ABSTRACT

Title of dissertation: INTEGRATIVE LEARNING AS A DEVELOPMENTAL PROCESS: A GROUNDED THEORY OF COLLEGE STUDENTS' EXPERIENCES IN INTEGRATIVE STUDIES

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The purpose of this grounded theory study was to learn how students in an explicitly integrative learning environment make meaning of and understand integrative learning. The research questions that guided this study included: Do students experience integrative learning? If so, how do students experience integrative learning, and which experiences do students identify as contributing to their ability to integrate? What challenges and successes do students experience with integrative learning? Consistent with constructivist grounded theory methodology (Charmaz, 2000, 2006). I developed an emerging theory about students' experiences with integrative learning that is grounded in the data. I interviewed 10 students enrolled in an Integrative Studies program at a university in the greater Washington, DC region.

Students in this study defined integrative learning very broadly. To capture the range of learning described by students, I created a continuum of different forms of integration that vary by complexity: application, comparison, understanding context, and synthesis. A developmental theory of integrative learning emerged from this study. Students engaged in the least complex form of integration, application, by finding their

coursework personally relevant and applying what they learn to their own lives. Through class discussion and reading students identified multiple perspectives, which led to integration as comparison. When different perspectives are in conflict, students began to engage in integration as understanding context. Context is an important consideration when evaluating competing claims and evaluating arguments. By reconciling conflict, students may reach the most complex form of integration: synthesis. Students needed to wrestle with the ambiguity and complexity and resist automatically adopting an externally provided solution from a trusted authority figure. Students in this study rarely if ever reached synthesis, but they agreed that it was an ideal. Students' level of cognitive complexity as well as their pattern of Integrative Studies course work affected students' progress with integrative learning.

By listening to student voices, I learned about the Integrative Studies program as students experience it and compared it to faculty expectations. This study both celebrates program strengths and offers recommendations for improvement. I discuss the implications of this for future research and higher education practice.

INTEGRATIVE LEARNING AS A DEVELOPMENTAL PROCESS:
A GROUNDED THEORY OF COLLEGE STUDENTS' EXPERIENCES IN
INTEGRATIVE STUDIES

by

Bonne Jean Brown Leonard

Dissertation submitted to the Faculty of the Graduate School of the
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DEDICATION

This work is dedicated to scholars and learners in my family, past, present, and future:

My father
Robert Rogers Brown
Counselor, teacher, mentor, and friend
(June 11, 1918 – September 3, 2000)

My partner
Charles Martin Leonard
An inspirational scholar/practitioner and gifted teacher

My son
Evan Paul Leonard
A curious, questioning, and engaged emerging scholar currently in 6th grade

My daughter
Kathleen Slater Leonard
A creative, expressive, and insightful emerging scholar currently in 4th grade

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After four years of full-time study, I am nearing the end of 22nd grade. To make my status as a doctoral student more real to my children and their friends, I have often told them my grade level. I love their wide-eyed reaction. I could not have made it through my doctoral work without the support, inspiration, and encouragement of many wonderful people.

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CHAPTER I

INTRODUCTION

Several higher education associations and scholars have argued that colleges and universities must be intentional in fostering integrative learning in undergraduate college students (Association of American Colleges and Universities [AAC&U], 2002, 2005, 2007; Baxter Magolda & King, 2004; Newell, 2001a; Seabury, 1999b; Thompson Klein, 2005b). These arguments assert that college students need to develop the capacity to make connections across various domains of learning for a variety of purposes. Indeed, the tone of this assertion is urgent: it is imperative that college students in the 21st century become integrative learners. Learning theories and cognitive development theories support attending to integrative learning as a way to achieve many of the developmental goals of formal education (Baxter Magolda, 2004; Dewey, 1956; Kegan, 1994; Perry, 1981). Integrative learning also is an appropriate antidote to the increasing specialization common in the academy and offers hope for a comprehensive and creative approach to many of society's challenging problems (Bok, 2006; Gutmann, 2005; Halpern, 1994; Rhoten, 2003; Thompson Klein, 2005a; Thompson Klein & Newell, 1997). However, the literature that mentions integrative learning as desirable is ambiguous and raises questions about its definition. Is integrative learning a learning outcome, or is it a process that leads to other desired outcomes? Is integrative learning an interdisciplinary phenomenon? What, exactly, is being integrated? What does integrative learning look like from a student perspective and how is it cultivated?

Currently, there are three national professional associations with an espoused commitment to promoting integration in higher education: the Association for Integrative Studies (AIS), the Association of American Colleges and Universities (AAC&U), and the Carnegie Foundation for the Advancement of Teaching (Carnegie Foundation). AIS has most often framed integration in the context of interdisciplinary studies. As a "national professional association for interdisciplinary teachers, scholars, and researchers" (AIS, n.d.a, p. 1), AIS embraces integrative and interdisciplinary studies and supports scholarship on interdisciplinarity. A cursory review of keynote speakers, special workshops, and special sessions presented at AIS Annual Conferences over the past 10 years as well as articles published in the Association's journal, *Issues in Integrative Studies,* demonstrates a strong commitment to interdisciplinary themes (AIS, n.d.b).

AAC&U is a national organization engaged in many projects, but with an overarching commitment to promoting liberal education. In its 2002 report, *Greater Expectations: A New Vision for Learning as a Nation Goes to College,* AAC&U included integrative learning as one of several essential learning outcomes for liberal education. In 2004, AAC&U partnered with the Carnegie Foundation, a national organization dedicated to the scholarship of teaching and learning, to launch a project to examine integrative learning as a key learning outcome of liberal education. Ten colleges and universities were invited to participate in the Integrative Learning Project. Among the project's goals were identifying promising practices and generating evidence of integration on college campuses. These three professional associations co-sponsored a conference in October 2005, Integrative Learning: Creating Opportunities to Connect, to encourage information sharing and collaboration on integrative learning among a broader

set of institutions beyond the original 10 selected to participate in the Integrative

Learning Project. Many of the presentations at the 2005 Integrative Learning conference

showcased programs or curricula designed to promote various conceptualizations of

integrative learning, or focused on organizational structures and leadership models to

further these integrative aims. Others dealt with assessment of integrative learning, but no

one definition of integrative learning was offered and accepted.

More evidence of the importance of integrative learning comes from learning

theories and cognitive development theories. Dewey's (1956) pioneering work at the turn

of the 20th century emphasized the need to connect learning to students' experiences.

Dewey championed active rather than passive approaches to learning and believed formal

classroom learning and lived experience should be integrated. Kolb (1984) is a more

contemporary advocate for experiential learning. Kolb describes learning as a process

that is shaped and reshaped by experience. Experience can be concrete or abstract,

reflective or active in nature. Kegan (1994) and Baxter Magolda (2001) espoused ideas

compatible with integrative learning in their accounts of how students journey to self-

authorship. To become a self-authored person, students use internally derived standards

for behavior and decisions and successfully integrate the interpersonal, intrapersonal, and

cognitive dimensions into a coherent whole. Similarly, Perry (1981) suggested the need

for integrative learning as students strive to reconcile competing understandings and seek

commitment in relativism.

As the academy has become more specialized, cultivating in students the ability to

find points of connection and convergence will be increasingly important (Bok, 2006;

Taylor Huber, Hutchings, & Gale, 2005). In the sciences alone, the pace of discovery and

the advancement of specialties and sub-disciplines contributes to the splintering effect inside higher education (Bok; Rhoten, 2003). Organizational structures within colleges and universities also reinforce the separation of disciplines with each being housed in its own department creating silos of academic work that do not intersect with other parts of the academy (Bok; Clark, 1987). Despite the extraordinary advances in knowledge and understanding, there is a cost to this penchant to narrowly focus on a specialty within a discipline. Specialists may fail to see the big picture (Brown Leonard, Schmidt, Smith, & Schmidt, 2005). Efforts to reconnect specific strands of knowledge require integration. In this way, the complex problems facing our world might be more comprehensively addressed with an interdisciplinary or integrative approach (Gutmann, 2005; Thompson Klein, 2005b; Thompson Klein & Newell, 1997).

<center>Background and Context</center>

The history of higher education in the United States reveals changes in the stated purpose of undergraduate education and provides a context for the diversity of institutional types today and the growing interest in integrative learning. Early colleges were charged with preparing the sons of the elite class for roles as clergy (Clark, 1987; Newman, 1982). The colonial period promoted generalist education with an emphasis on mastering classical content, engaging in tasks said to promote mental discipline, and building character (Bok, 2006). Soon after the Civil War, a new style of university came into prominence: the German model research university. The research university encouraged specialization and was committed to discovering and transmitting knowledge (Bok; Clark; Kerr, 2001). Within these broad changes that influenced institutional type, the organization and structure guiding curricula also changed over time, moving from

repetition and drill common in colonial days to markedly less structure in which student interest directed course selection at the beginning of the 1900s (Bok). By the mid 1940s, most colleges and universities adopted requirements that promoted depth of learning through a major and breadth of learning via selected required courses or an expectation that students take courses across several broad areas of the curriculum. Interdisciplinary work was promoted as a response to the fragmentation and specialization of the research university (Bok). Thompson Klein (2005a) traced the roots of interdisciplinary studies, a curricular innovation that is committed to integration, to the nation's early days. The interdisciplinary professional literature, however, began in the 1970s.

Integrative Learning as a Learning Outcome

Interest in integrative learning is part of a broader commitment to creating conditions across college campuses that support student learning (American College Personnel Association [ACPA], 1994; AAC&U, 2002, 2004b; Barr & Tagg, 1995; Stage, Watson, & Terrell, 1999; Wingspread Group on Higher Education, 1993). Regional accrediting agencies reinforce this expectation by demanding that colleges and universities define and measure the learning outcomes they are attempting to foster (Middle States Commission on Higher Education, 2002; Higher Learning Commission, 2003). Whether motivated by external pressures or by internal demands for accountability, many colleges and universities are striving to define and measure student learning. The student affairs profession has signaled its commitment to student learning in several collaborative publications from national associations, specifically the American College Personnel Association (ACPA) and the National Association of Student

Personnel Administrators (NASPA) in partnership with the former American Association

for Higher Education (AAHE) (AAHE, ACPA, & NASPA, 1998; Keeling, 2004).

Included in the calls for greater emphasis on student learning is the expectation

that students become integrative thinkers. This challenge is made more difficult by a lack

of clarity about what integrative learning is and how it is taught and measured.

Integrative learning, then, is a construct in need of greater understanding. That

institutions of higher education should be concerned with student learning is not

controversial. Research in cognitive science, interdisciplinary theory, and the scholarship

of teaching in interdisciplinary studies offer insights into student learning and the

integrative process (Bransford, Brown, & Cocking, 1999; Davis, 1995; Haynes, 2002b;

Newell, 1998b, 2001b; Seabury, 1999c; Thompson Klein, 1990; Thompson Klein &

Doty, 1994). Despite a prophetic volume by Henry published in 1958 that celebrates the

importance of the integration of educational experiences and integrative learning, very

little empirical research has been conducted on integrative learning. There is strong

support for including integrative learning as a desired learning outcome in the 21st

century, but there is less clarity in how to define integrative learning and how to measure

it.

What is Being Integrated?

At the heart of the confusion about integrative learning is determining what,

exactly, is being integrated. Based on a review of the literature, there are three broad

realms where integration is desirable: (a) integration across courses or curricular

structures (e.g., between general education and the major) (Newell, 1998b; Taylor Huber

& Hutchings, 2004; Thompson Klein, 2005b), (b) integration of the formal academic

sphere with the co-curricular or personal areas of life (Brownlee & Schneider, 1991; Newell, 1999, 2001a; Thompson Klein, 2005b), and (c) integration of old knowledge with new perspectives (Baxter Magolda & King, 2004; Bransford et al., 1999; Resnick, 1989).

Cultivating Integrative Learning

Once the form of integrative learning is specified (i.e., what is being integrated), there is scant empirical literature describing how integrative learning as a learning outcome is cultivated and measured (Newell, 2001b; Taylor Huber et al., 2005). In addition, most existing research neglects the perspective of student learners. Regardless of the form, it seems clear that integrative thinking is challenging and can be linked to higher-order thinking skills such as synthesis and self-authorship (Baxter Magolda, 1998; 2001; Kegan, 1994). Successful integrators must be able to confront and reconcile diverse and potentially conflicting perspectives. When these perspectives challenge deeply held beliefs, students may struggle with the tension or dissonance prompted by trying to understand new information that is incompatible with existing cognitive structures (Baxter Magolda, 1992; Belenky, Clinchy, Goldberger, & Tarule, 1986; Kegan, 2000; Newell, 1999, 2001a; Perry, 1981; Piaget, 1968). Integration is a process; therefore *how* students make meaning and reconcile the tension of conflicting perspectives is more important than *what* decision is made (Newell, 2001a; Thompson Klein & Newell, 1997). Successful integrative learners are able to gather and evaluate information according to an internalized belief system that guides decisions in adult life, key characteristics of people who are authors of their own lives (Baxter Magolda, 1998). Assessing efforts to foster integration is difficult when the desired learning outcome is so elusive, yet this is

precisely what regional accrediting bodies will expect of colleges with integrative learning as a stated learning goal (Higher Learning Commission, 2003; Middle States, 2002; Miller, 2005). In this study I approach integrative learning and its cognitive complexity from the perspective of student learners.

There are abundant claims that certain learning environments (Boyer Commission on Educating Undergraduates in the Research University, 1998; Gabelnick, MacGregor, Matthews, & Smith, 1990; Newell, 1999, 2001a) and certain pedagogies are worth embracing for their potential to promote integrative learning in students (Haynes, 2002b; Newell 1999, 2001a; Seabury, 1999b; Thompson Klein & Newell, 1997). These insightful recommendations are conceptually grounded in interdisciplinary practice, but an empirical link to integrative learning is missing (Newell, 2001a; Thompson Klein, 2005a). Even so, there is an abundance of curricular and pedagogical recommendations for promoting integrative learning. First-year seminars, interdisciplinary courses, senior capstone courses, team teaching, learning communities, service-learning, and other experiential learning opportunities such as internships are cited for their active engagement of students and their probable contribution to integrative learning (AAC&U, 2002; Davis, 1995; Haynes, 2002b; Newell, 1999, 2001a; Schroeder & Hurst, 1996; Shapiro & Levine, 1999; Taylor Huber & Hutchings, 2004; Taylor Huber et al., 2005; Thompson Klein, 2005b; Thompson Klein & Newell, 1997). However, efforts to create contexts to foster integration are not always perceived as successful by students (Davis).

Purpose of the Study and Research Questions

The heightened expectations of the higher education community to create conditions for student learning form the backdrop for this study. The purpose of this

study was to understand, through the use of constructivist grounded theory (Charmaz, 2000, 2002, 2005, 2006), undergraduate students' perceptions of and experiences with integrative learning in an explicitly integrative academic program. Specific research questions were the following:

1. How do students make meaning of and understand integrative learning?

2. Do students experience integrative learning? If so, how do they experience integrative learning, and which experiences do students identify as contributing to their ability to integrate?

3. What challenges and successes do students experience with integrative learning?

A second purpose of this study was to develop a theory about students' experiences with integrative learning that is grounded in the data. To learn about the intentionally integrative academic environment that serves as a context for this study, and prior to conducting interviews with students, I interviewed faculty and staff members as well as analyzed documents relevant to the mission and curriculum of the Integrative Studies program that served as the research site.

<div align="center">Definition of Terms</div>

Integrative learning is touted as a powerful and essential outcome of the undergraduate experience (AAC&U, 2002, 2004b; Baxter Magolda & King, 2004; Dressel, 1958; Miller, 2005; Taylor Huber & Hutchings, 2004). Yet, the literature is vague in defining integration as a learning outcome and often circular in describing how students become integrative learners (i.e., students become integrative learners by learning to integrate) (Newell, 1998b; Taylor Huber & Hutchings). For this study, my

understanding of integrative learning can be defined with some precision, but what students identify as integrative and what faculty and staff architects of learning opportunities claim is integrated or intentionally designed to promote integrative learning must emerge from the study.

Integrative vs. Integrated

It is important to distinguish the terms *integrative* or *integrating*, which are active student-centered processes, and *integrated*, which could be used to describe an educational context and emphasizes coherence and complementarity of functions (Dressel, 1958). Integrative learning is an active process in which students engage. It occurs within the individual and, likely, by different means depending on the student's strengths and preferred learning style (Dressel; Taylor Huber & Hutchings, 2004).

The linking process characteristic of integrative learning is more than a pairing of ideas. To be integrative, the connection must blend and synthesize perspectives. The synthesis may be of different points of view or perspectives that are disciplinary (e.g., interdisciplinarity), but could also be different views outside of the academic context (Haynes, 2002a; Newell, 2001a). Some argue that this integrative process produces an outcome greater than the sum of its parts (Newell, 1998b). For interdisciplinary scholars, the definition of interdisciplinarity that is widely embraced comes from Thompson Klein and Newell (1997):

> *interdisciplinary studies* may be defined as a process of answering a question, solving a problem, or addressing a topic that is too broad or complex to be dealt with adequately by a single discipline or profession. . . . IDS [interdisciplinary studies] draws on disciplinary perspectives and integrates their insights through construction of a more comprehensive perspective (pp. 393-394).

Later Newell (2001a) expanded this definition to address integrative learning as learning

that comes from multiple perspectives whether those perspectives are from "academic

disciplines, cultures, subcultures, or individual life experiences" (p. 197), and learning

that can occur in a variety of sites. With this broader definition, Newell acknowledged the

role student affairs staff members have in facilitating integrative learning on campus.

Similar to this latter definition, Haynes (2002a) defined integration as "the combining

and synthesis of various viewpoints, worldviews, or systems of thought " (p. xiii). This

definition is inclusive of interdisciplinary integration, but Haynes also included as

synthesizing elements perspectives and insights that do not come from the disciplines.

Integrative learning appeals both to the cognitive and non-cognitive realms of

learning. The cognitive dimensions consider how different perspectives contribute to an

enriched whole (Taylor Huber & Hutchings, 2004). The non-cognitive aspects of learning

are affective and embrace student attitudes. Students must have interest and motivation to

engage fully and purposefully in the integrative act (Alexander, 1997; Baxter Magolda,

1987; Bendixen, 2002; Fink, 2003; Newell, 2001a). Learning can also produce anxiety as

students confront new perspectives and ideas. According to Perry (1978), learning can be

ego threatening as old understandings are abandoned for new, more complex ways of

making meaning.

In their analysis of the applications to the AAC&U and Carnegie Foundation

sponsored Integrative Learning Project, DeZure, Babb, and Waldmann (2005) noted the

inconsistency with which institutions used "integrative learning." Acknowledging the

uncertainty around a definition of integrative learning, Kendall Brown, Jiang, Newell,

Tobolowsky, Haynes, and Schneider (2005) offered a working definition: "Integration of

Learning is the demonstrated ability to connect knowledge across disciplines, and from disparate contexts and perspectives. *Its development is fostered through participation in intentional academic and co-curricular experiences during college*" (p. 1). This expectation that an educational environment can be designed to support specific learning goals is not new. Chickering (1969) and later Chickering and Reisser (1993) advocated for this intentionality between environments and learning. An academic program that is intentionally designed to promote making connections might support this integrative process; however, little is known about whether these facilitative contexts or programs produce their intended outcomes. Ultimately "the synthesizing enterprise – the bringing of what one has learned in one context to another – has been left almost entirely to students' private initiative" (Brownlee & Schneider, 1991, p. 15).

Integration as a Higher Order Thinking Skill

Several conceptual frameworks suggest that integrative learning is a higher order thinking skill. Integration is related to synthesis, which is a complex, sophisticated way of thinking according to Bloom's taxonomy (1956). Although widely accepted, Bloom's claim was not empirically developed. Bloom's framework of educational objectives progresses from knowledge, comprehension, application, and analysis, to synthesis and evaluation. Bloom claimed that processes lower on the hierarchy had to be mastered before a learner could advance to more complex categories. In a revised version of Bloom's work geared specifically for K-12 educators, synthesis is replaced with "create" and moved to the most advanced position (Anderson & Krathwohl, 2001). The new framework uses verbs to describe the categories in an effort to be more useful to teachers.

The categories are remember, understand, apply, analyze, evaluate, and create (Anderson & Krathwohl).

Additional conceptual evidence that integration is an advanced cognitive process comes from Kolb's (1981) experiential learning model in which integration of diverse ways of responding to the world and receiving information is not expected until "mid career" (p. 249). Cognitive development theories (Baxter Magolda, 1992, 2001; Belenky et al., 1986; Kegan, 1994; Perry, 1970, 1981) also suggest that integration demands more sophisticated ways of knowing. Students who are integrative learners likely are comfortable with the idea that knowledge is uncertain and dependent on context (Haynes, 2002a). Students who are integrative learners may also be more confident of their role in creating knowledge. These qualities of viewing knowledge as uncertain and dependent on context as well as the ability to wrestle with complexity and ambiguity to reach an informed decision are characteristic of what Baxter Magolda (1992) would term contextual knowers. Yet, very few undergraduate students have reached contextual knowing in their epistemological development, according to Baxter Magolda (2001). If integrative learning is indeed a higher order thinking skill, then students may require a more complex capacity for meaning making to become integrative learners.

Integrative Learning Defined for this Study

For this study, integrative learning is a broad term that captures a variety of integrative forms such as interdisciplinary study, service-learning, experiential learning, cooperative learning, and the blending of in class and out of class learning that could occur in almost any context (e.g., classrooms, student organizations, residence halls, work) (Kuh, 1995; Newell, 1999, 2001a; Thompson Klein, 2005b). This study was

designed to prompt students to consider the ways in which their academic program contributes to or inhibits integrative learning, but also encouraged students to explore other contexts that they identify as providing opportunities for integration. Most important is the meaning student participants give to integrative learning. Also important is the definition of integrative learning used by the faculty and staff of the Integrative Studies program where this study took place.

<div align="center">Significance of Study</div>

The Carnegie Foundation has partnered with AAC&U to engage campuses in exploring ways to foster and measure integrative learning (Taylor Huber & Hutchings, 2004). This initiative claims that developing integrative learning in students is an essential goal and a central challenge for college educators. As integrative learners, students will be prepared to make informed decisions in every sphere of their lives (Taylor Huber & Hutchings). Scholars and national organizations have acknowledged that many of the world's most pressing problems are too complex to be addressed by one perspective (Boyer Commission, 1998; Committee on Science and Engineering and Public Policy, 2004; Davis, 1995; Gutmann, 2005; Halpern, 1994; Scott, 2002; Thompson Klein, 2005a; Thompson Klein & Newell, 1997). In an increasingly global society, issues related to environmental degradation, for example, cannot be addressed narrowly or just locally. Chemistry, public policy, international affairs, psychology, and biology are disciplines that might be used to solve environmental problems. Similarly, scientists, government officials at local, national, and international levels, and business and industry leaders need to collaborate to design and implement workable solutions to environmental threats. Addressing interdisciplinary research particularly, the National

Academy of Sciences (Committee on Science, Engineering, & Public Policy, 2004), the

National Science Foundation (Rhoten, 2003), and AAC&U (2002) all have entreated

colleges and universities to create more integrative learning opportunities. Indeed, Scott

advocated using integrative learning as the central organizing idea for general education

as did Seabury (1999b), who champions interdisciplinary general education.

Ample evidence that integrative learning is an expected outcome of higher

education exists, but the empirical evidence on integration and how it is cultivated is

sparse (Newell, 1998b, 2001b; Thompson Klein, 2005b). Many scholars make a strong

conceptual case in describing how integration occurs. Thompson Klein (1990), Newell

(2001b), and Miller and Boix Mansilla (2004) offer models for the integrative process.

Other scholars assert that certain pedagogies or conditions promote integrative learning,

such as capstone courses, portfolios, living-learning environments, team teaching, or

service-learning (Davis, 1995; Haynes, 2002b; Newell, 2001a; Thompson Klein &

Newell, 1997). Guidance exists for faculty and administrators seeking to create integrated

educational environments or promote integrative learning (Davis; Haynes, 2002b;

Newell, 1998a; Thompson Klein & Doty, 1994). Missing from these expert accounts are

the voices of college students describing their experiences with these innovative

approaches (Asbeck, 1993; Brown Leonard & Haynes, 2005; Haynes, 2005; Seabury,

1999b). This study helps capture students' experiences and helps document reactions to

academic contexts designed to be explicitly integrative. This study can guide college

administrators seeking to support integrative learning in students by identifying specific

examples of how students become integrative learners. These examples of effective

practice derived from the qualitative investigation of one program are not intended to be

generalized; readers must judge whether it is possible to adapt insights from this study to their home colleges and universities. As Mertens (2005) explained, within the constructivist paradigm, ". . . every instance of a case or process is viewed as both an exemplar of a general class of phenomena and particular and unique in its own way" (pp. 308-309). Finally, as a grounded theory study, the analysis attempted to build a theory about student experiences with integrative learning that is grounded in the data.

<center>Summary</center>

Widespread interest in integrative learning in the academy has not yet produced empirical studies designed to examine how students understand integrative learning or how they learn to integrate. One central concern is the lack of clarity about the meaning of integrative learning. This study differentiates, as did Dressel (1958), between educational contexts that are integrated and the act of integration or integrating. Of particular interest is the integrative process that takes place within the student: does it happen, what does it mean for the student, and which experiences contribute to integrative learning? In this study, integrative learning is desired in its own right rather than a vehicle to some other desired learning outcome.

CHAPTER II

LITERATURE REVIEW

Consistent with the interpretive and inductive aspects of qualitative research, this review of the literature offers a brief introduction and context to the topic of integrative learning (Creswell, 2003). The intention is to share with readers those studies and reports that have shaped my thinking about this research. Rather than pursuing an exhaustive search of the literature to formulate hypotheses, a qualitative researcher seeks to find the important questions in the voices of the participants (Creswell).

This chapter frames the current study within the history of the missions of higher education institutions in the United States. The history of interdisciplinary studies as a form of integrative learning is presented followed by a discussion of liberal education and the growing consensus of learning outcomes, including integrative learning, emerging from the national discussion on liberal education. The chapter explores the higher education context for integrative learning, including the renewed emphasis on college student learning, an exploration of the integrative process, and presentation of evidence that students and faculty often perceive the educational context differently. Next I present current educational trends purported to promote integrative learning such as a commitment to creating coherent, integrated institutional contexts, an exploration of out of class learning contexts, promising pedagogies, and issues related to assessing integrative learning. The chapter ends with a discussion of how students construct knowledge based on insights from cognitive science about how students learn, the cognitive complexity integrative learning demands, and the contributions of cognitive

development theories to understanding integrative learning. If integrative learning is a

process that requires students to reconcile the tensions of conflicting evidence (often in

the form of different perspectives), then I consider the potential for integrative learning to

be consistent with the development of self-authorship (Baxter Magolda, 1998, 2001;

Kegan, 1994) and transformative learning (Kegan, 2000; Mezirow, 2000).

<div align="center">Purposes of Higher Education</div>

Historical Perspective

The history of higher education in the United States offers an important context

for the current attention being given to integrative learning. A rich diversity of

institutional types and missions exist today, but this has not always been the case. When

the U.S. was established as a fledgling republic, higher education was focused on

religious training to prepare the sons of the elite for the clergy (Clark, 1987; Newman,

1982). The early colonial colleges extended the emphasis on character development to

include the study of general letters and sciences. Students were drilled on the course

material in an effort to develop mental discipline (Bok, 2006). Following the Civil War,

U.S. higher education was powerfully influenced by the German research model, which

emphasized creating and transmitting knowledge, and revered disciplinary specialization

(Clark; Kerr, 2001; Thompson Klein, 2005a). In the mid 20th century, the GI Bill

prompted increased access to college (Bok). Colleges and universities focused their

attention on the needs of individual students and the needs of the larger society, making a

renewed commitment to preparing citizens for full participation in a democratic nation

and an interconnected world (AAC&U, 2002; Baxter Magolda & King, 2004;

Knefelkamp & Schneider, 1997; Musil, 2003). These historical shifts and trends represent

changes in emphasis rather than the abandonment of one type of education for another.

Indeed, the current variety and diversity of higher education institutions are a reflection

of this accumulated set of innovations (Clark).

Thompson Klein (2005b) traced the origins of the use of "integration" to early

literature in psychology that referred to "integration" in the sense of "integrated

instruction" (p. 8). Interdisciplinary education, and its integrative learning goal, has roots

in the generalist education movement in the early 1900s (Thompson Klein, 2005a,

2005b). In the mid-1900s scholars began to distinguish between integration as a

connection between seemingly disparate disciplines to a process that characterized "the

interplay of an individual and an environment" (Thompson Klein, 2005b, p. 9). Formal

interdisciplinary or Integrative Studies programs did not become common until the 1960s

and 1970s; the formal literature on interdisciplinary studies dates to the 1970s (Thompson

Klein, 1999). The early work of interdisciplinary scholars attempted to define and justify

interdisciplinary inquiry to the academy. Interdisciplinary studies literature in the 1990s

and early 21st century was characterized by efforts to professionalize interdisciplinary

studies and to offer faculty and administrators strategies and theories to guide practice

(Haynes, 2005). Volumes on teaching and pedagogy (Davis, 1995; Haynes, 2002b)

joined books on interdisciplinary general education (Seabury, 1999c), interdisciplinary

faculty (Lattuca, 2001), and interdisciplinary curricula (Newell, 1998c; Thompson Klein

& Doty, 1994). As Haynes (2005) pointed out in her review of Thompson Klein's

(2005a) book, it is Thompson Klein who is taking the interdisciplinary literature to a new

level, that of "construct[ing] a conceptual and historical framework for understanding,

studying, and supporting interdisciplinary practices" (p. 2). A link that Thompson Klein

(2005a) implies between integrative learning and liberal education is made explicit in a recent article on integrative learning and interdisciplinary studies: the integrative learning goals of interdisciplinary studies are compatible with AAC&U's conceptualization of liberal education (Thompson Klein, 2005b).

Liberal Education

There is a national movement to encourage all institutions, regardless of type, to embrace liberal education outcomes (AAC&U, 2002, 2005). Often confused with "liberal arts," which refers to specific arts and science disciplines, liberal education "is a philosophy of education that empowers individuals, liberates the mind from ignorance, and cultivates social responsibility" (AAC&U, 2002, p. 25). This current movement builds on the National Institute of Education (1984) report, which stated that liberal education should embrace content knowledge as well as core capacities such as problem solving and synthesis. AAC&U's message is that liberal education is the right kind of education for the knowledge economy and the global marketplace; all students, not just those at elite institutions, need a liberal education.

AAC&U supported a national collaboration on the goals and purposes of higher education that culminated in a comprehensive report, *Greater Expectations: A New Vision for Learning as a Nation Goes to College* (2002). This landmark work is shaping the course of higher education reform and placing liberal education and student learning at the center of a national debate. The case made by the national panel that produced *Greater Expectations* is that all students, regardless of major or institution type, benefit from a learning-centered liberal education. Appropriately, *Greater Expectations* celebrates improved access to higher education; however, it also notes that more needs to

be done to ensure all students persist in college and develop the depth of learning

necessary to contribute to a rapidly changing world. Specifically, the panel recommended

that colleges and universities "help college students become *intentional learners* who can

integrate knowledge from different sources, and continue learning throughout their lives"

(p. xi). The intentional learner also is empowered, informed, and responsible for her or

his own actions and the support of democratic ideals.

This commitment to student learning has led to a new long-term AAC&U

initiative, Liberal Education & America's Promise (LEAP), aimed at promoting among

colleges and universities both a commitment and a capacity to foster the kind of student

learning needed to participate as an engaged citizen in a global community (AAC&U,

2005). Among the liberal education outcomes identified by AAC&U are:

- "knowledge of human cultures and the natural world,"

- "intellectual and practical skills" including communication and inquiry skills,

- critical and creative thinking,

- information and quantitative literacy,

- teamwork,

- "*integration of learning*" (emphasis added),

- "individual and social responsibility" including civic knowledge and
  engagement both locally and globally,

- intercultural competency,

- ethical reasoning, and

- an inclination for lifelong learning. (p. 2)

Integrative learning, then, is an integral part of liberal education and considered by some to be an important goal for all students in post-secondary education.

<div align="center">Context of Integrative Learning</div>

Focus on Student Learning

Liberal education goals, then, outline a set of skills and competencies students should learn while in college. The idea of focusing on student learning in higher education was brought into sharp relief relative to the focus on teaching and content coverage when Barr and Tagg (1995) published their article calling for a paradigm shift. They outlined the urgent need for change in the academy from what they described as an instruction and teacher-centered model of education to one that is learning and student-centered. Originally published at the turn of the 20th century, Dewey (1956) voiced his views that education should be focused on the learner and his or her experiences, not on the teacher. Although Dewey's (1956) essays focused on elementary education, he made it clear that colleges, too, have stifled students by delivering a curriculum designed to transmit the accumulated knowledge of the ages. Dewey would agree with Barr and Tagg: learning should link to individual experiences, involve students as active participants, be holistic in scope, and make learning goals explicit.

This emphasis on student learning is gaining sustained national attention in higher education. Numerous reports and other publications decried the need for a more learning-centered approach in higher education (AAHE et al., 1998; AAC&U, 2002; ACPA, 1994; Bransford et al., 1999; Keeling, 2004; Wingspread Group on Higher Education, 1993). The Wingspread Group on Higher Education was a collection of higher education, government/policy, and business leaders who gathered to consider, "'What Does Society

Need from Education?'" (p. *i*). In considering this distinctly public purpose, the group

advised explicit attention to values, a renewed commitment to undergraduate learning,

and raising expectations and articulating clear learning goals for all learners in K-12 and

beyond. Similarly, the American College Personnel Association (ACPA, 1994) publicly

asserted its position on the primacy of student learning to the mission of higher

education. Later, the American Association of Higher Education (AAHE) partnered with

two national student affairs associations (ACPA and NASPA) to celebrate academic

affairs and student affairs partnerships that enhance student learning (1998). This

commitment was rearticulated by national leaders in student affairs with the release of

Learning Reconsidered (Keeling, 2004), a joint NASPA and ACPA document placing

student learning at the center of student affairs practice. Higher education accrediting

bodies, too, have demanded that colleges and universities define and assess student

learning (Middle States Commission, 2002; Higher Learning Commission, 2003). Even

colleges and universities with a clear sense of purpose may need to revisit their goals

with faculty and students to make explicit student learning expectations and goals

(Angelo, 1999; Banta, Lund, Black, & Oblander, 1996; Newell, 1998c). Members of the

campus community need to understand and be able to articulate desired outcomes. Of

particular interest here is that integrative learning has been identified as a critical learning

outcome to which colleges and universities should attend.

Scope of Integrative Learning

Integrative learning requires students to blend perspectives. Some scholars refer

to integration across courses or curricula (Newell, 1998b; Taylor Huber & Hutchings,

2004; Thompson Klein, 2005b), blending of the curriculum and co-curriculum (Brownlee

& Schneider, 1991; Newell, 1999, 2001a; Thompson Klein, 2005b), or the connection of new knowledge to prior knowledge (Baxter Magolda & King, 2004; Bransford, Brown, & Cocking, 1999; Resnick, 1989). These perspectives may be provided by disciplines, or they may come from a diverse peer group, diverse religions, or diverse nations (Fink, 2003; Haynes 2002b, Hurtado, 1999; Newell, 1999). Taylor Huber and Hutchings asserted that integrative learning has both cognitive and affective dimensions. The cognitive side involves considering "different dimensions of a problem, seeing it from different perspectives, and making conceptual links among those dimensions and perspectives" (Taylor Huber & Hutchings, p. 2). The affective dimension to learning includes a readiness to engage fully and purposefully in the integrative experience and embraces the emotions that accompany confrontation of strongly held beliefs or of two conflicting perspectives (Alexander, 1997; Bendixin, 2002; Fink, 2003; Newell, 2001a). Relationships with faculty and classroom environment also contribute to the affective dimensions of learning (Baxter Magolda, 1987). Integrative learning is an "umbrella term" that captures a variety of integrative forms (Thompson Klein, 2005b). The classroom, workplace, and home are sites where the capacity to integrate is needed to manage the complexity of life.

The Integrative Process

Insights on how people integrate are found in the interdisciplinary literature. Newell (1998b) asserted, "the literature on interdisciplinarity is weakest when dealing with the process of integration itself. There are numerous pragmatic suggestions . . . but conceptual confusion leaves the process itself unclear" (p. 559). Scholars have conceptualized the process of integrating different disciplinary perspectives as a series of

steps derived from observation and personal experience (Newell, 2001b, 2007;

Thompson Klein, 1990). These models begin with defining the problem and scanning the

disciplinary literature for relevant material to bring to bear on the problem. Thompson

Klein's (1990) model included provisions for a team approach to integration, and both

Thompson Klein (1990) and Newell (2001b, 2007) emphasized identifying disciplinary

contributions and integrating those insights. Both models also recommended resolving

disciplinary conflicts by creating a common vocabulary, creating common ground,

constructing a new understanding of the problem under investigation, and testing the

understanding by trying to solve the problem. There are subtle, nuanced differences in the

outline each model provides. Although the suggested steps are linear in the way they are

presented, these scholars insisted that the process of integration "is not a strictly linear

process" (Thompson Klein & Newell, 1997, p. 404), and Seabury (1999a) pointed out

that the integrative process is not one that can be followed lock-step or be controlled by a

faculty member. Seabury suggested that integration is a learning outcome that can be

encouraged, but faculty "should not expect to control the processes of insight and

integration" (p. 143).

Miller and Boix Mansilla (2004) took a different approach to understanding the

integrative process in interdisciplinary collaborations. Based on interviews with

researchers and teachers in successful interdisciplinary projects, these authors identified

five cognitive strategies that contribute to integration: (a) using analogies to show

relationships and to apply a concept from one discipline to another discipline, (b)

adopting "compound concepts" to capture the linking of two or more disciplines, (c)

creating "complex and multi-causal explanations" by borrowing ideas or concepts from

various disciplines to explain the topic being studied, (d) proceeding "through checks and balances" by using one discipline to question and check up on the contributions of another discipline, and (e) "bridging the explanation-action gap" which involves using disciplinary perspectives for the purposes of explanation or application (p. 10). These strategies are a sample of the techniques used in successful interdisciplinary work, but are not intended to be prescriptive. As empirically derived observations, these insights illuminate some techniques by which experts in integration facilitate their work, but Miller and Boix Mansilla's model focused on identifying strategies rather than explicating a comprehensive process of integration.

Students' Perceptions of their Learning

The commitment to liberal education and integrative learning as a desired learning outcome is growing in currency with higher education faculty, staff, and administrators, but few studies have investigated student experience (Asbeck, 1993; Brown Leonard & Haynes, 2005; Haynes, 2005). There is some evidence that students have different goals and perceptions from faculty and staff (Brownlee & Schneider, 1991). For example, several scholars have noted the increasing interest in vocational training and careerism among students (Boyer, 1987; Davis, 1995; Hartley, Woods, & Pill, 2005; Katchadourian & Boli, 1985). The Higher Education Research Institute (HERI) has tracked the attitudes of incoming first-year students from 1966 to the present using the Cooperative Institutional Research Program (CIRP) survey (Sax, 2004). These data revealed that a higher percentage of first-year students in 2001 came to college for the economic rewards (close to 70%) compared to 1971 (about 45%) (Astin, Oseguera, Sax, & Korn, 2002). Certainly colleges and universities acknowledge the economic

benefits of earning a bachelor's degree, but mission statements tend to express commitments to the free exchange of ideas, the value of diversity, and the cultivation of problem-solving and other cognitive skills—in short, the aims of a liberal education (Bok, 2006; Gould, 2003). These learning outcomes generally take precedence over job preparation for faculty (Taylor Huber & Hutchings, 2004).

Even if there was consensus of overarching purposes at an institution, teachers and students approach the teaching and learning enterprise from distinctly different frames of reference (Bloom, 1958). For some students, the basic principles and values of a liberal education are perceived as being in conflict with vocational or professional education. That is, liberal education may be viewed as impractical and incompatible with the world of work (Taylor Huber & Hutchings, 2004). Yet, as the world has become increasingly interconnected and technology has changed at a dizzying pace, the needs for workers in the 21st century are more complex and sophisticated and, as it turns out, directly in line with the outcomes of a liberal education (AAC&U, 2002; Bok, 2006). The versatility and flexibility demanded in the 21st century workplace is well served by the skill and content learning characteristic of liberal education. AAC&U (2002) insisted, "liberal education *is* a practical education because it develops just those capacities needed by every thinking adult" (p. 26).

In addition to differences in expectations between students and faculty, there is also evidence of differences in perceptions. In a study of student perceptions of team teaching, Davis (1995) found that faculty viewed their efforts at collaboration as strong and effective, but students did not rate their team teachers as strong on collaboration. This discrepancy may be due in part to the difference between collaborative planning engaged

in by the faculty that may be successful, but not as visible to students who are looking for evidence of collaboration in classroom teaching or grading. Students also may have a different idea of what it means to be collaborative or may be reacting to other characteristics of a course or faculty members in reporting their assessment of the teaching team's collaboration. Seabury (1999a) also pointed to the mismatch between faculty claims of modeling and preparing effective assignments to promote integrative learning and the modest student learning that results. The tension for faculty to rely on traditional approaches to teaching (i.e., lecture), Seabury claimed, is great and happens despite faculty efforts to resist it. By the very nature of the teaching/learning enterprise, it is possible to have fundamental incongruity between faculty intentions and student perceptions. This difference in perceptions may affect how students perceive and respond to college and university contexts that are intentionally student learning-centered and committed to cultivating integrative learning. The focus of this study is on student perceptions of integrative learning in part because perceptions provided insights into how students experience an educational environment intentionally designed to promote integrative learning. Examining student perceptions of integrative learning also permitted analysis of whether the intended outcomes from a faculty perspective were recognized as such by students.

<div align="center">Educational Trends Promoting Integrative Learning</div>

Integrated Environments

To create learning-centered colleges and universities that intentionally cultivate desired learning outcomes, faculty and administrators must adapt research on how students learn to educational environments. Literature on cognitive development has

identified some of the circumstances and conditions that facilitate learning. Learning is enhanced by active pedagogies (Bonwell & Eison, 1991), high expectations coupled with support, modeling, prompt feedback, and opportunities for application and integration (Blocher, 1978). Creating a campus ecology that facilitates these learning conditions calls for aligning espoused values with practice, purposeful linking of environment and goals, and, some argue, striving for coherence in the way students experience their undergraduate education (Boyer Commission, 1998; Keeling, 2004). AAC&U's *Greater Expectations* (2002) and LEAP (2005) reports subtly differentiate between an integrated, aligned educational environment and the student learning outcome of integration. However, both suggest that an integrated learning context is helpful in promoting integrative learning in students.

Armstrong (1998) described four types of interdisciplinary learning environments that vary in their degree of integration. The first involves offering students an array of different courses. Connections among the courses are left to the student with no faculty guidance. The next integrative level provides a point of convergence for students who have taken a diverse set of courses, such as a capstone course. Students share information about their experiences and work, independently, to achieve integration. The third level involves faculty as well as students in the act of synthesis. Courses are designed to showcase different perspectives, often by inviting a series of experts to share their expertise with the class. Some would describe this course approach as multidisciplinary (Newell, 1998a; Stember, 1998). The fourth and most sophisticated level of integration involves a more intentional effort to bring together diverse insights to form a more complete understanding of an issue or problem.

Another model that captures different levels of integration comes from a study of productive interdisciplinary collaborations in research and teaching, both in and out of academia (Miller & Boix Mansilla, 2004). A situation void of integration is labeled "mutual ignorance"; collaboration characterized by sharing a superficial awareness of different points of view is "stereotyping"; "perspective-taking" involves a genuine understanding and appreciation for the perspectives of collaborators; and "merging" describes a new approach and a new blended way of seeing the world (i.e., a hybrid) (Miller & Boix Mansilla, pp. 13-14). These models of integration provide an appreciation for the range of integration possible, but fail to offer concrete suggestions on how to achieve these ends.

Person-environment interaction. Some of the calls for alignment among institutional goals and practices are rooted in person-environment frameworks. Early campus environments theorists highlighted the importance of context in understanding student experiences in college (Barker, 1968; Clark & Trow, 1966; Lewin, 1936; Pace & Stern, 1958). Research on these theories is complex and challenging given the vast number of environmental variables that can affect student experience. Also, an underlying premise of theories is that congruency between the student and her or his environment is a desired outcome. That students are more satisfied in these compatible settings is one measure of success, but student development theory (Knefelkamp, 1984; Piaget, 1968) states that growth and development are advanced by optimal dissonance. Thus, efforts to create a good match may have a dulling effect on student learning.

If the goal is to cultivate integrative learners, having an integrated learning environment may or may not contribute to this goal. Consistency between theory and

practice has benefits and contributes to institutional integrity, but to date there is no evidence that this integrated approach influences students' integrative capacities. However, being purposeful and intentional about desired learning outcomes in designing and implementing learning opportunities makes intuitive sense and is advocated by theorists and practitioners alike (Baxter Magolda & King, 2004; Fink, 2003; Gabelnick et al., 1990; Haynes, 2002a; Kuh, 1996; Kuh, Kinzie, Schuh, Whitt, & Associates, 2004; Schroeder, 1981; Schroeder & Hurst, 1996; Shapiro & Levine, 1999; Tatum, 2000).

Intentionality. Many educators would agree that it is important to create intentional learning contexts to support desired learning outcomes (Baxter Magolda & King, 2004; Fink, 2003; Haynes, 2002b; Newell, 1999, 2001a; Palomba & Banta, 1999; Tatum, 2000). Thus, creating learning contexts that promote integration in students is an appropriate goal. It seems clear that students have to be the agents of integration; students have to make integration happen for themselves (Dressel, 1958; Newell, 1998b; Seabury, 1999b). It also appears that curricular coherence is rare: "Few maps exist to help students plan or integrate their learning as they move in and out of separately organized courses, programs, and campuses" (AAC&U, 2002, p. x). Indeed, given the varied patterns of enrollment exhibited by college students today, an intentionally integrated educational environment may not be experienced as such by students who are "swirling" in and out of different institutional contexts in pursuit of a college degree (McCormick, 2003). Current decentralized organizational structures (e.g., discipline based departments) are barriers to collaboration and integration as well (Taylor Huber & Hutchings, 2004). Whether explicitly integrated or not, some purposefulness or intentionality in shaping the environment to achieve the desired outcome seems reasonable.

Out of Class Context

Sources of evidence of student learning are assumed often to come from the traditional academic, formal education context. This formal context for learning is at the heart of most college and university missions. Students, however, report learning in many contexts beyond the classroom (Kuh, 1993; Kuh, Douglas, Lund, & Ramin-Gyumek, 1994; Terenzini, Pascarella, & Blimling, 1999). Student affairs professionals support these conclusions as their work is largely dedicated to the out of class learning of college students (NASPA, 1989; Stage et al., 1999). As some research reveals, not all out of class experiences (e.g., fraternities, high profile men's sports) are supportive of cognitive learning (Pascarella, 2001a; Pascarella, Edison et al., 1996; Pascarella, Whitt et al., 1996), but overall the benefits of college in terms of student learning are not limited to the classroom (Pascarella & Terenzini, 1991; Pascarella, Whitt, et al.).

