

TRADITIONAL COLLEGE FRESHMEN'S
PERCEPTIONS OF THEIR ACADEMIC
TRANSITION EXPERIENCES FROM
HIGH SCHOOL TO COLLEGE

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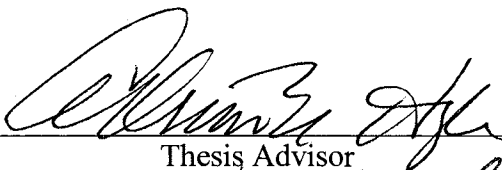
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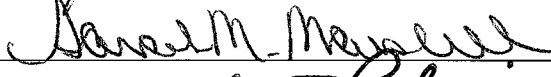
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Chapter One

Design of the Study

In many high schools in the United States, students have not been adequately prepared for the rigor of college (Astin, 1993; Barth, 2003; Barth, Haycock, Huang & Richardson, 2000; Klingelhofer & Hollander, 1973; Schneider & Stevenson, 1999). Many students are underprepared when it comes to learning how to study, how to take notes, or even how to write simple compositions. This is evidenced by the fact that more than 80% of students at two-year colleges and 64% at four-year colleges need academic remediation in core subjects (Levine & Cureton, 1998). Moreover, more than three-fourths of the colleges and universities in the United States offered remedial courses in reading, writing, or math in 1995 (Levine & Cureton, 1998).

Additionally, faculty have commented on the underpreparedness of college students. Less than one-fourth of faculty classified students as “well-prepared academically” (Levine & Cureton, 1998, p. 128). Faculty also complain about having to lower the level of expectation because students do not have the background required for college-level courses (Guffey, Rampp, & Masters, 1998; Pitts, White, & Harrison, 1999).

In college, students are expected to take care of themselves. They are expected to know how to study and take notes and listen effectively to lectures. In many courses, they take one exam covering weeks of lectures and several textbooks. They are expected to know how to extract the right information from a lecture or textbook in order to study it, present it orally to a class, or provide it in a research paper (Arnold & King, 1997; Astin, 1993; Dextras, 1993; Erickson & Strommer, 1991). One might believe that after at least

12 years of schooling, young adults would know how to study and be ready to continue to the next level. However, many students arrive at college with academic skills that have served them well in high school but are inadequate for college (Walter, Gomon, Guenzel & Smith, 1989).

College-bound students have unrealistically high expectations for their performance in college (Levitz & Noel, 1989). Astin, Parrott, Korn, and Sax (1997) speculate that grade inflation in high school has given college freshmen higher expectations for their grades in college. In 2002, 97% of freshmen surveyed expected to make at least a “B” average. Only 77% reported that they were on track to do so, however (Sax, Keup, Gilmartin, Stolzenberg, & Harper, 2002). This possibly inflated perception of their academic ability may lead many students to college with a false sense of security regarding their future academic success. Academic difficulty is one of the major reasons students do not return to college after the first semester or the first year (Tinto, 1993). Those who return are those who have been able to successfully transition from high school-level to college-level academics (Tinto, 1993).

It has been shown that college freshmen have transitional experiences that move them toward academic change for success in college (Birnie-Lefcovich, 2000; Roe, 2003; Shaw Sullivan, 1997; Terenzini, Rendon, Upcraft, Millar, Allison, Gregg & Jalomo, 1994; Weissman, Bulakowski, & Jumisko, 1998). It is suggested that the bulk of this change occurs between a student’s high school graduation and the end of the student’s freshman year (Gardner, 2001; Pascarella & Terenzini, 1991; Tinto, 1993). It is also believed that these students, although unprepared for the rigors of college-level

academics, find the means to reorient their ways of thinking and doing to meet the new academic challenges they find in college (Bridges, 1980, 2001, 2003).

This study examined how high school prepares students academically for college, if confidence in high school academics carries into college academics, and students' means of reorienting their ways of thinking and doing during their transition from high school to college.

Students at a large, comprehensive, public Midwestern university were asked to provide insight on their transition from high school to college. Through individual interviews, each student expressed in his or her own words what experiences helped make the transition successful.