This research documenting out of class contributions to learning varies in terms of the dependent measures used. Learning may be measured by grade point average (Astin, 1993), scores on the Graduate Record Exam (GRE) (Anaya, 1996), or scores on tests such as the Watson-Glaser Critical Thinking Appraisal or Form 88A of the Collegiate Assessment of Academic Proficiency for writing, scientific reasoning, reading, and mathematics (Pascarella, Whit et al., 1996). Other research has been based largely on student self-reported behaviors or gains on various learning outcome measures that frame learning in terms of perceived growth (Astin, 1993; Pascarella, 2001a; Pascarella & Terenzini, 1991) or in terms of behaviors related to engagement as measured by the National Survey of Student Engagement (NSSE; Kuh, 1991). Sometimes labeled "cognitive skills" or "intellectual growth" as the desired outcome, students report their

perceived growth in a number of areas (Pascarella & Terenzini, 1991). The following

prompts from the 2005-06 College Student Survey (CSS; HERI, 2005) are illustrative:

"ability to think critically," "ability to get along with people of different races/cultures,"

and "analytical and problem solving skills." None of the prompts in the CSS addresses

integrative learning (or related ideas such as synthesis, connections, or links). As

Pascarella (2001b) noted, self-report is an appropriate approach to capturing college

student learning, but this evidence of cognitive gains is indirect (Ewell, 1997; Middle

States, 2002). Engaging students in conversations about their learning and reviewing

academic products such as papers, offer more direct evidence of student learning.

Pedagogies

Faculty teaching in interdisciplinary programs have been interested in pedagogies

that promote integrative learning for some time. Integrative learning requires students to

actively work to integrate diverse perspectives, but faculty and program staff engage in a

number of facilitative activities to support this learning outcome. For example, faculty

could collaborate in team course development or team teaching, coordinate a series of

disciplinary courses, design a course around a problem or issue, create a capstone

experience, incorporate field work or service-learning into a course, or include a required

portfolio assignment (Davis, 1995; Haynes, 2002b; Thompson Klein & Newell, 1997).

Interdisciplinary scholars have written extensively about the pedagogies that

promote integration, but make the point that there is no one right approach and different

contexts warrant different strategies (Seabury, 1999c; Thompson Klein & Newell, 1997).

The authors contributing to *Innovations in Interdisciplinary Teaching* (Haynes, 2002b)

explored a range of traditional and new approaches to interdisciplinary teaching. These

authors contributed insights about how to approach the overarching learning goal of integrative learning including team teaching, writing, learning communities, technology, and inquiry-based courses, among others. Seabury (1999c) explored cultivating integration through general education. Other authors have discussed the tools of integration related to interdisciplinary inquiry, which include dialectical reasoning or use of metaphor (Stember, 1998), finding common ground through meta-language (Kockelmans, 1998), and using questions to prompt integration (Newell & Green, 1998). Although creative and compatible with the literature on student learning, these innovative pedagogies have little or no empirical connection to promoting integrative learning.

Experiential learning is a pedagogy that offers promise in promoting integration as part of a larger category of active learning approaches that place student learning at the center of the educational enterprise and seek to actively engage students (Bonwell & Eison, 1991; Hake, 1998; Halpern, 1994). Grounded in the educational philosophy of Dewey and the cognitive psychology of Piaget, experiential learning embraces the cognitive and affective dimensions of learning by asserting that knowledge is gained via experience (Kolb, Boyatzis, & Mainemelis, 2001). Service-learning is one example of experiential learning in which civic or social responsibility as well as empathy are among the desired learning goals (Kezar & Rhoads, 2001). Jones and Abes (2001) found that service-learning can be an effective stimulus for identity development and that it promotes self-authorship. Related instructional strategies such as cooperative learning or group work can be subsumed under a larger category of collaborative learning. These approaches have their own guidelines for implementation and facilitating group work to encourage individual learning and student responsibility (Cooper, Robinson, &

McKinney, 1994). Problem-based learning is a related idea, but its proponents argue that it is more than a technique, elevating it to a worldview that places problems at the center of the educational experience (Savin-Baden, 2000). Any of these instructional strategies or philosophical approaches could support integrative learning if they are applied intentionally.

Assessment

If integrative learning is a stated goal of higher education, then it must be carefully defined and measured. Accrediting bodies have reinforced the expectation that colleges and universities document evidence of student learning as part of the self-study process (Middle States, 2002; Higher Learning Commission, 2003). Unlike K-12 accountability standards that are tied to standardized tests that tend to measure a narrow range of learning, regional accrediting bodies currently allow colleges and universities to articulate their own learning goals (AAC&U, 2004a). To meet accreditation standards, colleges and universities document through assessment activities their progress toward meeting these self-defined learning goals. Campuses engaged in assessment ideally are interested in continual improvement, but many also are interested in meeting the demands of external accreditors (Banta & Kuh, 1998; Banta et al., 1996; Palomba & Banta, 1999).

A commitment to assessment cannot be implemented without appropriate tools for measuring student learning. Given the confusion about integrative learning as a construct and the dearth of research on how to cultivate and measure integration, it is helpful to turn to literature on interdisciplinary education for insights into integration. Research conducted through Project Zero at the Harvard Graduate School of Education produced a framework for assessing "interdisciplinary understanding" as a key outcome

of interdisciplinary work (Boix Mansilla, 2005). Integration is central to this definition of interdisciplinary understanding. Boix Mansilla's view of integration focuses on process for the sake of a product; it is a means to more complex ways of thinking about issues or problems or finding solutions, rather than an end in itself. For student work to demonstrate interdisciplinary understanding, it must (a) be connected to the disciplines, (b) contribute to a new perspectives or understanding that could not have occurred if only one discipline was used, and (c) demonstrate a critical awareness of how the disciplines integrate and the limitations of this process (Boix Mansilla). This framework offers guidance about the kinds of experiences that might cultivate sound integrative work that is interdisciplinary in nature: sufficient grounding in relevant disciplines, a pressing issue or problem that is in need of an interdisciplinary approach, and practice reflecting on the relative contributions and limitations of each disciplinary lens applied to the problem at hand (Boix Mansilla).

Instruments designed to measure integration are few (Miller, 2005; Taylor Huber & Hutchings, 2004). Wolfe and Haynes (2003) developed an assessment tool designed to measure the degree of disciplinary integration achieved in a substantial piece of interdisciplinary writing. The Interdisciplinary Writing Profiles focus on four dimensions of good interdisciplinary writing: using disciplinary resources, creating an argument, engaging with multiple disciplines, and interdisciplinary integration. Evidence of integration includes establishing "common ground" and creating a "new holistic understanding" (p. 165).

Two additional strategies for investigating the integrative process are the interview and portfolio. Interviews can be particularly helpful in providing access to

perceptions, attitudes, and underlying subjective processes (Kvale, 1996; Perakyla, 2005). Interviewing students about their learning experiences is a promising approach to understanding more about integrative learning (Newell, 2001a). Documents such as portfolios can also provide evidence of integrative learning (Banta et al., 1996; Buchanan, 2005). The current study uses interviews as the primary method of data collection and uses documents, although not portfolios, in an ancillary way.

<center>Students' Construction of Knowledge</center>

Insights on how to conceptualize and understand integrative learning comes from cognitive science, often referred to as the science of learning. Some of the literature identified specific strategies for helping students retain and recall information (Halpern & Hakel, 2000, 2003; Mentkowski & Associates, 2000). According to Dressel (1958), the integrative process involves attempts " . . .*to organize in meaningful fashion knowledge and experience which at first seem largely unrelated*" (p. 22). Dressel made the claim that integrative learners are able to learn new knowledge efficiently. The organizational structures created when one integrates are flexible and easily adapt to new information. A key benefit of integrative learning, then, is cognitive agility and sophistication. These individual benefits make integrative learning an important learning outcome for higher education in and of itself rather than just a means to reach other desirable learning outcomes such as problem-solving and team process (Hursh, Haas, & Moore, 1998).

Piaget (1963, 1968), in the context of child cognitive development, referred to the process of integrating new information with existing mental structures as assimilation and accommodation. As people learn new information, they attempt to make it fit into existing cognitive structures (assimilation). When new information does not readily fit

those frames or structures (i.e., assimilate), the frames are either adjusted to accommodate the new insights or the new information is discarded. Although the realization of underlying mental frameworks that organize information for better recall is not new (Bloom, 1956), mental models or organizing frameworks are also used in meaning making and are a distinguishing characteristic of experts (Bransford et al., 1999; National Research Council, 2001).

Actively engaging with learning and modifying existing mental frames are part of Kolb's (1984) experiential learning theory. He asserted that learning is a process rather than an outcome. Kolb suggested that Piagetian ideas of assimilation and accommodation promote cognitive development and through experiences people become more sophisticated thinkers as their conceptual mental frames adjust to accommodate a new set of perspectives.

Linking new learning and information to existing structures to build new understandings and meanings is an idea consistent with the constructivist tradition (Baxter Magolda, 2004; Mertens, 2005). Constructivism embraces the idea that people actively make meaning of their experiences. For the constructivist, learning occurs in the individual, yet learning may be facilitated by other people with knowledge and experience (Cobb, 1994; Phillips, 1995; Woods & Murphy, 2002). In describing social constructivism, Baxter Magolda stated, "realities are multiple, context-bound, and mutually shaped by interaction of the knower and the known" (p. 35). Indeed, social constructivism is evident in a number of publications that attempt to translate the science of learning to good educational practice (AAHE et al., 1998; Bransford et al., 1999; Halpern & Hakel, 2003; National Research Council, 2001). Vygotsky (1978) argued that

learning is facilitated by engagement with others who are more knowledgeable. The difference between one's current developmental level and a more advanced developmental level that one can reach with the assistance of more experienced others is called the "zone of proximal development" (Vygotsky, p. 86). There is an optimal dissonance where there is sufficient discord to motivate change and, with sufficient support, this condition can lead to learning and developmental growth. One goal of education is to intentionally disrupt the status quo by questioning and challenging existing beliefs and truths (Dressel, 1958). The disequilibrium, triggered by the challenges to existing beliefs, can lead to the socially supported construction of new knowledge, which is at the heart of social constructivist learning theory (Phillips, 1995). The expectations of integrative learning potentially fit this model. If the diverse perspectives encountered by a student are in conflict, then reconciling them will likely involve some dissonance. That is, there is likely to be uncertainty and discomfort that, if not too great and successfully resolved, can lead to cognitive development. By confronting complexity and tension in conflicting perspectives within one's zone of proximal development, integrative learning and enhanced cognitive capacity may result (Newell, 1999; Vygotsky).

Cognitive Complexity

The Carnegie Foundation/AAC&U initiative exploring how campuses foster and measure integrative learning claims that developing integrative learning in students is "one of the most important goals and challenges of higher education. . . . [in that it will] prepare them to make informed judgments in the conduct of personal, professional, and civic life" (Taylor Huber & Hutchings, 2004, p. 13). Bloom (1956) also claimed that

integration was an important cognitive task. In his taxonomy of educational objectives, synthesis was the penultimate item in his scheme. In a recent revision of the taxonomy, Anderson and Krathwohl (2001) replaced "synthesis" with the verb "create" and it was elevated to the most complex cognitive task. Synthesis is a term frequently associated with integration (AAC&U, 2005; Newell, 1998b, 2001a; Thompson Klein & Newell, 1997).

The idea of integration as an advanced capacity is echoed in Kolb's (1981) experiential learning model. The experiential learning model describes three phases of human growth: acquisition, specialization, and integration. Following the development of basic skills comes the specialization phase, characterized by efforts to perfect a learning style. Preferences for learning are well established and other modes are neglected. It is not until later in life that a person strives to create balance in her or his approach to the world by developing non-dominant learning styles. Along this developmental trajectory is an increase in "complexity and relativism" (Kolb, p. 250). The development of the various forms of complexity (symbolic, behavioral, affective, perceptual) rarely happen in a uniform manner, similar to other developmental patterns that are characterized by recursive paths (Kolb; Perry, 1981). Kolb's model supports the idea of integration as a developmentally complex phenomenon that is achieved later in life.

Although not all integrative learning is interdisciplinary, all interdisciplinary learning is integrative. Interdisciplinary inquiry requires integrating knowledge, crossing boundaries between and among disciplines, being creative and innovative, reasoning by analogy, reasoning deductively, as well as the ability to synthesize (Newell, 1998c). Synthesis, by definition, demands that students recognize the contributing elements as

contextual and constructed and reassemble a whole greater than the sum of its parts (Thompson Klein, 1999). Some researchers make the case that interdisciplinary work requires "deep learning" as compared to surface learning (Ivanitskaya, Clark, Montgomery, & Primeau, 2002; Moore, 2002). Deep learning involves underlying conceptual ideas and relationships whereas surface learning is more superficial and relies more on memorization (Moore). Deep learning requires the ability to rely more on internalized ideas of what constitutes learning, to be less dependent on authority, and to have confidence in what one thinks and does (Ivanitskaya et al.).

Cognitive development theories. Additional evidence of the complexity of integrative learning comes from theories describing college students' cognitive development (Baxter Magolda, 1992, 1999; Kegan, 1994; Perry, 1970, 1981). Most cognitive developmental theorists do not give explicit attention to integration or integrative learning in their models; however, components of the integrative process can be identified. Perry (1981), building on Piaget's (1963) work, crafted a theory based on interviews with Harvard University men in the 1950s and 1960s. In his early effort to capture the developmental processes underlying how students understand their world, Perry (1981) identified nine positions, which are frequently condensed into four groups: Dualism, Multiplicity, Contextual Relativism, and Commitment in Relativism (Perry, 1981). Early positions are characterized by reliance on external authority for decisions and a tendency to view the world in dichotomous ways (e.g., right/wrong). These positions are referred to as dualism. Multiplicity is characterized by recognizing diverse opinions and an inability to differentiate among them, believing that everyone has a right to his or her opinion and opinions cannot be wrong. In contextual relativism, students

begin to recognize the influence of context. Students in this position know opinions must be supported with evidence to have credibility. The final three positions in Perry's scheme are referred to as commitment. These positions reflect a thoughtful awareness of one's views and values and a strong sense of internally derived direction. Although the stages are descriptive of developmental milestones, Perry (1981) thought it was likely that the most growth occurred in the transitions between the stages. The transitions host the disequilibrium that must accompany developmental change (Hursh et al., 1998; Perry, 1981; Piaget, 1968). Perry (1981) also recognized that development was not necessarily linear and that a student's developmental journey could involve pauses (temporizing) and retreat from personal responsibility to less sophisticated stages.

The descriptive power of Perry's (1981) scheme was strong, but not inclusive of the developmental experiences of women. In an effort to learn more about the ways women come to know, Belenky, Clinchy, Goldberger, and Tarule (1986) conducted a study of women's experiences as "learners and knowers" (p. 11). From their study, five distinct perspectives emerged as descriptive of how women think about their lives. The different perspectives include Silence, Received Knowledge, Subjective Knowledge, Procedural Knowledge, and Constructed Knowledge (Belenky et al.). The perspectives vary on the source of knowledge and the degree of agency one has in creating knowledge. For a woman who sees the world from the point of view of silence, knowledge is external to the individual, the purview of experts, and not something over which she has any control. In contrast, from the perspective of constructed knowledge, knowledge is tentative and context bound and the person in this perspective is an active participant in the creation of knowledge (Belenky et al.). Originally, this model was not intended to be

a developmental theory. Women can shift among the different perspectives at different times in their lives (Goldberger, Tarule, Clinchy, & Belenky, 1996). Understanding the way women know provided an important reminder that not all people fit the pattern of development outlined by Perry (1970, 1981) and paved the way for more work in cognitive development theory.

During her dissertation research, Baxter Magolda (2004) also noted that the women in her study did not fit neatly into Perry's developmental positions. This discovery prompted her to consider a research agenda that could lead to a more inclusive model of intellectual development. Baxter Magolda's 1986 study was an effort to understand women's experiences and led to a theoretical model that had room for both men and women. The Epistemological Reflection Model was shaped by this longitudinal research. Through the analysis of interview transcripts of students during their college years, a developmental sequence emerged describing the nature of knowledge and the nature of knowing as it applies to learning (Baxter Magolda, 1992). Each of the first three developmental positions has two gender-related patterns describing how students come to know. Absolute knowing is described by beliefs that knowledge is concrete and certain and is imparted by authorities (Baxter Magolda, 1992). The two patterns of knowing at this level are receiving, a preference for listening, and mastering, a preference for asking questions and engaging with authority figures in a learning context. Although men and women exhibited both patterns, more women followed the receiving pattern and more men the mastering pattern. Transitional knowing acknowledges that some knowledge is uncertain, but only in a few areas. Transitional knowers seek understanding. Some students (mostly women) exhibited interpersonal patterns characterized by interacting

with others to hear others' views, cultivate relationships, and share their own ideas. The impersonal pattern involves discussion characterized by debate and challenge, preferably with the professor. Independent knowers accept knowledge as uncertain. Students at this level are beginning to recognize the validity of their own perspective and tend to believe everyone has a right to his or her opinion. The two patterns of knowing for independent knowers are interindividual, where students are eager to learn from different perspectives and want to share their own views (used more often by women), and individual, characterized by focusing on one's own views while engaging in discussion with others and perhaps not listening attentively to what others have to say (used more often by men). Finally, contextual knowing describes a phase where knowledge is uncertain and context bound, constructed by integrating expert insight, others' views, and one's own perspective. There were no discernable or distinct patterns of knowing among contextual knowers. In her later work, Baxter Magolda (2001) expanded her epistemological reflection model to describe the way college graduates, through encounters with diverse peers and experiences, become increasingly more self-reliant about how they think, interact with others, and think about themselves. Baxter Magolda (1998, 2001) and Kegan (1994) refer to this process as self-authorship.

Epistemology of integration. Integrative learning embraces a way of knowing that acknowledges uncertainty and ambiguity. To be successful at interdisciplinary and integrative learning, a student may need to be comfortable with the idea that knowledge is uncertain and relative as represented by Perry's (1970) positions within contextual relativism or commitment in relativism or be an independent or contextual knower according to Baxter Magolda (1992). The emphasis on understanding and building

connections also reveals a constructivist assumption in integrative learning and interdisciplinarity. With support, students can navigate confronting new ways of looking at the world and adjust their existing cognitive frames. In her edited volume on interdisciplinary pedagogy, Haynes (2002a) introduced chapters on interdisciplinary teaching with insights about the cognitive demands of integrative thinking. Integrative thinking, Haynes explained, is an ambitious task for students, requiring "movement away from an absolutist conception of truth to a conception of truth that is situated, perspectival, and discursive and that informs and is informed by the investigator's own sense of self-authorship" (p. xv).

Integrative learning is a process rather than a product (Thompson Klein & Newell, 1997). When students learn to integrate, they are using sophisticated cognitive structures that allow them to manage ambiguity and complexity (Haynes, 2002a; Newell, 2001b; Thompson Klein, 1999). Similar to the emphasis of the cognitive development theorists (Baxter Magolda, 1992; Perry, 1981; Piaget, 1968), of interest is not what the student is thinking, but *how* she or he is thinking (Hursh et al., 1998). Epistemological development is a process of becoming more complex and sophisticated about how one knows. The constructivist position on personal epistemology suggests that people actively make meaning of their experiences; they construct it (Baxter Magolda, 2004). Internal assumptions and external relationships and experiences intersect with personal epistemology to promote change and transformation of a person's view of knowledge (Baxter Magolda, 1998, 2001).

Self-authorship captures the complex interplay among three developmental dimensions: epistemological (how we know and decide what to accept as knowledge),

intrapersonal (how we view ourselves), and interpersonal (our relationships with others) (Baxter Magolda, 2001). A person who engages in self-authorship is able to contribute to knowledge construction, put himself or herself at the heart of knowledge building, and collaborate or consult with others in the process (Baxter Magolda, 1998, 2001; Kegan, 1994). According to Baxter Magolda (2001), very few students in the predominantly White, Christian, affluent student sample in her longitudinal study exhibited evidence of self-authorship in college. Most of her participants did not become contextual knowers during college. They tended to rely on external formulas for managing life decisions and were not adept at considering multiple perspectives before making a decision (Baxter Magolda, 1998, 2001).

Baxter Magolda (1998, 2001) continued interviewing her college student participants beyond graduation. She learned that when these graduates confronted difficulties at work or at home many were forced to wrestle with dissonance in ways that were more immediate than ever before. Reconciling these problems prompted many graduates to internalize belief systems and strategies so that they could author their own lives. Perhaps if this dissonance could be encountered during the college years, students would be more likely to develop self-authorship as undergraduates. Hofer and Pintrich (2002) critiqued Baxter Magolda's work by suggesting that the participants in this study had not encountered some of the challenging and disruptive experiences that a more diverse environment might have provided, stating that such challenges can provoke developmental changes. Research involving high-risk students who had to navigate the college admission and matriculation processes without the support of knowledgeable others showed greater progress toward self-authorship than those students in Baxter

Magolda's study (Pizzolato, 2003). "High-risk" students in Pizzolato's study include

students who are more likely to withdraw from college because of poor academic

preparation or performance, or those who are first-generation students, or come from low

socioeconomic backgrounds. Almost half of the sample were women and most were

students of color. Pizzolato's study suggested that self-authorship was developed when

students were able to successfully navigate university systems despite being outside their

zone of comfort.

One of the hallmarks of integration is reconciling disparate points of view

(Newell, 1999; Thompson Klein & Newell, 1997). Encountering conflicting perspectives

either from trusted authorities or confronting a compelling perspective in conflict with

one's own deeply held beliefs can be threatening for undergraduate students (Newell).

When these perspectives relate to one's identity, such as issues about race, class, or

gender, the level of threat can be heightened (Newell). The dissonance created by these

encounters can be overwhelming, but students can also be supported sufficiently to

weather these disquieting experiences and emerge as more independent and confident

thinkers capable of authoring their own lives (Baxter Magolda, 1998; Knefelkamp, 1984).

Faculty and staff can do much more to design intentional learning opportunities for

students to confront diverse perspectives, to challenge underlying assumptions, and to

promote self-authorship and integrative learning in their students (Baxter Magolda &

King, 2004; Kegan, 1994; Taylor Huber & Hutchings, 2004). The pursuit of integrative

learning seems compatible with the goal of developing self-authorship.

Indeed, Baxter Magolda (1998) outlined several ways higher education can strive

to promote self-authorship, including creating dissonance, giving students a chance to

construct knowledge, and attending to identity development by connecting self-understanding to learning. Educators, then, need to recognize that "*knowledge is complex and socially constructed, . . . self is central to knowledge construction, . . .* and *authority and expertise are shared in the mutual construction of knowledge among peers*" (Baxter Magolda & King, 2004, p. 188). These three principles can influence educational practice by "*validating learners' capacity to know, . . .situating learning in the learner's experience, . . . and mutually constructing meaning*" (Baxter Magolda & King, p. 191). By engaging in this intentional development of self-authorship, campus communities may also be creating contexts conducive to transformative learning (Kegan, 2000). Kegan, building on Mezirow's (2000) work, makes the case that learning designed to cultivate self-authorship is transformative. The integrative process, too, may prompt a change in the way a student knows and makes meaning such that what was "subject" becomes "object" (Kegan, 1982, 2000). That is, the dissonance experienced when confronting diverse perspectives characteristic of integration can transform thinking and lead to self-authorship.

Summary

This chapter provided an overview of the literature that informs the current study. The current emphasis on student learning in higher education was put in historical context with specific attention to integrative learning as a desired collegiate outcome. Some of the characteristics of the higher education environment for integrative learning were discussed. The chapter then outlined educational innovations intended to promote integrative learning, such as integrated learning environments and interdisciplinary pedagogies, and discussed the distinctive challenges of assessing integrative learning.

The characteristics of integrative learning as a complex mental process were explored, including connections to higher-order cognitive skills, the epistemological demands, and possible similarities to self-authorship and transformative learning.

CHAPTER III

METHODOLOGY

This chapter explores the underlying philosophical roots of qualitative methodology and the characteristics of grounded theory. The research context is described in detail followed by a discussion of research methods and data analysis procedures. I next describe trustworthiness and research ethics, concluding with a discussion of my background as the researcher.

Purpose of the Study

The purpose of this grounded theory study was to understand undergraduate students' perceptions of and experiences with integrative learning in an explicitly integrative academic program. Specific research questions included:

1. How do students make meaning of integrative learning?

2. Do students learn to integrate, and if so, which experiences do students identify or perceive as contributing to their learning?

3. What successes and challenges do students experience with integrative learning?

The research questions addressing students' experiences with integrative learning were exploratory and reflect the dearth of empirical studies addressing integrative learning as a learning outcome. As such, they were well suited to qualitative methodology (Creswell, 2003; Mertens, 2005).

A goal of this research was to develop a theory about students' experiences with integrative learning that was grounded in the data. In addition, to learn more about the

Integrative Studies degree program and the institutional context of this study, I interviewed faculty and staff affiliated with the program and reviewed documents related to the mission and curriculum.

Constructivist Grounded Theory

Intended to capture the complexity of human experience through an inductive process, qualitative research acknowledges the context of study participants by locating the research in the natural environment (Creswell, 2003). Patton (2002) recommended qualitative methods to investigate problems about processes where an in-depth view of individual experiences is needed. Although many different data collection strategies could be appropriate, it would be unlikely for a proposed data collection procedure to unfold in a manner identical to the original plan. In fact, one distinguishing feature of qualitative research is the emerging and interpretive nature of the data collection process (Denzin & Lincoln, 2000). Rigid sample sizes and objective measures are not consistent with the evolving nature of qualitative research. The hallmarks of qualitative research include: (a) an interest in naturalistic inquiry such that researchers go to participants in their natural setting, (b) an interest in capturing complex processes, and (c) a view of data analysis and interpretation that is emergent from the data itself (i.e., an inductive process) (Charmaz, 2000; Denzin & Lincoln, 2005; Mertens).

The qualitative approach that guided this study was grounded theory methodology, which has its disciplinary roots in sociology. Grounded theory was the outgrowth of the collaboration of two researchers representing two distinct traditions: Strauss who was at the University of Chicago where qualitative methods were embraced and where the legacy of pragmatists such as Dewey was palatable, and Glaser from

Columbia University who came from a strong quantitative perspective (Charmaz, 2000; Strauss & Corbin, 1990, 1998). This early collaboration in the mid-1960s marked a reemergence of the qualitative research movement and the advent of grounded theory methodology (Charmaz, 2000).

Grounded theory is a methodology that guides researchers in developing theory out of data, thus making the theory "grounded" in the data (Clarke, 2005; Mertens, 2005; Strauss & Corbin, 1990). The central concern of grounded theory researchers is engaging with and understanding the data (Charmaz, 2002). Grounded theory relies on making comparisons across the collected data. Through a process of differentiation and integration, grounded theory involves closely examining and pulling apart data into descriptive categories. Following this fragmentation is a process designed to reassemble and reintegrate the parts into a coherent and representative theory. Through comparisons, the emerging analysis is tested against existing data and preliminary understandings are explored through more data collection. Grounded theory uses a "self-correcting, analytic, expanding process" (Charmaz, p. 682) to guide data collection and analysis.

Researchers use memos to explore their preliminary understanding of the data, to explore and expose their own biases and assumptions, and to cultivate conceptual categories (Charmaz, 2002; Fassinger, 2005). Memos are an important safeguard against imposing preconceived structure and interpretations on the data. Insights explored in the memos are likely to prompt further data collection (Charmaz). By promoting a reflexive stance for the researcher, memos serve an important role in constructivist grounded theory. Distinctive features of grounded theory methodology include (a) the persistent interplay of data collection and data analysis leading to the identification of themes and

categories in the data, (b) a sampling process driven by theoretical concerns, (c) data analysis that is sparked by asking questions of the data and writing memos, and (d) theory development aimed at capturing a process or action (Charmaz, 2000, 2002, 2006; Clarke, 2005; Mertens, 2005).

Charmaz (2000) convincingly argued that the work of Glaser and Strauss as well as Strauss and Corbin is positivist in its orientation, despite its groundbreaking role in advancing qualitative methodologies. She made the case that early manifestations of grounded theory assume an external reality exists to be discovered by an impartial researcher. This ontology coupled with the strict, formulaic approach to data analysis described by Strauss and Corbin gives this earlier brand of grounded theory clear positivist tendencies. It is as if there is a truth inherent in the data that is waiting to be uncovered (Charmaz; Mertens, 2005). Clarke (2005) took Charmaz's critique further by arguing for a new approach to grounded theory that is compatible with postmodernism. Clarke's emphasis was on providing additional analytical tools used to interpret data and build theory that focuses on the situation. In addition to the traditional techniques used in grounded theory, Clarke's situational analysis contributed a situation-specific perspective that honors postmodern sensitivity to context and the existence of "*situated* knowledges" (p. xxv).

Strauss and Corbin (1994) recognized this evolving nature of grounded theory. Yet it is Charmaz (2000, 2002, 2006) who advanced the constructivist version of grounded theory used in this study. Constructivist grounded theory "takes a middle ground between postmodernism and positivism and offers accessible methods for taking qualitative research into the 21st century" (Charmaz, 2000, p. 510). Constructivist

grounded theory is an interpretive methodology in that it claims that knowledge and experience are mutually shaped by the participant and researcher rather than accepting that an objective truth is waiting to be uncovered. This openness to interpretations of participants' experiences is rooted in a constructivist paradigmatic perspective. Constructivism holds that there are multiple realities in the world and each person creates or builds her or his understanding by linking new knowledge to existing cognitive organizational structures (Charmaz, 2000; Mertens, 2005). According to Charmaz (2002), the grounded theory researcher "aims to learn participants' implicit meaning of their experience and build a conceptual analysis of them" (p. 678).

This understanding of constructivist grounded theory is appropriate for this study because it is compatible with both the research questions and with my worldview. Indeed, the very nature of how people learn is rooted in the ontological assumption that multiple realities exist and the epistemological assumption that these realities shape understanding as people actively construct meaning (Bransford et al., 1999). In describing her journey to a constructivist stance while researching college students, Baxter Magolda (2004) acknowledged that "realities are multiple, context-bound, and mutually shaped by interaction of the knower and the known" (p. 35). For her, the constructivist position on personal epistemology suggests that people actively make meaning of their experiences (i.e., they construct it). Internal assumptions and external relationships and experiences intersect with personal epistemology to promote change and transformation of a person's view of knowledge.

As a social constructivist, I am interested in the individual student as knower. This knower is embedded in a sociocultural context, and this context enables and

constrains the learning that is possible. Although people construct meaning in relationship with others, the learning experience is more private and internally conceived (Cobb, 1994). Each person builds her or his own understanding, and these constructions are likely to differ from one another. Thus, this study embraces social constructivism, a constructivism that recognizes the importance of social context. In this study, the undergraduate student participants and I, as the researcher, worked together to enhance understanding of students' experiences with integrative learning (Brown, Stevens, Troiano, & Schneider, 2002; Charmaz, 2000, 2005). In short, constructivist grounded theory maintains (a) a belief in the agency of individuals and their ability to represent their experience faithfully, (b) the belief that meaning is constructed through social interactions, (c) the constant interplay of data collection and data analysis, (d) using detailed description, (e) a commitment to systematic coding of data and reflective practices on the part of the researcher, (f) using memos to facilitate conceptual analyses, and (g) using theoretical sampling to aid in refining theory (Charmaz, 2000; Denzin & Lincoln, 2005; Mertens, 2005). Researchers engage in both analytical and creative thinking when they interpret data and generate codes and categories (Strauss & Corbin, 1990; 1998). The goal of this study was to develop a theory of students' experiences with the process of integrative learning.

Research Context

An Integrative Studies degree program at a comprehensive university in the greater Washington, DC region served as my research site. For the purposes of this report, the academic program will be referred to as "Integrative Studies." Integrative Studies is a degree-granting unit within Arts and Sciences that was established in 1995 by

the state's higher education governing board. The goal of this new college was to offer an innovative and unparalleled undergraduate experience at the university (Elfant, 2002).

The University Context

The university is a public, 4-year institution with multiple campuses. The main campus is the location of this study. In its mission statement, the university expresses it commitment to interdisciplinary research and teaching "by rethinking the traditional structure of the academy" (University, 1991, p. 1). It professes an interest in preparing students for problem-solving roles and for finding meaning in their lives, a commitment to diversity, and an interest in attracting a faculty that is "diverse, innovative, excellent in teaching, active in pure and applied research, and responsive to the needs of students and the community" and willing to embrace the university's goal of inspiring "interactive" change (University, p. 1).

The university is a large, suburban university rated as an Intensive Doctoral/Research institution under the Carnegie classification system (University Gazette, 2000). In Fall 2005, there were 17,525 undergraduate students seeking degrees at this university and another 12,203 graduate students or non-degree seeking students for a total enrollment of 29,728 (University, 2005a). Eighty-three percent of the students were in-state residents and a total of 9,806 (33%) were from underrepresented racial/ethnic groups or international students. In Fall 2005, the number of first-time first-year students was 2,538. Although not described as transfer students by the Office of Institutional Research, many students come to this university as "other freshmen" or as new students in the sophomore, junior, or senior years. Tuition and fees for Fall 2005 were $5,880 for in-state undergraduate students and $17,160 for out-of-state

undergraduates. Room and board was $7,903 per year on average (University, 2005a). The athletic program is in the National Collegiate Athletic Association (NCAA) Division I.

Integrative Studies

Integrative Studies is a degree-granting unit within the Arts and Sciences at the university (University, 2005c). Founded in 1995, the Integrative Studies program offers two Integrative Studies degrees: the bachelor of arts in integrative studies and the bachelor of science in integrative studies. The Office of Institutional Research and Reporting (2005) stated that the Fall 2005 undergraduate student enrollment in Integrative Studies was 327. This population was comprised of 9 first time first-year students, 11 other freshmen, 60 sophomores, 122 juniors, and 125 seniors. Thirty-four percent of the Integrative Studies students were from underrepresented racial/ethnic groups or identified as "other/no race." Of the 327 students, 21 were African American (6%), 36 were Asian American (11%), 17 were Hispanic American (5%), 1 was Native American (<1%), and 35 were "other/no race" (11%). Five students were international students "non-resident alien" (2%) (Office of Institutional Research and Reporting, 2005). Most of the students were in-state residents (90%) (Office of Institutional Research and Reporting). According to the dean's office, most of the students commute to campus. In 2003-04, 122 students earned the bachelor of arts in integrative studies and 16 students completed the bachelor of science. Of these graduates, 42 were from underrepresented racial/ethnic groups (34.4%) (Office of Institutional Research and Reporting).

Curriculum. Students in Integrative Studies meet the general education requirements at the university by completing a set of competencies, including "communication, critical thinking, information technology, problem solving, valuing, aesthetic response, social interaction, effective citizenship, and creating global perspectives" (University, 2004b, p. 2). Students demonstrate their competencies in these areas through portfolios that are created in most Integrative Studies classes. A comprehensive portfolio prior to graduation addresses student progress on the competencies. The senior capstone course is designed to support students as they prepare their graduation portfolio. The college describes three categories of requirements for Integrative Studies students: general education, including a first-year experience (Division I), learning communities (Division II), and concentration (Division III). In addition, students have an experiential learning requirement, and must complete a senior capstone course and a graduation portfolio (University, 2005c). The first-year experience is a year-long core curriculum and learning community. Students enroll in four courses in common, each for one half of a semester or six weeks, with a two week break between units offered in the same semester: Community of Learners, The Natural World, The Social World, and Self as Citizen (University, 2004a). The courses are small, seminar - style with extensive reading, writing, and collaborative projects as well as opportunities for service-learning or individual projects (University, 2004a). Division II learning communities are courses that are "integrative in nature (exploring issues from multiple perspectives and academic disciplines)" (University, 2005c, p. 2). Experiential learning is possible in some learning communities. The "integrative concentration" that comprises Division III is a predetermined set of course offerings of at least 30 semester credit hours

that can be modified with the guidance of a faculty advisor (University, 2005c, p. 2).

Twelve credit hours of experiential learning are required and may be fulfilled with

coursework in Division II or Division III. Each experiential opportunity includes a

reflective paper (University, 2005c). All Integrative Studies students also must complete

a senior capstone course, which is taken the semester prior to graduation. In this course

students "present a senior exposition and begin to write the graduation portfolio"

(University, 2005c, p. 3). The graduation portfolio is the vehicle students use to

demonstrate that they have successfully completed the academic skills and competencies

required for graduation. Both the capstone and the portfolio provide an opportunity for

"synthesis" (University, 2005c, p. 3).

Faculty reported that the integrative nature of the program is achieved in several

ways. First, the first-year experience models an integrative approach to learning by

addressing several different disciplinary perspectives as they apply to a common theme.

Although interdisciplinarity per se is not emphasized, these classes bring in different

perspectives on a theme. The four themes addressed in the first year are Community of

Learners, The Natural World, The Social World, and Self as Citizen. Second, the

experiential learning component is intentionally connected to the curriculum and offers

students a chance to relate their more formal academic work to a real world context.

Third, the use of portfolios stimulates students to make connections within and between

courses. Fourth, by emphasizing competencies rather than specific units of credit needed

to complete requirements, students are encouraged to see their education as seamless

rather than segmented and compartmentalized. Fifth, the concentrations pursued by

students include courses from more than one academic department. Sixth, all students

take a senior capstone course intended to provide a point of synthesis for their academic career and to support the creation of a graduation portfolio.

The Integrative Studies program at this university met several key criteria, making it a desirable location for this study. Integrative Studies (a) offered a degree program that explicitly cultivates integrative learning in its students, (b) had a traditional age student population, and (c) included a racially/ethnically diverse student body. Additionally, this academic program was a site in which I have had no previous experience, and was located within driving distance of my home.

Integrative Studies program. Three hundred twenty-seven students were enrolled in the Integrative Studies program in Fall 2005 (Office of Institutional Research and Reporting, 2005). The Integrative Studies website tells prospective students that the Integrative Studies program "creates a dynamic learning environment which integrates interdisciplinary knowledge with workplace and lifelong learning skills" (University, 2005b, p. 1). Students "think deeply about what, why, how, and for what purposes they learn" (University, 2005b, p. 1). This academic program was cited by Thompson Klein (1999, 2001) as one of several models of current interdisciplinary and integrative learning programs in the United States. In addition, this university was identified by the National Survey of Student Engagement (NSSE) as an institution that is "educationally effective" based on strong NSSE benchmark scores that relate to levels of student engagement (Hinkle, Kezar, Magolda, Muthiah, Schroeder, & Whitt, 2003). These scores were higher than would be predicted given the incoming characteristics of the student body. The Integrative Studies program specifically was identified by the NSSE report as a site of outstanding curricular innovation where active and collaborative learning is strong

(Hinkle, et al.). It is important to note that these measures are not attempting to assess the effectiveness of the Integrative Studies programming at cultivating integrative learning. The NSSE benchmarks are more general measures of student engagement consistent with the literature on effective educational practices. Another indicator of program quality is the program's participation in the Boyer Center's Partnership Assessment Project on student affairs and academic affairs partnerships (Bucher, 2004).

Traditional age student body. Students enrolled in the Integrative Studies program are overwhelmingly of traditional age. The associate dean's office reported that approximately 90% of the students are between the ages of 18 – 23. This study was limited to traditional age students because of my interest in understanding how students in this age range grapple with integrative learning. Although I expected a diversity of developmental levels within the traditional age population, limiting my study to students who were 18-23 years old could allow for the emergence of a developmental pattern related to integrative learning. The lower end of this range ensured that all participants were legal adults able to consent to participating in the research. The upper end of the age range acknowledged the possibility that a student might take five years to complete a degree. Including students with more life experience might complicate the analysis given the possibility that more mature students engage the world from a more sophisticated perspective and are more internally directed in their thinking. I was seeking participants who would offer a wide a range of cognitive development perspectives.

Racially/ethnically diverse students. Students enrolled in the Integrative Studies program are racially/ethnically diverse. In Fall 2005, 34% of the students were from underrepresented racial/ethnic groups or selected "other/no race" (Office of Institutional

Research and Reporting, 2005). Excluding the "other/no race" category, 23% were

students of color. Specifically, there were 21 African American students (6%), 36 Asian

American students (11%), 17 Hispanic Americans (5%), and one Native American

(<1%). Although this qualitative study does not claim representativeness in the same way

as large-scale quantitative studies, being inclusive of different perspectives that may be

shaped by race/ethnicity is important. Too many studies in higher education have been

conducted with a sample of convenience that tends to be dominated by White students.

Although the connection between meaning-making capacity and racial/ethnic background

is not conclusive, there are some researchers who suggest the experience of coping as a

person in an underrepresented group may facilitate cognitive complexity (Fassinger,

1998; Kich, 1996; King & Shuford, 1996; Pizzolato, 2003). The discomfort these

students experience and manage as a person with a marginalized status might give them

the tools to think in more complex ways about the world.

<div align="center">Sampling</div>

This study drew participants from two different populations: undergraduate

students enrolled in the Integrative Studies degree program (bachelor of arts and bachelor

of science), and full-time faculty and staff affiliated with the Integrative Studies program.

The emphasis of this study is on student experience; therefore I present the aspects of the

study that relate to students first. However, the faculty and staff portion of the study took

place prior to the work with students.

Theoretical Sampling

Consistent with the recommendation of grounded theory experts, this study

employed theoretical sampling of the student population (Charmaz, 2000, 2002; Strauss

& Corbin, 1990, 1998). This hallmark of grounded theory placed theory-building at the center of the sampling process. A key interest was identifying data sources that allowed for comparisons (Charmaz, 2000, 2002, 2005). As data were collected and coded, I sought additional participants to investigate the appropriateness of the codes and to address the gaps in my understanding. I also reviewed the collected data for evidence of the emerging themes (Fassinger, 2005). The nature of theoretical sampling demands more than one interview contact with each participant (Charmaz, 2000, 2002). Charmaz (2000) also recommended engaging in theoretical sampling later in the study to prevent forcing the data into codes and to prevent "premature closure to the analysis" (p. 520).

Sampling of Student Participants

    Sampling criteria. Initially 12 students were sought for the study, three at each level of academic standing (first-year through senior). Ten students participated in the study, one first-year student and three students each with sophomore, junior, and senior standing. I present details on these participants in chapter V. More important than specific numbers is the depth of understanding achieved through the data collection process (Creswell, 2003). According to Jones, Torres, and Arminio (2006) it is important to pursue a sample that will "elicit insight and greater depth of understanding about the phenomenon of interest" (pp. 67-68). To explore issues related to student experiences with integrative learning, the sampling of student participants was guided by the goal of including diverse points of view and experiences regarding integrative learning. I sought student volunteers with different levels of class standing as well as a mix of students who began Integrative Studies as first-year students and those who transferred into the

program. By attending to variation on these dimensions, a range of experiences with the formal Integrative Studies curriculum was represented.

The decision to stop sampling at 10 students, with only one first-year student, was guided by theoretical and practical reasons. First, in addition to the one current first-year student, six additional participants had joined the Integrative Studies program as first-year students and talked vividly about their life and coursework as first-year students. Although there may be a difference in how the first year is represented between those recalling the experience and those actively engaged in it, the references to the first year from students in the second, third, and fourth years were compatible with the comments from the first-year student in the study. The only qualitative difference in their comments was that the current first-year student provided more logistical and organizational details related to the first year. A second reason for not interviewing more first-year students was a timing problem. If I pursued students who had been first-year students in 2005-06, they would have been second year students in the Fall 2006, the next opportunity I had for recruiting new participants. If I recruited current first-year students in their first semester of college, it may have been too early in their collegiate experience to engage fully in the study. Third, the practical reason for not recruiting more first-year students was a recruitment problem. Although one other first-year student expressed interest in the study, he did not complete an interest form and, therefore, was not invited to interview. When additional participants no longer offered new insights into integrative learning in the Integrative Studies program, then it was possible to conclude that the sample was saturated.

Sampling strategies. All student participants were selected using purposeful sampling with a goal of achieving maximum variation on demographic variables as well as in perspectives on integrative learning; the latter was achieved by having a sample that was stratified across the four years of the academic program. The goal of purposeful sampling was to identify "information-rich cases" (Patton, 1990, p. 169). To achieve these goals, I requested the electronic mail addresses of all 327 students with declared Integrative Studies majors. I invited students to participate in the study via electronic mail and selected a stratified sample from the students who volunteered to be interviewed. To recruit additional first-year students, I used snowball sampling with the help of faculty and staff. Faculty and staff informants recommended students for the study based on the theoretical needs of the data collection and analysis. Given the possible connection between cognitive complexity and a person's non-dominant status in society described earlier, this study sought to achieve variation on a variety of demographic variables including race and ethnicity, gender, sexual orientation, physical ability, family educational level, and immigrant generation status (Fassinger, 1998; Kich, 1996; King & Shuford, 1996; Pizzolato, 2003). Although I was not seeking maximum variation on each of these demographic variables or attempting to be representative, the maximum variation strategy provided a rich and comprehensive range of student experiences on which to base the analysis. Yet, this variation must be constrained by certain criteria (e.g., criterion sampling) (Mertens, 2005; Patton, 1990). The main criteria for the student participants were being a current full-time student between the ages of 18-23 and being enrolled in the Integrative Studies degree program. Students were asked to meet these criteria before expressing interest in the study.

Participant recruitment. The associate dean announced this study in general terms via an electronic listserv to all students enrolled in Integrative Studies in early March 2006, immediately after receiving formal approval from the Institutional Review Board from the University of Maryland and the host university (Appendix A). Initially, I attempted to invite all students enrolled in the Integrative Studies program (327 as of Fall 2005) to participate in the study. The recruitment process included a written invitation from me (Appendix B) that was sent electronically along with an interest form (Appendix C). A more tailored invitation to participate in the study was sent to students nominated by faculty and staff (Appendix D). Interested students completed the interest form (Appendix C) included in the letter of invitation (Appendix B) and returned it to the researcher by electronic mail or by depositing it in a drop off box in the lobby of the Integrative Studies program's administrative home. I reviewed the interest forms as they were submitted to select a sample that included students in each of the four years of the degree program. The Institutional Review Board at the host institution requested a change in the interest form such that no demographic information beyond class year could be included on this initial form. Information on other selection criteria could not be collected until participants had given informed consent. I contacted selected students by electronic mail to schedule an interview appointment (Appendix E). This initial sample excluded first-year students, a detail that was discovered when no first-year students volunteered after the initial appeal. An email invitation (Appendix B) was sent to the first-year student listserv in late March. Four faculty or staff members were asked to nominate first-year students for the study between late March and mid-April. Only two students who initially volunteered for the study were not selected to participate because they did not

diversify the sample based on class standing. These students were notified by electronic mail and thanked for their interest (Appendix F).

I sent electronic messages to the selected students 24 – 36 hours prior to the interview reminding them of the time and location of their appointment. At the first meeting, the student learned more about the study, provided informed consent (Appendix G), and completed a brief demographic data form (Appendix H). During the interviews, one participant, Bond, revealed that he was 24 years old when he started the study and had turned 25 during the study. Being between the ages of 18 and 23 was a criterion for participating in the study that I had not verified with the participant. Rather than disqualify Bond's participation, I judged that the age range for the study could have been 18-24 without compromising my intention to focus on traditional age students.

Students who agreed to participate in the study received a $25 gift certificate to the campus bookstore after the first interview. To encourage students to persist in the study, another $25 gift certificate to the campus bookstore was given to students who completed all the necessary interviews and provided the writing samples. With the exception of one student who withdrew from the study prior to his first interview, all other students scheduled completed three interviews. Funding for these incentives was provided by the Integrative Studies associate dean's office. Students were not aware that their academic program was providing these incentives. In exchange for the support and incentives, the Integrative Studies program expects a presentation to their faculty on my research.

Sampling of Faculty and Staff Participants

     Sampling criteria. The sampling criteria guiding the selection of faculty and staff were pragmatic. The goal was to find faculty and staff knowledgeable about Integrative Studies, and its university context, who could provide me with insights about the history, culture, and learning goals of the Integrative Studies degree. Of the 18 full-time instructional faculty, 8 faculty and staff were invited initially to participate, and 7 agreed to be interviewed. The eighth faculty member did not respond to repeated invitations to participate in the study.

     Sampling strategies. The sampling objective for faculty and staff participants was purposeful with the goal of gathering rich information about the ways in which the program seeks to explicitly promote integrative learning. Snowball sampling was used beginning with the gatekeeper in the dean's office (Patton, 1990). The associate dean recommended interviewing six faculty members who teach either in the first-year program, the Introduction to Integrative Studies course, or the senior capstone course, and two staff members with significant advising and recruitment responsibilities. These faculty members were suggested as key informants most likely to provide me with extensive background information on the Integrative Studies degree program history and current practice. One purpose of this study was to understand students' perceptions of the Integrative Studies degree program. During the interviews, students identified six faculty who were particularly strong in promoting integrative learning or those whom they thought were less effective in promoting integrative learning. I planned to follow-up with these faculty and staff, but of those identified three had already been interviewed, one did

not respond to my requests for an interview, one was on leave at the time of the follow up conversations, and one was unavailable for personal reasons.

Participant recruitment. After receiving approval from the Institutional Review Boards at the University of Maryland and the host university, the associate dean sent an electronic mail message to faculty and staff in Integrative Studies to announce the study, introduce me as the researcher, and to encourage cooperation with the study (Appendix I). I sent electronic mail messages to faculty and staff recommended for the study by the associate dean (Appendix J) and followed up with phone calls to schedule interview appointments. I told faculty and staff participants that the purpose of the interview was to orient me to the Integrative Studies program, to learn more about the history and culture of Integrative Studies, and to explore the ways in which each faculty and staff member contributed to the integrative learning goals of the degree program. I asked faculty and staff to give their informed consent (Appendix K). Interviews were conducted in the faculty and staff members' offices.

<center>Data Sources and Collection</center>

A gatekeeper facilitated access to the research site, an essential first step to collecting data. After securing access I collected data for this study from several sources: (a) in-depth interviews with students, (b) interviews with faculty and staff, (c) papers or portfolios completed by the student participants, and (d) documents describing the mission and curriculum in Integrative Studies.

Gatekeeper

The associate dean of Integrative Studies is a close colleague of faculty members in my doctoral program. Through informal interactions with the associate dean at

conferences, I secured support for access to students in Integrative Studies. I sought and received Institutional Review Board approval for this study at the University of Maryland and the university hosting this research.

In-depth Student Interviews

Interviews can produce rich data about student experiences and provide a window into cognitive processes. Skilled interviewers can prompt more detailed responses from participants and improvise on the interview protocol, if needed, to pursue a promising lead. Even so, interviews are conducted in an artificial context and, as such, might make participants more anxious. Interviews also privilege ways of knowing that are verbal and expressive (Creswell, 2003). I weighed these benefits and limitations to interviews and concluded that interviews were the most appropriate data collection strategy for this study.

Student interviews were face-to-face, in-depth, semi-structured conversations that were about one hour in length. I conducted student interviews on campus in private meeting rooms in the student union or in available office space within the administrative home of Integrative Studies. All locations were convenient for participants. The goal in selecting an interview site was to create a safe and comfortable environment for students that would encourage candid conversations. Consistent with the goals of theoretical sampling, each participant was interviewed three times (Charmaz, 2000). All interviews were recorded using a digital voice recorder. The interview questions were framed as open-ended probes beginning with words such as "describe," "how," and "what" rather than "why." These question stems were deliberately chosen to elicit a descriptive narrative rather than justification for past actions (Kvale, 1996). The interview questions

(Appendix L) were created to correspond to the research questions, and included queries about the nature of the Integrative Studies degree, assignments that prompted integration, the role faculty and peers played in learning, and how students defined integrative learning. Three recent graduates of the Integrative Studies degree program identified by the associate dean and recruited via electronic mail (Appendix M) pilot tested the student interview protocol after providing informed consent (Appendix N).

The overarching purpose of the interview was ". . . to understand the meaning of what the interviewees say" (Kvale, 1996, p. 31). Although the interview prompts were determined in advance, the semi-structured interview allowed for divergence from the protocol to follow up on salient points brought up by the study participants, and required the interviewer to reflect back the meaning shared during the course of the interview itself (Kvale). As the interviewer, I framed the general theme of the conversation, but allowed the interviewee to select specific instances to share.

Immediately following each 60 – 90 minute interview, I spent at least 10 minutes reflecting on the interview and wrote a memo about the interview setting and first impressions, as well as initial insights and reflections on the interpersonal interaction of the interview (Kvale, 1996). I transcribed each interview as soon as possible after the interview. Some interviews were transcribed within 24 - 48 hours, but all were completed within 7 to 10 days. Within 7 – 10 days, participants received via electronic mail a cover letter and copy of their interview transcript with instructions to review and revise the transcript for accuracy and clarity (Appendix O). This process invited participants to reflect on and possibly alter or add to the conversation. All participants requested that the transcripts and their edits be shared via electronic mail rather than U.S. mail. At the third

and final interview, I asked participants if they would be willing to meet with other students who participated in the study in a focus group to discuss the data analysis. I noted that this participation would reveal their involvement in the study to the other members of the focus group thereby compromising confidentiality. Students not comfortable with a group session or those with schedules not compatible with the focus group meeting times were invited to a private meeting with me. All participants agreed to participate in this follow up conversation if they were not moving from the area. In October participants formally were invited to comment on the emerging theory by reviewing the preliminary themes that came from the data analysis and their connections as depicted in the preliminary theoretical model. Five students participated in the follow up conversations.

Interviews with Faculty and Staff

Interviews with faculty and staff had a different purpose, one aimed at gathering information about the academic program and expectations faculty hold for students. This background information guided some of the student interview questions and served to triangulate the analysis of student interview data. Six of the seven faculty and staff interviews were conducted prior to the student interviews and provided more details on the context and culture of the research site and helped me identify those aspects of the academic experience that were intentionally integrative. To learn more about Integrative Studies and the distinctive vocabulary used by community members, I asked several faculty and staff to describe Integrative Studies history, rituals and traditions, language and terminology distinctive to the community, and the program's commitment to integrative learning. I prompted faculty and staff to consider specific assignments, events,

curricular structures, and any other interventions that are in place to promote integrative learning.

The Integrative Studies program was selected as a research site because the Integrative Studies degrees are offered in an explicitly integrative academic program. The faculty and staff interviews, along with documents, helped me establish more specifically which aspects of the student experience were intended to encourage integration. This information in turn guided the student interviews in exploring to what extent these purposeful opportunities were perceived or experienced by the students as contributing to their integrative learning. Students mentioned three faculty members beyond those I had already interviewed who might offer additional insights into students' Integrative Studies experience, one of whom was a part of the initial group of faculty and staff contacted for interviews and did not respond to my request for an interview. The students mentioned another faculty member who was going on leave when I contacted him. He was invited to share relevant course materials rather than participate in an interview. A third faculty member was not available for an interview for personal reasons. These additional contacts were intended to help triangulate student reports and explore dimensions of the Integrative Studies degree program not yet explored, rather than provide me with details about the institutional context.

The faculty and staff member interview protocol (Appendix P) outlined the specific interview prompts for these conversations. At the end of each interview, I asked faculty and staff members if I could contact them for elaboration or clarification of the topics we had discussed. I also asked if they would be willing to nominate a few students to participate in this study if I had a difficult time directly recruiting volunteers. All

faculty and staff participants were willing to be contacted for additional information or for providing student referrals. The faculty and staff interviews were recorded using a digital voice recorder, but not transcribed. I took notes during the interview and created a more detailed set of notes within 48 hours. The data from these conversations provided thick description of the research site, generated interview prompts for the student participants, and helped in triangulating the analysis of the student interviews.

Papers and Portfolios from Student Participants

All student participants provided me with a paper that was, in their estimation, an example of integrative work. Originally this paper was going to be assessed using the Interdisciplinary Writing Assessment Profiles, which measures the degree to which a piece of writing demonstrates interdisciplinary integration (Wolfe & Haynes, 2003). Participants also were invited to share one additional artifact as an example of their understanding of integrative learning; options could include a portfolio, concept map, journal, or anything else students thought was appropriate. The formal assessment of students' writing was not completed because using an instrument designed to assess interdisciplinary integration would not be a fair or appropriate measure of students' ability to be integrative given that the faculty did not stress interdisciplinary writing. Instead, I asked students to describe the ways in which the paper demonstrated integration and explored through interviews students' understanding of integration and the role of their assignments in promoting integrative learning.

Document Analysis

In addition to student work, I examined official documents (or records, according to Hodder (2000)) relating to the establishment of the Integrative Studies program. I also

collected documents that put the program in context within the larger institution, including Integrative Studies' mission statement, promotional materials, course syllabi, assessment reports, and writing rubrics. I asked the associate dean and the faculty and staff I interviewed for any other documents they thought might inform my understanding of the research site. Based on faculty and staff recommendations, I added a Boyer Center report to the list of documents reviewed. Using documents provided insights into the language distinctive to this site and provided compelling description of the research context. It was possible that documents would be hard to locate or that a key document was inadvertently withheld, thereby affecting the comprehensiveness of the available data and their interpretation (Creswell, 2003). However, this was not the case in this study.

Rapport Building

Successful in-depth interviews rely on establishing rapport between the interviewee and the researcher. To accomplish this goal, I employed several strategies. First, all interviews took place on the participants' college campus. Second, in the initial interview, I spent 10 -15 minutes asking questions designed to put the student at ease (Appendix L). Third, as an interviewer I strived to create a conversation-style exchange using open-ended questions rather than pursuing questions in rapid succession (Charmaz, 2002). Fourth, I actively listened and used prompts to encourage the participant to elaborate. Finally, I used non-verbal cues such as nodding to support the participant. I self-monitored this behavior so as not to affirm every comment with a nod such that the participant might think my nods were indications of "right" answers. I also could not assume that my nodding, which is a White, middle-class means of showing affirmation, would be perceived as such by students from backgrounds different from my own (Helms

& Cook, 1999). Since I did not expect to be able to stop nodding completely, prior to the interview I explained my tendency to nod to each participant to prevent misunderstanding (Appendix L).

<div align="center">Data Analysis</div>

Grounded theory methodology demands "extensive amounts of rich data with thick description" (Charmaz, 2000, p. 514), which are coded and interpreted using a constant comparative approach. As the researcher, I read the data and studied the interview transcripts carefully (Charmaz, 2005). The coding and analysis processes in grounded theory are intertwined and often lead to more data gathering (Strauss & Corbin, 1990, 1998). As described by Charmaz (2000, 2002, 2005, 2006), by writing memos I could systematically reflect on the meaning of the data and begin the interpretive process. Memos provided an outlet for making assumptions in coding explicit and for engaging with the perspectives in the data. Using memos helped initiate the analytic process and prompted the integrative interpretation of data. At every step of the analysis, I was diligent in respecting the words and intentions of the participants by actively listening, asking for clarification to improve my understanding, and by member checking (Mertens, 2005). Throughout the analysis I attended to the underlying cognitive structures that shape how student participants think about their learning. Asking questions about the nature and limits of knowledge and how students reconciled conflict, or considering how students engaged with complex problems, facilitated this exploration of how students think.

This data analysis section presents the strategies used for coding and triangulation in this study. I discuss theoretical sensitivity and its relationship to the development of the emerging theory.

Coding Strategies

Student interview data were coded using a constant comparative approach. The rigor of grounded theory is linked to the systematic approach to data analysis while still attending to the emerging nature of the analytical and interpretive process. The strategies and approaches used to interpret the data included at least two steps: (a) open coding, and (b) selective coding (Charmaz, 2002, 2006; Mertens, 2005). Although discussed here sequentially, the different types of coding are not pure and distinct. There was a constant interplay between the coding strategies just as there was between data collection and interpretation (Charmaz, 2000; Fassinger, 2005; Strauss & Corbin, 1990, 1998). As explained by Charmaz (2000), "Every qualitative researcher makes multiple analytic decisions. Foremost among these is how much complexity to introduce" (p. 526). The two step coding process used in this study was guided by Charmaz (2006).

Open coding. The goal of open coding was to describe the data and to capture actions related to students' experiences with integrative learning (Charmaz, 2002, 2005, 2006). Open coding occurred initially when transcribing the interview tapes. I created memos and recorded early impressions and insights. Next, I engaged in deep textual analysis by coding line-by-line to capture the meaning and key concepts of each line of text (Charmaz 2000, 2002, 2005, 2006; Jones et al., 2006; Strauss & Corbin, 1990, 1998). Line-by-line coding is most effective in the beginning of a study. Other strategies included coding sentences or paragraphs by trying to capture the major ideas or by

examining the transcript as a whole for a gestalt impression of the data (Fassinger, 2005; Strauss & Corbin, 1990, 1998). During data collection, the line-by-line coding was recorded on printed copies of the interview transcripts and later refined and transcribed to HyperResearch, a qualitative research software program. Codes described more perfunctory processes such as "scheduling classes" that were on the periphery of the interview and the analysis, as well as more complex ideas such as "challenging taken for granted assumptions," "exposing bias," "easing transition," "knowing self," and "approaching topic differently." Many codes were related to each other because the initial codes reflected the language of the participants such that different gerunds were used to describe similar processes. For example, "feeling challenged," "being outside comfort zone," "overcoming challenge," "discussing controversial topics," and "seeing the benefit of challenge" all supported the idea that integration was challenging and informed two themes: "encountering conflict" and "working harder and smarter." After the initial coding during the data collection process, I went back to the data with a comparative lens to determine the similarities and differences across data sources (Charmaz, 2002; Strauss & Corbin, 1990). I explored assertions made by one student with other students. For example, when Ann described using papers only from her first year to demonstrate the competencies in her graduation portfolio, I asked other participants about how their coursework beyond the first year contributed to their fulfillment of the competencies and to their ability to integrate. Through these discussions with students I explored whether and how the courses students, both in Integrative Studies and in other departments, influence their understanding of integrative learning. Revisiting the data multiple times allowed for insights from one data source to shape the interpretation of other data

(Charmaz, 2005). Strauss and Corbin (1990, 1998) warned against foreclosing on an interpretation based on prior assumptions and biases. Asking questions of the data (who, when, where, what, how, how much, and why as well as questions about frequency, rate, and timing) helped minimize this risk by enhancing theoretical sensitivity (Strauss & Corbin, 1990, 1998).

Selective coding. The second distinct step in coding involves developing categories or themes to encompass the patterns identified in the data (Charmaz, 2002). Initial codes were clustered and sorted in an attempt to create broader conceptual categories that synthesize the earlier impressions. In my analysis, the conceptual categories and theory development were simultaneous activities. I clustered codes under broad headings that were salient to me based on the interviews and my memos. Some of these early themes included "understanding complexity," "defining moments," and "making sense of integrative studies." Then I asked questions and made comparisons, which helped uncover the complexity of the web of relationships (Strauss & Corbin, 1990). For example, did transfer students understand integration differently than students who joined Integrative Studies as first-year students? Another question related to differences in students' goals for a college education. Did these differences in students' sense of purpose in college influence their understanding of integration? Was there a pattern to how students described how they learned to be integrative? What experiences or assignments were mentioned? Were my roots in interdisciplinary studies privileging some forms of integration over others in my analysis of the data?

I sorted and mapped possible relationships among the themes. The initial analysis produced 17 themes of which 5 were included in the preliminary theory. After further

revision, the number of conceptual codes was reduced to 13. I removed two themes that were too descriptive and did not contribute sufficiently to the overall story told by the data. One of the themes I eliminated included codes relevant to students' reasons for going to college. Students' enrollment in intentionally integrative course work in Integrative Studies or other departments such as Women's Studies was more relevant to understanding students' experiences with integration than students' purposes in going to college. The emergent theory was refined and expanded through conversations with student participants and peer debriefers, as well as my ongoing engagement with the data. A constructivist grounded theory does not assume that there is an answer hidden in the data that needs to be uncovered, rather that a systematic approach to data analysis and coding allows the researcher to construct a reasonable and credible interpretation of the data (Charmaz, 2000). Codes are representations of data and are affected by the researcher's views and assumptions (Charmaz, 2002). As the researcher, I was attentive to the participants' experiences by respecting their voices and representing them honestly.

Triangulation

As themes emerged from the analysis of student interview data, I consulted the faculty and staff interview data and student writing samples for points of convergence and divergence. Of particular interest was comparing those aspects of the Integrative Studies degree program that were intended to foster integrative learning in students with student reports of which experiences contributed to their ability to integrate.

After reading several writing samples, I noticed how little these writing samples resembled the interdisciplinary writing I had assessed previously using the Interdisciplinary Writing Assessment tool identified for this study. Several students

provided me with integrative essays written for portfolio assignments. These essays proved duplicative, and affirming, of the perspectives shared in the interviews. These writing samples were about integration rather than being integrative. Other writing samples included research papers or reaction papers that did not attempt to be interdisciplinary but were, according to the students, examples of integrative work. This discovery prompted memos about my unintended bias in favor of interdisciplinary integration. I needed to reframe my initial thinking that the students were not being very successful as integrative learners to accept a broader definition of integration. This comparative analysis was compatible with the tenets of grounded theory methodology and contributed to the development of theory.

Theoretical Sensitivity

Strauss and Corbin (1990) discussed several ways for researchers to develop the theoretical sensitivity needed to analyze data and generate theory using a grounded theory approach. Theoretical sensitivity signals a readiness to see relationships in the data and to interpret and make sense of the data (Strauss & Corbin). As a characteristic of the researcher, theoretical sensitivity includes the capacity for insight and creativity at an abstract, conceptual level (Strauss & Corbin). Charmaz (2006) translated this earlier notion of theoretical sensitivity into a set of recommendations that support theorizing. According to Strauss and Corbin, theoretical sensitivity can be cultivated from the literature, from professional or personal experience, and by engaging in an analytical process. Charmaz, in contrast, emphasized the analytical process, including "seeing possibilities, establishing connections, and asking questions" (p. 135). The structure provided by Strauss and Corbin guides this exploration of my theoretical sensitivity

because it offers identifiable domains from which I can enhance my theoretical sensitivity. These domains overlap with researcher reflexivity, but offer a comprehensive approach for exploring this important predisposition.

Literature. Prior research as well as more informal sources of literature (e.g., diaries, biographies, reports, memos) help orient the researcher to the salient terms and concepts associated with the topic under investigation. Although not interested in hypothesizing about relationships among variables, the researcher can learn from the literature what relationships might be considered and how to ask questions of the data (Strauss & Corbin, 1990). For the purposes of this study, I used documents such as those related to the establishment of the academic unit housing the Integrative Studies program, mission statement, promotional materials, course syllabi, and transcripts from interviews with selected faculty and staff to learn more about the research context. I consulted these documents during data analysis to learn whether program features that were intended to support students' understanding of integrative learning matched the experiences cited by students. Extensive reading on integrative learning, how it is defined and how it might be cultivated, has also contributed to my theoretical sensitivity without overly shaping my expectations for this study.

Professional experience. Experience with the general setting in which the study took place also can make researchers theoretically sensitive. In this case, my 22 years as an undergraduate student, graduate student, or employee in a higher education context (including six different campuses) contributed to my sensitivity of how a college works and what questions I needed to ask to understand the distinctive features of a given environment. In addition, my professional experience in a residential college dedicated to

interdisciplinary studies framed my awareness of program features and curricula that were relevant to this study. Finally, my experience conducting a longitudinal study designed to explore students' understanding of interdisciplinarity and integration offered important insights for this study and guided my interviewing strategies. These existing perspectives must be monitored through systematic reflection in memos to prevent them from limiting my ability to recognize insights that are expected or so common as to become almost invisible to scrutiny (Strauss & Corbin, 1990). Indeed, Charmaz (2006) recommended writing memos as a tool for theorizing and making explicit any connections I had identified in the data, and for recording my preliminary interpretations.

Personal experience. Life experience that falls outside of professional roles can also contribute to theoretical sensitivity (Strauss & Corbin, 1990). In this case, my own experiences as a traditional age college student provided some awareness of what it is like to be an undergraduate and enhanced my ability to perceive meaningful relationships. These insights were limited by the distinctiveness of attending a small, liberal arts college for women over 20 years ago. My current experience as a doctoral student interested in integrative learning as an academic topic as well as a learning outcome for my own studies also heightened my theoretical sensitivity. This awareness also could interfere with hearing undergraduate students' experiences and was the subject of multiple memos to guard against imposing my view of integration on the students. The inquiry auditor as well as the peer debriefers assisted me in grounding my interpretation in the data rather than in my experience. Finally, triangulating the data analysis with documents and faculty and staff interviews was another safeguard.

Analytical process. As a researcher engages in data analysis, theoretical sensitivity also was enhanced. Charmaz (2006) advocated using gerunds in coding to encourage attention to underlying processes rather than descriptive topics. The process of coding and asking questions of the data, making comparisons, reflecting, and building categories from concepts was lively and rich and contributed to my theoretical sensitivity (Charmaz). The interpretive process was fueled by the data, which in turn fueled the analysis. This synergistic process contributed to theoretical sensitivity by creating an immersion experience for me as the researcher (Strauss & Corbin, 1990).

Developing the Emerging Theory

The theory that has emerged from these data is what Charmaz (2006) called a "plausible account" (p. 132) of the process by which undergraduate students in an explicitly integrative program have come to understand integrative learning. The process by which this theory was generated is presented here.

As described earlier, the data in this study were coded using a line-by-line strategy and yielding over 1,400 codes. I identified the 13 conceptual codes by comparing and sorting the data by related themes and by referring to memos written during the data collection phase of the research to learn from and build on those conceptual ideas that seemed to be recurring in the interviews. Through this process I struggled to let the data direct the sorting rather than my own preconceived assumptions about what integrative learning should be. A breakthrough in my own thinking came when I realized and accepted that integrative learning could have many meanings and not just one. Without intending to, I had privileged interdisciplinary integration as "real" integration and discounted other accounts. This realization allowed me to see how integration of all types

is learned. I began to extract examples from the interview transcripts of how students

described their integrative experiences and focused on the overall process rather than the

experiences of any one participant. Through this analysis, I identified several positions or

benchmarks experienced by the participants regardless of concentration or class year that

seemed to be related to their capacity to integrate (i.e., to integrate as the students defined

it, which is a much wider definition than I originally anticipated). I sketched out a

possible theoretical model based heavily on a typology of interdisicplinarity by Stember

(1998). I shared this rough model with focus groups, which included 5 of the 10

participants, and then refined the order and movement within the model based on our

conversations.

<div align="center">Trustworthiness</div>

Every effort must be made in qualitative research to share with readers the details

of the analytical process to establish trustworthiness (Charmaz, 2000; Creswell, 2003).

The reader must trust that the data and the interpretation are rigorous and appropriate.

Trustworthiness is enhanced when credibility, transferability, dependability,

confirmability, and authenticity are addressed (Denzin & Lincoln, 2000; Lincoln & Guba,

1985; Mertens, 2005).

Credibility

Readers need some assurance that the way the researcher is representing the data

and the interpretations have clear connections to the way the participants constructed

their reality (Creswell, 2003; Lincoln & Guba, 1985; Mertens, 2005). Research with

credibility has been faithful to the intentions and meanings of the participants. There are

several ways in which I demonstrated credibility in this study. First, this study involved

sustained observation of student participants, with three in-depth interviews per participant (Lincoln & Guba; Mertens). In addition, I enlisted two doctoral students to serve as peer debriefers. One peer debriefer was selected based on her interest in undergraduate student learning and the other was asked to focus more generally on college student development. The role of the debriefers was to challenge my interpretations of data and find gaps in my analyses as well as to respond constructively to my preliminary interpretations. The debriefers engaged in conversation with me and I kept written records of our exchanges for the audit trail (Creswell; Lincoln & Guba; Mertens). These conversations with colleagues who have a different set of perspectives from me challenged me to consider whether my analysis truly was grounded in the data. These conversations occurred in person and included two meetings. The first meeting was with each peer debriefer individually in November 2006 and the second meeting included both peer debriefers and took place in February 2007.

All student participants were asked to review completed interview transcripts for accuracy and were invited to alter transcripts to reflect more accurately their meaning and thinking. This member checking occurred within 7-10 days of each interview (Creswell, 2003; Mertens, 2005). In addition, student participants were invited to review the emerging themes and theory from the data analysis and offer feedback on whether the analysis reflected their experiences. This review process was conducted in a focus group with three students and two students met individually with me for this conversation. Two additional students agreed to participate but did not make it to their scheduled session. These efforts, as well as the data gathered from faculty and staff, serve to triangulate the student perspectives (Creswell; Krathwohl, 1998; Mertens).

Transferability

Research conducted in the qualitative paradigm is not primarily intended to be transferable. However, by providing thick description of the research site and the data, readers can judge whether the findings of this study have any practical use for their contexts (Creswell, 2003; Lincoln & Guba, 1985; Mertens, 2005). I described the research site, the conceptual codes that emerged from data analysis, and the emergent theory in detail to help readers determine whether the findings of this study apply to their situations.

Dependability

To make the case that the research was conducted in a rigorous way, the qualitative researcher must keep careful track of the inductive path or process used to turn raw data in to a coherent interpretation. The analytic process needs to be described in detail including a description of key decisions and details of the coding process used. I wrote memos to capture the most salient insights and connections made during the analysis, but did not capture every thought in written form. In addition, member checking and peer debriefing support dependability (Charmaz, 2000; Lincoln & Guba, 1985; Mertens, 2005).

Confirmability

Readers need to be sure that the process followed by the researcher was thoughtful and purposeful, not capricious. By providing sufficient amounts of data in the results section and by engaging in an inquiry audit, readers will be more confident in the ability to confirm the results of the study. Clear and organized records are key to providing evidence to any auditor of the integrity of the analytical process (Lincoln &

Guba, 1985; Mertens, 2005). My inquiry auditor was someone with experience and

understanding of qualitative methodologies and with knowledge of grounded theory in

particular. The auditor focused on the both the processes and products of the research

(Lincoln & Guba). Together we determined what documents and materials made a robust

audit trail, including the research proposal, raw interview data, memos and other notes

about the research process and interpretations, codes and concepts, and preliminary

theoretical musings (Lincoln & Guba). The auditor was enlisted early in the study, but

conducted his audit in January 2007 after data were collected and the data analysis was in

its final stages of refinement. The inquiry auditor wrote a memorandum asserting the

dependability and confirmability of this study (Appendix Q).

Authenticity

By providing a balanced view of the data, authenticity is enhanced (Lincoln &

Guba, 2000). Considering whether there are rival interpretations to the data is an

important aspect in establishing authenticity (Krathwohl, 1998). Similarly, seeking

negative cases is part of theoretical sampling characteristic of grounded theory. As a

theory was being constructed from the data, I worked to find students with experiences

that challenged and revealed gaps in the emerging theory (Mertens, 2005).

Ethics

As with any research conducted with human subjects, care must be taken to

ensure that study participants are not harmed by their participation in the research

(Creswell, 2003; Krathwohl, 1998; Mertens, 2005). Students were told that this study was

examining students' experiences in an integrative studies degree program. The purpose of

the research was described verbally and in writing through the informed consent form

(Appendix G). At the time they were recruited, students were told that, by agreeing to participate in the study, they were consenting to engage in two to three 60 – 90 minute interviews and that they would provide me with a paper and at least one more artifact that, in their estimation, was an example of integrative learning. Throughout the research process, I strived to keep the best interest of the participants at the forefront of my thinking, especially when reporting the data (Mertens). An ethic of care guided all research decisions (Noddings, 1984). All student participants selected a pseudonym to protect their identity and confidentiality (Creswell). Although there were no stated benefits to participation in this study, participants often commented on their interest in my research and their eagerness to help. Most also reported that they found the conversations about integrative learning engaging and beneficial to their understanding and their own reflective work (Kvale, 1996). At the request of four students, I sent to them the completed set of their interview transcripts. They expressed an interest in using some of the insights discussed during our interviews for future portfolios.

The primary ethical consideration related to faculty and staff involvement was confidentiality. The small size of Integrative Studies makes preserving anonymity very difficult. I intend to share the results of this study with the faculty and staff of the Integrative Studies program and made every effort to protect the identity of individual informants. However, I made it clear to participants that their comments may be connected with them despite efforts to mask their identity. In the text of the dissertation, I did not refer to the Integrative Studies program or the host university by name, a step that should facilitate confidentiality among a wider audience.

Researcher Reflexivity

As a researcher engaging in qualitative methodology and qualitative methods to explore integrative learning in college students, I had to be aware of my role as the research instrument (Krathwohl, 1998). My background and my theoretical frame prepared me to undertake this constructivist grounded theory study and informed my reflexivity.

Background

My interest in students' experiences in an intentionally integrative academic program is rooted in my former professional role as assistant dean of a school of interdisciplinary studies. In this capacity, I worked closely with students engaged in interdisciplinary inquiry and with faculty and staff striving to design curricula and outside of class experiences to enhance students' understanding of interdisciplinarity. As they progressed through the four-year academic program, some students struggled with learning to integrate disciplinary perspectives, and some seemed to make steady progress toward the program's stated objective of creating interdisciplinary learners. A curiosity about how students wrestle with the challenges of becoming interdisciplinary prompted a longitudinal study focused on assessing students' understanding of interdisciplinarity and integration. In this study, a colleague and I interviewed 10 undergraduate students using a semi-structured format. Each participant was interviewed once a semester during the participant's undergraduate years about her or his interdisciplinary classes and the meaning each was making from her or his experiences. This assessment project provided experience with conducting interviews with students about their learning and interpreting interview data, which helped me with the research described here (Brown Leonard &

Haynes, 2005). These experiences also reinforced interdisciplinary integration as a strong, if not ideal, form of integration.

In addition to the experience of conducting interviews and interpreting data from the interdisciplinary learning study, I have participated in two other qualitative studies that involved focus groups. These experiences with qualitative methods helped me learn to shift my orientation from a scientific, post-positivist way of viewing research to one that is constructivist in nature. My graduate assistantship in the Interdisciplinary Studies Program at the University of Maryland, Baltimore County also informed my perspective. From fall 2004 to spring 2006, I was engaged in projects centered on defining student learning outcomes for interdisciplinary studies. Previous work experience in a school of interdisciplinary studies as well as a graduate assistantship in an interdisciplinary studies program have provided invaluable exposure to the idea and practice of integrating disciplinary perspectives.

Theoretical Frame

My stance as a social constructivist is compatible with this research, and acknowledging this stance is important to reflexivity. Social constructivists embrace dialogue and engagement with others to facilitate meaning making and understanding. As such, qualitative methodologies are appropriate for learning about students' perceptions and experiences, to respect students' reality as they live it. In addition to social constructivism being a research orientation, I also find social constructivism to be a compelling learning theory. Social constructivism extends the ideas of cognitive constructivists such as Piaget to include an appreciation for the environment (Phillips, 1995). Learning is influenced by context and by social relationships, but learning still

requires the individual to connect new ideas and perspectives to existing ideas (Cobb, 1994; Phillips). Social constructivists embrace the idea that learning is constructed by connecting new ideas to existing knowledge and experience (Baxter Magolda, 2004; Bransford et al., 1999; Halpern & Hakel, 2003). During this study I had to continuously monitor my assumptions because my early undergraduate and master's level experiences with research were situated in the positivist paradigm. I currently embrace a social constructivist worldview, but recognize remnants of the positivist perspective in my thinking.

Summary

This chapter provided the rationale and features for pursing a qualitative approach to addressing the research questions. I described grounded theory methodology, the research context, research methods, and my approach to data analysis. I discussed rapport building and trustworthiness as well as ethical concerns, and explored my role as the researcher in shaping the study and data interpretation.

CHAPTER IV

FACULTY PERSPECTIVES ON INTEGRATIVE STUDIES

To learn more about the Integrative Studies program and the ways in which it sought to intentionally cultivate integrative learning, I interviewed Integrative Studies faculty and staff members individually. These interviews were conducted prior to interviewing students. In addition to providing background and history on the Integrative Studies program, these conversations helped orient me to the culture and norms of the program. For example, I learned that students rarely referred to their degree as "Integrative Studies," preferring instead to use the program name or acronym. I also learned that the program's existence was threatened in 1999-2000 and that the faculty who weathered that crisis were still "wounded." I found that these faculty and staff members treated inquiries related to their program with caution, not wanting to reveal weaknesses that might be used against them in the future. The program also lost oversight of an adult learning program in 2003, an administrative decision that surprised members of the Integrative Studies program. This decision prompted greater mistrust between Integrative Studies and the university's administration. These reports and insights helped me understand the broad climate issues that served as a backdrop to the student conversations.

In addition, the faculty and staff interviews provided comparative data for the student perspectives on a number of important points. Several faculty and staff members referred me to documents and the program web site for more information on policies, graduation and assignment requirements, and program assessment. After a brief

description of the faculty and staff participants, in this chapter I present faculty and staff perspectives on the following themes: (a) recruiting new students, (b) describing "typical" Integrative Studies students, (c) defining Integrative Studies, (d) perceiving Integrative Studies as having a marginalized status, (e) describing strengths and weaknesses of the Integrative Studies degree, (f) cultivating integrative learning, and (g) defining learning outcomes of the Integrative Studies degree. Relevant data from the documents consulted for this study are woven into these sections as well.

<div align="center">Faculty Participants</div>

I spoke with seven faculty and staff members, all of whom taught in the formal classroom setting. The Integrative Studies program does not make distinctions between faculty and staff, but two of the participants had more administrative duties than the other faculty and served as academic advisors, a duty not shared by other faculty. To be consistent with local norms, the participants in this phase of the study are referred to as faculty. There was consensus across these voices on most of the topics we discussed. These perspectives, as well as the few points on which there was some dissension, are described in this chapter. The interviews with faculty were not transcribed, but I assembled detailed notes after each conversation. The few quotes in this chapter are verbatim quotes from these conversations. Table 1 provides a brief description of the faculty participants, each identified by a pseudonym that I assigned.

Table 1

Faculty Participants

_____

Pseudonym   Faculty role(s)

_____

Kasey   Teaches or has taught in first-year experience, learning communities,
               capstone.

Katherine   Teaches or has taught in first-year experience and learning communities.

Paul   Teaches or has taught in first-year experience and learning communities.

Esther   Teaches or has taught in first-year experience and learning
               communities; advises students.

Ashley   Teaches or has taught in the first-year experience, learning
               communities, capstone, and Introduction to Integrative Studies.

Denise   Teaches or has taught in first-year experience, learning communities,
               capstone; advises students.

Melanie   Teaches or has taught in first-year experience and learning communities.

Themes Describing Faculty Perceptions of Integrative Studies

Recruiting New Students

Denise and Esther, given their roles as advisors, were most involved in meeting

with prospective students. In representing Integrative Studies to students Denise and

Esther "try not to be all things to all students." From their points of view, students need to

be interested in faculty interaction and be engaged learners to be successful in Integrative

Studies. Both Denise and Esther described Integrative Studies differently to students

depending on the audience. First-year students received a tailored message depending on

their level of commitment to a specific major, and transfer students received a modified

message that acknowledged their previous experience in higher education. On a more

practical level, Melanie also noted the absence of a 20-second "elevator speech" to describe Integrative Studies. It was difficult to convey the complexity of the Integrative Studies program in a succinct manner, which was a weakness for recruiting new students.

First-year students. First-year students who were undecided about a major or had general rather than technical interests heard about how the first-year experience in Integrative Studies fulfilled the general education requirements. The advisors presented Integrative Studies as having two programs: One was a degree program in Integrative Studies and the other was a first-year experience program that met almost all of the general education requirements for any student at the university. Students were encouraged to try Integrative Studies, efficiently meet the general education requirements, and then be in a position to continue with Integrative Studies or move to their desired major in the university. The advisors did not emphasize the integrative approach of the first-year experience. Esther and Denise claimed, and Melanie concurred, that students did not understand or show interest in pedagogy or interdisciplinarity. Instead, recruiters emphasized seminar classes (in contrast to lecture), the class schedule (no Friday classes), and how courses are taught (group work and experiential learning). Melanie commented that parents seemed to understand the idea behind Integrative Studies much more than the students. In general, faculty tried to keep the message simple.

For those first-year students with a major, Esther and Denise focused on how the student's academic areas of interest could be met by Integrative Studies. Esther noted that many of the faculty did not think of Integrative Studies as being two distinct programs, the first-year experience and the Integrative Studies degree. Indeed, Kasey commented

that it was problematic that students in the first year often were perplexed by the integrative nature of the curriculum and struggled with it. She wished more could be done at the point of entry to explain what Integrative Studies was all about and to attract students who were interested in an integrative approach to learning.

Transfer students. Denise, Esther, and Melanie found transfer students with some college experience were able to relate better to the Integrative Studies program's emphasis on collaboration, experiential learning, and integrative learning. Advisors presented these students with information about Integrative Studies as an interdisciplinary experience. Advising sessions with transfer students focused on how the Integrative Studies program could meet a given student's needs and how their previous coursework satisfied various requirements for the Integrative Studies degree.

Finding Integrative Studies. Denise and Esther reported that new students discovered Integrative Studies via word of mouth, admissions, and university academic advising. However, other faculty members, including Melanie and Ashley, commented that the admission office did not represent Integrative Studies well. According to Denise, about 60% of the new students were attracted to Integrative Studies for a specific concentration and 40% were interested in the learning style and approach to teaching championed in Integrative Studies. For example, students who said, "I don't test well," found the emphasis on reading and writing in Integrative Studies attractive.

Typical Integrative Studies Students

Two ways of thinking about the students in Integrative Studies are (a) considering what attracts students to the program, and (b) describing students' personality characteristics. Faculty discussed students' motivation for joining the Integrative Studies

program. For many, the choice was pragmatic. Denise explained that the state

requirements for endorsements in teacher education were interdisciplinary and consumed

50-60 credits. Since there is no formal teacher education program at the university,

students aspiring to be teachers needed to pursue their degree in Integrative Studies to

enable them to complete their requirements in a timely fashion. Integrative Studies also

attracted students who could not meet the management program's requirements, but were

interested in a business-oriented degree. Many of these students pursued the

organizational management concentration in Integrative Studies. Other students were

attracted to the organizational management concentration because they did not like the

rigid curriculum of the business school or were not interested in a business degree.

According to Esther, about 50% of the graduating class joined the degree program as

transfer students. Ashley thought this figure was closer to 70%. Most of the students

pursue an established concentration, but there is an option to design a concentration.

Denise reported that in 2005, 6 of the 125 graduates had self-designed concentrations and

everyone else pursued an established program of study.

    A second way to describe Integrative Studies students is by their personal

characteristics. Kasey shared an observation also expressed by Ashley and Melanie that

the diversity of students made it difficult to describe a "typical" student. However,

Integrative Studies students tended to be similar, according to Kasey, "in their preference

for papers and dislike for tests." Kasey suspected this was in part because Integrative

Studies students see too many possibilities, which made taking multiple choice tests more

difficult. Integrative Studies students tended to have broad interests. Denise said

Integrative Studies students tended to be science and math phobic as well as passionate and smart.

Melanie described students in Integrative Studies as smart, but in need of challenge; the students needed to be pushed to reach their potential. In some ways students were "high maintenance" and depended on personal assistance, according to Denise. Ashley, Melanie, Esther, Denise, and Paul specifically described students as independent and willing to take an active role in their education. Students spoke up if they did not like something. Esther noted that most of the students saw education as useful in and of itself, and most were good at group work and appreciated the value of group work even if they did not enjoy doing it. Ashley and Esther reported that many Integrative Studies students pursued leadership on campus and got involved in the community. Integrative Studies students often saw disciplinary majors as too limited, were willing to be self-reflective, and were comfortable with ambiguity, according to Ashley. To be successful in Integrative Studies, Paul and Melanie commented on the need for students to "think outside the box." Although Integrative Studies students are relatively diverse, Esther and Denise noted the program was working to expand enrollment beyond the primarily suburban White students from in state, especially in terms of greater diversity in religion and politics.

Ashley noted that many Integrative Studies students were non-conformist and intellectual risk-takers, but the students pursuing education careers seemed more conventional on the whole. Kasey viewed students as different and distinctive. Of the 54 faculty and administrators involved with the Integrative Studies program across academic affairs and student affairs at the university who responded to the Educator's Partnership

Inventory sponsored by The Boyer Center, 80% reported that Integrative Studies students

"are different than other students on campus" (Bucher, 2004, p. 4).

Defining Integrative Studies

One faculty member, Paul, predicted that I would hear a range of responses when

I prompted faculty to define Integrative Studies. Indeed, the level of comfort in

discussing integration and integrative learning varied greatly. For Kasey, Integrative

Studies was about "being able to connect the dots between disciplines, not just mixing

them up." This approach was more holistic and allowed personal lives and academic

work to connect and for positive social change to result. For Melanie, being integrative

meant "taking two or more differing disciplinary perspectives and integrating in a way

that makes it seamless [for students]." Ashley confessed that integrative learning was

"slippery," in that "it is not interdisciplinary studies or grounded in disciplinary

perspectives." Referring specifically to the first year, Ashley described it as

"transdisciplinary" where the emphasis was on larger meta questions that transcended

disciplines. Katherine noted that integrative learning was explained differently depending

on the question and the audience, but that "any collaborative enterprise requires it."

"Post-disciplinary" was the term Paul used to describe Integrative Studies. He said that

although students did not explore methodologies or focus on interdisciplinary theory,

they experienced courses that were interdisciplinary. Paul described the program as trying

to "focus on learning in every context" by emphasizing "self reflection and assessment"

and students being responsible for their own learning.

Esther explained integration to prospective students via examples. From her

perspective, the defining characteristic of Integrative Studies was "understanding

context." To be integrative, students needed to learn to "situate any topic or experience in its context and recognize the connections between one subject and anything else." Esther noted, "some students never get it [what Integrative Studies means] during their four years," especially if they have a very specific focus (i.e., business). Esther observed that the business and education students tended to resist integration and view themselves via their concentration rather than as a member of Integrative Studies.

Paul and Melanie also talked about Integrative Studies as having a role for faculty and the institution in that it served as an incubator for curricular innovation and a model for student affairs and academic affairs partnerships. Coming up with good ideas and developing them was a strength of the program, but there was a risk that other programs would make a case for housing these new programs in their units. Melanie described how Integrative Studies lost a conflict analysis concentration it had developed in part because there were no specific conflict experts on the faculty. According to Melanie, the interdisciplinary nature of the faculty and the curriculum was misunderstood at the institutional level. The Integrative Studies program supported faculty in their efforts to be excellent teachers. As evidence of this commitment to teaching, Paul noted that Integrative Studies faculty have been recognized consistently by the annual university teaching awards.

Integrative Studies' Marginalized Status

Paul reported that there was a lot of excitement and support for Integrative Studies when it was established as an innovative degree-granting unit in 1995. He explained that the relative autonomy of the early years gave way to skepticism when conservative perspectives dominated the state governing board for higher education.

Integrative Studies survived a serious threat to its existence in 1999-2000 that resulted in an administrative reorganization. The program now is housed in arts and science. There is a "culture of innovation" in Integrative Studies, according to Paul, but sustaining this creativity is challenging, a challenge that is not unique to Integrative Studies.

Denise and Melanie reported that the current support for Integrative Studies from the upper administration was strong, but this had not always been the case. Others at the university perceived Integrative Studies as lacking in rigor and had been "nicknamed Crayola College." Kasey stated that Integrative Studies was referred to as "Kinder College" and that new students at the university did not perceive it as demanding or rigorous. Denise conceded, "some of the early criticisms of Integrative Studies were legitimate." She noted that the duplicate degrees offered were problematic and that more oversight was needed. Denise said that faculty at the university referred students with learning disabilities to Integrative Studies. Melanie also commented that students with learning disabilities were served well by the personal attention in the first year, but that the writing demands often were too great for them. Denise said that Integrative Studies was generally perceived as "strange, liberal, and crunchy." Paul noted, "some [people at the university] admire Integrative Studies and others are surprised it [the program] still exists." Paul suspected that faculty members "hired in other departments in the past five years do not know much about Integrative Studies" and that even today there is some misunderstanding across campus about what Integrative Studies is all about.

These observations were corroborated by data from the Boyer Center (Bucher, 2004). About 70% of the respondents stated that university did not "reward me adequately for my involvement" (Bucher, p. 4) in Integrative Studies, and about 63%

disagreed or disagreed strongly that the university "recognizes the contribution that [Integrative Studies] makes to student learning" (Bucher, p. 5) on campus.

Strengths and Weaknesses of Integrative Studies

Some of the faculty spoke of the strengths of Integrative Studies in terms of how student learning was affected and others talked more about the experiences of faculty. Denise, for example, emphasized the way students develop skills in writing and oral presentation. She added that students were "reflective about themselves and able to make connections." She thought students took personal responsibility for their education. Similarly, Kasey celebrated the way Integrative Studies supported students when describing its strengths. Katherine added the emphasis on experiential learning as another strength because it provided short-term benefits (i.e., job experience) as well as long-term benefits related to the "relationship between in-depth knowledge of an area or sets of areas and the benefit of different perspectives." Students were able to look at a complex issue and see how other perspectives contributed to students' understanding. The National Survey of Student Engagement (NSSE) recognized program strengths as well. The NSSE identified the Integrative Studies program as a curricular innovation of note under the active and collaborative learning benchmark (Hinkle et al., 2003). This distinction is not directly related to the Integrative Studies program's ability to cultivate integrative learning, but highlights the program's commitment to collaborative learning.

Melanie highlighted the dedicated faculty as a strength. She elaborated, "they [the faculty] are committed to teaching first," which is consistent with Integrative Studies' mission. Faculty members were consistently trying new things, and a forward-looking orientation kept the faculty engaged. For Katherine, a strength was the holistic approach

Integrative Studies takes so that students were encouraged to bring their "background to bear on their work." Again, Melanie noted that Integrative Studies was good at developing programs and encouraging curricular innovation and creativity. According to the Boyer Center report on academic affairs and student affairs partnerships, several factors were responsible for the success of the Integrative Studies program. The 54 respondents to the Boyer Center survey cited the commitment of the faculty and staff most frequently (24 responses). Others attributed the success of Integrative Studies to experiential learning opportunities (9 responses), and to the integrative or interdisciplinary approach championed by the program (8 responses) (Bucher, 2004).

The weaknesses in Integrative Studies cited by faculty included structural as well as cultural flaws. Denise reported that students perceived they lacked a coherent knowledge base in a single subject, a concern she did not share. According to Esther, each semester course offerings are juggled and teaching assignments changed often up to the last minute. This pattern affected faculty members' level of preparation and complicated students' efforts to plan their course schedule. Esther thought that, as a program, faculty in Integrative Studies did not fully explore whether students met all the competencies. The senior capstone is intended to monitor students' progress, but Esther reported that students' experiences in this course were uneven. Students have told Esther that the capstone courses just emphasized the component pieces of the portfolio.

Other weaknesses shared by faculty focused on program culture, specifically student attitudes and program complexity. Faculty expressed concern that students were not as motivated as they might be. Kasey explained, "students in upper division classes don't do the reading unless we [the faculty] require them to do daily responses." When

students take shortcuts with assignments, the quality of the in-class discussion is compromised. From the faculty perspective, Melanie cited as a weakness the tendency for faculty to overextend, especially faculty teaching in the first-year experience. One double-edged practice is team teaching, which simultaneously refreshes and drains faculty because of the planning and coordination needed to create a well-integrated course with another professor.

According to faculty, students have difficulty meeting the demands of the Integrative Studies program. Katherine noted that students struggled with reading and synthesis. Interdisciplinary work is very hard for first-year students who were "challenged by difficult discussions." Esther reported that students rarely succeeded with integration when they write integrative essays in the first year. Even if they did succeed, they would not see a link between that assignment and being in an Integrative Studies program.

How Integrative Learning is Cultivated

There are several program features that faculty repeatedly cited as key contributors to helping students become integrative learners, including the first-year experience, the senior capstone, and portfolios. Other contributors mentioned by faculty were more idiosyncratic and included how the program was designed as well as various classroom practices.

First-year experience. Everyone with whom I spoke mentioned the first-year experience was very important as the place where students learned to write integrative essays and to explore topics from different disciplinary perspectives. Paul identified the "year-long research program that culminates in cultural biography" as one assignment in

the first year that was attentive to integration as well as a web page assignment that

students built across the four units of the first year. The emphasis on writing meant

faculty needed to be skilled at teaching students about expectations related to their

writing. Faculty in the first-year experience attempted to provide explicit instruction, but

Kasey thought it was too explicit at times. Some faculty members on the first-year

teaching team for a given unit were seeking a recipe for integrative writing, which Kasey

believed was unproductive. According to Paul, the units in the first year were additive

and coherent and supported cumulative learning.

     Senior capstone. The senior capstone course also was identified by all the faculty

as an important place where integrative learning was promoted, although not all agreed

that it lives up to its potential. Paul noted that students viewed the capstone as a chance to

draft their portfolio and resisted the integrative potential. Esther pointed out that the

capstone served as a regrouping point for Integrative Studies majors who have spent their

junior and senior years engaged in different patterns of coursework that varied greatly in

terms of the attention given to integration. From Esther's perspective, students who

enrolled in few learning communities or went a full semester or more without taking any

Integrative Studies courses, or even studied abroad, had a compromised experience in

terms of integrative learning. As a formal reconnection to the Integrative Studies degree,

the capstone needed to deliver on its promise for synthesis, but this promise was often not

realized.

     Portfolios. The portfolios completed by students also promoted integrative

learning. According to Ashley, students responded to prompts that facilitated intellectual

integration. The rubric for the portfolio assembled by students after Unit 1 included a

range of expectations, most linking course learning to the competencies. According to the rubric, to be considered excellent the integrative essay assignment "consistently makes insightful connections across course; integrative & reflective" (Community of Learners Portfolio Evaluation, 2006). Although this is the only explicit reference to integration, the portfolio as a whole demanded reflection on a wide range of skills and learning experiences, including an in-depth analysis of the group work.

Katherine found that some students resisted reflecting on their practice. Faculty seemed to know that the reflections students write might not be authentic. The graduation portfolio asked for a paragraph on Integrative Studies and Kasey reported that students do not do it consistently well. Paul noted that some students saw portfolios as busy work and "jumping through hoops." He noted that other students saw the value of portfolios and felt a sense of accomplishment with them. According to Paul, students got tired of writing reflective essays and were good at parroting back what they knew faculty wanted to hear.

Program design and classroom practices. Denise and Katherine commented that the way the degree is designed also was integrative in that it included experiential learning to connect learning inside and outside the classroom. Integrative Studies blended in class and co-curricular experiences, general education and the concentration, study abroad, work and school, and instructors and peers. The integrative nature of the program could also be traced to the blurring of roles in the program and the suppression of the formal hierarchy. Melanie and Ashley described how students in the learning communities were encouraged to co-facilitate as a way of beginning to disrupt the idea that the faculty were the experts. Katherine remarked that Integrative Studies modeled integration and this modeling promoted students' understanding of integrative learning.

Denise described how the program allowed some courses to double count in the requirements and that this practice helped promote students' ability to make connections and view their degree as a cohesive whole and not discrete units. Rather than something that was addressed directly or separately, Esther commented that integrative learning was embedded in the total Integrative Studies experience. Esther also thought faculty supported students' awareness of what it means to be integrative through academic advising.

Kasey noted that the attention paid to integration by the faculty was uneven and that, other than the capstone, very little if any formal attention was given to integrative learning. Paul noted that there was not very much purposeful work in the junior year designed to support integration. Ashley echoed this view but added that if faculty "ask students to relate their experiential learning to the classroom," the learning communities that students take in their sophomore and junior years could be sites for integrative learning. Esther concurred that experiential learning prompted integration. Integration was taught through assignments as well as through class structure, which promoted peers learning from each other. Using groups and teams and providing time in class to reflect on the group process all contributed to student integrative learning. Katherine recommended asking of students, "What perspectives did your group members bring?" For Kasey, providing feedback to students on their writing and conversations seemed to be the most effective way of teaching students to become integrative learners. Faculty concurred that integrative learning was time consuming for faculty and students alike, and that the evidence of their success was mixed.

Learning Outcomes for Integrative Studies

I asked faculty to talk about what students in Integrative Studies learn and what evidence supports that learning. Most faculty referred to the competencies, the stated learning outcomes for the Integrative Studies degree. All students in Integrative Studies are expected to develop proficiency in "communication, critical thinking, information technology, problem solving, valuing, aesthetic response, social interaction, effective citizenship, and creating global perspectives" (University, 2004b, p. 2). Many faculty also explored with me the characteristics of Integrative Studies students that distinguish them from other students at the university.

Katherine noted that the competencies were " a means to an end." The competencies were not just about academics, "they are life skills that we practice in an education context" in support of life-long learning. As Paul explained, the competencies were "not standards for performance but more a heuristic for thinking about self and learning." Students began to shape their meaning of the competencies in the first year. Paul reported that even the faculty disputed what the aesthetic competency represents. As students struggle with this competency they contribute to shaping what aesthetic competency means. According to Paul, students could recite the competencies and how courses fit them. Individual courses have learning outcomes related to the competencies. Each course is attentive to some of the competencies, but is not expected to address them all. Paul believed there is value added in Integrative Studies, but that some students learn more than others.

Esther suspected that many students did not fully understand or even think about integrative learning until they were prompted to write their introductory essay about it for

their graduation portfolio. The rubric used to evaluate the graduation portfolio includes

the expectation that students in the introductory essay, in which students write at least 12

pages on being a learner, are expected to "demonstrate integrative and analytical

thinking" and should "integrate ideas and experiences" (Graduation Portfolio Response,

n.d., p. 1). When faculty assess the portfolio as a whole, student writing is judged on

whether it is "integrative – makes connections across courses and disciplines and between

theory and practice" (Graduation Portfolio Response, p. 3). Esther found students were

comfortable talking about making connections, but these connections were not reflective

of comprehensive integration. Melanie, however, shared her impression that most

students did become integrative learners by the time they graduate. She noted that the

first-year students all reported that they have mastered the competencies when they write

their portfolios, but seniors were more humble and realistic. If students misrepresent their

learning by overstating their accomplishments, Melanie thought the exit interview would

expose this lack of authenticity in the graduation portfolio. In Melanie's experience,

however, most students were genuine in their assessment of their learning.

Beyond the competencies and the graduation portfolio, faculty identified some of

the hallmarks of an Integrative Studies student in terms of those qualities that the

program cultivated in students. For example, students in Integrative Studies learned to

question and seek evidence. Esther talked about how students expected a rationale for

claims and policies and would ask faculty to "prove it." Paul described this disposition as

a willingness for Integrative Studies students to ask, "why?" Some faculty in other

university departments found this behavior annoying, according to Esther. Esther added

that students tended to be good at critical thinking, value critical engagement, and have lots of energy.

Facuty members also thought the learning outcomes in Integrative Studies were stronger than those achieved in other majors at the university. Faculty responses to a survey about academic affairs and student affairs partnerships related to the Integrative Studies learning community showed 80% of respondents perceived students in Integrative Studies learned more compared to "educational activities on this campus (Bucher, 2004, p. 3). Similarly, 80% of faculty respondents agreed or strongly agreed that the Integrative Studies program "facilitates student learning more effectively than other educational activities on this campus" (Bucher, p. 4). In response to an open-ended prompt about the most important outcomes of the Integrative Studies learning community, student learning received 10 responses, 8 respondents mentioned life-long learning was mentioned, and 7 respondents indicated outcomes related to integrative or interdisciplinary learning (Bucher).

Summary

This chapter outlined faculty perspectives on the history of Integrative Studies at this university. Of particular interest were the observations about the Integrative Studies program that coincide with the students' perspectives. In particular, this chapter outlined faculty views on (a) the approach Integrative Studies takes to recruiting new students, (b) characteristics of a typical Integrative Studies student, (c) defining Integrative Studies, (d) the marginalized status of Integrative Studies, (e) strengths and weaknesses of Integrative Studies, (f) how integrative learning is cultivated, and (g) the overall learning outcomes of Integrative Studies.

CHAPTER V

FINDINGS AND THEORY DEVELOPMENT

This chapter presents the findings of this grounded theory investigation of undergraduate students' perceptions of and experiences with integrative learning in an explicitly integrative academic program[1]. Across all of the student interviews I created a total of 1,427 initial codes. I then clustered these initial codes into 13 conceptual codes or themes that captured multiple initial codes and helped represent the experiences of the students in the study. Chapter V includes brief profiles of the 10 student participants, identified by their pseudonyms. The profiles include the demographic data provided by the students as well as their position within the Integrative Studies program in terms of class standing, transfer status, and rationale for pursuing an Integrative Studies degree. The chapter then presents the 13 conceptual codes around which the data coalesced, beginning with codes that relate to students' understanding of integrative learning and to the process of becoming integrative, followed by codes relevant to the Integrative Studies learning environment (the intentionally integrative academic program in which this research was conducted).

Profiles of Participants

Ten students participated in this study. Brief descriptions of each participant appear below and summary information is presented in Table 2.

Darth Vader (DV) is a first-year student in her second semester of the first-year experience. She is a White female who is living on campus. She identifies as

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[1]The description of the findings includes quotations from participants. To facilitate understanding, I have removed many of the "likes," "you knows," and "ums" unless they contribute to understanding the quote.

Table 2

Student Participants

_____ _____

Pseudonym Key characteristics

_____ _____

Darth Vader (DV) First-year, White female with in-state status. Heterosexual, able-bodied. Participated in outdoor orientation, first-year experience, and living on living-learning floor.

Matt Second-year, White male with in-state status. Heterosexual, able–bodied. Participated in outdoor orientation, first-year experience, and the living-learning floor. Living on campus.

Mary Second-year, White female from out of state. Heterosexual, able-bodied. Participated in outdoor orientation, first-year experience. Living on campus.

Cindy Second-year, White female from out of state. Heterosexual, able-bodied. Participated in outdoor orientation, first-year experience, and living-learning floor. Living on campus.

Nicole Third-year, African American female from out of state. Lesbian, able-bodied. Transfer student. Took Introduction to Integrative Studies. Living off campus.

Chiwy Third-year African international female. Heterosexual, able-boded. Transfer student. Had not taken Introduction to Integrative Studies. Living off campus.

Anisah Third-year South Asian woman with in-state status. Heterosexual, able-bodied. Participated in first-year experience. Commuter.

Ann Fourth-year White female from out of state. Heterosexual, able-bodied. Participated in outdoor orientation, first-year experience, and living-learning floor. Living on campus.

Bond Fourth-year White male with on-state status. Heterosexual, able-bodied. Transfer student. Took Introduction to Integrative Studies. Commuter.

Lynne Fourth-year White female from out of state. Heterosexual, able-bodied. Participated in the first-year experience. Living on campus.

heterosexual, able bodied, and does not work on or off campus. DV is an in-state student. Both parents have master's degrees and a younger brother still lives at home. DV as well as her parents and grandparents were born in the United States. Her decision to attend this university was influenced by proximity, attractiveness of the campus, and the availability of her chosen major, secondary education. All secondary education majors earn degrees in Integrative Studies. DV first heard about Integrative Studies when she was reviewing housing options and became interested in the living-learning option. She attended the Integrative Studies session at summer orientation. To facilitate her transition to college, she participated in an outdoor orientation program exclusively for Integrative Studies majors that took place in late summer just before the start of fall classes.

Matt is a second year student who identifies as White, male, able bodied and heterosexual. He began in Integrative Studies as a first-year student and currently works about 20 hours a week in a retail clothing store off campus. Both parents have bachelor's degrees and a younger sister is applying to college this year. Matt, his parents, and his grandparents were born in the United States. Initially Matt wanted to major in journalism. He explored the Integrative Studies program at summer orientation in part because the name caught his eye. A youth-centered church in his hometown carries the same name. He was attracted to Integrative Studies for the emphasis on papers and lack of tests as well as the attractive first-year schedule. He fully intended to transfer to the journalism department after the first year. The integrative nature of Integrative Studies was not an attraction, but the approach to learning and not having classes on Fridays were appealing features. Matt elected to participate in the outdoor orientation program for new first-year

students as well as to live on the living-learning floor with other first-year Integrative Studies students.

Mary is a second-year student who identifies as White, female, able bodied, and heterosexual. She is from out of state and lives on campus. She works 35-40 hours a week at two jobs, one on campus and one in food service off campus. Mary also described herself as first-generation, reporting that her mother completed high school, but her father did not. Her older brother is also in college. Mary, her parents, and her grandparents were born in the United States. Mary began her college career in Integrative Studies having learned about it at summer orientation. Someone she met at orientation knew about the program and since Mary was undecided about her major, she decided to explore Integrative Studies as an option. The experiential learning emphasis impressed Mary's mother and Mary thought the program played to her strengths in writing and group work rather than taking tests. She also was attracted to the small, personal atmosphere portrayed by the orientation advisors. The week before school started she participated in an outdoor orientation and camping experience for students in Integrative Studies.

Cindy is a second-year student who learned about the Integrative Studies program as a prospective student seeking opportunities to earn a degree that would prepare her for work in a zoo. It is the connection to her chosen major that prompted her to join Integrative Studies rather than the fact that the program is integrative in its approach. She is from out of state and lives on campus. Cindy participated in the outdoor orientation program for new first-year students the week prior to the start of fall semester and lived on the living-learning floor her first year. She identifies as multiethnic indicating a blend

of Italian, Hispanic, and White. She also identifies as heterosexual and able bodied. Cindy spends 3-6 hours a week working on campus. Her father has a doctorate and her mother has earned a bachelor's degree. Both Cindy and her parents were born in the United States. Cindy is the oldest in her family so no other siblings have attended or completed college.

Nicole is a junior who transferred to the institution and then changed majors to join Integrative Studies. She began in the School of Management, but found the coursework did not match her career goals. Nicole was attracted to the flexibility of the Integrative Studies curriculum and the opportunity to design her own degree program. She identifies as a lesbian, African American female, without any physical disability. She is from out of state and lives off campus. She works on campus between 20-30 hours a week. Her father has a bachelor's degree and her mother has attended college. She has older brothers who have gone to college, but no older sisters. Her father says she would be the first female in the family to earn a degree when she finishes, which is a symbolic motivator. Nicole, her parents, and her grandparents were born in the United States.

Chiwy has junior standing and identifies as a heterosexual female who is Black/African American and without disability (except for needing glasses). She started the university in a different academic unit and transferred to Integrative Studies in Fall 2005, making the semester she participated in this study only her second semester in the Integrative Studies program. She was attracted to the seminar style classes and opportunities for interaction with faculty and peers as well as the flexibility of the curriculum. She lives off campus and works 40-50 hours a week off campus. Her father's educational level is "high school or less" and her mother has completed some college.

She has older siblings who have attended or completed college. She is a foreign born resident alien/permanent resident.

Anisah is in her third year and has junior level status. She identifies as a South Asian, able bodied, heterosexual female from in state. She initially intended to pursue a degree in international relations. At summer orientation she was introduced to Integrative Studies and decided to try it. She expected to transfer to a different major after the first year, but she enjoyed the first-year experience so much, that she changed her major to education and stayed in Integrative Studies. She works 20 hours a week off campus and lives with her family off campus. Both parents have educational experience of high school or below. Anisah has older siblings who have attended or completed college. She was born in the United States but at least one of her parents was born outside the U.S.

Ann initially identified herself as a junior because she is in her third year of study, but she had enough credits to be classified as a senior and intends to graduate in December 2006, a semester early. She describes herself as a White, heterosexual, able bodied female from out of state. When she came to summer orientation, a faculty member from Integrative Studies sat with her at lunch and recruited her into the program. She was undecided about a major and the approach to learning sounded like a good fit for her. She participated in the summer camping trip prior to the start of school and later served as a student mentor on this trip. Ann also lived on the living-learning floor her first year. She works about four hours a week off campus. Her parents both have bachelor's degrees, and she has an older sibling who has completed college. Ann, her parents, and her grandparents were born in the United States.

Bond is a White male who has senior standing. He will complete his degree in December 2006. He identifies as heterosexual and able bodied. He lives off campus, in state, with his extended family and works off campus over 40 hours a week. Bond's father has a master's degree and his mother's formal education stopped at high school or below. Bond transferred to the university as a government major, changed to a communication major, and finally he discovered Integrative Studies. During the course of the interviews Bond celebrated his 25th birthday. He does not have any older siblings who have attended or completed college, and both he and his parents were born in the United States.

Lynne is a graduating senior who identifies as White, female, able bodied, and heterosexual. She came to the university from out of state in part because of the diversity of the student body and the fact that the CIA and FBI recruited on campus. Although her initial career interests faded before coming to campus, she attended the Integrative Studies orientation session after reviewing materials on the program sent to her home. Lynne was attracted to the first-year schedule and seminar-style learning. She lives on campus in a residence hall and works about 15 hours a week on campus in addition to many volunteer activities. Her father has some college and her mother has a bachelor's degree. She does not have any older siblings who attended college. Lynne, her parents, and grandparents were born in the United States.

<center>Conceptual Themes</center>

The initial codes applied to the data were sorted and compared to identify 13 conceptual codes or themes. During the data analysis I identified three overarching frames for the conceptual themes: (a) understanding integration, (b) becoming

integrative, and (c) the Integrative Studies learning environment. Subsumed under these headings are the 13 identified conceptual themes that were distilled from over 1400 line codes. The codes subsumed under the "understanding integration" and "becoming integrative" headings all are linked to the theory that represents students' experiences with integrative learning. The third set of codes about the Integrative Studies learning environment include descriptive rather than theoretical themes that are salient to the context in which this study took place. These descriptive codes were elevated to themes based on their prominence in the student interviews.

As might be expected when conducting research on human behavior and learning, the conceptual codes are artificially static and self-contained. There is fluidity to the established categories such that the ideas and evidence for one category might also apply to another category. The organizational frame I imposed on these data is intended to make it easier to read and interpret the vast and varied data collected in this study, but other organizational schemes may apply. Readers should be aware of this imposed structure and not view each category as pure or immutable.

<center>Understanding Integration</center>

Student participants talked at length about their understanding of integrative learning. Since none of the participants in this study elected to attend the Integrative Studies program because of its emphasis on integrative learning, faculty, peers, and the curriculum shaped students' understanding of Integrative Studies and integrative learning. The small classes, attractive schedule, and experiential learning lured students rather than the program's integrative approach. This section presents the data related to students' understanding of integrative learning and Integrative Studies.

Defining Integration Broadly

Students' explanations of integration included great variety and detail as to the components or elements that were integrated. From the students' perspectives, all of the variations offered qualify as a form of integration. Students defined integrative learning in all its iterations as a verb. Students described integration as an action and as a process rather than as a static outcome. The definition involved two parts: the action word and the integrated elements. Although the words used as synonyms of integrative learning were relevant – all involved some sort of connecting—it was the integrated elements or what was being integrated that was very broad. Students talked about applying, blending, bridging the gap, combining, coming together, complementing, connecting, crossing over, gelling, incorporating, intersecting, interlocking, intertwining, linking, making sense, mixing, merging, pushing together, recognizing, relating, synthesizing, and tying together. Considering the elements that were being combined or integrated revealed a deeper understanding of students' definition of integrative learning. These verbs depicting connections are evident in the following student explanations of integrative learning, which relate to curricular structures, learning environments, interpersonal dimensions of learning, and linking theory to practice.

Curricular structures. For some students, integrative learning meant bringing together different competencies or different general education credits. DV, in describing the ways in which her academic program in the first-year experience was integrative, explained,

> I know we got a speech credit for the first unit and we did work on speaking . . .
> We do a lot of technology if we are getting the technology credit . . . But also we
> got a history credit in the last unit. I'm sure we got an English credit, and then in
> this unit we're getting a social science credit, I think another technology credit. . .

DV offered other definitions and descriptions of integrative learning, but she was the only one who claimed that courses that met multiple competencies or fulfilled specific areas of the general education requirements were integrative per se.

Students reported integrating different subject areas or disciplines. Anisah described her first-year experience: "you are in one seminar and you are seeing different, like, you are seeing the environment from like an economist's point of view and then from like the sociologist's." As Ann noted, "My learning is integrative because it combines classes from different disciplines and that is really unique because not only am I learning from just one school within the college, but I am learning from different schools within the college." Later Ann talked about the advantage of learning the same thing in more than one class:

> So I was taking a business class and I was also taking a leadership class. Some of the topics seemed to cover each other. Like, Maslow's hierarchy of needs. Just like basic topics, but we also covered it in a communication class in organizational management.

Bond cited the different class activities or approaches to teaching that are integrated. He stated, "being able to apply the different . . .facets of, I guess, learning. You know, the testing, the experiential learning projects, the writing, the speeches in class." Nicole talked about the integration coming from teachers who "don't teach just one style. Every professor has a different teaching style, which helps you learn something in a different way." Some assignments, such as a debate, also were considered inherently integrative. Matt described how his preparation for his debate on global warming involved research, developing arguments and counter arguments, and thinking about the presentation and performance aspect:

It was a very different way of integrating things because it was not only the factual information, it was also what the others were going to say, how the professors were going to be looking at us, because we wanted that grade, that good grade, and we wanted to beat our opponents, we wanted to get our point across and maybe change some opinions of our audience, so it was a very important project for us just in how we wanted to perform, what we wanted to accomplish, and you know, the outcomes.

The students in the Integrative Studies program talked about their awareness of learning styles, having completed Kolb's *Learning Styles Inventory* in Unit 1 or in the Introduction to Integrative Studies course for transfer students. Several students talked about the integration of different learning styles as important to their program. Nicole said integrative learning was "blending different learning styles together and different ways of teaching certain disciplines together rather than just sticking to one, like the traditional way of teaching." Technology was also cited as an integrative element that intersected with group communication needed for a group project. Chiwy explained:

I don't think I would have been integrated as much, but we did all of our communication online, through emails, and we had set up a group page that we could just go and post stuff on. And we all lived in four different areas, completely, so we really learned how to manage our time outside of school and then managing our time in school and in class and working on our other assignments. It was really like a juggling act with that class.

Learning environments. Other integrated elements were more holistic than specific curricular structures and teaching approaches. Lynne described how the various courses affected each other: "you read something in one class and you bring up the discussion in another." For Matt, living on the living-learning floor and living with the same students he sees in class creates a ubiquitous context for integration. He explained the integrative nature of the living-learning floor:

We had the same classes, we lived together, we turned into a huge family, basically. We did everything together. If we didn't understand things or bouncing certain things off, or we were griping about something, you know, we were

talking about something else. And just with the ethnic diversity too in there, we had a lot to talk about many times.

Another holistic view of integration involved connecting current learning with prior learning. Lynne described her process for writing papers: "I make connections to other classes or events that I went to or things we studied 6 weeks ago, so I'm thinking it's already ingrained in me to make those connections across the board."

Interpersonal dimensions of learning. Many students cited the blending of peers' experiences or perspectives with their own views and experiences as an important dimension of integration. During class discussion the students described taking those views into account as they formed their own understanding on a topic, a process they insisted was integrative. DV described the in class experience: "Everybody shares different ideas and, you know, we'll bounce them off of each other. So we will combine each other's ideas with our own, sort of." Chiwy expressed her appreciation for different perspectives by acknowledging that she had assumed her experiences and views were representative of others:

> There are certain people in the class who say, "Yes, this is what I believe in. This is what I would like to learn about a little further." I think one of my biggest problems from before and I think it's decreased now, is that I think that since I am this certain way and I understand certain things this way, that I think everybody else in the world does. And I am like, "How could you not understand this, I mean, come on," you know? And learning that other people's brains don't function the way mine does is also very important.

Ann expressed a view shared by others: "Peers are really important in all the classroom settings because when we're sitting in class and we're having discussions, a lot of the time when they bring up something it's different than what I'm thinking." Exposure to different interpretations and perspectives contributed the fodder for integrating the views of others with one's own views.

Chiwy, a transfer student who had not taken Introduction to Integrative Studies, associated integrative learning with being in a diverse or racially/ethnically integrated environment. She cited the composition of her group for a group project as an example of integration: "In my group, let's see, there is an Italian, an Afghani, a Mexican, an American, and there is an Ethiopian. So my group just by itself is pretty diverse. And then there is [sic] different religions within that group." Chiwy was the only student to define integrative learning as the opposite of segregation.

A term used repeatedly by all participants was "perspectives." Participants talked fluidly about the different perspectives represented by their peers as well as the reading and their faculty. Different perspectives, then, were often being integrated in this academic program. In describing her views on integration, Anisah said, "just incorporating different aspects, like not just learning the traditional way but incorporating different ways to learn it [the topic at hand], like seeing it from different perspectives, so that's what I think integrative learning means to me." By reading different texts, topics were often examined from different points of view. Cindy commented: "during the first-year experience I really learned a lot about integrating, looking at stuff from different points of view." Similarly, Mary emphasized the importance of consulting different sources: "if you're learning something, to not just read about it in a book, but to try to learn about it from different, also to learn about it from different points of view, as opposed to just one point of view and like sticking with that." Mary also shared the goal of uncovering alternative history or perspectives that were not always represented in the mainstream media.

Sometimes students were charged with integrating faculty perspectives, particularly in a team-taught course. Nicole had such an experience:

> So, the only downfall I would say about that [Integrative Studies course] was that it was team-taught. I've spoken to other people who don't like the team-taught courses, just because, depending on the professors, they often bump heads. You know, they would argue in front of the class or they could never determine the same grade for students.

Theory to practice. Classroom learning also was linked to life, as Nicole described: "just taking it [class topics] away from the class and being able to relate it to your everyday life." This application was part of a broader theory-to-practice cluster of integrated elements. All of the students commented on some sort of connection between the classroom and real life or personal experience often in conjunction with experiential learning. Students who worked more than 20 hours a week or were active in student organizations saw a connection between their class work and their out-of-class lives. In some cases skills learned in one context were applied to the other. Anisah talked about applying facilitation skills learned in class to her work chairing various campus committees: "I think I have incorporated a lot of what I learned in the classroom in my leadership." For Mary, the integrated elements traverse different spheres in her life. She stated,

> I can always use something that happened at work or something that happened in class to explain a situation or to relate something to another situation that we're discussing. And I can always pull on things that I'm learning in class to my work as well. So I guess for me that's really like how the whole thing is integrated.

Lynne also talked about taking in-class learning and translating it into practice as an integrative act: "Like I didn't really understand advertising and marketing until I put together like several pieces to advertise [a series of major campus events]."

Mary offered a summary of this constellation of integrated elements when she defined integrative learning as:

> finding ways to make connections between pretty much everything you do, to make connections between different texts and different art works, and different experiences and music or art or a book that you've read along with the facts from the textbook along with what's going on in your life, what's going on in the news. It's a way to make connections between all of those things and think about how it affects you maybe or how it affects the world.

For students who persisted in Integrative Studies, this approach to learning fit their understanding of the world. DV commented, "You see how it all fits together, so you see how in the world everything is integrated together and how teaching/learning like this sort of makes more sense." Although participants had a lot to say about integrative learning, most confirmed that they had never or only in a limited way tried to define integrative learning before.

Identifying Forms of Integration

To showcase the range of integrative experiences claimed by students, this section highlights integration as application, comparison, understanding context, and synthesis. Then I present metaphors for integrative learning offered by the participants. The metaphors are organized along these same broad categories of integration.

Application. Study participants frequently cited the application of one idea to another or one context to another as an example of integration. When pressed, all agreed that integration involved application but that not all forms of application could be labeled integration. The definitions of integration offered by participants often used the word "apply," but these references were often vague. In her efforts to describe integrative learning, DV said:

> In learning you are processing the information, then applying it, and then it goes back in the circle and learning more. I think that's at least the way it worked. So with something, we would learn about it, we would reflect on it, we've had a lot of journals and reflective pieces. And then we would sort of apply it, and that's really where the integrative part took over, because applying it, you're not just applying it in that area. You may be applying math and science, science to math, or styles you see writers using in your own writing kind of thing.

Cindy noted, "integration requires a lot of effort, . . . applying the different concepts to each other and relating them." Cindy talked about applying what she learned in one class to another class:

> In [a science class] we talk about animals going extinct and I try to ask why or what human factors influence that. And the teacher will briefly mention it, but I will think about what I've learned in [an Integrative Studies class] and try to apply those topics to my [science] class.

Cindy actively sought intersections in her coursework by applying what she has learned in Integrative Studies to other courses and saw this as evidence of her learning.

> Just sit in one of your lectures for a non-[Integrative Studies] class and ask the "Why?" in all the different topics that are presented and try to tie it to other classes, just tying your different classes and realizing that you do it is just proof that you've learned something about integrative studies and you've applied it to your life.

For Matt, integrative learning involved application to his own life: "I've also gotten that book knowledge and book experience and class experience, but a lot of it is still what you've been able to take away from it, how you apply it to your everyday life." The application process can embrace everything. Bond asserted that his Integrative Studies degree is more relevant than other degrees because "everything I do is applicable right now. Everything." As these examples demonstrate, application was a form of connection, but other examples showcase more interpretive skills in identifying the similarities and differences between or among integrative elements.

Comparison. The act of comparing in the context of this study involved an analytical assessment of two or more ideas or theories or anything regarding how similar or different they are to each other. Ann gave an example of how some of her coursework was covering similar content. She reported,

> I see that [course content] overlapping a lot . . . Because when I'm in business, it is different than when I am in leadership. Although they are very similar, the professors teach it differently, because a professor of leadership is going to talk about group interaction whereas a business teacher is going to talk more about on the job and things like that.

Describing the academic component of the outdoor camping experience, DV talked about comparing one aspect of her experience to another. There is some application in this example, too, but the details DV gave in this example highlight comparison.

> So, having to go through that process of research, reflecting, and thinking was also the Kolb Learning Style of getting the answers ourselves. So we of course went over the answers so when we wrote the essays we knew all the answers, but it was like mixing them all together like how does teamwork relate to, I don't even remember how they put it. But it was sort of like, the questions didn't exactly deal with nature but they had some aspect of teamwork or something that we were doing, so when I was writing the essays, I was able to, "Whoa, wait a second," step back and look at it.

The process of answering questions for the outdoor orientation exam involved comparing different elements of the experience to each other. An assignment in Unit 4 also promoted integration by comparison. Anisah described how the large group presentations in that unit were integrative by requiring students to attend their peers' presentations and assessing them. According to Anisah, "we had to see each other's presentations and we critiqued them and had questions and learned more about each presentation. It was just neat that the students were the teachers, you know?" The students had to compare the performance of a group to a set of expectations as well as to each other for the purposes of evaluation. Bond, who enjoyed being the devil's advocate, offered an example of

integration that involved comparison. Bond's example compared a popular view of environmentalism with an alternative view:

> In my science class where we are learning about saving the environment, well you don't understand that certain facets of the economy depend on this kind of pollution. Sad as it seems, these students need to know why they are doing it, why people are doing this . . .There is a reason for that, I mean.

By comparing theories, experiences, or perspectives, these students were engaging in a different form of integration that was related to but distinct from application. Another form of integration involved recognizing the underlying context shaping the similarities and differences revealed by comparison.

Understanding context. When students understand context, they are beginning to bridge the gap between considering multiple perspectives and consolidating or blending those perspectives. Chiwy offered an example of how grappling with difficult issues such as racism and poverty can be approached by knowing where some of the presenting issues came from. Chiwy thought about housing markets when working on an assignment for class:

> The housing market, for example, when it first got started, that has had a tremendous impact on racism and diversity in the U.S. People think the housing market to be like, the housing market is just housing, it's when people buy and sell houses. But just real estate in general has a very dramatic impact on the flow of things in the U.S. and how one thing is taken differently from another, or why certain groups in certain areas are poorer and you can't just say, "They're lazy, that's why." But you can actually go back and say, "Well this is why they may be this way. They had a little bit harder time getting these things because of these reasons." And that has been a good level of knowledge for me to have as well.

Mary, too, found an assignment prompted her to think about context. She and her group members were involved in a project on homelessness and wanted to make it as personal as possible. She and her group members understood that there were some context issues related to doing the assignment that demanded consideration:

So I think just being able to go in and talk to them [homeless people], and feel comfortable talking to them was another big thing for me. Because being a girl, being a female going into DC, I've had the homeless ask for help before and being alone, like, I never felt comfortable. To be like, "Why are you homeless?" You just want to get away from the situation because you never know. But going in as a group, especially having three guys, I felt very comfortable with being on the street talking to these men and asking them different questions, and I think it kind of, I don't know if it was good or bad, but it made me more trusting of like homeless people. Not that I would go and start striking up conversations with any random homeless person, because you know there still is that little bit of fear and the safety issue.

Some students spoke about understanding bias and the source of information on a topic.

Lynne asserted:

Everything's written with bias, so you not only have to go to the source, but you need to realize that this source can't be the end all, be all, end all or whatever. You need to understand that there are others. . . . I think I look at things fairly clearly in that I do understand everybody comes with a bias. That's the other thing [Integrative Studies has] taught you, how to track bias and understand it and know where it's coming from and who's really sponsoring these advertisements and the advertisements are in a newspaper that is owned by a company that also owns, you know what I mean?

By understanding context, simply considering multiple perspectives can lead to blending multiple perspectives.

Synthesis. There were very few examples of students successful in blending multiple perspectives. Anisah was proficient in describing the idea, but stopped short of a full example. According to Anisah, "you're looking at [a] topic and incorporating other disciplines and other perspectives. And you just gain a better understanding and more enhanced perspective on that and you just achieve a greater knowledge on that topic or individual, whatever it may be." Anisah's desire to apply different disciplinary arguments to a conversation about human trafficking in South and East Asia, the Middle East, and North Africa is describing synthesis:

When someone talks about it [human trafficking], I can talk about it. Look at the poverty of the nation, look at the populations. I can talk about it from an

economics standpoint and an historical standpoint and then a scientific standpoint, you know, look at the environment. I'm able to do that, incorporate different aspects and bring it all together. And one of my friends commented, "How do you think like that? . . .It does make sense, once you've said it, but I would never think that bringing in scientific and like an historical . . . I just never have thought that those two would mix. How did you think like that?" That's how I think especially like in school and I think the whole integrative learning aspect plays a huge part in that, because in a way it fostered that ability to think like that.

Offering a similarly detailed example, Lynne traced the intersections of advertising with a host of theoretical perspectives and stated:

. . .advertising plays into how race is related and also ties into how gender is related and, hey look, advertising plays into and media plays into class, and certain classes, socioeconomic class, plays into the people who are available, who can learn about these things and at the same time that class plays in language and language connects to race, and men are more likely to have to learn English than women because women are required to stay home most times and that plays into advertising because men are going to be out on the street working, they're going to be reading the newspapers because they can read English, um, so, really that, it's interesting, wow, it's all connected. Now, that's integrative to me.

The connections build and weave and are more complex than most of the other examples in the study. Mary also blended perspectives when she described her understanding of poverty:

I guess it kind of amazes me how naïve some people can be. Whereas they think poverty is all based on individual decisions and it has nothing to do with the environment or, you know, what's going on around the world or what's going on in a certain city or town and that it is entirely based on like individual decision whereas, really, it has a lot to do with everything, like how that person was brought up, do they have a mental illness, if the town's going through a high period of unemployment, if they have medical and health coverage.

These examples offer a glimpse into the range of integrative processes Integrative Studies students used. Examining the metaphors participants used to describe their Integrative Studies experience offers another glimpse into their understanding of integration.

Metaphors. In the second interview I asked participants to think about and share a metaphor that captured how they thought about their education in Integrative Studies.

Although some students struggled or were reluctant to articulate a metaphor, others did so with ease. In some cases the focus was more on the Integrative Studies program rather than their experiences in it, but this shift in focus did not dilute the descriptions. The idea of Integrative Studies embracing multiple perspectives was widely represented in these comments, but evidence of blending perspectives was rare.

DV shared a metaphor that centered on application and comparison. She was comparing and applying what she learned in integrative classes to classes in other parts of the university. As a first-year student she had not yet taken any of the courses in departments outside of Integrative Studies, yet she thought that she had the ability to see how ideas in these other classes connect. In her own words DV said, "I guess [the Integrative Studies program] is the switch that made the light bulb go on in my head. I really think that is what did it." I asked her what the light bulb signified and she replied,

> The light bulb I guess is being able, the "Ah ha," to take a step back to see the big picture, because now, even in my other classes, I will be able to do that. And sort of, I'll see, "Okay, I see where this goes into this area" based on my own knowledge. I mean it won't be nearly as much as the others [Integrative Studies classes] . . . , but I will be able to do that now based on my own knowledge.

DV has developed an independence that she believed will allow her to apply what she learned in Integrative Studies to another course context.

Most of the metaphors embrace comparison of multiple perspectives and understanding contexts. Anisah's metaphor for integrative learning was a salad or a Thai soup, "where everything just doesn't seem to mix together . . . you can see all the ingredients in it . . ." Bond, too, emphasized the variety of perspectives available and chose to keep the component parts separate and distinct. For him, Integrative Studies was a buffet with many choices. He said,

> It's up to the student to choose . . . You can have a typical thing. You can always go and sit down and order from the menu, and that's what I think this school does. You know, they have the menu portion if you want to go sit down and eat exactly off the menu, that's great. If you want [Integrative Studies], you go to the buffet and you choose everything.

Lynne used her bookshelf as a metaphor for her Integrative Studies experience. The bookshelf had titles from classes and from her personal reading that reflect her passions and Integrative Studies concentration. According to Lynne, "if you take a look at my bookshelf and see, like, the four years, you'll see it all." The diversity of perspectives present was impressive, but the books remained discrete entities that do not intersect.

Matt, too, offered a metaphor that was centered on comparing perspectives and understanding context. His metaphor began as a road or path and ended up as a tree:

> I'm this trunk of integration I guess, if you will, and I've branched out in certain aspects, you know, I've done branches in [different departments]; I've branched out in the experiential learning in terms of an internship outside of school and a project inside of school. So I feel like it's given me all this great variety and so hopefully the fruit of that variety is going to be some success.

He mentioned an integrated core (the trunk), but did not explore that idea further in his metaphor; however, the multiple contributors to his learning (the branches) were evident.

For Nicole, her experience was a rubber band ball:

> You start out with just the one little band and that would be, I guess, like your Integrative Studies class. And as you are learning all the different styles and techniques that prepare you for god knows how many more classes you have to take, you keep adding bands. You add a band for every paper you write. . . So as you continue to go, you can only add a rubber band if you are actually able to integrate it. So if you can't say you have integrated something you cannot add another rubber band.

Some of the metaphors hint at synthesis that was left unrealized by the context of the description. For example, Ann thought about "a lot of streams, little streams, coming together like in a delta to form one big river or ocean. . . . And these streams would be

coming from all different parts of the land or whatever." For Ann the streams represent all the experiences that have shaped her college experience from group interaction to leadership to specific courses she has taken. Although tributaries to a body of water do blend and intersect once they reach the river or ocean, Ann did not emphasize this outlet; instead she is focused on the little streams. Mary made a similar observation using an artistic metaphor, "you take . . . a little bit of every color, something like that, where you mix a little bit of everything to create a whole (laugh)." When asked whether she was painting something particular within the context of this metaphor, she replied,

> I was thinking about it more in terms of a landscape because I mean if you look out the window right now, you couldn't possibly paint what I'm seeing with two colors, you need at least six or seven (laugh).

Again, the mixing of paint suggests a blending of perspectives, but Mary emphasized the number of colors rather than their blending in her example. In Chiwy's metaphor she was building a "complex house" for which the Integrative Studies program was the foundation.

> I feel like I am really at the bottom. I am still sort of playing around with myself and my thoughts, you know, and how I want to be, how I should be. So that's really the base, and once I have that foundation I can have my pillars in place and eventually have my little roof somewhere down the road.

When asked about why the house was "complex," Chiwy hinted at synthesis. To her, "complex" embraced the idea of integration: "It's not just a house that's made of bricks or stones, but it has a lot of pieces that come together to make my house a home; it encompasses people of different races and genders and everything else." The materials used for construction are blended in a sense, but Chiwy emphasized the foundation and the structure, not the mortar.

The metaphor that captured synthesis was Cindy's:

> I kind of think of regular learning as coming in the primary colors and then integrative learning when you are trying to tie the different subjects together, it's more like watercolors and like mixing it all together. So, like you have this English class that is red and science is blue and math is green. And then, Integrative Studies is trying to blend the colors into purples and yellows and such.

It is easy to visualize how colors bleed into one another on the canvas and create an image that would not have been possible without the blending of colors with each other and with the water.

Making Sense of Integrative Studies

Students spent time in the interviews talking about their efforts to make sense if the Integrative Studies program in which they were enrolled. Learning how to be integrative or what it means to be a part of an Integrative Studies program was not directly communicated to study participants at orientation or when transfer students joined the program. The students who were a part of the outdoor orientation program received more explicit instruction about the nature of Integrative Studies. Most participants discussed the ways in which integrative learning was modeled by an integrated context and how important it was to have an open mind to engage in integration. Wrestling with the gap between theory and practice within the Integrative Studies degree program provides another opportunity for making sense of Integrative Studies.

Being oriented to Integrative Studies. As discussed earlier, orientation staff avoid the term "integrative" and students who joined the program as transfer students did not recall any advising conversation that outlined what an Integrative Studies degree program was all about. Further, these students did not expect this from advisers. Chiwy explained

that the burden of finding out about the program to which one wants to transfer rests with

the student:

> It's assumed that you know what you're joining basically, so there isn't an overall explanation. I think that would apply to pretty much every department. If you go to a department saying, "I'm ready to transfer over," they think you've already done your research, know what you're joining, therefore you don't need an explanation anymore. So, I never had an explanation about what Integrative Studies was actually.

For Chiwy the lack of explanation was not distressing, but for Ann the lack of clarity she

had for her Integrative Studies degree caused anxiety. This concern was accentuated by

the fact that she was a senior:

> It's just that, I don't feel like I do have a really good grasp on it and I think that's kind of frustrating still as a senior. Um, maybe like freshman year they could like talk about integrative learning some more, I don't know that they do that enough through each class.

> *Participating in the outdoor orientation program.* Perhaps Ann's experience in

the outdoor orientation program was qualitatively different from her younger peers or

perhaps it was too long ago, but other students who participated in the outdoor orientation

experience said the explicit discussion of Kolb's Experiential Learning theory helped

them understand the way the first-year curriculum was structured. DV found this

introduction to be extremely helpful in navigating the rest of the first-year experience.

She described:

> I had a head start on sort of, I knew about competency learning. I knew about the ways we were supposed to think, the way we were supposed to write. I already knew about the Kolb learning style. I had already written several, I had a journal and I had written an essay for [the professor] . . .

DV had more confidence going into the first year because she had learned about

expectations and practiced the kind of writing demanded by the program.

Modeling integration. Anisah thought that having an integrated classroom or environment was sufficient for teaching students to be integrative. She said,

> I think . . . since everything is integrated in the Unit, you're thinking or you're required to see in that integrative perspective. So I see it as similar, like you have to be integrative to be in that integrated section.

This integrated environment prompted Anisah to be integrative. Ann expressed a similar insight, "I think it definitely, it's not something really that is taught probably, the idea of looking at things in an integrative fashion, I think it's something that we just do."

Nicole shared a different perspective. For her, the integrated context is necessary but not sufficient to teach integration to students. In her view,

> you can have all the building blocks and say this is how it is supposed to be, this is why this class is formed to combine different learning styles and techniques, but unless you're actually doing it, unless the students are actually forced to do it, it won't necessarily occur.

Nicole claimed that actively practicing integration helped her learn how to be integrative. Bond shared a similar view in stating that the student must engage in the integrative process:

> In order to be integrative and be able to take everything into consideration, one, the individual, the receiver, the student has to be willing to be integrative, to be willing to learn a vast number of different ways of learning in that particular environment. But the class also has to reflect that, too.

Taking an entirely different view, but one that was compatible with her understanding of integration, Chiwy described her course on human differences as integrated:

> Everyone there is very different, but we all brought it together. We are talking about the same thing that deals with many different things. So that has both, it is both an integrated class and it's also integrative in the things that we discuss, so that's been great.

In Cindy's words:

> Integrated classes kind of set up the outline for our integrative learning and you just have to go and fill in some of the blanks and just apply, just add to the topics yourself. And be willing to see the different perspectives.

These student voices suggested that integration is a process that requires individual effort and that effort is facilitated by a learning context that models integration. Matt commented that the modeling helped his understanding:

> Integrative Studies is learning by example and seeing, okay, the faculty does it, it's legit, it works because they shared some of their experiences in terms of breaking down the entire course . . . saying, "what could be better and what didn't work? Let's try this."

Matt agreed that it would be possible to learn how to integrate in a traditional context, but "I think that's a very, it would be a lot more difficult and it would really depend on the person. If they made the effort to integrate other things into their learning experiences." DV summarized, "Yes, it does [an integrated context facilitates your ability to integrate]. It definitely does help it, but I think the final sort of step has to come from [within oneself]."

Being receptive to integration. The challenge of becoming an integrative learner is made more manageable if the students can be open-minded in their approach to new ideas. Bond talked about the importance of being open-minded and how he struggled in this regard "because you come in here with your preconceived notions on how the world revolves around you and not realizing that college is going to completely change your mindset on a lot of things." Cindy credited the Integrative Studies curriculum with helping her be more open-minded. She said it "challenged my past assumptions about different topics." Humility was also an important trait for engaging in integrative learning. When I asked Bond about whether he saw humility as part of the integrative process, he replied,

Oh, definitely. I think knowing when I'm wrong, but being able to recognize when I'm wrong is not necessarily a bad thing, it's called going to school and that's why I'm paying money to go so I can lose some of my preconceived notions of how things exist and work and all that other stuff.

The learning process is lengthy from Lynne's perspective:

I think really it did take four full years . . . And that's hard. Because like, people keep drilling you with integrative, integrative, integrative and you're like, "I don't even know how to think integratively. I don't know how to apply it, I don't know what that means."

Lynne continued with an assessment of why integrative learning is so difficult:

I think for so long you're inundated with so much stuff and your brain just almost doesn't have the capacity, because I think the way our minds work, we segregate things. We categorize; that's how the brain works. Psych 101 will tell you that. . . . You create categories, you stereotype, and you separate, and when you can't, you can't separate in this discipline so you have to completely relearn your way of thinking, your way of studying, your way of writing a paper, your way of, and I really think it takes almost four years to be able to sit down and write a paper and be able to, "I remember this from this" and to pull this from here and this is all connected to, and really being able to flush out the different aspects.

This reflection from a graduating senior offered evidence that learning the integrative process was developmental in nature.

Recognizing theory and practice gap. Another part of making sense of Integrative Studies is reconciling the theory to practice divide that exists at times. Sometimes the ideals of the Integrative Studies program were not realized in practice. There were systemic issues gleaned from the participants and a scattering of idiosyncratic complaints dealing with individual classes. Given the stated goals of the program, the weaknesses exposed in this study offer guidance to practitioners on areas for improvement, namely the integrity of the degree program and the quality (and quantity) of reflective writing.

Student participants cited the flexibility of the curriculum and the ease with which advisors helped them graduate on time as a strength. Bond's appreciative attitude for

good academic advising was common: "He [my advisor] literally just did everything for me. He figured out everything and that really helped me bring more focus to my education." The advisor was helpful and spent time with Bond and helped him achieve some clarity about his future goals. Other references to advising were equally positive, but Lynne's comments suggested that perhaps advisors finesse schedules and degree programs in ways that compromise the integrity of the program. Speaking cautiously so as not to harm the Integrative Studies program, Lynne confided:

> I pretty much took whatever, and this is going to sound awful and hopefully [Integrative Studies] doesn't feel bad about this, but thankfully my name is changed, I kind of chose whatever classes I wanted to and then if I could justify why it would apply to [my concentration], "Oh, check, check, check, move, move, move, this counts for this, this counts for this, this counts for this, and you're graduating in May 2006." "Hey, that's awesome!"

Lynne confessed to ignoring basic requirements and was startled to hear that there were some core classes that she had neglected to take. Lynne's advisor, "just moved all my courses around until it made sense that I could graduate. Really, that's what happened. I thought I was going to have to go an extra year. Because, I don't have any of these core classes." There were several references to advisors making things work in the best interests of students. When Cindy planned her schedule she met with her advisor: "I was actually going to take a class that I thought was a requirement, but she had worked her magic and used an elective I had taken previously to meet that requirement." The frequency with which these changes are made was not clear, but Nicole reported that she "took one actual class that [Integrative Studies] has, and that wasn't even for my major, I think I took one class on the major list of requirements that was actually there. All the other ones I actually substituted." Making sense of Integrative Studies is complicated, then, by the malleability of stated requirements.

Another aspect of the Integrative Studies program that may not be achieving its stated goals is reflective writing. During the study a participant confessed to taking shortcuts with some of the reflective writing assignments. Cindy commented that this was true especially in the first year,

> when we were asked to write . . . reflective papers on each of the competencies. And if you felt that that competency had nothing to do with what you learned, then you would tend to make it up or think about how you've learned in the past and how you applied some of that to this Unit.

She went on to describe how shortchanging the requirement was a survival tool:

> Typically, the reflective writing is genuine, but sometimes you have to fudge a little bit to meet all the requirements. I think that every [Integrative Studies] student fudges their papers at least a little bit. We are almost trained in it because we have so many papers to write and so little time.

Mary corroborated this perspective and her practice of using reflective writing in one class for related classes:

> Because if you have to do them [portfolios] for every [Integrative Studies] class, you end up, especially if the topics are similar in the classes, you can almost copy and paste one of your other portfolios and different parts of it and add some and change some things, and have a portfolio done again.

Mary was most direct in her description of how students approach their portfolios. "You know what the professor wants to hear, you know the key words to use, and you know how to put it all together to make a portfolio without actually thinking about anything too much." Because the learning goals for a course are clearly communicated, she said,

> you say that's what you learned and you know examples leading up to that regardless of if you agree with them or not. And you just get really good at saying, "This is what I learned, this is how I learned it," and, you know, making it into a nice portfolio or a nice paper.

DV agreed with this assessment as she completed her first year: "We don't necessarily

take it extremely seriously, and you know, pause and really think." These confessions of not attending fully to some of the requirements did not diminish students' confidence in the Integrative Studies program. The scope of the discussion about how students learn to be integrative in their thinking suggested most of the participants had not thought much about it and none had considered a nuanced understanding of integration suggesting different types or forms of integration.

In summary, students who participated in the outdoor camping experience prior to the first year considered it a strong contributor to their understanding of integrative learning. The Introduction to Integrative Studies course was helpful to transfer students, as well. However, students who joined the program as first year students found the immersion experience of the first-year was a comprehensive orientation to Integrative Studies. Faculty also pointed to the first-year experience as the cornerstone of the Integrative Studies program. Other contributors to understanding integration came from experiential learning, creating portfolios, and writing reflectively. Receiving feedback from faculty on writing offered another vehicle for improved understanding of integration as did reading from diverse perspectives, participating in group projects, and writing papers. Students also mentioned working, advising, creating a concentration, living on campus, being in a co-curricular organization, and being in an integrated context as experiences that helped them understand what it means to be integrative. Many of these facets that promoted understanding of integration also supported students' ability to integrate, but not all, and the experiences differed greatly across students.

Becoming Integrative

The following sections address the themes related to how students learn to become integrative thinkers. Identifying environments or assignments that encouraged students to become integrative has important implications for practitioners interested in creating such learning contexts. In keeping with the broad definition of integration used by participants, the landscape for promoting integration is equally vast. In this section I outline key ingredients to promoting integrative learning that seem to cut across specific cases: engaging in personally relevant experiences that lead to self-knowledge and understanding, encountering conflict, understanding complexity and multiple perspectives, and resolving conflict.

Finding Coursework Personally Relevant

When study participants discussed compelling learning experiences or articulated reasons why a given assignment or project contributed to their learning, they often cited the personal relevancy of the topic. Usually this relevancy was described in terms that directly connected to the students' lives. Ann discussed a paper that she thought was a good example of her integrative learning and how she was able to choose a topic that connected to her experiences in high school with a particular activity. Ann shared, "I was able to look at something that was important to me in my high school life." This paper was one of her "favorite papers" in her college career. DV got animated and a bit distressed when she talked about the effects of immigration policy on a local Latino theatre troupe. She explained:

> If I get a little into this subject, my boyfriend is from Bolivia, they've had a hard time with sort of getting the visas and so I've had first-hand experience with how hard that is. So that really struck with me.

When Matt read an essay for class that he assumed would be boring, he was surprised and delighted to find the author "gave the youth a voice and gave them a chance." Matt was impressed with the author's "efforts to investigate and try to figure out what they [youth] responded to and then he used that to his advantage, you know, everybody won." In another context Matt was struck by how an in-class exercise designed to expose how individuals contributed to pollution really affected him. He concluded, "things that you can apply to your daily, your personal life I think is great because you're taking that from the classroom, and that really makes it stick with you." Cindy described an example when her academic work conflicted with her belief system and how she wrestled with figuring out "how am I going to take this into my life?" The application to learning was made by Lynne who described in discussion classes she learns best by listening, "but a lot of it has to be personal. Like, I learn best if something's personal." Matt would agree. He described learning as "what you've been able to take away . . . how you apply it to your everyday life, and where is it going to take you?"

In other examples, personal relevancy was described as an intention of a presentation or debate to make the experience more meaningful to the audience. In trying to make homelessness a more tangible reality to her peers, Mary and her group members shared the voice and story of a homeless man in Washington, DC. Creating a personal profile would make it more difficult for her peers to ignore. Mary noted:

> If people don't know somebody personally who is homeless or who has been homeless, then they kind of just say, "Oh, yeah, there are homeless people out there" and that's it. And we were really trying to address that issue and make it a personal story.

In describing another presentation, Mary said her team decided their project should "be relevant to the students. . . . We knew we wanted [it to be] interesting to the students [so] they would pay attention and maybe care."

Another part of personal relevancy is the learning that contributes to self-understanding and self-knowledge. One area in which participants expressed new understanding was related to discovering biases and assumptions. For Cindy, a course helped challenge some taken for granted assumptions:

> I learned what the word "ideology" meant and just realized how much our ideologies affect every aspect of our lives and when you try to break out of that ideology you see almost how zombied we are in terms of thinking certain things. That's just how we've been trained and it is hard to break out of that at times and see where we all might have been going the wrong way, but because everyone was doing it [we kept doing it].

Chiwy described a similar process of being "deprogrammed" and making a conscious effort to "get me over certain fears that I have, not fears even, just things that had been programmed inside of me. I was sort of deprogramming myself." When asked about what was her most important goal for college, she reported:

> A very, very important thing for me is getting to know myself, because I'm on a quest to find myself (laugh), as is everybody else in the world. But, so I always sit down and reflect [outside of school] on what I've been doing in school.

The importance of personal relevancy was underscored by frustration when the connection was absent. For Bond, being forced to work in a particular type of experiential learning site was aggravating. He described:

> The class I'm taking now, [environmental science], you have to take 75 hours of community service and all of this other really difficult stuff for somebody who is in business. Why would I want to go take water samples and ph samples and oxygen samples and all this crap out on a lake? There is like no, no interest to me. I'd never do it in my right mind, but it forces you to do it.

By applying learning to their own lives in some meaningful way, participants were able

to become engaged in the learning process and begin the journey of becoming integrative.

Identifying Multiple Perspectives

Some of the examples of integration demonstrated a consideration of two or more

perspectives on a topic. Mary described this approach in a general sense:

> You would want to learn about that issue if from every or most individuals' points of view, and look at it in different mediums whether it's books or the arts, or news or relevant topics which do that kind of research rather than just reading about it in a textbook.

In reviewing her interview transcript Mary added that one of the perspectives that she and

her peers were encouraged to seek were the voices of people with little or no power in a

given situation. Students also found diverse perspectives among their peers who shared

their views through class discussion.

Lynne, in her example, identified disciplines as the perspectives being considered,

and made her case for the importance of embracing more than one point of view:

> Because even if you're an economics major, economics is about race and class and gender and media and colonization and globalization. So how can you just study economics and not take classes on or courses in race and gender and class and the differences? It's just like, it's everything.

Anisah shared this view. She defined integration as looking at a topic from different

perspectives. "You know, you're looking at a topic from a scientific view, from a social

view, from an historical, everything. That's how I see Integrative Studies; we're

incorporating all the different fields of academics into one topic." In her example, Anisah

went one step further than Lynne and asserted, "it [Integrative Studies] really does

prepare you so much better for the future." Finally, offering evidence from a particular

course, Cindy identified the multiple perspectives in terms of course themes that included

how

> nature, rivers, and natural roads could influence the movement of people and then
> those people who lived through that wrote novels or their lives were the subject of
> a later film and you saw how those events contributed to literature.

Encountering Conflict

All of the students in this study gave examples of a time when they were

confronted with a conflicting view or encountered a situation where they had to confront

something or somebody. In some cases conflict was witnessed by students, meaning the

student was not actively engaged in the conflict (external conflict). In other cases the

conflict directly involved the student sharing the experience either publicly or in private

(internal conflict). Encountering conflict led students to integration in the sense of

understanding contexts and was an essential prerequisite for eventually reconciling

conflicting perspectives. Exposure to conflict was fostered by the curriculum and life

beyond the classroom.

Conflict outside self. Conflict was experienced outside oneself in classes in which

students were asked to discuss controversial issues. These discussions could get spirited

and confrontational. Debate and argument helped to air the different perspectives on the

topic. If certain ground rules for discussion were understood and followed, the discourse

was more civil and productive. Lynne described a class discussion that was lively:

> One was a discussion about, I want to say abortion, . . . but I also know the
> individual involved was transgendered, so I almost want to say it was an argument
> about gay and lesbian rights and maybe having children. . . . And I really don't
> know, but it got personal is what the problem was, it got very personal. . . . [So,
> by] asking the wrong questions, well in reality you can't ask any wrong questions.
> You have to ask because you don't know, but I think the way they framed it, it
> seemed like an attack.

In Matt's class when the topic was birth control and abortion, "she [the professor] cut off [discussion] at one point because some people were letting, it is such a heated debate." The topic of some of the Integrative Studies classes invited discussion about controversial issues, particularly those focused on human differences. Other classes introduced controversy in assignments. In the Introduction to Integrative Studies class an assignment introduced the conflict and served as a vehicle for practicing the skills needed in the program. Nicole described the group project in her introductory class:

> I think that group consisted of five people including myself. In that class our group assignment was to pick a controversial issue at the time and pretty much present both sides of the issue and just discuss it and see what the class thought on it.

> Conflict was also found within and across courses that prompted comparing

different theories or perspectives. A senior, Ann, found conflicts in the various leadership theories she encountered in her coursework and commented,

> I think it's challenging when you're reading something or you're reading a couple of pieces of work and you have to write one paper and you're getting a different, completely different views from three pieces that you're supposed to incorporate into one, or talk about in one paper. I think that's very challenging with integrative work.

Chiwy cited an example when a guest speaker sparked a conversation about war and the human condition. This discussion tapped fundamentally distinct views about war and human nature, but may not have been the discussion intended by the instructor. Chiwy recalled:

> A lot of people in the class were like, "War is not necessary" and some people, and they didn't speak up until this one girl spoke up. She said, "I think war is necessary. It's inevitable. It is a part of human nature." Which led us to wonder, "what is human nature?"

As a second-year student, Cindy claimed these conflicts of course content were rare: "Usually the professors (laugh) will try not to teach us contradictions because it will confuse students."

When controversial topics or conflicting perspectives were expressed, it was inevitable that students encountered points of view with which they do not agree. This type of conflict was expected by students and was viewed as a positive contributor to student learning. As Nicole explained, "there are some outspoken people who brought up issues [in seminar] that a lot of other people didn't agree with and that's where some very interesting discussions can take place." Chiwy normalized the conflict in her human differences class when she said, "The whole class is based on difference, so we all have very different views." DV noted that when controversy erupts in class, "a lot of the times people agree to disagree because they have seen different things and they view different things and that's just how the world is. It would be pretty boring if we all saw it the same." Bond took the view that he can learn something useful even from those people with whom he does not and will not agree:

> One day if I get into business or if I get into politics, even though I didn't exactly want to learn that or I don't share that same point of view, I still take that bit of knowledge away with me and go, "Well, this isn't exactly what I wanted to hear and it isn't exactly my point of view," but at the end of the day, I'm not going to have that point of view. I at least was aware that I knew that it was a different point of view, that it was something to consider and it was something new I had learned, why that person in this particular environment thinks exactly that way.

At times the conflict seemed tedious. Chiwy described a peer who seemed to contradict others just for the sport of it:

> There is always this one girl who has the complete opposite view of everyone else in the class. It's always the same girl. And, it's very hard for me to understand how she sees things that way. Because I don't see things that way, so I'm like, "How

does she think that's right?" Like, I don't understand how she thinks that's right. But nobody says that to her, but we'll ask her, "How is this right in your head?"

Students also encountered external forms of conflict in their out of class lives. Matt described an incident on his living-learning floor in which another resident created a Facebook group for White students in response to a group set up for Black students. According to Matt this student "kind of had his own group of friends," and was somewhat separate from the other residents. This Facebook group, to which Matt was invited, espoused:

> "I'm sick of Black people who just complain about everything and they have all these opportunities and they are never happy and it's time for the White man to rise up." . . . all of us were very against it and we couldn't believe he had the audacity. I just couldn't imagine putting it on the Internet and he was saying that. It was a really, a big night for us because this [biracial] girl was just so upset and she went to his room, like, "How could you say these things? How could you do this?"

Matt witnessed this conflict and felt the tension, but he did not confront the creator of the Facebook site.

Cindy encountered conflict in the outdoor orientation program in which she participated prior to the start of her first year. For one of the activities, the faculty leaders left the new students in a cave. The students were charged with finding their way out of the cave, a process that created a huge argument when Cindy was on the trip. She described her role in this conflict:

> I just kind of sat back and watched. It was frustrating and hilarious at the same time. Um, I knew that we would get out eventually. I knew the teachers had to be near by listening to us or that the cave had to go in a circle or something because in the 21st century they can't just put 12 students in a cave and make them get lost. So when the teachers finally showed up and told us we had been arguing and fighting right in front of the corridor we were supposed to take all along, it was very nice (laugh) to see people in their place and help them see that their arguing about who is a leader was not helpful at all.

Anisah also talked about her co-curricular involvement in student government and how

the judicial branch was prepared to handle conflict when it occurred. She said, "as part of

the supreme court you're just a moderator, you're the middle man [sic], and you're just

supporting student government as a whole." Formal grievances had not been filed, but the

systems were in place to handle such complaints.

　　　　Conflict within self. In some cases in-class conflict prompted a direct conflict for

the student, either in private or as an active participant in a public conflict. Chiwy

described what it was like for her to encounter class topics that conflicted with her

upbringing and culture:

> So, and being gay or homosexual or any of those, where I grew up it's completely
> taboo. We did not talk about it, we don't notice it, it is almost nonexistent. So
> being in class and talking to people who are actually not heterosexual but are
> homosexual or gay or bisexual or transgendered and seeing that they have real
> experiences that heterosexual people go through is very important because I can
> talk to people now without having any form of judgment upon them. I think that
> has been the greatest thing in that class, is learning about things I never, ever
> thought I would end up learning about.

In Introduction to Integrative Studies, Nicole's group picked gay marriage as their

research topic, which for Nicole was a bit tiresome. She had encountered that topic in

other classes and, as a lesbian, she at times experienced tension with group members

when they learned she was "in a relationship with a woman." Nicole commented, "I mean

for me, since it is real life for me, the issue was just, 'How often can I talk about this?'"

　　　　Matt shared the perspective of being the student to whom someone else angrily

reacted:

> I had an idea of mine just attacked one day, you know, "What is your problem?"
> You know, another guy who had a very different set of beliefs than me and it was
> just kind of like, "Why can't you just say, okay, you're denying me my right to say
> what I learned . . ."

Indeed, without some difference of opinion, the quality of the exchange is hampered.

Bond praised the conflict when he said:

> It doesn't create ideas if you don't have a devil's advocate. Everybody knows that. . . . You can't have a group where everybody is groupthink; you can't have that all intertwined or all it will be is, "Oh, I agree," "I agree." Why do you agree and why would you not agree with it? Some of the best ideas come from some asshole in the back going, "I don't agree with this." Why don't you agree with this? It forces people to think. That's how I look at it.

These students acknowledged, then, that conflict had benefits even if it created discomfort at times.

Several of the students in the study described themselves as strong Christians. The tenets of their faith included a strong belief in creationism and a distrust of the theory of evolution. Anisah summarized this dilemma:

> When I was in Unit 2 and we were learning about evolution and the natural sciences. That was difficult because I'm passionate, like as far as the community and society I grew up in, it's a bit more conservative, you know, as far as the whole Creation of Man, so that was a very conflicting issue that I had, especially like inside. I couldn't like see that point because of the other lens that I was looking through.

Cindy, too, encountered this complication:

> Like I'm studying evolution right now in [a science class] and I disagree with many of the aspects of evolution and what my teacher is speaking [about]. He definitely agrees with everything he is presenting, but because I'm a Christian and my faith ties into various aspects of the evolutionary theory, my personal feelings, I have to separate them for class and yet tie them in later.

In some ways, Cindy acknowledged, she was engaged in the opposite of integration by keeping her personal beliefs and the teachings of her class separate. When she was studying, Cindy made this observation: "I was reading my notes out loud and trying to teach myself the facts, but as I was saying these things, I was like, 'I don't agree with the statement coming out of my mouth, but that's what my notes say.'" She found herself

having to learn course material that was in conflict with her faith. Matt, too, noticed this

tension related to Unit 2 in the first year. From his perspective the faculty member did not

handle well questions from conservative Christian students:

> There were several of the people in the class who had strong Christian beliefs and,
> you know, were asking questions that he [the professor] just completely just
> stalled. You know basically in a round about way he said that if you, not
> necessarily if you're a Christian, but if you believe in sort of creationist theories
> then you're just uneducated and ignorant. And for some people, we were like,
> excuse me, just making these inflammatory statements.

> Outside of the classroom, students in Integrative Studies also experienced internal

conflicts. Lynne described being challenged in her views on the death penalty by

someone she met at work:

> Someone in my office is a death penalty rights advocate, so she does a lot of work
> centering around trying to get people who are on death row like off death row.
> And I've always been a believer, through ignorance, of an eye for an eye. Like in
> high school . . . I did a lot of intensive research on specific serial killers and I just,
> I was so saddened by everything that I saw, that I assumed that all, and I mean
> really just sociopaths, . . . to a certain degree you can't fix sociopaths.

Through this out of class contact Lynne had one of her fundamental beliefs challenged.

For Mary, her internal conflict was with her family. She reported, "my parents know that

I disagree with them on a lot of things. I just don't talk about politics or those kinds of

things with my family, and it's okay." The ways in which students managed these

conflicts offer greater insights into their experiences with integration and making sense of

their world.

Reconciling Conflict

The challenge of encountering conflict stood out as a concern for all students

whether or not they successfully reconciled the discrepancy. Students had a lot to say

about the importance of engaging fairly with others who held opinions different from

them. They also employed various strategies for reconciliation including holding on to their previous position by agreeing to disagree, avoiding the conflict, dismissing the critique, or attempting to reconcile the conflicting views by synthesizing them into a coherent perspective.

In class discussions when the topic was controversial, strong views often clashed. DV talked about how she would handle a situation in which a peer held an equally strong opinion about a topic that conflicted with her point of view. DV said, "I'd probably tell them that I respect their opinions and if they want to have a nice debate with me, that's fine, but I'm not going to yell and scream at them. It's not worth it." Matt reinforced this expectation for civil discourse. He expected to respectfully listen to those ideas with which he does not agree, and if

> I'm going to be doing that for you, I would want that same respect in return. You may not agree with me and that's fine, but still listen to me like the way I listened to you and respect what I'm saying. So I think definitely for me that is where, that's really the only place that I'm going to have a little bit of issues if it's not mutual. . . . it is important to hear, you know, different things and stuff that you might not believe in and certain view points, because that's the only way that you can learn about something.

Matt acknowledged that staying open minded and listening to ideas he found objectionable was difficult.

> It's tough, I mean, I think first of all you really have to have a strong sense of self. You really have to know yourself and what you believe in because only then can you really evaluate certain issues that come your way, whether you agree with them or whether you don't.

Anisah advised:

> Especially in situations where you have two extremes that are in conflict and it just doesn't seem like they can come to a resolution or come to a mutual agreement, you can't bring them together, you really need to step back.

More specific examples of conflict also provide a glimpse into how these students responded to or reconciled the conflict. Mary conflicted with her family regarding political views. She reported, "in some sense it's easier not to discuss it [politics] and I know the way my family is and I just kind of let them be and they just kind of let me be, so it's okay." Avoiding confrontation, then, becomes a strategy for peace when participants know certain topic areas are volatile and likely to lead to strife.

Another strategy was to dismiss the counter argument as unworthy. Mary had a particular perspective on homelessness and poverty and its causes and dismissed an opposing view on this topic. In her words,

> I guess that argument that [the cause of poverty rests with the] individual and we shouldn't help them [homeless people], it just amazes me that people can be so egocentric, I guess, and just not worry about it if it's not in their face. And then, you know, but there are a lot of people who realize that poverty happens for numerous reasons and they want to help those people without trying to judge them in any way and I think like that's a really good point of view to come from.

Based on experience and her own convictions, Mary picked her stance and was impatient with alternative views. In Matt's experience on his living-learning floor with a racially insensitive incident, the conflict involved strong emotions and tension. Matt explained:

> It is very difficult to describe the emotions cause I was just reading [the Facebook site] going, "Are you kidding? Is this really happening?" And that, to me, was just, I just couldn't believe it. . . . And the girl who was mixed [biracial], . . . I have never seen, I mean she came into our room literally shaking and she was like, "Are you serious? This is going on right now?" And it was a huge issue for our group, you know. . . . And none of us knew what to do.

Matt encountered conflict with this racial issue, but sidestepped it rather than actively trying to grapple with it. In this instance, Matt confronted conflict without reconciliation.

One of the conflicts encountered by several study participants was between conservative Christian beliefs and evolutionary theory. All of the students who described

this conflict felt they had successfully resolved it. Matt made it a non-issue by accepting

the contradiction:

> I feel like in terms of the evolution aspects, I can accept what science has presented, but at the heart of it, what I've grown up with, you know, is basically Genesis. And, you know, I don't think any of that is wrong, but I feel like I can take both of those and I can, you know, appreciate both for what they are.

Anisah experienced a similar conflict, but arrived at a different understanding. In her

view:

> When we were talking about how there is a small percentage difference between the chimpanzee and the human, you know, coming from a somewhat conservative background and just not too much of a fan of natural sciences' reasoning of how everything came about. I have a big, strong stance in religion, but as you learn more and understand more of the other perspective, you kind of think in the end we are all God's creations so it makes sense that we are all alike, made from the same creator.

In reference to this conflict, Anisah shared that the reconciliation process was difficult,

but she arrived at the following conclusion:

> Well there's different, there's some views that religion and science don't mix. Actually, my [high school science teacher], he really helped me out on this. He told me this when I was a junior in high school, he said, "I think religion and science are very much alike. It's just telling you where we came from and why we're here. They are both trying to find the same meaning."

This reconciliation, then, is really an externally provided solution, which Anisah has

adopted. The result is a restoration of the equilibrium she sought when her faith and the

science of evolution clashed. In a similar way, Cindy adopted the balance her father

shared with her prior to coming to college. He told her:

> "Well, actually some of these themes [of evolution] can be understood." He had to teach evolution as part of the biology course in the Catholic school he taught at. He said, "Here are the points where you can actually agree with it and other points you can disagree with it," and you really have to just not, in my case, put God in a box and say, "This is what happened. This is what God did. I know exactly how many years it took to create Adam and Eve and create the word, it happened in seven days" and for us we believe that to God, a thousand years is like a day and a

> day is like a thousand years, so He could have had parts of evolution occur over billions of years, but that could count as day one to Him. So that's where part of my belief is, when it comes to [my science] class. I can agree with parts of it and yet disagree with other parts.

Anisah and Cindy provided examples that demonstrate an approach to meaning making that relies on external authorities to resolve the conflict. Matt's solution was to accept both perspectives "for what they are," thereby not reconciling the conflicting perspectives.

<div align="center">Integrative Studies Learning Environment</div>

Throughout the interviews all the participants shared stories about their undergraduate experience and offered descriptions of their Integrative Studies program that contributed to a rich and dynamic portrait of their undergraduate program. Approximately one-fifth (500) of the line-by-line codes capture some aspect of the Integrative Studies context. These codes have been clustered and distilled into six categories including easing transition, being different, working harder and smarter, taking a bitter pill, learning from peers, and building faculty relationships. Each of these categories is described below.

Easing Transition

None of the participants in this study selected Integrative Studies as a major because it emphasized integrative learning. Instead, they were attracted to a number of distinctive features that set it apart from other academic programs at the university. Of the seven participants in the study who began the program in the first year, all but one found the program at summer orientation (or just before) after already choosing to attend the university. Students often reported being attracted to the desirable schedule: students are in class Monday through Thursday from 10:00 AM to 4:00 PM and have an extra

week of spring break. Additional attractions included few if any tests, easy access to faculty, and the ease of registering for classes.

These features all contributed to making the transition from high school to college more manageable. Anisah's experience was typical. As a junior, she still could vividly recall what it was like to come to summer orientation intending to major in international affairs. "Orientation was wonderful, but when it came to registering for classes, I felt so lost. You know, I was just totally on my own and I didn't know what to take . . . . It [Integrative Studies] is just an easier transition from high school into college." Navigating the registration process was simplified. Mary described how the Integrative Studies advisors met with them and said, "We'll help you register for these classes and you're guaranteed a spot." This assurance helped alleviate the anxiety that often accompanies engaging in an unfamiliar process.

The curriculum of the first-year experience also facilitated students' transition. The year is divided into four units, and faculty explained how the first unit emphasized students as learners. In describing Unit 1, Cindy said, "I really appreciated that they [the faculty] emphasized getting to know each other [other students], how to survive in college." Mary concurred that "the first unit was pretty basic. It was kind of like an introduction to college, almost." By explicitly attending to the expectations of the collegiate experience in the curriculum, students were more comfortable. The small classes and intimacy established in the first year and beyond created a connection or bond among the students. Several students talked about feeling a part of a community within Integrative Studies. For example, Bond reported, "I feel a stronger sense of community to the [Integrative Studies] community, more so than I would say [to the university] at

times." Anisah talked about Integrative Studies students as providing "little support

groups here and there just helping each other out." Anisah described that when she's on

campus and an Integrative Studies student applies to be a part of the same student group

she is in, "it's like, 'Oh, I am [Integrative Studies] too.' And then automatically there is

this whole like, we belong to the same community in that sense." She went on to

describe:

> There automatically is some type of kinship, because you did share the same
> experience, even if you didn't go through the first-year experience, like you might
> have had the same professor or the same type of classroom or you may have the
> same knowledge of how many more experiential learning credits you have to
> take, like the learning communities, the portfolios, you've shared a similar
> experience with that individual.

In addition to the content of the curriculum, the students expressed appreciation

for small classes as well as greater coherence and purposefulness to the Integrative

Studies courses in comparison to their high school or other university courses. Matt

described Integrative Studies as providing a "small, intimate atmosphere for learning."

This new approach to learning was engaging and, therefore, facilitated their adjustment to

college. DV thought the first-year curriculum made more sense and was more

comprehensive:

> It [Integrative Studies] is a lot more helpful than high school ever was because
> you had separate classes and they stayed separate so there was really no crossing
> over. So you couldn't combine them and then learn what you did with them in the
> real world kind of thing. … I'm learning more a lot more about the government
> and the philosophy behind the government, which makes me, helps me
> understand politics better, if I want to go vote. … And you just never really get
> that in high school or in the other college classes.

The open and trusting classroom environment in Integrative Studies pushed Chiwy to

open up in ways she was unaccustomed to based on her previous coursework.

Because everyone opened up about things that they really never shared with other students that they didn't know before. So that sort of forces you, whether you like it or not, to trust the people in class with you because you already shared, you know, some of the most vulnerable things in your heart.

Although perhaps guarded at first, Chiwy welcomed the chance to participate so openly in class and relished the self-discovery that such an experience brought.

In some cases students talked about being a good fit for the Integrative Studies approach to learning. For Ann, Integrative Studies was "a lot different than high school, I guess. I don't know, maybe it's just like the coursework here [in Integrative Studies]. Something seemed to work better." The integrative approach to learning made sense to her and fit her learning style. In Bond's case, discovering Integrative Studies offered welcome relief from an academic system that had criticized his learning capacity. Bond explained:

I really did not want to be in school. I hate school. I don't like it, I never have. I had teachers that would literally make fun of me because I didn't know it, I didn't understand what they were talking about. And I would ask questions. I'm not the kind of person to say, "Well, I don't get this," fold my hands and that's it. . . . Why are you, why is it that I ask questions and I don't get everything just like everybody else does am I considered slow or abnormal? I think that I learn differently, and then to have people recognize the fact that not everybody learns the same, I think that's why I feel so compelled and more connected to Integrative Studies, so. I think my willingness to learn has been a lot better. I also think, you know, being able to see both sides of the coin has been really helpful. To learn more just about a particular subject. And I think that's the whole key, and an element of learning I think that has completely changed for me.

Lynne, too, acknowledged that when she discovered Integrative Studies, she "showed up on the first day and just sort of realized how unique it [Integrative Studies] was and found out that I was kind of good at it." Lynne's high school experience was more compatible with the demands of Integrative Studies, but she recognized how the curriculum could support her learning. She described her school as being "all about finding your voice. It

was just so exciting to come to a place where I kind of already felt comfortable but I could develop upon that comfortability [sic] in a new way." DV summed up this idea:

> I just think being there [in Integrative Studies] and you know this whole new learning style, this whole new learning environment made me excited because I didn't think that was the way high school went, so it was exciting to be doing something new so that really just got me excited about all of it.

> Out of class experiences also contributed to easing the transition to college.

Students who participated in the living-learning floor cited both the real and potential benefits of being a part of that residential community related to transition to college. Matt was the most enthusiastic about his first-year experience living with a diverse group of Integrative Studies students:

> I know a girl who is a very close friend of ours who lives literally 10 minutes down the road and doesn't have nearly the experiences, especially with just the people, I mean, we lived, we did everything together. We would walk to the dining hall as like a group of like 10, I mean people saw us coming and went the other way, I mean, you know, we did everything together.

In addition to the close friendships that facilitated Matt's social integration, he also viewed the living-learning floor as contributing to his integrative learning. When asked about what contributes most to his integrative learning, Matt replied:

> That's a good question. I think especially last year, it was a lot more integrative because I was on the living-learning floor, because I think the people really contributed a lot just because we had the same classes, we lived together, we turned into a huge family, basically.

Several students remarked that the living-learning floor offered convenient access to Integrative Studies peers. Cindy noted:

> If we have questions, there are 15 other [Integrative Studies] students on this floor who can help answer our questions. It was really nice to have people in my classes living on my floor that I could ask questions of. That, I really enjoyed that.

For Ann, the benefits of the living-learning program were not realized beyond the first

semester. Ann thought the connections made to Integrative Studies were at the cost of

knowing more people throughout the university:

> Living on the living and learning floor is something, as a tour guide, I usually do
> not suggest to [Integrative Studies] students just because you go to class with this
> same small group of students from 10:00 to 12:00 and then 1:00 to 3:00, and then
> you come back and you are with them at night and stuff. It just isn't a lot of
> diversity in that sense. And that was really frustrating, although it seemed really
> great the first semester or maybe halfway into the first semester. It was just hard
> because I wanted to meet some other students. You know, I felt so away from the
> rest of the university.

Integrative Studies also annually offered an opportunity for about 12 incoming

first-year students to join an outdoor camping and experiential learning program. Several

of the students in the study participated in this program and valued the experience. DV

was motivated to participate in the outdoor orientation for the chance to meet people and

to earn a credit before school started. She reported that participating in this program "was

the best decision I ever made because all of my friends, my main friends, are from [the

outdoor orientation program]." Mary, too, recalled that the outdoor orientation was

important to her transition:

> I think it [the outdoor orientation program] was probably very important because I
> really didn't know what I was getting myself into at all. . . . What was really great,
> too, like for me, I didn't know anybody so the first week of school I didn't walk
> into a class of 150 kids going, "Oh, geez." Like I walked in and I, it felt, it made it
> feel so much more comfortable knowing that I knew like 16 people almost as
> close, like four of my really close friends are people that I met on [the outdoor
> orientation program], so I think it definitely helps to make connections.

In keeping with the diverse motivations for joining the first-year experience, Mary

pointed out that "a lot of people will do [the Integrative Studies program] the first year

and then not continue, but they will do it just to get the gen eds out of the way 'cause it's

kind of an easier and more fun way to do it, and it kind of helps people adjust to college

life too, I think." Attrition in the first year, then, is expected as students move onto other majors at the university after their first year in Integrative Studies. Those who persist in the program seem to develop a strong sense of identity with their chosen major, which is described in the following section.

Being Different

A consistent and powerful theme across the interviews was that being an Integrative Studies major placed one outside the mainstream at the university and in social contexts. For everyone in the study, the decision to pursue an Integrative Studies degree was considered unusual or alternative. No one had a history of Integrative Studies majors in their family. Bond said that peers criticized his affiliation with Integrative Studies. He was told that Integrative Studies students were "crazies" and "weirdoes," which he thought was linked to having "our own little campus." Several students complained that other university faculty as well as friends and relatives outside the university were critical of their chosen major. Anisah summarized, "I guess, sometimes it's [Integrative Studies] just not seen, not necessarily respectable, but not as trustworthy a way of learning because everyone is so used to the traditional way." Ann recalled a typical reaction when she told someone her major. "Well, the reaction when I say 'Integrative Studies' is always a cringe, like, 'What's that? What are you going to do with that?'" Lynne got a similar response when she reported her major as Integrative Studies, "they [friends and family] kind of give me this look, 'All right, clown college, go on.'"

Matt thought his friends and family just do not understand Integrative Studies,

> because it is such a different approach. It is so different, especially for my family members that were in college a long time ago. The whole idea of the Integrative Studies is so beyond them. Even my friends at other schools, they don't get it.

Lynne expressed her frustration and fatigue at "always trying to legitimize it [Integrative Studies]; you just get so tired." In Nicole's experience, "a lot of people they think it's like an easy degree because we don't, because all of our classes don't necessarily require a test every two weeks and a final." The devaluing of the degree was something Mary experienced as well: "My friends always give me a hard time, like, 'What are you going to school for?' I have a friend who's an engineer and he calls it, well he calls all liberal arts majors 'arts and crafts' majors."

Occasionally students hear positive reactions, such as Mary's: "I tell some people about [Integrative Studies] and they're like, 'Man, I wish I had done that. That would be so great. I wish my school had that.'" Yet there is some evidence that the admissions office at the university was perpetuating misinformation about Integrative Studies. Mary was aware of a prospective student who called the admissions office to inquire about Integrative Studies and was told the program no longer existed. Such apparent institutional neglect fueled students' frustrations and contributed to feeling marginalized.

As is often the case with marginalized populations, the students themselves adopted language that emphasized this "other" status. For example, Integrative Studies courses were described in comparison to "normal" or "typical" courses that are found in "mainstream" departments such as psychology and biology. Cindy made reference to "normal [university] students" in referring to those students at the university who are not in Integrative Studies. Anisah referred to Integrative Studies as "alternative" and the rest of the university as "traditional."

Being on the margins of the university seemed to be a point of both frustration and honor. Students commented that the Integrative Studies program's approach was

essential to their success in college. Chiwy struggled to find an appropriate major at the university and concluded, "I really think that if it wasn't for [Integrative Studies], I would still be hating going to school." Bond, too, credited the Integrative Studies program with helping him finish his degree. When I asked Bond if he would have dropped out of college if Integrative Studies was not available, he replied, "I think so." Both of these students transferred into the program and had the most vivid comparisons disparaging the rest of the university. All of the students felt proud to be Integrative Studies majors and claimed that their educational program was both more demanding and better than traditional majors at their university.

Working Harder and Smarter

Every participant made comparisons to the larger university that were critical of traditional majors and affirming of their own path in Integrative Studies. The transfer students were particularly outspoken about the differences between Integrative Studies and the rest of campus and their observations went beyond classroom experiences. Participants' comments ranged from assertions that they had chosen the right path for them to stronger assertions that they were pursuing a more rigorous and qualitatively better major compared with others at their university. Lynne was comfortable with her Integrative Studies degree:

> So, I don't know, as much as they [family and friends] may challenge what I think is the best education, I know I'm doing the right thing and I know it's working for me and I know I'm going to make changes and do the best because I came from this sort of a thing. So it's sort of, "I know I'm all right, so I'll keep going" idea.

All of the students in the study expressed similar thoughts about being enrolled in a program that fit their strengths and learning style.

Integrative Studies is harder. Some of the claims about rigor centered on the large amount of reading and writing Integrative Studies classes demanded. The first-year experience was particularly challenging, as Lynne described:

> Students their first year are put through the washing machine. They go through the most rigorous activities and events and work possible. You have a paper due every day. You read 50-100 pages every night. You do portfolios, you do presentations, you learn HTML and IT stuff and the same time you are learning history and science and reading philosophy.

In one of Mary's second-year courses in Integrative Studies, she reported, "we pretty much have a novel to read a week. Next week we have two, which is going to be a little crazy, along with different handouts and one day we usually discuss." By comparison, student participants perceived classes outside of Integrative Studies as less demanding. Mary noted that she always had more work to do than her roommates who were not Integrative Studies majors. "They have more tests than I do, but I spend more time outside of class working on things than they do." The experience Integrative Studies students get with writing filters their reaction to assignments in other classes. In one of his non-Integrative Studies classes, Matt described how the professor tried to brace the class for their final assignment: "'Your final paper is going to be four pages.' . . . It's like last year we had eight pages in two nights." Matt was clearly not thrown by this purportedly demanding assignment.

The act of integration itself was also described by participants as difficult, more difficult than other forms of learning. Several phrases captured this ambiguous process in a creative way. First, DV talked about "the hard part [of integrating] is taking a step back and looking at all of it." This idea of seeing something more clearly and completely when one is integrative resonated with the participants, but no one was able to shed light on

what "stepping back" looked like. Second, Matt used the phrase "thinking outside

yourself" to capture the importance of looking beyond your own frame to consider other

perspectives in your analysis.

Integrative Studies is better. Furthermore, students believed that emphasizing

reading, writing, and experiential learning over tests was the right thing to do to promote

learning. As Cindy described:

> I really like writing papers in contrast to tests because I get more out of writing a paper than a test. You just cram for a test, but it takes me longer to write a paper and more time to absorb the information.

Similarly Nicole expressed,

> I think being able to go out and have hands on experience is far more beneficial than like having a test every two weeks. In one of my classes, in my finance class, I have a test, what, I've had two exams. I don't remember anything from those exams.

Although some students are less conscientious about completing all the reading, most

students in the study recognized that the investment of time and intellectual energy was

worth it. Mary summarized this view:

> You know, you have to put the time into it; you have to put the work into it. Whereas in other classes you can do the minimal and get by and still get an okay grade. But here, if you don't put the time into it and you don't do the reading, because to write the paper you've got to do the reading, and to sit in class you have to do the reading so not doing the reading is not always an option, I mean, you have to do it or there's no point in going to the class.

When explicitly comparing Integrative Studies the participants were quick to praise the

discussion-based approach of Integrative Studies and quick to denigrate the more

traditional lecture approach of their classes in other departments. The difference is not

just connected to the chance to participate in class discussion, although that is a

distinction made by all of the students. Anisah talked about a "difference of presence [in

the] classroom" for Integrative Studies that offers an opportunity to engage. By

comparison, she says, students not in Integrative Studies, "they would just attend a

lecture, take notes, maybe ask a question if they didn't hear something. But as far as like

questioning the content, they didn't have that opportunity." She continued on to describe

Integrative Studies as a place that encourages that questioning. "We questioned content,

we talked about it, you know, what is this person thinking? Why do you think this person

wrote this? It's just more of what you think." Occasionally a course in another part of

campus will engage students and use active learning approaches, but these courses were

rare. Mary described what she perceived to be a typical university course:

> My developmental psych class that I have tonight, we'll go in, she puts
> PowerPoint on, we take notes on the PowerPoint and that's the end of class. And
> we do that pretty much the entire time . . . and we have four tests, you have to
> take three of them, and then we have eight different writing assignments and you
> have to do five of them and they're just to read a psychiatric journal article about
> whatever the chapter is about and write a one-page response. And then we have
> the tests and that's it. So that's a pretty dry class. You know what is expected of
> you.

Other claims of programmatic superiority focused on the kind of learning

expected. Cindy talked about learning "to question common views and common

opinions" by not taking anything for granted. She credits Integrative Studies with helping

her to "be more open-minded" and "challeng[ing] my past assumptions about different

topics." Cindy offered a specific example of this challenge from Unit 3 in the first year:

> Unit 3 really challenged me in terms of being open-minded. There were films and
> discussions that were just very shocking and so against anything I had anticipated
> hearing. I hadn't expected to watch a movie that was completely from a different
> perspective that was totally contrary to the American ideologies.

Bond thought being open-minded was the most difficult part of being integrative:

> I think it was really, really difficult to [be open-minded]. Because you come in
> here with your preconceived notions on how the world revolves around you and

not realizing that college is going to completely change your mindset on a lot of things.

Students reported that most of the courses in Integrative Studies demand analysis and ask them to go beyond superficial interpretation. As Nicole described, her instructor for Introduction to Integrative Studies helped her understand this more in-depth approach by teaching her the importance of "questioning and looking deeper, analyze this. How does it relate to you and the way you think, the way you feel, the way you believe?" The goal of that class was to orient transfer students to integrative learning. Matt also described the "deep thinking" demands of integrative learning by telling how he prepared to engage in integrative work:

> You really have to get yourself ready mentally for it, to challenge yourself, to maybe think a little bit deeper, think a different way, write about it, really explain yourself, you know, be able to explain yourself, so I think it, you have to be there.

When asked if depth was compromised in favor of breadth in her Integrative Studies courses, Anisah contributed, "I feel like you learn even more, especially with like the experiential learning and the in-depth thinking and analyzing everything from different perspectives. I feel like you learn a lot more. It is very enlightening." Cindy also asserted that the integrative approach to learning was better:

> Because you can hold onto processes and knowing how to do something, but the facts you'll often forget. And just knowledge to me is knowing a little bit about a lot and knowing how to expand on that learning when I need to.

In the area of advising and faculty contact, Bond compared the Integrative Studies program favorably with his previous major in communication. "It's about educating and having compassion and understanding your students versus just 'Here is how it is' and 'This is how it is going to be. Sorry you don't like it, whatever, blah, blah, blah.'" Nicole

considered the experiential learning requirement in Integrative Studies a distinct

advantage over her School of Management peers:

> I feel like I have maybe, I don't want to say an upper hand, but I feel like I have a
> better understanding, because they [School of Management students] don't have
> to do that [experiential learning]. When I talk to them and say, "And, oh, I did
> this." And they are like, "Really? Wow. That is something I would like to do."
> But none of their courses require them to, so they don't do it.

The differences from Chiwy's perspective were related more to self-exploration

and the open, supportive culture of Integrative Studies. She found the course content and

opportunities for reflection beneficial to her self-understanding:

> For me personally, I think what I really appreciate about it the most is that it
> [Integrative Studies] has given me better awareness of myself. And I'm speaking
> from the classes I've taken so far, so hopefully I'll have the same experience with
> my future classes. But, it's taught me a lot and it's allowed me to look into myself
> a little more.

She also compared the generous response of other Integrative Studies students in

the computer lab when she needed to print a paper but had forgotten her wallet with her

printer card. Chiwy said,

> "I really need to print my paper. Does anyone have a card? I will pay you back."
> And she [an Integrative Studies student] said, "It's no problem." And this girl
> came out and she offered her card. Like three or four girls offered their card,
> they're all [Integrative Studies] students. I swear, if I did this in the [campus
> center] lab where I don't know anybody, everyone would just look at me and be
> like, "Okay" and go back to what they were doing.

Bond summarized the overall impact of Integrative Studies particularly for new

transfer students:

> I think last semester was really enlightening for me as a person, as a
> professional, as a student, as a brother, everything. It was kind of like, it was mind
> blowing. It was like, wow. It really opened up my mind last semester.

Students who began their college career in Integrative Studies corroborate these

sentiments from transfer students.

Every student in the study described instances when their Integrative Studies coursework prompted them to think about something new. Whether being challenged to wade through dense philosophical text as Matt described from his first year or being prompted by peers in class discussion to look at an issue or topic from a different perspective as Nicole and others pointed out, all students said something similar to Chiwy's comment: "I think that has been the greatest thing in that class [on human differences] is learning about things I never, ever thought I would end up learning about." Students, then, claimed their area of study was better because it fit their learning style, was more intellectually demanding, and offered a superior education in part because of its rigor.

Finally, many of the participants, but not all, cited the integrative nature of their academic program as a distinguishing feature that made it better than a more traditional approach. Some students also struggled to articulate the value added by an integrative approach, but most described it succinctly. For example, Anisah stated:

> You know, not only are you just looking at one topic, but you're looking at that topic and incorporating other disciplines and other perspectives. And you just gain a better understanding and more enhanced perspective on that and you just achieve a greater knowledge on that topic or individual, whatever it may be.

The integrative approach is more inclusive and comprehensive than other approaches. For Cindy, Integrative Studies "is just a more well rounded way of learning because you see every point of view while you are discussing one topic versus taking a class on policy, a class on the environment, and a class on animal biology." In describing an Integrative Studies course that included a field trip to New York City, Lynne characterized the level of engagement this way:

> And we argue about abortion and we argued about transsexuals and versus transgendered and, you know what I mean. That was probably the most integrative, and then again, we went to New York City and we looked at that stuff and we attended different shows and while we were attending the shows, we looked at the advertisements that were on the building or who sponsored, the brochure, so pretty interesting. And you really learned to track back the history.

This idea of looking back and tracking the history or seeking alternative perspectives was also a recurring theme. Mary referred to it as "alternative history." These non-dominant perspectives were encouraged as part of a multi-dimensional approach to a topic. Chiwy offered advice for prospective students who might be considering Integrative Studies:

> So, I would probably tell them [prospective students] that anybody that's very inquisitive about themselves, for anybody who wants to break out of their normal everyday life and meet people who are completely different from them [should consider Integrative Studies]. You get a chance to learn about things you never might have wanted to learn about or that you never even knew existed.

Bond, drawing from his experiences in other programs at this university and in other institutions, affirmed that Integrative Studies was "more intimate. It is more educational; it's the way it's supposed to be. Interactive with professors who have way more experience in a subject than I could ever imagine, so that's one of the benefits." The faculty were praised across the board as being accessible and caring. A separate section about faculty relationships explores this theme in greater depth.

Taking a Bitter Pill

Almost every student in the study had a story about being required to do something they didn't want to do, but in hindsight knew that it was good for them and contributed to their learning. These observations reminded me of the bitter pill such as a vitamin supplement that is unpleasant to take but necessary to promote improved health. All students used the word "forced" to describe these impositions. Although the small class size and personal atmosphere were universally cited as advantages because they

helped students get to know each other, participants described these features as something unavoidable and forced upon them. Mary's comment summarized those of several students:

> Now I go to some of my classes [outside of Integrative Studies] and you don't have to interact with anyone if you don't want to. Whereas [in Integrative Studies], you have to talk; you're forced to. So even the antisocial kids had acquaintances, which I think is nice (laugh).

In this sense, being forced to engage is a fact of life in Integrative Studies.

A more contentious part of the Integrative Studies curriculum is the emphasis on group work. Students are involved in group projects in almost every course. Some students, like Nicole, find group work extremely distasteful. She stated, "I am not a fan of group work at all. I am a very independent worker. I like being able to get stuff done on my time when I feel like it." Group grading policies and uneven levels of commitment to the project among group members were common complaints. Nicole continued,

> I just don't like how it is that whole, everyone gets the same grade kind of thing. Because no one ever puts in the same amount of effort. And the thing with group projects is that it is kind of hard to see the individual and what they are doing and what they are capable of and whether or not they are actually learning, because you are looking at it from a group perspective.

Nicole's insight about group work masking individual learning was noted in the context of grading and a concern that professors cannot assess individual learning in group projects or have a reliable understanding of the contributions made by individual group members. Ann found group work frustrating as well:

> Often times there is not a lot of group evaluation done in [Integrative Studies]. And I think that's discouraging, especially freshman year, because people are like, "I don't want to keep going through this program and getting stuck with poor groups."

Learning how to manage "bad groups," as Ann called them, is one of the silver

linings in having to engage in so many group projects. DV noted:

> when you work in groups, the group dynamics, you have to learn to work with a really bad group. You're assigned a group and you're stuck with them and you've got to kind of be willing to, you know, sometimes you're going to end up doing more work, but if you talk to the professor, you've got to be willing to talk to them and tell them what's going on.

These difficult experiences with groups are good preparation for the world of work. Ann

commented, "I just feel like I'm very prepared with group work, I feel really able to work

in any type of group I might be put in." Matt echoed this sentiment when he described a

frustrating group experience:

> So that was a good learning experience both academically and personally because we're going to be dealing with this basically all of our lives anyway, so if we can figure out a good way to handle maybe that troublesome group member who doesn't show up or that person who comes in late now, then we'll be better off.

Nicole said the following summary that I gave in the interview was "right on point." I

said:

> There are some characteristics such as the group work . . . where you are kind of forced into these situations that you really don't prefer, and yet you come away with the idea that those are still good things. So, you've got this flexibility and freedom of choice, you've got this required stuff that you have to do, and rather than say that is just a weakness in the program, I think I detected in your comments a, "But you know what? I still learned from that. I still came away with benefits. So even though I didn't like it, it was good for me" kind of a thing.

Although most of the students did not like group work, they did not see this requirement

as a weakness in the Integrative Studies program. To the contrary, they endured the group

assignments knowing that they were good for them and would help prepare them for life

after college.

Another bitter pill for some students was experiential learning. Fewer participants

were reluctant to participate in experiential learning as compared to group work, but

those who were burdened by it found hidden benefits. Bond was very critical of his

experiential learning project on a lake:

> Why would I want to go take water samples and pH samples and oxygen samples
> and all this crap out on a lake? There is like no, no interest to me. I'd never do it
> in my right mind, but it [Integrative Studies] forces you to do it. But the great
> thing is, that while you're being forced to do it, you're still actually getting
> something out of it. It allows you to see something and to be exposed to
> something you would probably never be exposed to in your life. . . .I've kind of
> bridged that gap [between professional scientist and lay person], so to have that
> experience I think speaks a lot about a person, that they, although they went to
> college and earned a particular degree, you're still learning a lot. I mean, you're
> still learning a lot of different facets of science and math, but it's all practical, it's
> practical stuff versus just garbage. Like, you have to learn.

Most students eagerly engaged in their experiential learning assignments and viewed

them as a strength of their academic program. For a few, the burden of completing the

hours was great given family, work, and other school obligations, but the worth of these

opportunities was not questioned. Chiwy described the challenge of getting her group

members together to prepare a presentation on their experiential learning activity:

> My group has completely different schedules so we couldn't find a time when we
> all could meet to go over this presentation. So we had to meet up at one of the
> group members' houses like at night. We were there until like midnight trying to
> figure out who is doing what and what's going to happen where.

Bond expressed a related frustration about juggling the requirement with work

obligations:

> I don't want to have to go to the American Red Cross [to complete the
> experiential learning hours] or just all these organizations that really I don't match
> up with. And if I'm going to be spending 75 hours away from my job, it better be
> doing something related to what I can do.

Yet, Bond also said, "I learn by practical experience, experiential learning. I find the

experiential learning more valuable than the stupid bookwork."

Finally, class assignments and requirements to take specific courses were viewed as unpleasant realities that ultimately helped Integrative Studies students with their learning. In describing the strengths of her leadership class, Nicole paused before she stated, "I would, oddly enough, I would probably say, after every couple of chapters we have to write a paper because in writing the paper, it kind of forces us to read the chapter and draw out something from it." Writing frequent papers may not be appealing in a general sense, but this assignment helped Nicole distill the relevant content and facilitated her learning. Cindy found a journaling requirement to be helpful to her learning, even though it might not have been her preferred way to work: "Just being forced to write a journal, being forced to take the time to integrate, and doing it right after class is very helpful to solidifying the themes in my memory." Bond resisted a required graphic design course because he expects to have professional designers do the graphic design work in his career in advertising and public relations.

> I don't want to learn how to do that [graphic design]. . . . It is actually more difficult because they force you to do that, and I'm, "Oh, god, that sucks. So awful, I've got to learn something." But, in the same aspect, it is good for you. You still need to know it.

In hindsight he recognized how this course would broaden his education and understanding of his chosen field. Bond appreciated this feature and how it distinguished his program from others that all looked the same:

> It [the required graphic design course] makes it more of an educational learning rather than just, again, it's not a cookie cutter of degree programs. If I wanted a cookie cutter, I could have gone anywhere. I wouldn't have come to [Integrative Studies].

Bond similarly resisted an assignment to build a website in another course. "I didn't want to do it, but over the course of the semester, based on the experiential learning and based

on a lot of … you are forced to do it. Whether you like it or not, you're going to do it."

Largely because the purpose of the assignment was to demonstrate learning rather than to

duplicate a first-class business website Bond saw the value of this assignment, even if he

didn't enjoy doing it.

Learning from Peers

Peer learning was a prominent theme across all the interviews and a characteristic

of the Integrative Studies program. The degree to which students viewed their peers as

legitimate sources of knowledge varied, but peers' importance in furthering

understanding and learning was embraced by all. Through class discussion and group

work, peers offered insights and fresh perspectives that participants identified as

contributing to their learning. Ann noted that her peers "provide different insights, say

things that I would probably never think about through group work and stuff." According

to Cindy:

> There were students gifted in different things [in her Integrative Studies course]
> . . . There were people who were really good at the history. They could list all of
> these events. Other people like myself would much rather be analyzing the
> literature and looking at all the symbolism and everything. It was just really neat
> to have all of those different perspectives; it just really complemented each other.

The discussion in class revealed different perspectives that DV found educational. DV

described this advantage during class:

> We get to see people's different opinions and when you read something it is nice
> to have your neighbor going, "Well, I think this," and I'm like, "Well, I didn't
> even get that from this, but now I see where you're coming from." And that is
> much nicer than having the professor tell you, "Well this is this, and this is this."
> It's nice to be able to experience all the different views of what is going on.

This approach to learning is not usually linear, and the meandering discussion can provide unexpected insights. In talking about one of his Integrative Studies classes, Matt described:

> There were a couple of occasions where we strayed a little bit from the initial plans, and I wouldn't even call it a tangent because we were able to bring it back to what we were talking about, but we brought out something very nice, very thoughtful, you know, something important that otherwise wouldn't have been talked about. I think that's really part of the magic I guess of [Integrative Studies] for lack of a better word, just that it is integrated, it's not all textbooks or anything like that.

Summary statements reinforcing the value of learning from peers came from Anisah and Lynne. Anisah insisted:

> You gain another perspective [through class discussion] and when you gain another perspective, you learn something new. It enhances your knowledge and your perception of whatever content it may be, so they [peers] definitely play a part in the big picture I am painting in my head.

Similarly, Lynne concluded, "Okay. Like my peers have been some of the biggest influences on my learning. They're the ones who brought personal stories from working with children or working in youth activism."

Group work offered another forum for peer learning. The level of intimacy established in a class or group facilitated the peer learning. As Bond related:

> By the time you leave [Integrative Studies], you know a lot of people in class. Sometimes it is like going into a therapy session because you end up knowing so much about the other person that you never thought you would know in the first place. "Wow, I really did learn a lot about this kind of person." But that also, that also benefits you too, to have the group interaction.

Ann advocated engaging in collaborative group work to get the most out of the assignment. She wrote a group paper with the entire group clustered around the computer keyboard. "When you sit down and write it together, everyone is learning from one

another's ideas and opinions and it's just more valuable than when you go back to your

room with a divided group project."

Peers also taught each other specific content or skills, although this direct form of

learning was not mentioned as frequently. Nicole gave an example of a peer who had

some technical skills that she admired and learned from. She learned about this peer's

talents and knowledge through a group project and could anticipate needing his guidance

in the future:

> So I told all of them, especially the guy that I work with, he was in one of my
> groups, "You know what, you can't graduate yet. I take my minor classes and I
> need you here." So I've been bugging him saying, "I'm going to be IM-ing you.
> Like, how do you do this? How do you do this? You'll have to come and help
> me." . . . He showed me all the shortcuts.

Lynne learned about the beliefs and values of a peer involved in an alternative political

group on campus. Lynne shared:

> Here is this person sitting next to me for six weeks and I didn't even know that's
> what his political belief was. You know, so it was really interesting to hear him
> talk about it and have him explain it and give me readings to read and things to
> sort of absorb and, I mean, just learning from people who are experts themselves
> because of their personal experience and the way they live their lives. I mean,
> that's just the way peers do it.

Lynne supplemented her learning from her peers with readings, but at other times she

relied heavily on personal testimony and personal experience as sources of knowledge.

Many students recognized, and found legitimate, personal narrative and

experience. The criteria for accepting personal testimony seemed modest in that having a

first-hand account of a topic was sufficiently robust for most students. As Mary

explained:

> Depending on the topic and what's being discussed or debated, in arguments, I
> guess personal experience I always listen to very heavily because you can usually
> tell if something has affected a person and if it has affected a person negatively or

positively you can usually tell they're not making it up and it's obviously a life story and a life event.

Chiwy reflected on how her peers contributed to her learning and brought up the richness of the diversity in her Integrative Studies classes. She said her peers give her

knowledge that I never was even aware of . . .I know that not everyone in the class is Christian or not everyone in the class is Muslim, or any other religion, that all of us bring our separate identities, our individual identities to the class. And that's what makes our class, that each of us are individuals who have completely differing views from one another and at the same time we share views of certain things as well.

Whereas in some instances some students found their peers to be legitimate sources of knowledge, others found peers to be reliable resources for clarifying assignments or concepts related to class. One advantage of the living-learning residential floor was access to peers in Integrative Studies around the clock. Matt found his first-year on the living-learning floor to be wonderful. As he described it, "we had a very close floor. We were like a huge family for the most part. That's one thing you really can't replace and that's an experience that I look very fondly back on." Matt also described how his peers were there to help out: "After class it's often good to talk with, you know, a peer, about what they might have gotten from a certain reading or theme." Matt could easily have these consultations with Integrative Studies majors on his residence hall floor. DV also participated in the living-learning floor and agreed with Matt: "[If] you have a question, I can ask my roommate, I can ask somebody down the hall." And although overall she was less enchanted with her experiences on the living-learning floor, Cindy also agreed that "the [living] learning communities are really great in their idea because you have those people nearby who are in your classes that you can ask questions of, you can work together on things, you can proof each other's papers; that was common." Mary

turned to peers for an alternative explanation when she did not fully understand the professor: "Sometimes a fellow student can explain it in much simpler terms because they're coming from your same point of view where maybe they didn't understand it either or they're able to express it in simpler terms." These examples of clarifying the ideas raised in class also extend to clarifying one's own perspective. DV found the in-class discussion useful for clarifying her own thinking. She described class time as "the students arguing with each other, which is really nice because it gives us a chance to sort of hash out our own opinions and they [faculty] are really just there to monitor us to make sure we don't kill each other."

Peers also help each other learn by providing feedback, help with homework, and companionship in a challenging course. The exchange among peers in Integrative Studies is experienced as multidirectional. Lynne had come to prize the give and take with peers. She said,

> I feel like . . . feedback is just so important and because I want people to give me feedback, I always try to give them something. So when we are discussing, like, term papers, I always try to give an idea of where they can find resources.

Although it appears opportunities for interaction with upperclass peers were rare, DV talked about the value of having older students spend time in the residence hall and helping the first-year students with their work:

> So Jason will come over and he will be like, "How are you coming on your essay?" And we will complain about it together or give each other ideas. If one of us is having problems we can sort of be like, "I don't know what else to write." "Well, have you considered taking this approach?" "Well, no, okay." Now I've got the rest of my essay.

This assistance from a more experienced student can help new students understand the expectations of the Integrative Studies program and its faculty. Other peer relationships

were intended to offer moral support. Cindy declared that she needed "a girl study-

buddy" in a class that was predominantly men. The person she found was not as expert in

the course's scientific content,

> so she is struggling to keep up with the science aspects, but she's very determined
> and so we worked together. We were in the same group for our presentation. We
> go on field trips and we kind of talk to each other and compare notes. So it is very
> helpful in those regards.

> There are limits, too, to what peers can contribute to learning. The in-class

discussions were guided, but students were welcome to speak freely. Nicole expressed

her impatience with students who parroted the views of their parents and were not able to

think independently. When such students speak, Nicole said,

> at that point, I kind of tune the person out. Or I'll just, "Okay, okay. We'll agree to
> disagree," and I'll stop the conversation there. I like to discuss and analyze things .
> . . with someone who actually has an original thought.

She actively chose not to listen to and, therefore, not to learn from someone who does not

speak with her or his own voice. Matt found some in-class debates or arguments can get

so polarized as to prevent learning. He described one discussion that

> got a little bit heated just in terms of personal opinions and, you know, just that, it
> [the discussion] got cut off I think because it wasn't going anywhere. . . . that was
> one of the weeks where I gave up, I was like, "Well, you guys go at it," because
> nothing was really going to be accomplished by it, it was just people sticking to
> their guns, which is important, but you know, nothing really productive came out
> of it.

Another inherent risk in accepting the perspective of peers was expressed by Mary: "So, I

guess it's just, you have to get the story from everyone's point of view that was there to

get the whole picture, because people's stories and opinions are always going to be

biased." The strategy of getting multiple perspectives on the topic is viewed as a way of

combating bias and of gaining a more complete understanding of a topic. As Cindy

commented, "everyone has a different perspective on everything and it is helpful to see what different views entail and how they can be combined into a more round way of looking at something."

The diversity of peers in the Integrative Studies program offered a wide range of perspectives and ideas when peers engage with peers. Lynne captured this idea when she said:

> I really like learning from a lot of different students in [Integrative Studies], so you get the people who have never taken a women's studies course and don't know what a transgendered individual versus a transsexual is. And I like learning from them and then being able to teach them at the same point. I wouldn't have people in women's studies courses like that; do you know what I mean? That's like the kind of stuff you learn in 100, you know 101 or whatever.

Other students commented on this opportunity to teach peers as well as to learn from them. Anisah recalled her first year:

> I feel like in every unit I talk more about the background that I came from, being a minority, being a Muslim, being a female Muslim, so it was just nice talking to my peers about it and they found a greater interest and they actually appreciated my presence in the class, just being more enlightened about other cultures and backgrounds.

Referring to large group presentations from Unit 4, Anisah described the scope of the project and the expectation that students attend and critique the presentations of other groups. "It was just neat that the students were the teachers, you know? The professors of course judged and graded, but they were learning more about it [various topics] too." At times teaching peers was less intentional. Chiwy realized:

> certain knowledge that I have that I take for granted because I was raised in it, certain people actually are not aware of it. That's been very important to me because I'm less likely to rush through a conversation with people.

Instead she is more patient and tries to explain what is second nature to her. Interacting

with diverse peers and learning from them can produce a dizzying array of perspectives

to consider. Cindy stated:

> I really grew more open minded as far as hearing everyone's point of view and to
> see what I thought and what they thought and where we could compromise or
> have consensus and really opened up my eyes to a lot of things.

Peers were powerful contributors to student learning and a valued part of the Integrative

Studies experience.

Building Relationships with Faculty

Just as peers contributed to the diversity of perspectives shared in the classroom

and to support beyond the classroom, students also cited interactions with faculty as

being important to their learning. The overarching faculty-related theme is linked to

students building relationships with faculty members teaching in Integrative Studies. A

relationship came after students and faculty got to know each other and was fostered by

faculty-student interaction both in and out of the classroom. Evidence of a relationship

included personal attention from faculty, being pushed to do one's best work, and

benefiting from faculty contacts in pursuing internship, research, or employment

opportunities. For some Integrative Studies students, contact with faculty was limited to

the classroom. Failure to cultivate more extensive relationships with faculty was not

viewed as a shortcoming of the faculty or the Integrative Studies program.

Study participants appreciated the open and caring attitude of Integrative Studies

faculty. In some cases this appreciation was in contrast to the frustration students felt

when dealing with faculty in other departments at the university. As Ann commented, "I

feel like with [Integrative Studies], the professors really do have a vested interest in the

students more so than the other professors around campus." Integrative Studies faculty

also were not overly controlling in the classroom. Students were given opportunities to

direct the conversation and to teach their peers. Mary described the class discussion in

seminars:

> It wasn't necessarily just what the professors wanted to talk about too, but if we found something that was going on at the time relating to the class, we would talk about that because it was a current issue.

The small class size facilitated a high level of engagement with faculty as well as the

seminar style approach. Chiwy said she was attracted to the closer contact with faculty

and peers facilitated by smaller classes:

> When I came to [Integrative Studies], I think it is because of the classroom setting; it's not in this big lecture hall where there are like 200 students and the teacher doesn't even know anybody's name, unless you're so close to him, so everyone [in Integrative Studies] knows the teacher directly. So far in every [Integrative Studies] class I've been in, we go around and introduce each other and say a little bit about each other and have one-on-one time with another student or the teacher so we really spend time getting to know who your other classmates are and who the teacher is and whatnot.

Ann described this atmosphere as more relaxed and open:

> So it is kind of everyone sitting around talking although the professors are there, the professors are not standing up there lecturing. It is a more laid-back atmosphere where I think everyone feels a little bit more comfortable, and the class can really take the discussion wherever they want to take it.

Students cited knowing their professors and their peers as important contributors to their

feeling at ease in the classroom. For Chiwy, getting to know faculty was a new idea.

Before she changed her major to Integrative Studies, "there was really no chance for you

to have a close relationship with your professors because it was a big lecture hall." She

had one English professor take an interest in her prior to coming to Integrative Studies,

and now she has connections with several faculty members.

Several participants referred to faculty as partners in learning. This view that faculty are students contributed to students' sense that faculty welcomed active student involvement and were willing to share power in the classroom. Anisah described her experiences in an Integrative Studies seminar as being in "a classroom where I was not just a student, but my professors are also students with me. It is like a community of learners where we taught each other." For Chiwy:

> It's almost as though they [the faculty] are students as well, but the head students of the class where we listen to them but we can also talk to them and express ourselves and our opinions to them without fear that they're going to give us low grades because we said something that they didn't like. . . . [the faculty] are also part of the class; they sit in the circle with us and sit everywhere throughout the class and hold discussions just like us. We don't have that subordinate feeling.

Most participants found it comforting to be a part of a smaller, more personal academic environment. Mary "really like[s] the personal aspects" of Integrative Studies. Mary added:

> It really helps that they [faculty] actually seem to care about you individually and they take an interest in what you're doing and they always, they don't just talk to you about the class you have them in, they ask you about your other classes and sometimes people relate it to what you're doing in the class you had with them, which I also kind of like.

Cindy corroborated this personal connection to faculty:

> They [faculty] are interested in your situation. [My professor] last semester . . . was awesome because he realized we had a heavy load from our other classes and if we needed a specific extension to come talk to him and he would try to work with us.

Matt described Integrative Studies as personal. "The professors know, they know you, they don't know *of* you or maybe if you were in their class. They know you."

Knowing faculty on a more personal level had implications beyond feeling more comfortable in class discussion. For Matt, the personal nature of the program came with

responsibility. "You're held accountable for a little bit more, because it's more personal,

too." Lynne described this increased accountability well:

> [When] you're working in a program where the professors know your name, they
> know your cell phone number, they know your email. They know when you skip
> class because they know where you sit and if you're not there they are going to
> call you out on it, or they're going to have your roommate or whoever you're
> living with or who is in your group to contact you to find out why you weren't
> there. And they are going to kind of drag your butt through until you are ready to
> do it on your own. And that's unique. They are not going to drop you on your rear
> end and you're going to know where to go. And you are going to start to develop
> that on your own.

Students who participated regularly were acutely aware that not being prepared for class

one day was obvious to the professor. Mary described a seminar in which she was one of

the few active participants: "it sucked because if I had a really busy night and I didn't get

my reading done, the professor knew because I wasn't saying anything." Students do not

want to disappoint their faculty members and work hard to produce good work on time.

Lynne was struck by how her attitude had changed over time:

> And it's really weird how my education has come to the forefront and now I feel,
> like I feel guilt for not delivering a paper. And I'm sure that professor is almost
> probably thankful that I didn't hand it in, because [it's] one less for them to read,
> but at the same time, the professors that I have want to see that from me. They
> want to see me handing it in. I guess the level of respect [that I have for my
> professors] has just grown immensely.

Lynne's respect for her faculty has been growing over the years as she builds

relationships with them and feels responsible for meeting their expectations.

A few students talked about specific examples when they were struggling

academically and Integrative Studies faculty offered helpful advice on how to improve.

When Ann wrote her first integrative essay in Unit 3, she was shocked by her grade.

> I got a paper back that had a C on it, when I had gotten As on everything else
> prior to this. So I was devastated, crying, and I went to see her [the professor] and
> was able to, we were able to revise a paper and that really helped.

DV also struggled but with Unit 2. Although she did not perform well overall in that unit, she commented that her faculty member helped her. "She [the professor] knew I was struggling and she really did try to work with me to help me out." DV summarized the importance of knowing her faculty: "the professors are really understanding. You get a lot better relationship with your professor because there are so few of you [in class]. It is easier to sort of be able to come to them." After four years in the program, Lynne had refined her interactions with faculty. She reported,

> A lot of times I've been working on a paper over the weekend and I'll email my professor, and I'll say, "I don't really understand what this question means" like the guiding questions they have to write papers, and I'll say, "I don't really understand what this means. What I think it is blah, blah, blah, blah." And I will write like a paragraph and then they'll respond, "You kind of have the right idea, but it really means this. Break it down."

> One of the ways faculty members communicated their care and concern was by

being accessible to students outside the classroom. In Chiwy's experience, faculty

> are very encouraging. They tell you, "Come in. Ask me, if you have any questions. Don't be scared." Or I can email them at 3:00 in the morning and they will respond to me when they have time. It's not just one way from me.

DV concurred:

> In class they [faculty] are always just very helpful and if you email them with a question they're really prompt and so they just really want to help you and they want to make sure you get to where you're going. So, that's really nice to have that.

When Bond tried to set up a meeting with an Integrative Studies faculty member, he was surprised by the reaction that was different from what he was accustomed to receiving. He had been used to being brushed off by faculty too busy to meet with him. Even if his Integrative Studies faculty were not available, they shared this news politely: "'Can I

arrange to come talk to you?' 'Yeah, what time? Well, I have a few days....' And they

will tell you why they can't do it. I feel like the [Integrative Studies] faculty gives a crap."

One student described the connection to faculty as part of her extended family.

Anisah asserted:

> We're all a family here, on this floor. I mean, some of my friends who aren't in
> [Integrative Studies], they'll come with me when I have an errand to run or
> something to drop off; they're amazed at how casually I can talk to some of my
> old professors and some of them I haven't even had a class with, but I do know
> them because we're such a close knit group here.

For Cindy, it was helpful just knowing faculty were available, even if she did not need to

contact them:

> It is nice to have a person you can contact and you know how to reach them, you
> know they will respond to your email, you know who will respond better to your
> email (laugh). And you get to know your teachers really well.

The students in the study recognized that this personal attention had some

important benefits. According to Matt, "[the faculty] know your studies, and that's part of

the beauty too, because they know you, they know what you're studying, they have these

contacts, and, you know, it's a really great little network." Cindy talked about valuing

faculty relationships.

> I want professors who know me as a person and know what my strengths and
> weaknesses are and will approach me after class and say, "I think you should go
> out and [apply for this special position]." Just having professors who know me
> and are willing to keep coming back to me, pressuring me to pursue something
> that will help me grow as a learner and as a person.

The real or potential benefit of having faculty facilitate opportunities on campus or in the

community was acknowledged and cited as a program advantage rather than a universal

expectation.

Although some students found the Integrative Studies program to be like a family, other students did not enjoy these ties. When asked about out-of-class contact with faculty, Ann replied, "I can't think of any interactions that I've had with them outside of class." Ann found it easy to connect with faculty about class related concerns but lamented, "no one's ever sat down with me and talked about my degree." Participating in the interviews for this study prompted this realization that was connected to Ann's frustration that the purpose of her degree was unclear to her as a senior. Similarly, Bond described his limited contact with faculty: "Outside of like a classroom environment . . . I really don't have a lot of interaction [with faculty]. I know there are some students that do. I have friends that keep in touch with their professors even afterwards." These rare exceptions help portray a more balanced picture of the quality of the faculty-student interaction in Integrative Studies, but the reader should note that the overwhelming message from students was that their faculty cared about them, were accessible, and were generous with their information and guidance.

<div align="center">Emerging Theory</div>

A primary goal of constructivist grounded theory methodology is the creation of a theory that is rooted in the data. The theory in this study is intended to describe the pattern of student experience as students became familiar with and skilled at integration. Jones et al. (2006) explained that the theory created through grounded theory methodology usually is more specific to a particular set of circumstances than formal theory. The theory emerging from this study has been revised three times based on the feedback of the participants during focus groups and peer debriefers. The theory is discussed in detail in Chapter VI.

Summary

This chapter presented the copious and complex data gathered from undergraduate students enrolled in an Integrative Studies degree program. The reader was introduced to the 10 students who participated in this study. Next I presented the 13 conceptual themes as they connected to students' understanding of integrative learning, becoming an integrative learner, and the Integrative Studies context. In the next chapter, the theory that emerged from this study is described in detail.

CHAPTER VI

DISCUSSION AND IMPLICATIONS

My interest in understanding students' experiences with integrative learning directed my choice of constructivist grounded theory methodology for this study (Charmaz, 2000, 2006; Strauss & Corbin, 1990). In particular, I wanted to know how students enrolled in an Integrative Studies program made meaning of integrative learning. My focus was on undergraduate students. From a student perspective, which experiences or assignments supported students' integrative learning, and what challenges did students face in their efforts to become integrative learners? Since I was investigating a complex cognitive process and seeking understanding rather than explanation, a qualitative approach to this study was appropriate (Charmaz, 2000; Mertens, 2005).

A hallmark of grounded theory methodology is the emergence of a theory to represent the process under investigation. The theory emerged from the data analysis, which consisted of line-by-line coding, using gerunds as much as possible to capture action, and constantly comparing insights both within and across participant interviews. As Charmaz (2006) noted, rather than trying to establish definitive answers, the grounded theorist is striving to capture a reasonable representation of what is going on with the data. To move an analysis from description to theory, Charmaz recommended focusing on processes and the relationships among components of that process by asking questions of the data and making connections in the data. As I engaged the data from this study, I identified patterns and themes in the words of the student participants that illuminated their undergraduate experiences and their learning. I reviewed, sorted, queried,

connected, edited, drew pictures of, and reflected on these patterns, eventually identifying

13 conceptual themes. The conceptual themes clustered around three categories:

understanding integration, becoming integrative, and understanding the Integrative

Studies learning environment. Understanding integration was comprised of three themes,

including defining integration broadly, identifying forms of integration, and making sense

of Integrative Studies. Becoming integrative included four themes: finding coursework

personally relevant, identifying multiple perspectives, encountering conflict, and

reconciling conflict. Understanding the Integrative Studies learning environment

encompassed six themes: easing transition, being different, working harder and smarter,

taking a bitter pill, learning from peers, and building relationships with faculty. The

emergent theory in this study directly incorporated 7 of the 13 conceptual codes, but also

was informed by the six primarily descriptive codes that depict the learning environment

used for this study.

This chapter describes the emergent theory developed by using constructivist

grounded theory methodology. The theory is created from the conceptual codes explored

in Chapter V. To facilitate understanding, I created a graphic representation of this

theory. I will describe student movement through the developmental spiral depicted in the

graphic. Next this theory is placed in the context of existing professional literature to

identify points of convergence or divergence with other published research. Finally, I

discuss the strengths and limitations of this research and the implications for both

research and practice.

Overview of Emerging Theory

The emergent theory from this research is tied directly to the purpose of the study: to understand undergraduate students' perceptions and experiences with integrative learning. More specifically, the research questions included: How do students make meaning of integrative learning? Are students successful in learning to integrate, and if so, which experiences do students identify or perceive as contributing to their learning? What successes and challenges with integrative learning do students experience? These research questions guided the inquiry by shaping the interview protocol and the substance of my conversations with undergraduate students.

Student participants thought about integration and integrative learning in a variety of ways. During the interviews they actively grappled with the terms that may have held little saliency prior to their participation in this study given that all of the students reported joining the Integrative Studies program for reasons other than its emphasis on integration. Faculty corroborated this finding by predicting that students would struggle to define Integrative Studies. This difficulty comes in part because most students did not think of their degree program as "Integrative Studies," preferring instead to use the program's name or initials to reference it. The 10 participants offered numerous examples and definitions of integrative learning that, at first, seemed indiscriminant and all consuming as captured by the "defining integration broadly" theme. With further analysis came greater clarity, which led to a theory of how students become integrative learners. This analysis begins with a description of the continuum of integration. Next I describe the ways in which students move through the integrative learning model. Then, I offer a detailed account of each developmental phase in the integrative learning model.

Continuum of Integration

During the interviews with participants, almost everything students experienced in the Integrative Studies curriculum and co-curriculum seemed to qualify as an integrative experience. After some reflection and sorting, the examples of integrative learning began to coalesce around different forms of integration: application, comparison, understanding context, and synthesis. I began to see these different integrative experiences as a continuum of integration rather than simply descriptive categories. The types of integration varied by sophistication and complexity. The continuum of integrative processes begins with the least sophisticated or least complex form and becomes increasingly more demanding and challenging. At its most basic and explicit form, integration is application. I challenged students to consider whether application was a necessary but perhaps insufficient part of integration, and several students conceded that not all forms of application are integrative. However, all students insisted that the connections they made through application qualified as integration. A second form of integration is comparing, examining the similarities and differences in two or more perspectives. This act of comparing and contrasting resembles taking a multidisciplinary approach when the perspectives being examined are disciplinary in nature. That is, different perspectives are acknowledged as relevant to the topic being studied, and there is some analysis to determine how each contributes distinctively and where the different perspectives line up with each another, but the views are not consciously blended (Stember, 1998). All of the students asserted that comparing is a form of integrating.

Another form of integration involves understanding context. According to students, considering how and where a perspective is situated, identifying bias, and

actively assessing arguments were also forms of integration. The complexity of understanding context is greater than either application or comparison, but those tools are useful to this more advanced form of integration. Students gave many examples of considering context when sorting through conflicting perspectives. A final form of integration is synthesis. Although no students in this study demonstrated synthesis, several talked about it. Students in the focus group also acknowledged synthesis as an ideal integrative act, although they doubted it could ever be achieved. Synthesis is the most complex form of integration and involves blending perspectives to create a new understanding. Without losing track of the contributing elements, synthesis produces something new out of those elements in addressing a problem or question more completely. Students' experiences in Integrative Studies contributed to their divergent understanding of integrative learning, to their propensity to define integration broadly. The continuum of integration emerged from the data collected for this study and was not communicated and cultivated within the Integrative Studies program. The question remains to what degree these broad ideas about integrative learning are intentionally embraced by Integrative Studies faculty.

This continuum of integration allowed me to embrace the participants' views that insisted that a vast range of experiences qualify as integrative, but also impose on the data a hierarchy of integration that privileges more intellectually demanding integrative work, namely synthesis. Rather than resist the voices of the participants by asserting that application was not truly integration, in this model I accepted the students' definition by recognizing a range of integrative experiences as possible. These integrative milestones within the continuum are represented as positions within the spiral in Figure 1, a graphic

Figure 1. Model of emerging developmental theory of students' experiences with integrative learning.

Internal

Reconciling Conflict

Synthesis

External

Encountering Conflict

Understanding Context

Identifying Multiple Perspectives

Comparison

Finding Coursework Personally Relevant

Application

Revisit other forms of integration
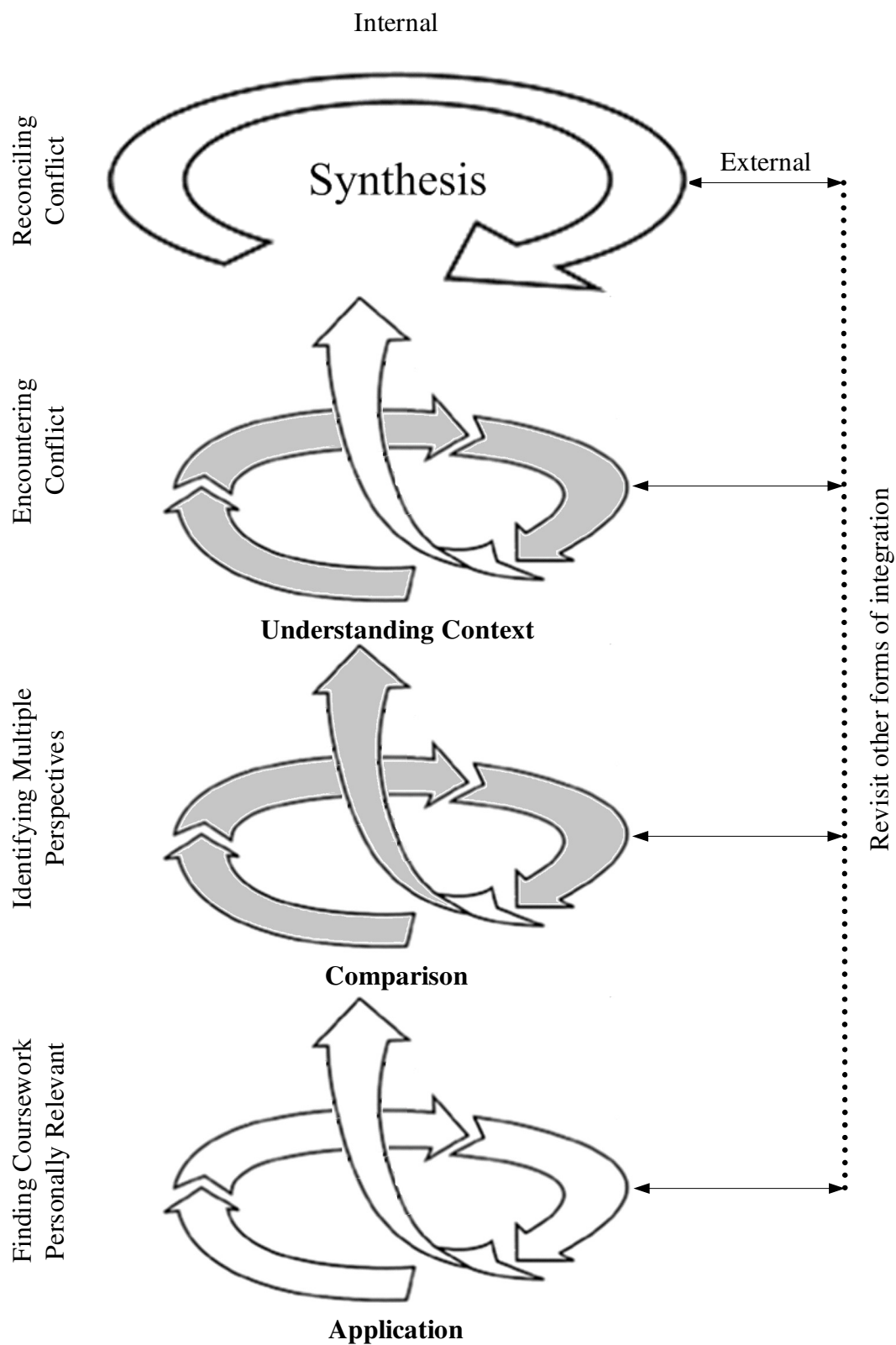
depiction of the emerging theory of how students become integrative learners. The spiral

resembles a large slinky that has been extended to show its coils. In creating the graphic

in Figure 1, I borrowed the image of the looping arrows from an existing source (ABC

Canada, n.d.). The use of these arrows in this context, however, is original. The labels on

the left of the graphic describe the experiences that promote transition from one

integrative form (application, comparison, understanding context, and synthesis) to

another. Students begin at the bottom of the graphic and move up as their thinking

becomes more sophisticated and their view of knowledge changes from thinking

knowledge is certain and fixed to being more tolerant of uncertainty. The arrows to the

right depict the recursive flow that permits students to revisit earlier forms of integration

at any time. The shaded arrows represent a "shadow zone" in which some students

artificially advance to the understanding context position but immediately return to

comparison because their understanding of multiple perspectives is superficial. The

interaction of these elements in Figure 1 is more apparent in the following section.

Movement Through the Spiral

The themes subsumed under the "becoming integrative" heading in Chapter V are

key ingredients in the emerging theory. As Perry (1981) asserted in reference to his

theory of cognitive and ethical development, the dynamic nature of development comes

in the transitions between positions. The "becoming integrative" themes fit into the

theory as vehicles for transition through the continuum of integration. Students entered

the model by engaging in an intentionally integrative environment and learned how to be

integrative in terms of application by engaging in coursework that was personally

relevant. Students gave examples of applying course material to themselves and outside

of themselves. Students moved to comparison by identifying multiple perspectives,

recognizing similarities and differences in those perspectives, and becoming more aware

of complexity. To advance to understanding context, participants described encountering

conflicting views. Students cited examples of witnessing the conflict in others or being a

direct participant and, at times, having deeply held convictions challenged. Here students

described learning to assess arguments and identify bias. Finally, to reach synthesis,

students had to reconcile conflicting views. Internal and external patterns of

reconciliation are possible, as well as dismissing the conflict all together, but only an

internal pattern of reconciliation leads to synthesis. An internal pattern is characterized by

a strong inner sense of self that guides decision-making and a confidence in one's

evaluative skills and ability to construct knowledge. Students in this study either

dismissed the conflict or used external patterns for resolving conflict, typically adopting

the recommended resolution of an authority figure held in high regard by the student.

Students moved through the continuum of integrative complexity in an iterative

fashion, rarely if ever ascending to synthesis and rarely if ever maintaining one direction.

Students reported cycling back through various positions on this model as they traveled

through their undergraduate experience. The spiral, looping nature of the graphic

depiction in Figure 1 is intended to capture this cyclical approach. Imagine the lower

loops of the spiral joining or at least becoming closer to the loop immediately above it

such that, after mastering the more modest forms of integration, students picked up and

carried that ability with them to use in future integrative challenges.

Another feature of this model relates to students' meaning-making capacity or

cognitive complexity. The way students define knowledge and their level of internal

motivation inhabit the gaps between the integrative positions in the Figure 1. Most students entered the model believing that knowledge was fixed and knowable. These students were seeking a right answer to the problems posed in class or in their co-curricular experiences. In addition, these students typically sought validation from authorities and were motivated to learn by external rewards such as grades. Following application, students were more likely to see knowledge as something that could be discovered, even if all the answers were not known at the time. At this point, students were still motivated by grades and the praise of valued adults such as teachers, but were becoming more independent in their academic work. Following comparison, students had successfully entertained different and, at times, contradictory points of view and, therefore, viewed knowledge as uncertain. In the face of conflict, students entertained perspectives that were different from their own, yet continued to value their own perspectives and stories. Many students espoused that everyone was entitled to her or his opinion. Some students began to critically assess different perspectives and to understand context. After understanding context, students continued to see knowledge as uncertain, but were more comfortable contributing to knowledge construction. Students demanded evidence and support for arguments. The pace with which students advanced through the spiral was related to their cognitive development. As students moved up the spiral, they were becoming more internally directed in their definition of knowledge and their understanding of themselves in relationship to others was becoming more stable and enduring.

There is one caveat to the theory described above and represented in Figure 1 that applies to a few of the participants. Many students who moved through the different

forms of integration exhibited characteristics consistent of independent knowers: they recognized the existence of different perspectives, acknowledged knowledge is uncertain, and expected individual claims to include evidence rather than opinion only (Baxter Magolda, 1992). In contrast to these independent knowers, several students seemed to be able to recognize different and conflicting points of view, but still expected to find a right answer. These students appeared to provide past and current examples of their integrative learning that demonstrated application, comparison, and understanding context. However, since all participants were embedded in an Integrative Studies program that emphasized the importance of examining topics from multiple perspectives, the students readily expressed an appreciation for multiple perspectives and, therefore, appeared to be independent knowers. On closer examination, some students also demonstrated characteristics more consistent with transitional knowers or even absolute knowers, which complicated the "journey" through the spiral (Figure 1).

With the help of peer debriefers, I reconciled this inconsistency by realizing that simply stating that students valued and appreciated multiple perspectives, a view that is a mantra in Integrative Studies, was not sufficient evidence of achieving this developmental milestone. Students who gave lip service to embracing multiple perspectives are in the shadow zone of the graphic in Figure 1, representing a superficial level of understanding that gives the appearance of moving from comparison to understanding context. These students, then, immediately exit the understanding context position and return to the comparison portion of the spiral where they can maintain their persistent belief that all knowledge is knowable.

It also is important to note the ways in which the environmental context interacts with this model. Being enrolled in the Integrative Studies program or any learning environment that is intentionally integrative connects students to this model. Yet, among Integrative Studies students, each student had a distinctive trajectory through the curricula. It appeared as if some students' understanding of integrative learning was arrested in the sophomore or junior year. By comparing data across students, it became clear that different educational environments or different course sequences affected student understanding of integrative learning. Environments that actively encouraged the experiences that promoted movement up the spiral were more conducive to students' development. In the case of this study, these environments included coursework in Integrative Studies, key Integrative Studies assignments, and interdisciplinary coursework outside of Integrative Studies. A more detailed description of each form of integration in the integrative learning model follows.

Finding Curricula Personally Relevant: Application

The data support a theoretical understanding of how students become integrative learners that begins with finding coursework and assignments personally relevant. For most students, formal classroom learning in high school was abstract and disconnected to their personal experiences. Transfer students claimed coursework in other collegiate contexts also was fragmented and not connected to their personal lives. With few exceptions, students described not understanding why a certain formula introduced in a high school math or science class was important or relevant. Although most students had solid, successful high school careers, Bond's teachers labeled him "deficient" and told him he was unable to learn certain topics. The disconnect between academic learning and

students' personal lives was profound and seemed to interfere with their academic success. Even the students who did well in high school yearned for more meaning in their academic work and longed to be engaged in a curriculum that played to their strengths, namely discussion and writing. Coursework that relied on testing played into their weaknesses.

Personally relevant curricula are broadly defined as approaches to teaching that prompted students to link the topic under investigation to their own lives. Connecting the classroom to one's personal life was a key component of how students described the Integrative Studies curriculum as integrative. Personal relevancy also implied a match between teaching approach and learning style. The Integrative Studies program strived to present material in a variety of ways. When these students encountered a curriculum that was personally relevant and congruent with their learning style, they reported finding their studies more purposeful and meaningful.

This link between self and course content can be facilitated by making the student or learner the focal point of a particular unit, which was the approach taken by the Integrative Studies program that hosted this study. Alternatively, through assignments that prompt personal reflection and narrative or assignments that allow students to explore their personal history or family roots, students may engage more because the projects have personal relevancy. These assignments also served another purpose in that they gave instructors a chance to assess a student's writing skills and to make the writing expectations in college explicit. Students described a biography project that cut across the first-year experience. Students selected a person to be the focus of several essays during the year. Cindy chose her grandmother, and Anisah selected her high school science

teacher who had been a mentor to her. By selecting personally meaningful subjects for this assignment, students described being more engaged and invested in their work. They found benefits beyond the grade for attending to the assignment, such as contributing to family history or publicly acknowledging the impact of a beloved teacher. This cumulative assignment relied heavily on application as a form of integration. Students applied what they had learned in the Self as Learner unit to portray the subject of their paper capturing key biographical data and positioning their subject in history. Chapters were added to the project that related to how the subject's life intersected with science or health and the ideas of citizenship, applying the topics taught in units 2 and 4.

Application is the least complex form of integration described by students and is a reasonable expectation for first-year students. Taxonomies of learning insert application after knowledge (remembering) and comprehension (understanding) (Anderson & Krathwohl, 2001; Bloom, 1956). The application skills demonstrated by students included applying a theory or model (a) to themselves (e.g., their lives, beliefs, and past learning), and (b) to a context outside themselves. Through this process students began to recognize similarities and differences needed to strive for the next level of integration: comparison.

Identifying Multiple Perspectives: Comparison

As students engaged in application outside themselves, they began to recognize that different perspectives exist in the world. They developed the capacity for comparing and contrasting different positions through class discussion, group work, experiential learning, and reading from diverse perspectives and sources. Seminar style classes promoted conversation and the exchange of ideas that differed based on personal

experience and background. Reflection on these encounters promoted analysis of these perspectives beyond recognizing that different views exist. Although students' initial reflections may have involved comparing others' views with their own, they learned to make comparisons beyond themselves. Group work also required students to negotiate different views and perspectives related to the project. Chiwy described the compromises among her group members working on the Events Management project. She noted that despite having a group comprised of immigrants and having that experience in common with each other and the population for whom they were planning the event, group members differed on what aspects of the projects were essential.

Well-designed experiential learning opportunities gave students the chance not only to apply theory to practice but also to compare practices in the experiential learning site with the material addressed in class. Cindy's experiences in a juvenile home for boys gave her a chance to compare the on-site leadership with the theoretical models she studied in class. She also connected the theory to her own leadership style as it was manifested in this experiential learning site. Finally, students reported that reading diverse perspectives contributed to their ability to integrate through comparison. Assignments that asked students to compare different authors' views or find the differences and similarities in two or more perspectives helped students develop skills of comparison. As students looked more critically at these differences, they frequently encountered conflicting perspectives, which led to the next level of integration: understanding context.

Encountering Conflict: Understanding Context

Whether the conflict was with a strongly held personal belief (conflict inside self) or between classmates who were arguing two different sides of a controversial issue (conflict outside self), encountering conflict was a powerful catalyst for learning. Wrestling with conflict challenged students' underlying assumptions about a lot of things. Taken for granted ideas that were critiqued, often for the first time. Cindy talked about being exposed to views on the United States that shocked her at first. She later appreciated these views for being candid and having an "eye opening" effect. Cindy was receptive to having the naïve, positive view she held of her country challenged, which consequently broadened her perspective on the complexity of issues that shape national identity. Students who learned to recognize bias and weigh arguments based on evidence were understanding context, a more sophisticated form of integration that transcends comparison. Mary talked about seeking the "alternative history" or perspectives held by the less powerful social groups.

Reconciling Conflict: Synthesis

To continue on to a more complex level of integration, synthesis, students developed strategies for wrestling with complexity, which ultimately helped them reconcile the conflicts they encountered. The reconciliation efforts of students in this study point to three options, only one of which led to synthesis: (a) dismissing the conflict, (b) adopting resolutions that integrated conflicting perspectives that have been worked out by external authorities, and (c) creating resolutions that integrated the divergent perspectives that were guided by students' internal processes. Students who dismissed the conflict were not successfully engaging in reconciliation and were still

endeavoring to fully understand contexts. These students needed to be able to see the significance of the differences and actively work to find meaning across the conflicting views before they could approach synthesis.

Students in this study who had reconciled conflict appeared to be making an internally driven decision; however, upon closer examination, each accepted the resolution offered by a respected authority. Cindy described a resolution to her conflict between her religious faith and evolutionary theory by adopting her father's resolution of this tension. Similarly, Anisah accepted the views of a respected high school teacher on how to reconcile the conflict between science and religion. Neither student relied on internal resources to find points of intersection that led to integration of views or compromise. No direct assignments or experiences were in place to promote reconciliation of conflicting views. Instead, students themselves were motivated to ease the cognitive dissonance that this conflict produced. A natural extension of this discussion suggested that successfully creating an internally driven reconciliation was needed to reach synthesis, the most sophisticated form of integration that was linked only theoretically to these data. No students in this study demonstrated this level of integration, but one participant described it as an ideal and others acknowledged it as an aspirational state during the focus group discussion. Portfolio assignments, particularly the graduation portfolio, were designed to promote synthesis. The only student in the study to complete her graduation portfolio during the semester in which I collected data described experiencing a latent appreciation for her Integrative Studies degree that she had not previously experienced. As graduation approached for Lynne, she talked about finally understanding the ways in which her degree was integrative, and she insisted that

it was not possible to fully comprehend the Integrative Studies degree until the end of senior year.

<div align="center">Theory and Related Literature</div>

The emergent theory, in addition to being directly tied to the data in this study, also connects to ideas and perspectives found in the professional literature. By reviewing the findings of this research in the context of related literature, I am able to explore in greater depth the significance of this research. This section explores the literature across several domains and addresses points of agreement and disagreement with the present study. The first section explores current definitions of integrative learning and compares them to the definitions from this study. Literature related to the conditions that promote integrative learning follows. The largest body of literature explored relates to student development theory, including intellectual development and psychosocial development, and related research. I explore the connections among these perspectives and the current theory.

The most compelling story told by these students and the emergent theory is that integrative learning is a developmental process that can be cultivated by an intentionally designed academic program. The successes and challenges described by student participants in the Integrative Studies program under investigation provided numerous examples of good practices as well as some insights into how programs can be more effective in helping students become sophisticated integrative learners.

Definitions of Integrative Learning

The view of integrative learning that emerges from this study is more complex and comprehensive than those definitions used in the current literature. Since designing

and collecting data for this study, two major reports have been released that address

integrative learning. The first report is from the Association of American Colleges and

Universities (AAC&U), *College Learning for the New Global Century* (2007). This

publication is the product of several years of work from the National Leadership Council

for Liberal Education and America's Promise (LEAP). In the report authors make the

case that every student needs to be liberally educated to contribute to and compete in the

global marketplace that defines the 21st century. This report combines the

recommendations of educators and employers in an effort to gain credibility with a

broader audience in its call for educational reform. According to this report, there are four

primary learning outcomes to which all collegiate institutions need to be committed if the

United States is to meet the global challenges of the 21st century. All students need (a)

"knowledge of human cultures and the physical and natural world," (b) " intellectual and

practical skills, including inquiry and analysis, critical and creative thinking, written and

oral communication, quantitative literacy, information literacy, and teamwork and

problem solving," (c) "personal and social responsibility, including civic knowledge and

engagement, intercultural knowledge and competence, ethical reasoning and action,

foundations and skills for lifelong learning," and (d) "integrative learning, including

synthesis and advanced accomplishment across general and specialized study.

Demonstrated through the application of knowledge, skills, and responsibilities to new

settings and complex problems" (AAC&U, 2007, p. 12). In this statement of desired

learning outcomes, the reference to integrative learning uses terms associated with the top

(i.e., synthesis) and at the bottom (i.e., application) of the integration continuum as

outlined in this study. The definition of integrative learning suggested by this learning

outcome also privileges integration of curricular areas such as general education with a major as well as adapting to new contexts and tackling difficult problems by applying knowledge gained in one context to another context. This view of integrative learning captures a narrow slice of the integrative learning definitions shared by students in this study and seems not to differentiate between complex forms of integration such as synthesis and less sophisticated forms of integration, namely application.

The *College Learning for the New Global Century* (AAC&U, 2007) report also gives a set of recommendations for how higher education can respond to this imperative to provide a challenging liberal education to everyone. Directly related to the goals of integrative learning, the report notes that many campuses are creating engaging interdisciplinary curricula that support student learning. Such curricula are the hallmark of the Integrative Studies program that hosted my research. This program also offers several of the best practices cited by this report, including a comprehensive first-year experience, writing intensive courses, learning communities, experiential learning, internships, and senior capstone courses. Consistent with this report's findings, these opportunities are housed in a program that is on the margins of the larger university and serve only a fraction of the student body. The report also exposes the commonplace pattern that the majority of the students in higher education today do not start and finish their degree in one major or in one university. The fragmented approach that many students take toward their education is problematic in establishing coherence. Students who begin the Integrative Studies program in the first year and persist are likely to have a more coherent academic experience than those who transfer into the program.

A second major report that addresses integrative learning is from AAC&U in partnership with the Carnegie Foundation for the Advancement of Teaching (2007). This online report is a series of documents, commentaries, and institutional websites designed to share the work of 10 campuses engaged in the Integrative Learning Project. Two documents directly define integrative learning. One of these documents is a *Statement on Integrative Learning* (AAC&U & Carnegie, 2004) that acknowledges the many ways in which students can be integrative. Focusing more on what is being integrated, this statement puts integrative learning in the context of a fragmented undergraduate experience and claims the greatest contribution of integrative learning is the enhanced coherence it offers undergraduate students. According to this statement, what is being integrated is learning "across courses, over time, and between campus and community life" (AAC&U & Carnegie, 2004, p. 1). The varieties of integrative learning include "connecting skills and knowledge from multiple sources and experiences; applying theory to practice in various settings, utilizing diverse and even contradictory points of view; and understanding issues and positions contextually" (AAC&U & Carnegie, 2004, p. 1). These characteristics of integrative learning map neatly onto the integrative learning model developed from the emerging theory of this study and depicted in Figure 1. The statement on integrative learning includes application and understanding context. It also embraces identifying multiple perspectives and encountering conflicting points of view. This statement continues by identifying the ways in which college and universities can create conditions to support integration, including "first-year seminars, learning communities, interdisciplinary studies programs, capstone experiences, individual

portfolios, advising, [and] student self-assessment" (p. 1). Most of these features are part of the Integrative Studies program that hosted my research.

A second document from the Integrative Learning Project restated many of the same points as the *Statement on Integrative Learning* (2004), but suggested that integrative learning contributes more than coherence to the undergraduate experience (Taylor Huber & Breen, 2006). According to Taylor Huber and Breen, integrative learning is needed to help students address "democracy's big questions," which are "breathtakingly complex" (p. 1). Integration is the "capacity to connect" (p. 1) and includes several varieties of integrative learning as mentioned in the statement on integrative learning. This article also asserts that the literature on intellectual development views integrative learning as an advanced process that is challenging to achieve. The first mention in this document of synthesis is in reference to Perry's scheme. According to Taylor Huber and Breen, Perry contended that to be capable of synthesis, students must be advanced in their intellectual development and have achieved his stage of commitment in relativism. Given this sophistication of integration, students need be challenged and supported to achieve this learning goal. Taylor Huber and Breen suggested that institutions interested in cultivating integrative learning in their students needed to employ multiple strategies and to develop a comprehensive plan for promoting integration across university life.

Both of these writings from the Integrative Learning project (AAC&U & Carnegie, 2004; Taylor Huber & Breen, 2006) construe integrative learning as a static outcome rather than as a process. The definition of integrative learning that they offer hints at the dynamic nature of this elusive goal, as does the recognition of multiple

varieties of integration. In my study, students viewed integrative learning as active and process-oriented. Integrative learning for students was complex and multifaceted. My research outlined four different ways of being integrative that varied by their level of complexity and sophistication, beginning with application followed by comparison, understanding context, and synthesis.

If integrative learning is framed as a static learning outcome, then it is important to identify clear, observable, measurable products that can be assessed. These reports do not offer guidance as to what these products might be. If integrative learning is described as a process, then the products are a window into a process, a proxy, rather than ends in themselves. In this study, portfolios were intended to provide evidence of integrative learning. However, simply asking students to complete such a project may be insufficient. This study suggests there are not just different varieties of integrative learning, but that they vary by complexity and sophistication. These products need clearer guidelines, describing the final product and the approach (or process) students need to take to complete the assignment (Miller, 2005; Palomba & Banta, 1999). By using rubrics with clearly articulated learning goals and details describing what the expectations are for each element in the assignment, faculty and students alike can be more explicit about what evidence of integrative learning looks like (Lovitts, 2007; Montgomery, 2002).

Integration as an Active Process

Being integrative is an approach to learning and to understanding the world that relies on active engagement and effort on the part of students. Overwhelmingly the student participants understood and made meaning of integrative learning as a process rather than as a product (Dressel, 1958; Kolb, 1984). This insight is consistent with

literature that reports the powerful, positive impact on student learning of pedagogies that promote active engagement in the material (Bonwell, 1996; Bonwell & Eison, 1991; Hake, 1998). When students are able to interact with their faculty as well as their peers through class discussion, small group activities, and hands-on activities, they gain greater conceptual knowledge about the course topic when compared to traditional lectures and labs (Hake, 1998).

Participation is a key ingredient for active learning and, according to the current study, integrative learning. Students reported that courses taught by Integrative Studies faculty were seminar-style rather than lecture and provided ample opportunity to contribute to discussion. Indeed, most students remarked that the expectation to come to class prepared and to participate was so great that they felt forced to contribute. On occasions when students came to class unprepared, students reported that the faculty member noticed their transgression given the intimacy of the seminar classroom. Several researchers have documented the intellectual gains, such as critical thinking, associated with discussion-based classrooms that include problem solving and hands-on work (Chickering & Gamson, 1991; McKeachie, Pintrich, Lin, & Smith, 1986; Moll & Allen, 1982). Most students in Integrative Studies found it easy to engage in class because the faculty exuded energy and passion for their course subject that was contagious.

The higher education literature also supports the connection between active student engagement and learning. The National Survey of Student Engagement (NSSE) is dedicated to using indicators of engagement to measure student learning outcomes such as satisfaction, perceived cognitive gains, persistence, and graduation rates. Specifically, NSSE offers institutional participants a set of benchmarks to allow for comparisons with

other institutions on their "level of academic challenge, active and collaborative learning, student-faculty interaction, enriching educational experiences, and supportive campus environment" (NSSE, 2001, p. 2). These areas, taken collectively, are what NSSE defines as student engagement, and each is comprised of survey items that measure time and effort students report devoting to class, study, and other educational activities as well institutional choices related to resource allocation, curriculum structure, availability of supplemental learning opportunities, and services designed to support and encourage student participation.

The NSSE data from the institution hosting this research indicated a high level of satisfaction and high levels of academic challenge and active engagement in learning by students in the larger university context (Hinkle et al., 2003). Both first-year students and seniors participated in the NSSE. The first-year students performed higher than predicted on three of the five benchmarks: active and collaborative learning, student interactions with faculty members, and supportive campus environment (Hinkle et al.). Senior respondents performed higher than expected on four of the benchmarks: level of academic challenge, supportive campus environment, enriching educational experiences, and active and collaborative learning. NSSE identified the university as "educationally effective" and selected it as a case study because it had higher graduation rates and higher scores on the NSSE benchmark measures than would be predicted given the incoming characteristics of its student body. To the extent to which the NSSE assessed student behaviors rather than self-reports of cognitive gains, these data offer another perspective on the learning context for this study. To complement and supplement these quantitative data, a team of investigators visited the campus to learn more about the institution and its

programs through the Documenting Effective Educational Practice (DEEP) project (Hinkle et al.). The investigators singled out the Integrative Studies program as a notable curricular innovation in terms of active and collaborative learning (Hinkle et al.). Data from the current study corroborate this finding. Student participants were enthusiastic about their academic experience in Integrative Studies and described almost all of their classes in the program as engaging. Participants also viewed their experiences as exceptional in the context of the larger university and perceived that Integrative Studies was more demanding than other departments. The students insisted they were working harder and smarter than their peers at the university.

According to NSSE results, first-year students at the university scored lower than predicted on the academic challenge benchmark after controlling for student characteristics, but senior scores were higher than expected (Hinkle et al.). These data suggest that perceptions of academic challenge change over time at the university and conflict with Integrative Studies students' assertion that other majors on campus are less rigorous and less intellectually challenging. By definition, none of the students in my study was immersed in another major and, therefore, did not experience the university as other majors might as seniors. Indeed, transfer students who joined the Integrative Studies program after the first year were the most critical of the broader university experience. These NSSE data support the connection between active engagement and satisfaction, but temper Integrative Studies students' claims that only Integrative Studies is providing students with academic challenge.

Other literature affirms the positive contribution of active involvement and engagement in class and out of class on student learning. Astin's (1984) theory of

involvement shaped his extensive work identifying the college environments that produce student outcomes, both cognitive and affective outcomes. Astin (1993) reported that retention is positively associated with those involvements that support the academic enterprise such as spending time studying, and interacting with peers and faculty, whereas involvements that distract students from the academic experience, such as working off campus, commuting, and reading for pleasure are negatively associated with retention. A puzzling finding from Astin (1993) was that the use of active learning strategies negatively affected student success. Astin (1993) speculated that the measure for active learning strategies relied on group project experiences in class and that poorly constructed group experiences might have prompted respondents to undervalue this experience. Other support for active engagement comes from Pascarella and Terenzini's (1991, 2005) extensive review of the research literature. In their analysis, when students spend time and effort on their academic work and get involved in college, there are positive benefits for learning.

An important catalyst of student involvement for Astin (1993) and others (Chickering & Reisser, 1993; Feldman & Newcomb, 1969; Kuh, 1993, 1995; Kuh, Schuh, Whitt, & Associates, 1991; Light, 2004; Pascarella & Terenzini, 1991, 2005) is peer interaction. The importance of peers on student learning is a major conceptual theme of the current study. Students noted that by engaging with their peers both inside the classroom and in the co-curriculum they were made aware of different perspectives and experiences. Small classes that encouraged a safe and free exchange of ideas were a catalyst for many of the most interesting, and at times challenging, peer interactions. To benefit from the different views shared by peers, students described having to be open

minded and willing to suspend making quick judgments. The classroom culture

demanded that students listen respectfully to all ideas, even those with which they did not

agree.

Being confronted with conflicting perspectives surfaced as a pivotal theme in this

study related to students' becoming more complex integrators. Often this conflict

occurred among other classmates as when student participants witnessed the

disagreement. At other times a student participant was actively engaged in the conflict.

The conflict was more unsettling for students when the topic under discussion was a

deeply held belief or conviction. When underlying assumptions were challenged, students

lost their grounding, or experienced what Piaget (1985) termed disequilibrium, an

uncomfortable state of uncertainty. Having one's conceptual mental frame challenged by

new learning is discussed in more detail in the developmental process section of this

chapter. If encountering different views or perspectives that conflict with one's own can

provoke intellectual growth, then creating opportunities for students to encounter conflict

is developmentally appropriate. Knefelkamp (1984) advocated for this idea of creating a

developmental mismatch between the student and his or her environment to encourage

optimal development. When the epistemological demands of the world exceed the

"internal epistemological capacity" of the student, it is possible to be overwhelmed

(Kegan, 1994, p. 41). This mismatch is growth producing, but the challenge of conflict

and cognitive dissonance needs to be balanced with intentional support (Kegan; Sanford,

1967). Students in this study cited the importance of support from peers as well as faculty

in managing the stress of conflict. Faculty accessibility, faculty skill in course facilitation,

and thoughtful feedback on assignments provided by faculty were the most frequently cited forms of instrumental support.

Support also takes the form of curricula that are applicable to students' lives. For students in this study, finding curricula personally relevant emerged as key step to becoming integrative. Several authors have commented on the advantage of connecting curricula to students' lives and experiences as a way to promote learning (Baxter Magolda & King, 2004; Dewey, 1956; Haynes, 2004; Howard-Hamilton, 2000). Baxter Magolda and King described the learning partnership model as a guide for developing learning opportunities that help promote self-authorship. Attending to the intrapersonal aspects of the individual student is an important step. Baxter Magolda and King suggested three principles to support educators who are trying to be intentional about supporting students in becoming the authors of their lives. They recommended connecting academic work to students' lives, recognizing students as contributors to knowledge construction, and defining learning as socially constructed. Using the learning partnership model as a guide, Haynes (2004) collaborated with her colleagues to create an interdisciplinary writing plan. This plan begins with assignments that rely on personal narrative and other devices to enable students to connect personally to their work. The assignments recognized students' existing experience and knowledge and prompted them to identify and present their own views on a topic.

Arguments in favor of situating learning in students' experience can be traced back to Dewey (1956) and his conviction that school needed to promote active engagement and build on the experiences children have in their daily lives. Cross (1999) described how Dewey advocated bringing experience into the classroom, but she pointed

out that it is also valuable to take formal classroom learning and link it to experience. She cited opportunities such as service-learning, internships, and cooperative education as tools for experiential learning. Making curricula personally relevant also makes the classroom more inclusive for African American students (Howard-Hamilton, 2000). Howard-Hamilton urged faculty to pay attention to students' racial identity development in promoting perspective taking and to make the "classroom learning process a liberatory practice for everyone" (p. 46).

Given the potential diversity of perspectives in a given classroom, it is difficult to imagine creating curricula that would hold the personal interest of all these diverse constituents. One way that the Integrative Studies program attempted to connect to diverse learners was to encourage its faculty to use a variety of teaching approaches in the classroom. This expectation for diverse approaches was part of the program culture and cited by some of the participants as one of the ways in which the program was integrative: it integrated different teaching styles. Designing courses to incorporate a variety of approaches improved the chance that at least some of the time students were in an academic setting congruent with their learning style, which in turn supported student learning (Gardner, 2006; Knefelkamp, 1984; Kolb, 1981). According to Gardner, teachers who use multiple approaches are helping students understand that issues or problems can be approached in a variety of ways, thereby dismantling the assumption that there is one right way to do things. This realization might help students recognize that the authority figure (e.g., the teacher) is not the only source of knowledge and begin to nudge students away from absolute knowing, a developmental position in which

students view knowledge as fixed and experts as having all the right answers (Baxter Magolda, 1992).

Integrative Learning and Developmental Theories

As students in this study became more sophisticated integrated learners they simultaneously demonstrated greater cognitive complexity. The interview data were replete with examples of the interplay between students' intellectual development and their understanding of integrative learning. Much of developmental theory can be characterized by a series of phases through which an individual becomes more complex in her or his thinking (McEwen, 2003). Cognitive-structural developmental theory describes phases through which individuals progress to become more inner directed, more aware of complexity, and better able to see patterns and create an organized view of the world (Pascarella & Terenzini, 1991). Cognitive-structural theorists are interested in describing how people think and make meaning of the world rather than addressing the content of their thoughts (Baxter Magolda, 2001; Belenky et al., 1986; Evans, Forney, & Guido-DiBrito, 1998; Kegan, 1982; King & Kitchener, 1994; Pascarella & Terenzini, 1991; Perry, 1981). Cognitive-structural theories tend to be hierarchical in nature describing a fixed sequence of developmental milestones (Evans et al.; Pascarella & Terenzini). In general, development is characterized as becoming less dependent on authority figures for knowledge, more accepting of knowledge as uncertain, and more aware of how they as individuals contribute to knowledge construction (Baxter Magolda, 1992; Kegan; Perry). The theory developed in this study follows a pattern consistent with these theories in that the forms of integration become increasingly complex as do the underlying cognitive processes needed to engage at these different levels.

Cognitive-structural theories and psychosocial development theories describe progression from one developmental stage to another in similar ways. Chickering and Reisser (1993) described a process of differentiation and integration such that new ideas first are broken down into component parts and understood separately from existing ideas and later become reconnected with each other in a way that enhance understanding. King (1994) also described differentiation and integration as evidence of students becoming more complex in their thinking. Piaget (1968) referred to this developmental process as assimilation and accommodation to capture how learners attempt to connect new knowledge to their existing views of the world. When the mismatch between new information and existing mental structures is too great, the mental frames adjust to accommodate the new material. In Marcia's (1980) dynamic theory of how ego identity is formed, crisis plays an important catalytic role in prompting differentiation. Marcia's notion of crisis is similar to a conflict, a critical developmental catalyst in this study, in that it demands a decision among competing choices. With commitment comes a resolution of the angst of crisis and a clear position on issues related to career, religion, politics, and sex roles (Pascarella & Terenzini, 1991; Marcia). In this study, conflict plays an important role as a catalyst for development. By first identifying multiple perspectives and then encountering conflicting perspectives, participants were engaging in assimilation and accommodation. Students who assimilated the conflict did not advance to a more sophisticated form of integration because they did not have the cognitive capacity to do so. Students who accommodated the new information created new mental frameworks and were successful in moving to more complex ways of integrating.

Perry (1981) discussed how students struggle with the "everything goes" mentality of pseudo-relativism (position 4) and need to progress to contextual relativism and, eventually, commitment to manage the discomfort of uncertainty. Baxter Magolda (2001) referred to these transition points as being at the crossroads, an important developmental threshold that can lead to self-authorship. For the students in this study, assignments such as a debate or discussion about a controversial issue brought these conflicting views to their attention. Leeman (1987) argued that debate promotes critical thinking and perspective taking, especially if students are asked to develop a case for both sides of the debate question. Such an assignment challenges students' beliefs in the certainty of knowledge. Leeman asserted that by asking students to choose which side of the debate offered the most compelling evidence, students learn to differentiate among the quality of the arguments. Students struggle with the multiplicity of perspectives and their egalitarian beliefs that everyone has a right to his or her perspective and every perspective is valid; everyone's views are equally right for her or him. There is a growing understanding that knowledge is uncertain, but little understanding of how to reconcile differing views. Student participants in this study began to sort out the competing claims of others by understanding context.

Current interpretations of much developmental theory has allowed for greater variability in the ways in which students progress through the various phases of development (King, 1994). Although the most advanced positions within these theories are generally considered to be qualitatively better and more complex than the earlier positions in the model, these positions may or may not be readily achieved. Goldberger et al. (1996) claimed that constructed knowing is better than other forms of knowing largely

because it is a more flexible way of knowing and reveals an awareness of how knowing

can be different based on context. This meta awareness is better than less aware positions,

according to Goldberger et al. In a similar way, synthesis is a higher order of integration

than application, comparison, or understanding contexts. Its position at the top of the

model is compatible with Bloom (1956) and Anderson and Krathwohl (2001). In this

sense, synthesis might be the goal of individual learning and the desired level of

achievement (outcome) of an academic program. It is not surprising that none of the

participants exhibited synthesis given the complexity of this form of integration

(Anderson & Krathwohl; Bloom; Newell, 2001b). Interdisciplinary scholars place

synthesis as the desired goal of interdisciplinary integration, but concede that it is very

difficult to achieve (Newell, 2001a; Thompson Klein, 1990). Bloom placed synthesis and

evaluation as the most complex forms of thinking.

Faculty and practitioners rarely see in the students with whom they work

examples of the developmental milestones that are identical to theoretical positions.

Developmental progress can be made in irregular increments and the sequences

themselves may not be as rigid as faculty and practitioners originally thought. Kegan

(1982) did not accept the idea of rigid sequences of intellectual development, favoring a

helix to represent the developmental orders, which is suggestive of a revisiting of

developmental tasks and experiences over time. Perry (1981) discussed this idea of a

recursive pattern to development. Parham (1989), too, talked about recycling through

stages of racial identity development. Similarly, in my theory of integrative learning,

students progress through phases of increasing complexity, bringing with them the tools

and insights learned in earlier levels of integration as they tackle more complex forms of

integration. Piaget (1968) referred to this capacity to use prior knowledge in novel contexts as horizontal décalage. As contexts changed and students confronted new challenges, students revisited earlier integrative learning positions in a cyclical fashion. This recurring movement through the positions happens more quickly and allows for accelerated movement through the model, a process that Piaget termed vertical décalage.

Another feature of some developmental theories is the idea of a pause or what Perry (1981) called temporizing. This pause is characterized by a holding pattern on the part of the student and often takes the form of a "wait and see" attitude about important decisions (Perry, p. 90). Perry also described the experiences of students who abandoned the developmental path through retreat or escape. Retreat involves returning to an earlier stage and staying put, and escape represents a stance characterized by alienation. Kegan (1982) introduced the idea of an "evolutionary truce" to describe the temporary balance achieved along the developmental trajectory that is disrupted by new experiences that prompt the need for more differentiation and integration. The path students in the current study took through the integrative learning model was at times characterized by a pause at a position. Some students seemed to arrest their development and not progress as fast or at all to more advanced forms of integrative learning. When Ann insisted that she was almost exclusively selecting papers she had written in her first year to demonstrate completion of the competencies as required in the graduation portfolio, I wondered if the attention given to the first and last year of the Integrative Studies program left a void during the second and third years. The structure of the curriculum in years two and three was less prescribed and students seemed to negotiate course substitution with ease. In addition, Esther reported it was possible for a student to not take any Integrative Studies

courses for a semester or a year. It seemed possible that students in the second and third years maintained or lost ground in terms of their ability to be integrative, rather than gaining new skills. This developmental pause, then, may be prompted by environmental conditions as well as by increased challenge and complexity.

When I tested this interpretation on participants, some were quick to disagree. After considering these responses, a pattern emerged such that students (a) whose major coursework (i.e., concentration) included primarily disciplinary courses in departments with modest if any attention to interdisciplinarity (i.e., the organizational management concentration), and (b) who did not take a learning community course in Integrative Studies for a semester or more, did not seem to move along as far on the integration continuum. In contrast some students rejected the idea of a plateau or decline in their understanding of integrative learning during the middle two years of college. These students had (a) enrolled in women's studies, social work, and sociology courses, which were often taught by faculty who also teach in the Integrative Studies program, and (b) enrolled in at least one learning community in Integrative Studies each semester of the second and third year. This analysis suggests that the learning environment affected students' progress through the integrative learning spiral by mediating students' level of engagement with the Integrative Studies program. This contextual dimension seems more salient than other student characteristics such as age, race, or gender as a mediating factor in students' integrative learning.

As students move through the spiral representing increasingly more complex ways of integrating, they are both aided by their level of cognitive complexity and are becoming more cognitively complex as they learn to integrate. Students in an

intentionally integrative academic context are introduced early, in the first week of the

first year, to multiplicity (Perry, 1981). The disciplinary world they have known, whether

or not they refer to it as disciplinary or compartmentalized by subject, is challenged.

Faculty and students agree that the first-year experience models an integrative approach

to learning by blurring the boundaries of the disciplines and creating a multidisciplinary,

if not an interdisciplinary, approach to understanding topics. As first-year students, they

recognize there are multiple perspectives on an issue. This awareness gives the

appearance that students are more advanced in their intellectual development than might

otherwise be expected. Many researchers have found that most first-year, traditional age

college students view knowledge as certain and expect authority figures to provide the

right answers (Baxter Magolda, 1992; Kegan, 1982, 1994; King & Kitchner, 1994; Perry,

1981). Exceptions to this pattern have been documented by Pizzolato (2003) who

examined self-authorship in students who had struggled in life and relied on a strong

inner drive to make it to college. These students experienced compelling, destabilizing

events followed by active pursuit of a goal, such as college. Many of the students in her

study were further along on their journey to self-authorship compared to most college

students.

Students in Integrative Studies learned early that knowledge is uncertain and that

their opinions and those of their peers are worthy of consideration. Students also learned

about bias and routinely had their assumptions about the world challenged. This

awareness of and ability to identify different perspectives contributed to students'

cognitive complexity, and is consistent with previous studies that address perspective

taking (Hurtado, Engberg, Ponjuan, & Landreman, 2002; King & Shuford, 1996).

However, student examples of perspective taking revealed varied levels of comfort with the idea that knowledge is uncertain and demonstrated different levels of reliance on internal processes when making decisions.

Despite recognizing that multiple perspectives are relevant, many students still relied on recipes or formulas to make sense of these different and often conflicting points of view (Baxter Magolda, 2001). As students engaged with more complex forms of integration, they demonstrated more consistent patterns of complex thinking, and with greater cognitive complexity came more sophisticated ways of integrating. Students' cognitive complexity, then, influenced their capacity to engage in higher levels of integrative learning. As well, efforts at being integrative in turn affected their cognitive complexity. Students' progress up the spiral in Figure 1, then, is also facilitated by the degree to which their intellectual processes are internally guided. It appears that the more students rely on external formulas, the slower their movement up the spiral and the more they exhibit external patterns for resolving conflict.

Insights about Integrative Learning

Defining and measuring integrative learning is made more challenging by labeling it a process. Assessment experts recommend having clearly stated learning goals and reaching consensus about how these goals are manifested and measured (Banta, et al., 1996; Palomba & Banta, 1999). One commonly used assessment measure in higher education involves using surveys that ask students to report on their own cognitive growth. Several major national surveys including NSSE, the Cooperative Institutional Research Program (CIRP), and the National Study of Living-Learning Programs (NSLLP) frame questions about students' cognitive gains in college by asking students to

rate to what extent have they grown in their ability to think critically, for example, while in college. These self-report measures are common and supported in the literature as appropriate and accurate ways to measure cognitive growth (Pascarella, 2001b; Pascarella & Terenzini, 2005).

The findings of this study challenge this convention. Based on self-report, every participant described him or herself as an integrative learner. The students in this study did not, and perhaps could not, independently distinguish among the various types of integrative learning. In the individual meetings and the focus group where the first iteration of the emerging theory was presented, students acknowledged the potential for synthesis as an ideal. They were able to recognize that their own learning had not reached this level of complexity and could comment on the other levels of integration when it was made explicit for them. In the context of the interviews, however, students were indiscriminant about their integrative experiences and lacked the nuanced view of a continuum of integration. Furthermore, those students who participated were prompted to reflect on integrative learning and to think about their education in ways that may have actually promoted integration. Participating in this study, then, may have been a catalyst for integration rather than experiences within the Integrative Studies program. Similarly, by participating in the study and talking about integrative learning, participants may have exhibited greater sophistication in subsequent interviews because of our discussions.

Faculty defined integrative learning in a variety of ways, often using the verb connect, but also emphasizing a range of features rather than one shared vision. They tended to emphasize taking a holistic approach to understanding a problem or topic. Faculty used the term interdisciplinary more frequently than students to describe

Integrative Studies and integrative learning, but their use of this term was inconsistent. One faculty member rejected interdisciplinarity as a descriptor of Integrative Studies and another purposely avoided using the term, but conceded that the courses in Integrative Studies are interdisciplinary. Definitions per se are not generally shared with prospective students; instead faculty provided examples and attempted to model the integrative process.

Integration is a form of connection (Taylor Huber & Breen, 2006). Indeed, some argue that all learning is about connection (Cross, 1999). I wonder if the connectedness related to integrative learning is aligned with the idea of connected knowing as described by Belenky et al. (1986). Clinchy (1996) wrote a chapter on connected and separate knowing as a follow up to *Women's Ways of Knowing* (Belenky et al.). She explained that connected and separate knowing are different procedural approaches to understanding and making meaning. When using the connected knowing approach, "one tries to embrace new ideas, looking for what is 'right' even in positions that seem initially wrong-headed or even abhorrent" (Clinchy, p. 207). In short, a connected knower must be open minded and resist a quick judgment when confronted with new ideas. Students in this study claimed integration required them to be open minded and willing to listen to ideas with which they did not agree. Although men can also be connected knowers, more women show this pattern (Belenky et al.). The present study included eight women and only two men. All of the women and one of the men described their preference for knowing in connected ways. Of the Integrative Study program students who graduated in 2005-06, 68% were women suggesting a possible link between preferred ways of learning and program selection (Office of Institutional Research & Reporting, 2006). It is

not clear why fewer men participate in Integrative Studies, but the commitment to connected knowing is one plausible interpretation.

When asked, students insisted that they were attracted to the program in part because of the interactive learning, small classes, and emphasis on writing. No one indicated an interest in integrative learning per se. This way of learning, however, seemed to fit each of the participants. Still, all insisted that anyone can learn to be integrative and that the Integrative Studies program was not comprised of students who already knew how to be integrative or who were natural integrators. Kegan (1982) described developmental theory that "defines growth in terms of differentiation, separation, increasing autonomy, and lose[s] sight of the fact that adaptation is equally about integration, attachment, inclusion" (p. 108) as being out of balance. Kegan pointed out the privileged view of development is characteristically male, or separate, and development as integration is associated with characteristically female or connected ways of knowing. Exploring this relationship between gender, learning style, and integrative learning is beyond the scope of this study, but merits further investigation.

Insights about Integrative Studies

This in-depth examination of the Integrative Studies program was not initiated as a formal program review process. However, in the course of the data collection and analysis, I identified some program strengths and some areas that could be improved. Students in the Integrative Studies program are enthusiastic about the quality of the teaching and the high level of active engagement students have in their own education. I share data comparing faculty and student perceptions of which program features contribute most to students' ability to become integrative learners. This discussion points

out that students cite many more out of class contexts that support integration than faculty. I also offer a brief discussion of student writing and the representation of different forms of integration in student written work. Additional recommendations for the Integrative Studies program are included in the implications for practice section.

The conceptual themes described in Chapter V provide evidence for Integrative Studies students' high regard for their educational experience. Student participants described being supported in their transition to college, building relationships with faculty, benefiting from group work despite their objections, learning from their peers, and working harder than their peers in other majors. Participants were engaged with their education and appreciative of the care and attention they received from faculty. Participants would agree that Integrative Studies provides both challenge and support (Sanford, 1967).

Faculty had ideas about where in the curriculum and co-curriculum students developed the capacity to be integrative. If integrative learning is a goal of higher education, it would be desirable to identify specific activities or assignments that help students learn how to be integrative. Faculty claimed the first-year program and graduation portfolio, with its supporting capstone course, contributed the most to students' understanding of integrative learning and their ability to integrate. Faculty also pointed to reflective writing and faculty feedback on student writing as important ways to teach integrative learning. Two faculty members mentioned experiential learning, but only one faculty member commented on the value of a co-curricular experience, the living-learning floor, in promoting integration in students.

Students more explicitly than faculty differentiated between experiences that promoted their understanding of integrative learning and those that contributed to their ability to be integrative. The distinction was subtle and there were a number of experiences that appeared on both lists. Many students spoke about the way writing reflective pieces, often in conjunction with the portfolio, contributed to their ability to integrate. Some of the other examples, such as participating in group projects, taking Introduction to Integrative Studies, participating in the first-year experience, and receiving feedback from faculty, contributed both to students' ability to integrate and their understanding of integration. Additional contributors included working, living on the living-learning floor, living on campus, living life holistically, participating in the outdoor orientation program, giving presentations, preparing for and participating in a debate, journaling, completing the first-year biography project and large group project, preparing for the graduation interview, and engaging in active and experiential learning. These experiences cited by students as contributing to their ability to be integrative span the out of class and in class realms. These examples also emphasize process rather than course content in describing contributions to students' ability to integrate. How courses were taught and how students experienced out of class activities were more important to students.

Only two students in the study had experience with the senior capstone course, but this is one important point of contrast with faculty perceptions of where in the curriculum students learn to be integrative. From the students' points of view, the capstone was a structured way to make progress on the graduation portfolio. The task orientation of this course limited its effectiveness as a catalyst for synthesis. The morale

in Ann's class was low, and she described a climate dominated by complaining and resistance. Since her peers did not do the reading, she stopped reading as well. Students did not seem to take this course very seriously, but appreciated the chance it gave to make progress on the graduation portfolio.

The other curricular contributions to understanding integrative learning cited by students were consistent with those shared by faculty. Both groups pointed to reflective writing and feedback from faculty as important teachable moments. Both groups also mentioned experiential learning and the outdoor orientation program, but students were much more emphatic about how strongly these experiences contributed to their integrative learning. I learned about the remarkable influence of the outdoor orientation program on students' expectations for integrative learning and I pondered with several students whether there was any way to expand the opportunity to include more than just 10-12 students. During the focus group, students said the trip for that fall had been canceled for lack of enrollment. Students raved about the immersion week and felt well prepared for the expectations of the first-year experience when it ended.

Students identified many more out of class contexts where they learn to be integrative than did faculty. The living-learning floor offered one such option that Matt found very helpful. Cindy's experience was less satisfying in this regard, but she acknowledged the potential of the living-learning experience in promoting integration. Greater attention from faculty and more intentional connections between the academic program and the living-learning floor might contribute to student learning (Gabelnick et al., 1990; Shapiro & Levine, 1999). In Mary's experience, working as a restaurant shift manager provided an important vehicle for integration. She described how her work

experiences provided great examples in class and how course material often informed her work in some way. Similar benefits were realized with experiential learning opportunities. Both students and faculty reported the importance of experiential learning.

Although I did not conduct an analysis of student writing, my informal review of the papers and portfolios students shared with me as well as faculty comments offer a modest substitute for this formal process. Student writing was mixed in terms of clarity, but there was evidence of application in most of the pieces I reviewed. There were also examples of comparison and some assignments revealed an understanding of context. Synthesis was not evident from the writing samples I reviewed, but was mentioned by one participant as a form of integration. Faculty, too, shared their assessment of student work. Faculty thought generally that students successfully became integrative learners by the time they graduated. They explained that some students, depending on concentration and commitment to Integrative Studies, were less comfortable with integration and were not as successful in fully understanding Integrative Studies.

Limitations of Study

There are several limitations related to this study. First, the study design was not longitudinal. Instead, I relied on a stratified sample to capture potential differences in understanding, perceptions, and experiences with integrative learning across four years of undergraduate study. As such, I was able to capture only a snapshot of participants' thinking and understanding about integrative learning rather than observing developmental changes in the same student over time. All students reflected and shared details about their previous experiences in high school and college providing some comparative data. In addition, I witnessed examples of the different forms of integration,

with the exception of synthesis, in all of the participants. However, evidence of developmental changes would be more robust if they were observed in the same students over time.

A second limitation is not being able to triangulate the interview data with integrative products. To triangulate these comments, I collected papers and other artifacts that the participants thought would be strong examples of integration. One of the artifacts had to be a paper, which I planned to assess using a tool developed to examine lengthy writing for evidence of interdisciplinary integration. I quickly learned that the Integrative Studies program does not explicitly describe itself as interdisciplinary. Faculty explained that many of their courses are interdisciplinary, but that the focus is not on disciplinary integration. Given this backdrop and the dearth of references to interdisciplinarity from the students, I decided not to conduct the assessment of the writing samples I collected. It was clear that none of the participants would be able to demonstrate integration using this tool. I read the papers and found that the integrative essays shared with me described students' understanding of integration rather than *being* integrative. That is, the papers were about integration but were not, in fact, integrative. The other integrative products included additional papers, PowerPoint presentations, web sites, and a brochure. These additional artifacts were not analyzed systematically, but were indications of assignments that promoted integrative learning from the participants' perspective.

There also are limitations related to my sample. First, achieving maximum variation was approached, but not achieved. I achieved variation, but ideally the sample would include one or two more men. With only two men in the study, it is impossible to point to gender patterns that might exist. Similarly, the diversity within the students of

color made seeing patterns related to race and ethnicity difficult, if not impossible. Of the four participants who identified as students of color, none was from the same cultural background. Some observers may question how I can be sure that the 10 participants provided adequate coverage for this topic. Despite the cues during data collection that suggested I had reached coverage of my research questions and was beginning to hear similar themes from the same participant over time and across participants, there is always the concern that more participants or more interviews would have produced new and potentially confounding data. Jones et al. (2006) noted, "coverage may nearly always be compromised by some dimension of convenience" (p. 67), as is likely the case in this study.

The sample also included only those students who had persisted in the Integrative Studies program. However, my study focused on students' experiences with integrative learning in an intentionally integrative academic environment. If I had studied students who left the Integrative Studies program, I may have learned something different about Integrative Studies. In addition, all participants were volunteers, and as such, may be different from other students enrolled in Integrative Studies who did not elect to participate in this research. Conducting three in-depth interviews provided ample opportunity to get to know the participants and to follow up on comments. Yet, upon reflection, another limitation is that not all insights from the data analysis were thoroughly explored in subsequent interviews. For example, I suspected that some students were professing a superficial commitment to understanding context after third interviews were completed for several of the participants. In the interviews with the

remaining participants I was able to probe and interrogate this observation, but ideally I would have made more comparisons across participants.

The interview protocol and research context may have privileged the identification of formal academic experiences related to integrative learning. Student comments focused primarily on their academic experience. Although we discussed outside of class experiences and the roles these co-curricular involvements played in supporting integration, the initial inquiry was in relation to the students' experiences in the Integrative Studies academic program. Even so, the importance of the co-curriculum in helping students become integrative was evident but may have been underestimated.

Another limitation is the initial reluctance of some faculty to speak candidly about the Integrative Studies program given its history of uneven support. As members of the Integrative Studies community with a vested interest in the college, faculty participants may have a skewed view of program strengths and weaknesses. Although I detected some hesitation from some faculty, the range of details and perceptions shared with me gave me confidence that faculty became more comfortable sharing their stories with me and trusted me to represent Integrative Studies fairly and with compassion.

Strengths of Study

This study's attention to student voices and perspectives about integrative learning is, perhaps, its greatest strength. The focus on student experience helps fill a gap in the literature on integrative learning. By understanding students' experiences, I was able to learn how an academic program's intended curriculum and efforts at creating community were actually received by students. Another strength relates to the student participants themselves. They were actively engaged in this study, scheduling three

interviews with me over the semester and exploring topics related to their learning. We developed rapport and created a climate in which students could openly share their views with me. The students commented that they enjoyed our conversations and appreciated the chance to think about the meaning of their degree program. Several participants requested edited copies of their interview transcripts at the end of the data collection phase for their use in preparing the graduation portfolio. Given the focus on how students understand integration, the interview transcripts will help them document their learning, a positive but unintended outcome of participating in the study.

Another strength was the choice of methodology. Constructivist grounded theory methodology was appropriate for the research questions and allowed for deeper investigation into the nuances of integrative learning from students' perspectives. The emerging theory, then, is another strength of the study in its potential to guide future research and practice on integrative learning. The theory is an outgrowth of the students' experiences and puts shape and direction to a complex cognitive process.

The research also produced an in-depth study of an academic program. Although program review was not the stated purpose of this research, the findings of this study will be shared with the faculty, and perhaps the students, from this Integrative Studies program.

<p align="center">Implications</p>

Implications for Research

The initial findings in this study revealed confusion over what it means to be an integrative learner that is also reflected in the professional literature. As higher education embraces integration and continues to investigate integrative learning empirically,

researchers need to be more precise and clear about how the terms integrative learning and integration are being used. More discussion and research is needed to reach consensus about what it really means to be an integrative learner.

The finding that integrative learning is a cognitive process that follows a developmental pattern, rather than solely a product, has important implications for both research and practice. Researchers tend to conceptualize learning outcomes as products that can be measured and quantified. Although there may be products that serve as indicators of whether a given cognitive process has occurred, the process itself is not observable. These data suggest that simply asking students if they are integrative learners will yield results that are too general to be helpful. Given the wide range of experiences recognized as integrative by students, it is plausible that students would claim to be sophisticated integrative learners when they are engaging only in lower levels of integrative experience. Additionally, depending on the context, it is possible that students become skilled at repeating the espoused values of a program without internalizing or fully engaging with the hard task of learning, thereby giving the illusion of greater sophistication than they actually possess.

Ideally existing assessment models can be adapted to be responsive to outcomes that are process oriented. In Astin's (1991) input-environment-output model (I-E-O), the outcome is often framed in terms of students' perceived growth or change. If the dependent variable is integrative learning, the findings from this study suggest that some student perceptions are indiscriminant, viewing all forms of integration as "integrative learning." Using this conceptual framework, then, might produce an inflated picture of success with integration. Outcomes assessment research needs to consider the extent to

which existing models are able to capture learning processes rather than static outcomes. There is a question as to whether quantitative measures can be effective in measuring cognitive processes that are complex and cannot be observed. It may be that qualitative approaches must be used to understand complex cognitive processes. The current study did not focus on cognitive processes directly, but other researchers recommend qualitative approaches as the best way to study cognitive processes such as intellectual development (Baxter Magolda, 1992, 2004; Belenky, et al., 1986, Perry, 1981) and moral development (Gilligan, 1982; Kohlberg, 1969).

Further research is also warranted to explore the relationship of gender to integrative learning. Given the similarities between integration and Belenky et al.'s (1986) connected knowing, there may be specific gender-related patterns to how students become integrative learners. More women are enrolled in the Integrative Studies program, and all participants valued relationships in the learning process, particularly with peers and faculty. There may also be connections between integrative studies concentrations, which tend to be focused more on humanities and social science disciplines, and gender. Very few students pursued the bachelor of science in integrative studies. In addition, more research on students with a marginalized status and integrative learning also is warranted. Research that includes more voices of students of color, students with different ability statuses, and students who identify as lesbian, gay, or bisexual would help empirically assess the theoretical connection between marginalized status and cognitive complexity (Kich, 1996; King & Shuford, 1996).

An additional area of research would be to follow the participants in this study for several years to create a longitudinal data set. This extension of the current project would

allow me to track changes in individual students rather than relying on a stratified sample. This longitudinal approach may provide more evidence of synthesis in the participants and allow me to focus on this higher order thinking skill to determine whether and under what conditions students learn to synthesize.

Future research might also explore the connection between religious beliefs and cognitive development. In this study, several students confronted conflict in the form of a challenge to deeply held convictions based on religion. Cognitive-structural developmental theorists agree that cognitive complexity is reflected in the approach one takes to understand the world or how one thinks, rather than the content of those thoughts. Are internal belief systems based on faith or religion qualitatively different from other ways of knowing?

Stewart (2002) explored the connection between faith and a sense of an integrated identity in Black students at a predominately White university. Stewart's literature review explores the link between spirituality and wholeness and between faith and meaning making. Her findings, however, are mixed. Stewart used the term "mature" to differentiate the degree to which her participants integrated their spirituality with their identity. Students with "spiritual maturity" could integrate different dimensions of their identity. In contrast with the three students in my study who were deeply religious, many of the students in Stewart's study were rebelling against the formal structures of religion and defining their spirituality in opposition to organized religion. Mueller (2006) explored the connection between conservative Christian faith and intellectual development by describing his experience as a practitioner. Although tempting to assume students who blindly follow their faith are dualistic (Perry, 1970), he advised asking

questions and listening to reveal the potentially more complex worldview students of faith hold. Exploring the intersection of cognitive development and faith development (Fowler, 1981) would help faculty and practitioners understand students' experiences when deeply held religious convictions are challenged in college.

Another avenue for future research involves the relationship between students' learning style and their decision to enroll in Integrative Studies. Most of the student participants were aware, in a general sense, of their learning style (Kolb, 1981). Given the observed pattern of learning preferences shared by participants, perhaps there is a more direct connection between students' learning style and enrollment in Integrative Studies or between students' learning style and becoming an integrative learner. This relationship might also help explain attrition from the Integrative Studies program when there is a mismatch between learning style and program demands.

The students and faculty in Integrative Studies perceived themselves as on the margins of the larger university. My experience in an interdisciplinary studies program was consistent with this finding. Further research could explore this marginalized status from the perspectives of program identity, organizational theory, and sustainability. Pursuing these research ideas would expand the literature on integrative learning and provide guidance for institutional practice.

Implications for Practice

The findings of this study can guide faculty and practitioners in higher education interested in promoting integrative learning. Curricular and co-curricular experiences can be designed to support students as they move through the integrative learning model. By intentionally crafting first-year courses, for example, to promote application of course

material to students' personal lives, students are prompted to engage in integration as application. Living-learning programs can also facilitate this connection by focusing on the residents sharing their histories and backgrounds with each other and celebrating the gifts and talents that students bring into the college experience. Similar programmatic and curricular interventions can be planned to help students recognize multiple perspectives, confront divergent perspectives, and reconcile conflicting perspectives. To help students learn to recognize multiple perspectives, residence halls might host rap sessions or talkbacks after students hear a public lecture or attend a performance. In addition, faculty can encourage students to share their perspectives during class discussion. Multiple perspectives might also be introduced through assigned readings. Creating contexts in which students can confront conflicting perspectives might include offering course topics that explore human differences. Classes, co-curricular clubs, or residence halls could host debates and panels where peers or experts disagree. Finally, to help students learn to reconcile conflicting perspectives, students might be asked to make interdisciplinary presentations or to engage in group projects that investigate difficult world problems such as poverty or global warming. Participants cited a variety of educational experiences like these that helped them become integrative learners. Creative practitioners can use the emerging theory of students' experiences with integrative learning to structure enrichment activities that help students become more sophisticated in their ability to be integrative.

Findings of this study also suggest that the anticipated benefits of an academic program and a program's actual benefits may not be perfectly aligned. When faculty and academic advisors communicate ambiguous or contradictory messages about what it

means to be integrative, students will reflect this confusion. Inconsistency among the faculty promotes inconsistent ideas among students, depending on how a given student learned about Integrative Studies and its mission (Kuh et al., 2004). For example, some faculty embraced the term interdisciplinary to describe the way courses are constructed and taught in Integrative Studies and others avoided this label. Only a few students used the term interdisciplinary to describe their own experiences and others described interdisciplinary experiences without using the term. For some transfer students, the message they received in Introduction to Integrative Studies was more about learning styles and adapting to the coursework and writing demands of their new academic home rather than receiving a clear message about what it means to be in Integrative Studies.

It is possible to create contexts in which students are prompted to consider alternative perspectives and grow in their cognitive complexity as a result (Baxter Magolda & King, 2004; Chickering & Reisser, 1993). These data suggest that creating supportive contexts for students to encounter conflict can contribute to student development. Yet, measuring this development is complicated because it is possible for students to superficially adopt the language and values of an academic program giving the appearance of growth and understanding when actual learning and development are limited. A faculty member, Paul, shared his assumption that, at least to some extent, students became savvy at producing reflective writing and portfolios that communicated what the faculty expected and wanted to hear. Students in Integrative Studies hear about the importance of considering multiple perspectives beginning at orientation and become skilled at reciting this and other stated goals of the program. By listening to students and probing their understanding, I learned that some students could not provide examples of

their learning that supported their claims. What appeared to be a more advanced way of thinking, then, was more rhetoric than substance.

On a pragmatic level, the findings of this study support some recommendations for the Integrative Study program that hosted this research that might help faculty achieve their desired learning goals. First, it is important to note the overwhelming appreciation participants shared for the Integrative Studies program, its faculty, the curriculum, and other students. There is evidence that Integrative Studies is a personal, demanding, and caring learning environment. In the spirit of assessment and the goals of continuous improvement, this study produced some recommendations for practice. For example, students would benefit from consistent and repeated discussion of what it means to be in an Integrative Studies program. Students were confused about their degree program in part because students did not receive one, clear message from faculty about the purpose and benefits of Integrative Studies. Many faculty felt strongly that prospective students were not ready to hear about the integrative nature of the program and instead described other features of the first-year experience. Students, especially seniors, felt the need to have a more coherent understanding of their academic program than they had. Being more explicit about Integrative Studies in a variety of contexts, such as summer orientation, the outdoor orientation program, the first-year experience, the living-learning program, learning communities, and the senior capstone course, might help students view their experiences purposefully. Another opportunity for transparency is related to the course substitution process. By viewing this process of substituting one class for another as "magic," Cindy and her peers were left without a clear understanding of the educational appropriateness of such changes. These course substitutions may be the right

thing to do, but students would benefit from knowing what rationale supports such changes rather than attributing it to advisor discretion or capriciousness. Integrative Studies might consider revising the course substitution policy to make the circumstances and procedures for course substitutions more explicit. Such a policy does not need to be rigidly prescriptive; there can be room for extenuating circumstances and unusual cases. However, by making these unusual cases the exception rather than the rule, there is greater collective confidence in the integrity of the academic program.

Other recommendations for practice suggested by this study include revisiting the design of the senior capstone course. The model offered by this Integrative Studies program does not seem to be meeting faculty or student expectations. Considering an in-depth research experience that allows students to do integrative work rather than describing integration is one way to offer students a chance to exercise their integrative skills and provide an integrative product for assessment purposes. A capstone research project must be carefully crafted to meet this integrative goal with clear expectations and support for students and faculty. What Ewell (1997) described as the designed curriculum or what is intended ideally should match the experienced curriculum or the course that students actually take. Capstone experiences are heralded by many in higher education as a way to promote student learning and provide assessable student academic products (AAC&U, 2004a, 2004b; Banta et al., 1996; Boyer Commission, 1998; Schneider, 2003). AAC&U (2004a) recommended shaping a capstone experience such that it serves "as both a culminating integrative experience and as the centerpiece of the effort to assess sophisticated learning" (p. 8).

Faculty might also consider creating more intentional connections with students in Integrative Studies during the second and third years. Several participants seemed to lose momentum in their journey to become integrative learners when their second and third year studies included few opportunities for purposeful integration. The first-year experience seems to be a strong starting point, but at least half of the program's graduates join Integrative Studies after the first year and do not have the benefit of this immersion experience. The Introduction to Integrative Studies course is intended to support the transition of transfer students, but not all new students are able to enroll in this course their first semester of the program. Ideally enrollment trends for Introduction to Integrative Studies could be forecasted to ensure enough sections are available for the students who need it.

Finally, any program that would like to help students become integrative learners can use the theory developed in this research to create curricular structures and assignments to support student learning. As AAC&U (2007) asserted:

> Whatever and wherever they [students] elect to study, each college student will be helped to achieve, in ways appropriate to his or her educational interests, a high level of integrative learning and demonstrated accomplishment across the full range of essential learning outcomes. (p. 19)

This quote points to the recommendation that colleges promote integration in every context, not just in Integrative Studies. Although I support this goal, the findings of this study revealed the challenges of promoting integrative learning in an explicitly integrative academic program. Integrative Studies programs are important sites for faculty development as well as student learning. Educators need to be supported in trying

to learn more about how to successfully promote integrative learning, support that is the Integrative Studies program in this study accomplishes through team teaching and curricular innovation. Integrative studies offers a context where new approaches to teaching are encouraged, yet even in this context students struggle with becoming integrative. Successes with integrative learning in these focused contexts ideally will spread to other parts of campus. Until integrative learning is more widespread, it is vital to sustain programs in integrative studies as incubators of curricular and pedagogical innovations that support of integrative learning. The theoretical model can be adapted to any setting that values integration. If synthesis is not a given program's desired outcome, faculty of the program can decide which type of integration is most appropriate for their student population and work on cultivating application, comparison, or understanding context. Students in this study suggested that achieving synthesis was a lofty goal, but one not likely to be achieved by undergraduate students. Further research will need to determine if synthesis is a reasonable goal of undergraduate education.

Conclusion

Conversations with students engaged in an intentionally integrative academic program have helped create a theoretical model of students' developmental experiences with integrative learning. The students and theory helped me understand the many dimensions of integration that are possible. This theory orders these types based on complexity creating a continuum of integration: application, comparison, understanding context, and synthesis. As is the case with most developmental theory, the ways in which students move from one level of integration to another is where the growth and dynamic tensions are felt most acutely (Perry, 1981). Movement through the integrative learning

spiral begins with personally relevant curricula. Identifying multiple perspectives, encountering conflicting perspectives, and finally reconciling these perspectives all contribute to further movement through this model. Cognitive complexity and environmental influences also have an impact on the way students experience integrative learning.

In addition to contributing this theoretical understanding of integration, this research also raises questions for future research. This study also offers insights about how the Integrative Studies program that hosted this study creates a context for learning and whether students experience it in the way faculty architects intended. The results identify many program strengths and provide suggestions for creating greater alignment between intended and actual outcomes. The benefits, then, are both local and more global as readers consider the degree to which this model of integrative learning resonates with their experiences and institutional context.

APPENDIX A

Integrative Studies Research Announcement for the Student Listserv

Dear [Integrative Studies] Students:

I'm pleased to announce an opportunity for you to share your perspectives about your [Integrative Studies] experience as part of a study conducted by a Jeannie Brown Leonard, a doctoral student at the University of Maryland, College Park. She is interested in learning about students' experiences in our Integrative Studies degree program. Jeannie will spend spring semester at [research site] collecting data for her dissertation. She will be talking with faculty and staff to learn more about our programs, but the main focus of her study is on [Integrative Studies] students. This spring, she would like to conduct three to four, 60-90 minute interviews with each student participant, and she is seeking students across the four years of our curriculum.

A formal letter of invitation will be coming soon, but if you are already eager to get involved, please contact Jeannie at **jeannie@wam.umd.edu** or call her at 410-381-9666. Interviews will be held on Tuesdays or Thursdays or over the weekend on campus at times convenient for students. In addition to interviews, students will need to share a copy of a paper and some other artifact (such as a portfolio, web site, report, etc.) that demonstrates integration. In all phases of this study, every effort will be made to keep students' personal information confidential. In exchange for your time, student participants will receive a $25 gift certificate to the University bookstore after the first interview and another $25 gift certificate at the conclusion of the study.

Sincerely yours,

[Name]
Associate Dean, [Integrative Studies]

APPENDIX B

Letter of Invitation to Prospective Student Participants

February/March 2006

Dear [Integrative Studies] student,

Please consider volunteering to participate in a study on student experiences in integrative studies programs. As a student currently enrolled full time in the Integrative Studies program at [research site], you are eligible to assist with this research. I am interested in learning more about integrative learning in higher education for my doctoral dissertation research.

As a participant, you will need to agree to participate in three to four (3-4) 60 – 90 minute interviews this semester. The interviews will be guided conversations rather than formal question and answer sessions. During the interviews I will ask you to describe your academic program and reflect on your learning. We will discuss assignments, interaction with peers and faculty, and anything else you think is relevant to your learning. All interviews will be audiotape recorded. You will be invited to review and correct the interview transcripts and to respond to preliminary data analyses. Finally, you will be asked to provide a sample of a writing assignment that you think demonstrates integrative thinking as well as one other artifact that represents your learning. To express interest in participating, please complete the attached interest form that asks several demographic questions.

I will do all I can to keep your personal information confidential. To help protect confidentiality, your interview tapes and transcripts will be coded with a pseudonym of your choosing. This pseudonym also will be used on the documents you share with me, but these data will not be linked to the personally identifiable information on the interest form.

There are no known risks of participating in this research project. In appreciation for your time, you will receive a $25 gift certificate to the University bookstore after completing the first interview and a second $25 bookstore gift certificate at the conclusion of the study. This research is not designed to help you personally, but you will have the chance to systematically reflect on your learning experiences.

I hope you will consider participating in this study. To volunteer or to ask questions, please contact Jeannie Brown Leonard, jeannie@wam.umd.edu or 410-381-9666. If you already know you are interested in participating, please submit the attached interest form electronically to me or drop it off in the "Integrative Studies Research" box by the elevators on the fourth floor [of program building]. Interview times are available on Tuesdays, Thursdays and over the weekend and will be held on campus. Thank you for considering this request.

Sincerely,

Jeannie Brown Leonard
Doctoral Candidate
University of Maryland

APPENDIX C

Participant Interest Form:
Student Experiences in Integrative Studies Degree Programs

I am interested in participating in the research study on students' experiences in integrative studies degree programs conducted by Jeannie Brown Leonard.

Name: _____

Local Address:_____

E-Mail: _____

Telephone: _____ **Cell phone**: _____

Please circle, highlight, or put an X by the appropriate responses below:

How would you prefer I contact you?

a. Email
b. Phone
c. Cell phone

May I leave a message for you on voice mail regarding this study?

a. Yes
b. No

Are you enrolled as a full time student?

a. Yes
b. No

What is your current class standing?

a. First-year
b. Sophomore
c. Junior
d. Senior

Thank you for your time and interest!

Please return this form to Jeannie Brown Leonard at jeannie@wam.umd.edu or deposit it in the drop box labeled "Integrative Studies Research" located at the desk near the elevators on the fourth floor of [program building]. Forms also may be mailed to Jeannie at 6527 Smokehouse Ct., Columbia, MD 21045.

APPENDIX D

Tailored Letter of Invitation to Students Nominated by [Integrative Studies] Faculty or Staff

Dear (name),

I invite you to participate in a study on student experiences in integrative studies programs. A member of the faculty or staff at [research site] has nominated you for this project.

As a participant, you will need to agree to take part in three to four (3–4) 60 – 90 minute interviews this semester. The interviews will be guided conversations rather than formal question and answer sessions. During the interviews you will be asked to describe your academic program and reflect on your learning. We will discuss assignments, interaction with peers and faculty, and anything else you think is relevant to your learning. All interviews will be audiotape recorded and transcribed for analysis. You will be invited to review and correct the interview transcripts and to respond to preliminary data analyses. You also will be invited to comment on the emerging theory that comes from the data analysis, either in a small group with other student participants or individually. Finally, will be asked to provide a sample of a writing assignment that you think demonstrates integrative thinking as well as one other artifact (e.g., a portfolio, web site, a report you created for an internship site) that represents your learning. This study is my doctoral dissertation research. I am interested in learning more about integrative learning in higher education. My work will expand our understanding of how to cultivate this important learning outcome. If you are interested, please complete the brief interest form (attached) designed to capture demographic information.

I will do all I can to keep your personal information confidential. To help protect confidentiality, your interview tape and transcript will be coded with a pseudonym of your choosing. The documents you share with me also will be labeled with your pseudonym. The information on the interest form will be kept in a locked file cabinet and my advisor and I are the only people who will be able to link this information to the interviews.

There are no known risks of participating in this research project. In appreciation for your time, you will receive a $25 gift certificate to the University bookstore after completing the first interview and a second $25 bookstore gift certificate at the conclusion of the study. This research is not designed to help you personally, but you will have the chance to systematically reflect on your learning experiences.

To volunteer or to ask questions, please contact Jeannie Brown Leonard, jeannie@wam.umd.edu or 410-381-9666. If you know you are interested, feel free to submit the attached interest form to me electronically or drop it off in the "Integrative Studies Research" box by the elevators on the fourth floor of [program building]. Interview times typically are available on Tuesdays, Thursdays and over the weekend and will be held on campus. Thank you for considering this request.

Sincerely,

Jeannie Brown Leonard
Doctoral Student

APPENDIX E

Scheduling Appointment with Selected Students

Thank you for your interest in the research I am conducting on student experiences in integrative studies programs. I would like you to be a participant in this study. Please consult the following dates and times and let me know by return e-mail when you would be available for our first interview. I would like to allocate 90 minutes for this first conversation to give us sufficient time to get to know each other and for you to learn more about the study and consent to participate prior to the actual interview.
Possible interview days and times:
[dates and times listed here]

Our conversation will take place in the [student center]. I will confirm the specific room as soon after we determine our interview time. Thanks, again, for volunteering your time for this research!

Jeannie Brown Leonard
Doctoral Student
jeannie@wam.umd.edu

[Note: Students who prefer to be contacted by telephone will be called using this text as a script. Interview appointments will be scheduled at that time or I will leave a phone message with possible times.]

APPENDIX F

Message to Participants Not Selected to Participate

Thank you very much for your interest in the research I am conducting on students' experiences in integrative studies programs. I have been pleased and surprised by the large number of volunteers for this project! At this time I do not plan on interviewing you for this study. However, if I discover I need more participants, I will be sure to contact you to determine if you are still interested and available to be interviewed.

Best wishes for a great semester. Thanks again for your interest.

Jeannie Brown Leonard
Doctoral Student

APPENDIX G
Student Consent Form

Project Title: Understanding Integration: A Grounded Theory Study of Undergraduate
College Students' Experiences with Integrative Learning

Why is this research being done?

This is a research project being conducted by Marylu McEwen and Jeannie Brown
Leonard at the University of Maryland, College Park. We are inviting you to participate
in this research project because you are at least 18 years old, and you are an
undergraduate student enrolled full time in an integrative studies degree program. The
purpose of this research is to understand students' experiences in an integrative studies
program.

What will I be asked to do?

The procedures involve participating in three to four (3-4) interviews during this
semester. Each interview will be 60 – 90 minutes hours long. Prior to the first interview,
you will complete a brief form to report demographic information. You may elect to
return this interest form to the researcher electronically. Although it is understood that no
computer transmission can be perfectly secure, reasonable efforts will be made to protect
the confidentiality of your transmission. The interviews will be guided conversations
rather than formal question and answer sessions. During the interviews you will be asked
to describe your academic program and reflect on your learning. We will discuss
assignments, interaction with peers and faculty, and anything else you think is relevant to
your learning. All interviews will be conducted at times and locations on campus
convenient for you. In addition, all interviews will be audiotape recorded and transcribed
for analysis. You will be invited to review and correct the interview transcripts and to
respond to preliminary data analyses. You also will be invited to comment on the
emerging theory that comes from the data analysis, either in a small group with other
student participants or individually. Finally, you will be asked to provide a sample of a
writing assignment that you think demonstrates integrative thinking as well as one other
artifact (e.g., a portfolio, report written for an internship site, web site) that represents
your learning.

What about confidentiality?

We will do our best to keep your personal information confidential. This research
involves making audiotapes of you to provide us with a complete record of our
interviews. To help protect confidentiality, your interview tapes, transcripts, and
documents will be coded with a pseudonym. These documents will be kept separate from
the demographic information on the interest form. Only the researchers will be able to
link the research materials to a specific person. All transcripts and audiotapes will be kept
in a locked file cabinet at the home of the student researcher. Only the researchers will
have access to the audiotapes and they will be destroyed in May 2008. All computer files

Project Title: Understanding Integration: A Grounded Theory Study of Undergraduate
College Students' Experiences with Integrative Learning

related to the study will not include any identifiable personal information. If we write a
report or article about this research project, your identity will be protected to the
maximum extent possible. Your information may be shared with representatives of the
University of Maryland, College Park, [your university], or governmental authorities if
you or someone else is in danger or if we are required to do so by law.

_____ I agree to be audiotaped during my participation in this study.
_____ I do not agree to be audiotaped during my participation in this study.

What are the risks and benefits of this research?

There are no known risks of participating in this research project. This research is not
designed to help you personally, but you will have the chance to systematically reflect on
your learning experiences. This process may affect your perceptions of your educational
experiences and inform your future educational choices. The results may help the
investigators learn more about integrative studies programs. We hope that, in the future,
other people might benefit from this study through improved understanding of integrative
learning in higher education.

Do I have to participate? Can I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take
part at all. If you decide to participate in this research, you may stop participating at any
time. If you decide not to participate in this study or if you stop participating at any time,
you will not be penalized or lose any benefits to which you would otherwise qualify.

Do I receive any compensation for participating?

In appreciation for your time, you will receive a $25 gift certificate to the University
bookstore after completing the first interview and a second $25 bookstore gift certificate
at the conclusion of the study.

What if I have questions?

Marylu McEwen and Jeannie Brown Leonard from the Counseling and Personnel
Services department at the University of Maryland, College Park, are conducting this
research. If you have any questions about the research study itself, please contact one of
the investigators:

Project Title: Understanding Integration: A Grounded Theory Study of Undergraduate College Students' Experiences with Integrative Learning

Marylu K. McEwen

Jeannie Brown Leonard

Associate Professor

Doctoral Student

CAPS Department

CAPS Department

3214 Benjamin Building

3214 Benjamin Building

University of Maryland

University of Maryland

College Park, MD 20742

College Park, MD 20742

301-405-2871

410-381-9666

mmcewen@umd.edu

jeannie@wam.umd.edu

If you have questions about your rights as a research participant or wish to report a research-related injury, please contact one of the following offices:

Institutional Review Board Office   Office of Research Subject Protections

University of Maryland   [Contact information for host university]

College Park, MD 20742

301-405-0678

irb@deans.umd.edu

This research has been reviewed according to the University of Maryland, College Park, and [the host] University IRB procedures governing your participation in this research.

Statement of Age and Consent

Your signature indicates that:
    you are at least 18 years of age,
    the research has been explained to you,
    your questions have been fully answered, and
    you freely and voluntarily choose to participate in this research project.

Name of Participant: _____
(Please print)

Signature of Participant: _____Date: _____

APPENDIX H

Participant Demographic Form
Student Experiences in Integrative Studies Degree Programs

Name: _____

Please help me understand your distinctive background. Circle, highlight, or put an X by the category that best describes you. Please feel free to add a category if a more appropriate description has not been included on this form.

1. What is your gender?
a. Female
b. Male
c. Transgendered

2. Which of the following descriptions best describes your race/ethnicity?
a. Black/African American
b. Asian/Pacific Islander/Asian American
c. Latino/Latina/Hispanic
d. Native American/American Indian/Alaskan Native
e. White/Caucasian
f. Multiracial or multiethnic (please specify):

_____
g. Other (please specify): _____

3. Where do you live?
a. On-campus residence hall
b. Off campus housing
c. With family (a commuter)

4. Did you transfer to this university?
a. Yes
b. No

5. Do you work?
a. Yes
b. No

If no, go on to question 6
If yes, how many hours a week do you work?
_____
Where do you work?
a. On campus
b. Off campus
c. Both on and off campus

6. Please indicate your sexual orientation.
a. Gay or Lesbian
b. Bisexual
c. Heterosexual

7. Do you have any physical disability? If so, please describe here:

PLEASE TURN OVER

8. Please indicate the highest level of education completed by parents or guardians. Check one level for each column.

<u>Father or Male guardian</u>   <u>Mother or Female Guardian</u>

Don't know
High school or less
Some college
Associate's degree
Bachelor's degree
Master's degree
Doctorate or professional
degree (JD, MD, PhD)

9. Do you have older siblings who have attended or completed college?
a. Yes
b. No

10. Please indicate your citizenship and/or generation status.
a. Your grandparents, parents, and you were born in the U.S.
b. You and your parents were born in the U.S.
c. You were born in the U.S., but at least one of your parents was not.
d. You are a foreign born, naturalized citizen.
e. You are a foreign born, resident alien/permanent resident.
f. You are on a student visa.

Thank you!

APPENDIX I

Research Announcement to [Integrative Studies] Faculty Listserv
From Associate Dean

RESEARCH ON INTEGRATIVE LEARNING
I'm pleased to let you know that a doctoral student at the University of Maryland, College Park, is eager to learn about integrative learning from [program name] students. Jeannie Brown Leonard will be spending this spring semester at [research site] collecting data for her dissertation research. She would like to talk with faculty and staff to learn more about our degree programs, but the main focus of her study is on our students.

I am writing to introduce Jeannie and her work. Prior to entering the doctoral program at the University of Maryland, Jeannie worked full-time at Miami University (Ohio) as assistant dean of the School of Interdisciplinary Studies. She will be contacting some of you to schedule interviews to learn more about [Integrative Studies] as well as our curriculum and culture, prior to embarking on student interviews. Your candid responses will help make this research robust and give us a meaningful assessment of our academic programs. I hope you feel you can speak freely about our strengths and weaknesses. Jeannie has agreed to share her findings with us when her dissertation is completed next year. Your responses will be anonymous and Jeannie is following [our university's] and the University of Maryland's IRB policies and procedures.

Please let me know if you have any questions or concerns. I know that you will enjoy meeting Jeannie, who is knowledgeable about and values the model of Integrative Studies.

APPENDIX J

Electronic Mail Message to Faculty and Staff Requesting Participation in Study

Good morning,

I am a doctoral student at the University of Maryland, College Park. I am conducting my dissertation research on student experiences with integrative learning at [program name]. I greatly appreciate the chance to learn more about the curriculum and culture of [Integrative Studies] and the experiences of students enrolled in the integrative studies degree programs.

As [the associate dean] mentioned in an earlier message, I would like to schedule a one-hour meeting with you to learn more about the history of [Integrative Studies], details about the academic program as well as rituals and traditions distinctive to [program name]. I have questions about the expectations faculty and staff have for student learning and the ways in which the program is structured to cultivate these desired outcomes.

I would be pleased to meet you in your office or to schedule a private meeting room in the [student center]. With your permission, I would like to audiotape our conversation to help me keep track of the important information you share with me. If possible, I would like to meet with you on one of the following dates when I will be on campus: [list dates]. Please let me know which date and time is best for you by replying to this message (jeannie@wam.umd.edu). I will follow up by telephone in a few days to try to schedule a meeting if I do not hear from you by email.

Thank you for considering this request for an interview. I hope we can find a mutually convenient time to meet.

Jeannie Brown Leonard
410-381-9666 (home)
jeannie@wam.umd.edu

APPENDIX K
Faculty/Staff Consent Form

Project Title: Understanding Integration: A Grounded Theory Study of Undergraduate
College Students' Experiences with Integrative Learning

Why is this research being done?

This is a research project being conducted by Marylu McEwen and Jeannie Brown
Leonard at the University of Maryland, College Park. We are inviting you to participate
in this research project because you are a faculty or staff member in an integrative studies
degree program. The purpose of this research is to understand students' experiences in an
integrative studies program.

What will I be asked to do?

The procedures involve participating in one approximately 60-minute interview. During
the interview you will be asked to describe the history and culture of the Integrative
Studies program and your role in the program. Your insights into the learning goals,
rituals, traditions, and distinctive language of the Integrative Studies program will inform
the questions asked current students. You may also be asked to nominate students to
participate in this study. The interview will be conducted at a time and location on
campus convenient for you. The interview will be audiotape recorded, but not
transcribed.

What about confidentiality?

We will do our best to keep your personal information confidential. The small size of the
eligible faculty and staff participants makes this effort more challenging. This research
involves making audiotapes of you to provide us with a complete record of our
interviews. To help protect confidentiality, your interview tape will be coded with a
pseudonym. Only the researchers will be able to link the research materials to a specific
person. All audiotapes will be kept in a locked file cabinet at the home of the student
researcher and they will be destroyed in May 2008. All computer files related to the study
will not include any identifiable personal information. If we write a report or article about
this research project, your identity will be protected to the maximum extent possible by
using the broadest descriptors possible (e.g., staff member, not head academic advisor;
faculty member, not former dean). Your information may be shared with representatives
of the University of Maryland, College Park, [your university], or governmental
authorities if you or someone else is in danger or if we are required to do so by law.

_____ I agree to be audiotaped during my participation in this study.
_____ I do not agree to be audiotaped during my participation in this study.

Project Title: Understanding Integration: A Grounded Theory Study of Undergraduate
College Students' Experiences with Integrative Learning

What are the risks and benefits of this research?

There are no known risks of participating in this research project. This research is not
designed to help you personally, but you will have the chance to systematically reflect on
your work environment. The results may help the investigators learn more about
integrative studies programs. We hope that, in the future, other people might benefit from
this study through improved understanding of integrative learning in higher education.

Do I have to participate? Can I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take
part at all. If you decide to participate in this research, you may stop participating at any
time. If you decide not to participate in this study or if you stop participating at any time,
you will not be penalized or lose any benefits to which you would otherwise qualify.

What if I have questions?

Marylu McEwen and Jeannie Brown Leonard from the Counseling and Personnel
Services department at the University of Maryland, College Park, are conducting this
research. If you have any questions about the research study itself, please contact one of
the investigators:

Marylu K. McEwen	Jeannie Brown Leonard
Associate Professor	Doctoral Student
CAPS Department	CAPS Department
3214 Benjamin Building	3214 Benjamin Building
University of Maryland	University of Maryland
College Park, MD 20742	College Park, MD 20742
301-405-2871	410-381-9666
mmcewen@umd.edu	jeannie@wam.umd.edu

If you have questions about your rights as a research participant or wish to report a
research-related injury, please contact one of the following offices:

Institutional Review Board Office	Office of Research Subject Protections
University of Maryland	[Contact information for host university]
College Park, MD 20742	
301-405-0678	
irb@deans.umd.edu	

This research has been reviewed according to the University of Maryland, College Park,
and your university's IRB procedures governing your participation in this research.

Project Title: Understanding Integration: A Grounded Theory Study of Undergraduate College Students' Experiences with Integrative Learning

Statement of Age and Consent

Your signature indicates that:
        you are at least 18 years of age,
        the research has been explained to you,
        your questions have been fully answered, and
        you freely and voluntarily choose to participate in this research project.

Name of Participant: _____
(Please print)

Signature of Participant: _____Date: _____

APPENDIX L

Interview Guide for Student Participants
FIRST INTERVIEW

Introductory remarks: Thank you for agreeing to participate in this study of students in an integrative studies degree program. I am very interested in hearing about your experiences. I need you to review and complete an Informed Consent form before we get started. This form describes in greater detail the nature of this research and asks you to consent to participate. [Pause to allow participant to read and sign informed consent.] Do you have any questions?

During the interview I may nod in the affirmative as you are speaking. This gesture is meant to support you and to encourage you. It is not meant to signal a correct answer or to inhibit you in any way. There are no "right" answers, just answers descriptive of your experiences. Our conversation will be audiotape recorded and transcribed. You will have a chance to review and edit the interview transcript within a week of this meeting. Do you have any questions before we begin? I will turn on the tape recorder now.

Research Questions	Interview Questions
Background information and rapport building	[Ask for clarification of demographic information on Interest Form, if needed. Ask student to pick pseudonym.]
	As we begin the interview, tell about how your semester is going?
	Tell me about your decision to join the Integrative Studies degree program at [this university].
	Has anyone you know (family, friends or others) pursued the Integrative Studies degree at [this university] or elsewhere?
How do students perceive and experience this Integrative Studies program?	Describe the Integrative Studies degree program to me as if I were a prospective student.
	Describe your curriculum. How are your courses taught? What teaching strategies do your faculty use?
	Do you think your academic program is integrative? If so, in what ways?
How do students make meaning of "integrative learning"?	How do you understand the terms "integrative learning"?
	What story or example of an assignment or a class experience illustrates this understanding?

Closing remarks: I have no further questions today. Do you have anything more you would like to share or to ask me before we conclude the interview? Thank you for your time. This interview tape will be transcribed. The transcription will be sent to you in a week. Please review it for accuracy and make any necessary corrections before sending it

back to me either electronically or by U.S. mail. Let's schedule our next interview. [Compare calendars to find a good date and time.] To the next interview, please bring me a copy of a paper you have written for a class that you think demonstrates integrative thinking. I also want you to identify some other artifact (it could be another paper, or a portfolio, web site address, or report from an internship site) that you think represents your experience as an integrative learner. I will not return the paper to you, but I can return the second artifact you provide.

In appreciation for your time, I have a $25 gift certificate to the university bookstore for you. When we finish our final interview and you have provided me with a paper and another artifact representing your integrative learning, I will present you with another $25 gift certificate.

SECOND INTERVIEW

Introductory comments: Thank you, again, for meeting with me to discuss your experiences in the Integrative Studies degree program. [Refer to first interview transcript and the participant's corrections, if any.] Do you have a paper and an artifact to share with me? Thank you. [If participant does not bring in desired documents, make arrangements to get them.]

As we discussed last time, during the interview I may nod in the affirmative as you are speaking. This gesture is meant to support you and to encourage you. It is not meant to signal a correct answer or to inhibit you in any way. Our conversation will be audiotape recorded and transcribed. You will have a chance to review and edit the interview transcript within a week of this meeting. Do you have any questions before we begin? I will turn on the tape recorder now.

Research Questions	Interview Questions
Introductory questions	Do you have any questions or comments since our first interview? Is there anything you want to follow up on after reviewing the transcript of the first interview?
	Tell me how your semester is going. What is most salient for you right now?
How do students perceive and experience this Integrative Studies degree program?	Pick one course (current or past) that you think is particularly attentive to integration: What are you learning from this class? What are the greatest strengths and weaknesses? How do you use the syllabus for this class? In what ways do you contribute to your classes? Describe how this class emphasizes integration.

	How do faculty and program staff shape your understanding of the Integrative Studies degree program? How do they contribute you your understanding of integrative learning?
	Tell me about _____ (assignment, event, incident from faculty/staff interview). How has _____ influenced your learning?
	How would you define "integrative learning" to someone not familiar with Integrative Studies?
Which experiences do students identify as contributing to integrative learning?	Does the curriculum contribute to your integrative learning? Which aspects of the curriculum are most effective in supporting your integrative learning?
	Beyond the curriculum, do other aspects of the Integrative Studies degree program contribute to your learning? Which ones?
	[Develop more questions based on other aspects identified (i.e., service learning, internships, work experiences, etc.)]
Do students learn to integrate?	Describe the ways in which your learning is integrative.
	What metaphor captures how you think about your education in Integrative Studies?
	Describe how you integrate. What steps do you take to be integrative?

Closing remarks: I have no further questions today. Do you have anything more you would like to share or to ask me before we conclude the interview? Thank you for your time. This interview tape will be transcribed. The transcription will be sent to you in a week. Please review it for accuracy and make any necessary corrections before sending it back to me either electronically or by U.S. mail. Do you think you would prefer using U.S. mail for this purpose? [If yes, provide participant with a stamped, addressed envelope for returning the transcript to me.]

THIRD INTERVIEW

Introductory comments: Thank you, again, for meeting with me to discuss your experiences in the Integrative Studies degree program. [Refer to second interview transcript and the participant's corrections, if any. Return the second artifact.]

As we have discussed, during the interview I may nod in the affirmative as you are speaking. This gesture is meant to support you and to encourage you. It is not meant to signal a correct answer or to inhibit you in any way. Our conversation will be audiotape

recorded and transcribed. You will have a chance to review and edit the interview transcript within a week of this meeting. Do you have any questions before we begin? I will turn on the tape recorder now.

Research Questions	Interview Questions
Introductory question	How are you? Do you have any questions or comments since our last interview? Is there anything you want to follow up on after reviewing the transcript of the second interview?
What successes or challenges with integrative learning do students experience?	What do you think has been the primary learning outcome of your Integrative Studies degree so far? What have you learned?
	Describe your interactions with your faculty.
	Describe the role your peers play in your learning.
	What do you do if you do not understand something in class, in the readings, or at your experiential learning site?
	Think of an assignment that was effective in promoting integrative learning. What was the assignment and what made it so effective?
	What are the challenges you face with integration?
	Give me an example of how you go about integrating.
Explore initial theoretical interpretations	[Develop questions based on data analysis to explore theoretical constructs.]
	[Develop questions based on the written work and other learning artifact.]
	[Develop questions to fill in gaps in my understanding or to follow up on earlier conversations.]

Closing remarks: I have no further questions today. Do you have anything more you would like to share or to ask me before we conclude the interview? Thank you for your time. This interview tape will be transcribed. The transcription will be sent to you in a week. Please review it for accuracy and make any necessary corrections before sending it back to me either electronically or by U.S. mail.

I have a second $25 gift certificate to the University bookstore for you. I would like your comments on the emerging theory from this study. Would you be willing to meet with other who participated in the study in a small group to discuss the data analysis? [If not,

would they be willing to meet with me individually for such a conversation?] The initial consent form you signed had contact information for my faculty advisor, the Institutional Review Board contacts at [your university] and University of Maryland, and me. Here is another copy of this contact information in case you have any additional questions or concerns.

Contact Information

If you have any questions about the research study itself, please contact one of the investigators:

Marylu K. McEwen   Jeannie Brown Leonard
Associate Professor   Doctoral Student
CAPS Department   CAPS Department
3214 Benjamin Building   3214 Benjamin Building
University of Maryland   University of Maryland
College Park, MD 20742   College Park, MD 20742
301-405-2871   410-381-9666
mmcewen@umd.edu   jeannie@wam.umd.edu

If you have questions about your rights as a research participant or wish to report a research-related injury, please contact one of the following offices:

Institutional Review Board Office   Office of Research Subject
Protections   [Contact information for host
University of Maryland   university]
College Park, MD 20742
703-993-4121
irb@deans.umd.edu

APPENDIX M

Electronic Mail to Invite Recent Alumni to Pilot the Student Interview Protocol

Dear (name),
Dr. [name], Associate Dean of [research site], gave me your name and contact
information as a recent graduate of the Integrative Studies degree program. I am
conducting my dissertation research on students' experiences in an integrative studies
program, with a particular focus on their learning, at [research site]. I am writing to
request about 60 minutes of your time to pilot the interview questions I have developed
for current students.

As a recent graduate, you are an ideal resource for me as I refine the interview questions I
will be asking current undergraduates. I will ask you some of the questions I intend to ask
current students about the Integrative Studies degree program, assignments that prompted
integration, the role faculty and peers play in learning, and how students define
integrative learning.

I will schedule our conversation at a time and location convenient for you. I will take
notes on your comments and suggestions, but will not audiotape our conversation. I
would greatly appreciate it if you could share your insights with me. Please contact me by
return e-mail or by phone at the number listed below if you are willing to assist me with
my research and we will schedule a time to meet.

Thank you for considering this request.

Sincerely,

Jeannie Brown Leonard
Doctoral Candidate
University of Maryland, College Park
jeannie@wam.umd.edu
410-381-9666

APPENDIX N

Alumni Consent Form

Project Title: Understanding Integration: A Grounded Theory Study of Undergraduate College Students' Experiences with Integrative Learning

Why is this research being done?

This is a research project being conducted by Marylu McEwen and Jeannie Brown Leonard at the University of Maryland, College Park. We are inviting you to participate in this research project because you are a faculty or staff member in an integrative studies degree program. The purpose of this research is to understand students' experiences in an integrative studies program.

What will I be asked to do?

The procedures involve participating in one approximately 60-minute interview. During the interview you will be asked to respond to the interview questions prepared for the undergraduate students participating in this study. Your insights into undergraduate experience of the Integrative Studies degree program qualify you to offer feedback on the questions that are designed to address student learning, assignments, and peer and faculty interaction. The interview will be conducted at a time and location on campus convenient for you. The interview will be not be audiotape recorded.

What about confidentiality?

We will do our best to keep your personal information confidential. To help protect confidentiality, no personally identifiable information will be collected. Only the researchers will be able to link your suggestions to the adjustments made in the interview protocol. All computer files related to the study will not include any identifiable personal information. If we write a report or article about this research project, your identity will be protected to the maximum extent possible by using the broadest descriptors possible (e.g., recent graduate). Your information may be shared with representatives of the University of Maryland, College Park, [your university], or governmental authorities if you or someone else is in danger or if we are required to do so by law.

What are the risks and benefits of this research?

There are no known risks of participating in this research project. This research is not designed to help you personally, but you will have the chance to systematically reflect on your undergraduate learning environment. The results may help the investigators learn more about integrative studies programs. We hope that, in the future, other people might benefit from this study through improved understanding of integrative learning in higher education.

Project Title: Understanding Integration: A Grounded Theory Study of Undergraduate
College Students' Experiences with Integrative Learning

Do I have to participate? Can I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take
part at all. If you decide to participate in this research, you may stop participating at any
time. If you decide not to participate in this study or if you stop participating at any time,
you will not be penalized or lose any benefits to which you would otherwise qualify.

What if I have questions?

Marylu McEwen and Jeannie Brown Leonard from the Counseling and Personnel
Services department at the University of Maryland, College Park, are conducting this
research. If you have any questions about the research study itself, please contact one of
the investigators:

Marylu K. McEwen	Jeannie Brown Leonard
Associate Professor	Doctoral Student
CAPS Department	CAPS Department
3214 Benjamin Building	3214 Benjamin Building
University of Maryland	University of Maryland
College Park, MD 20742	College Park, MD 20742
301-405-2871	410-381-9666
mmcewen@umd.edu	jeannie@wam.umd.edu

If you have questions about your rights as a research participant or wish to report a
research-related injury, please contact one of the following offices:

Institutional Review Board Office	Office of Research Subject Protections
University of Maryland	[Contact information for host university.]
College Park, MD 20742	
301-405-0678	
irb@deans.umd.edu	

This research has been reviewed according to the University of Maryland, College Park,
and [your university's] IRB procedures governing your participation in this research.

Statement of Age and Consent

Your signature indicates that:
      you are at least 18 years of age,
      the research has been explained to you,
      your questions have been fully answered, and
      you freely and voluntarily choose to participate in this research project.

Name of Participant: _____
(Please print)

Project Title: Understanding Integration: A Grounded Theory Study of Undergraduate College Students' Experiences with Integrative Learning

Signature of Participant: _____Date: _____

APPENDIX O

Cover Letter to Accompany Completed Interview Transcript

Dear (name),

Thank you, again, for agreeing to participate in my dissertation research on integrative studies programs.

I am enclosing a copy of the transcript from our interview on (date). Please take a few minutes to review the text of our conversation to ensure your responses have been recorded correctly. Although the quality of the tape recording was good, I want to be sure that your intended message is reflected in this transcript. Please pay particular attention to page X [indicate page or pages where the recording was unclear] and verify the text that is highlighted. At times subtle differences, such as the word "not" in a sentence, can radically change the meaning of the interview. Your careful attention to this task is greatly appreciated.

Please return your edits to me by (date), one week from today, or at our next interview. If no changes are needed, please send me a brief email message stating that the transcript is accurate. You may make changes using the "track changes" function or simply type in corrections using a different color. Alternatively, you may print the transcript and make corrections by hand. At our interview you were provided with stamped, addressed envelopes, if you preferred this latter option.

Thank you for your time and attention. I look forward to seeing you again on (date) at (time) at (location). [For second interview add: Please remember to bring a copy of a paper and one other artifact (e.g., a portfolio, paper, web site, report) that you think is a good example of integrative learning.] Please contact me at 410-381-9666 or at jeannie@wam.umd.edu if you need to reschedule this meeting.

Best wishes,

Jeannie Brown Leonard
Doctoral Student
University of Maryland

APPENDIX P

Faculty/Staff Interview Protocol

Thank you for taking time to meet with me about the Integrative Studies degree at [research site]. I am interested in learning about [research site], the degree program and about your connections to purposeful courses, programs, or events that are intended to promote integrative learning. I plan to audiotape our conversation to provide a back up to my notes, but I will not transcribe the tape. I will do all I can to protect confidentiality, but the small size of [research site] makes this task more difficult. You will not be identified by name in any report or article created from these data and will make reference to your comments in the most general way possible (e.g., faculty member, not former dean; staff member, not academic advisor).

I need you to review and sign a consent form prior to our interview. This form describes in greater detail the nature of this research and asks you to consent to participate. [Pause to allow participant to read and sign informed consent; provide participant with a duplicate form for their records.] Do you have any questions?

Theme	Question
Background	How long have you worked at [research site]?
	What is your role at [research site]?
	How would you describe the Integrative Studies degree to a prospective student?
Integrative Studies Degree	Help me understand [research site] and the Integrative Studies degree in the context of the larger university. I am particularly interested in the history of the [research site].
	What are Integrative Studies students like?
	Are there specific rituals and traditions that shape the [research site] experience for students? If so, tell me about the rituals or traditions. How do you believe they shape the [research site] experience for students?
	Is there specific local language used with in the Integrative Studies degree that I should know about? If so, please identify the language and what I should know about it.
	How is the Integrative Studies degree perceived on campus?
	What are the overall strengths of the Integrative Studies degree? Weaknesses?
	Are there any key documents that you think I should review to have a better understanding of [research site] and the Integrative Studies degree program? If so, what are they?

Integrative Learning	What are the expected learning outcomes for students in the Integrative Studies degree program?
	Is [research site] successful in achieving these outcomes? How do you know?
	What is integrative learning? -How does the College foster or promote integrative learning? -In what ways do you and your work promote integrative learning in students? -What evidence is there that students become integrative learners?
	What aspects of the degree program are most successful in helping students become integrative learners?
	What are the challenges you face in promoting students' integrative learning?
	What problems or challenges do students typically experience as they strive to become integrative learners?

Thank you, again, for sharing this information with me. Is there anything else about the program that you would like to share with me? If I have questions later in the study, may I contact you to request clarification or elaboration on the topics we discussed today? May I also contact you for nominations of prospective student participants, if needed?

APPENDIX Q

Memorandum from Inquiry Auditor

March 28, 2007

MEMORANDUM

TO: Jeannie Brown Leonard

FROM: Keith E. Edwards

As Inquiry Auditor for your dissertation research, I have examined and verified the process and product of your research. This role provided one way to increase dependability and confirmability. I examined your use of grounded theory methodology and can verify that data collection and data analysis procedures were consistent with constructivist grounded theory as it was outlined in the dissertation proposal. I also can verify that the final outcomes were reasonably concluded from and grounded in the participants' experiences.

You were successful in your attempt to appropriately collect, code, and analyze data from the words of the participants. You also achieved a verifiable grounded theory from the raw data collected.

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