Problem Statement

Many assume that young adults who earn a high school diploma are academically prepared for college. Unfortunately, a high school diploma does not guarantee academic preparedness (Choy, 2002; Mortenson, 2002). Many students enter college without the academic skills needed for success (Arnold & King, 1997; Astin, 1993; Barth et al., 2000; Dextras, 1993; Erickson & Strommer, 1991; Levine & Cureton, 1998; Light, 2001). Some underprepared students succeed (Adelman, 1999; Felix, 2002; Grimes, 1999; Horn & Kojaku, 2001; MacLellan, 2001) and continue higher education, but many others do not (Tinto, 1993, 1996, 1999). Research indicates that students who leave college do so for several reasons—academic difficulty and adjustment difficulty are two reasons related to academic preparedness (Tinto, 1993). This study examined the problem of academic underpreparedness and how it affected students' transition from high to college.

Bridges' (1980, 2001, 2003) three phases of transition explain differences in successful transition from high school to college in terms of the different ways that freshmen adjust to the academic rigors of college. He might speculate that successful freshmen learn to use coping, assimilating, and accommodating mechanisms from upperclassmen or peers. His three phases of transition—the ending, the neutral zone, and the beginning—are clearly evidenced in freshmen transitions from high school to college, with high school graduation as the ending, and success and persistence in college as the beginning. The transition occurs in the neutral zone. In the neutral zone, a person tries to let go of an old outlook, reality, attitude, value, or self-image, and tries to find ways of replacing the old with a new version as quickly as possible. The transition process requires an inner realignment of the way a person handles the loss of the old and makes the adjustments needed for success. It is based on this inner realignment that people reorient their ways of thinking and doing to face whatever changes are happening (Bridges, 1980, 2001, 2003).

Purpose of the Study

The purpose of this study is to examine the experiences of successful college freshmen that guide and assist in their academic transition from high school to college. For this study, successful students are defined as those that have completed one full semester of college and returned for a second semester to the same institution. No research has been found utilizing Bridges' three phases of transition as it might relate to the academic transition from high school to college. This study examined students' transition experiences using Bridges' ending, beginning, and neutral zone framework.

Research Questions

The following research questions guided this study:

1. What do successful college freshmen experience as they transition academically to college?
2. How do the perceptions of successful college freshmen fit within Bridges' (1980, 2001, 2003) phases of transition?
3. What means do successful college freshmen use to reorient their ways of thinking and doing into the college academic environment?

It is important to note that in qualitative research studies, the hypothesis is not posed at the beginning of the research (Fraenkel & Wallen, 2000; Mertens, 1998; Strauss, 2001); rather, the hypotheses and findings from a qualitative study emerge as the study progresses. Although the research objectives above were guidelines used to begin the study, new hypotheses were formulated and the old ones reconsidered in different ways throughout the study. This will be discussed in depth in Chapter 5 – Data Analysis.

Conceptual Framework

This study was conducted from an interpretivist perspective. The interpretivist approach was derived from Max Weber's idea that in the human sciences researchers are concerned with understanding rather than explaining (Crotty, 1998). Interpretivism looks for cultural and historical interpretations of the world (Crotty, 1998) and emerges from the notion that reality and knowledge are socially constructed (Mertens, 1998). Interpretivist researchers seek to understand lived experiences from the point of view of those who live them and understand the intention of human behavior (Crotty, 1998). This

study was based on the idea that there are multiple ways of interpreting the transition experience and that each individual's perception of the transition is valid.

This study used a qualitative method of inquiry known as phenomenology. Phenomenological studies attempt to understand the meaning of interactions, events, and situations to people at certain times (Bogdan & Biklen, 1992) and to gain insight into the experience of a phenomenon (Patton, 1990). The themes that emerge in phenomenological studies arise from the individual's unique perspective, and lend insight into the phenomenon itself (Crotty, 1998).

The concept of phenomenology is based on the work of Martin Heidegger, who explains that the action of being in the world is a system of equipment, social roles, and purposes (Crotty, 1998). Phenomenology seeks to ascribe meaning to experiences and emphasizes the individual's subjective experience (Tesch, 1990). The intent of a phenomenological study is to describe the event from the point of view of the participant; with the focus on understanding how individuals create and understand their own life spaces (Mertens, 1998).

Crotty (1998) explains the phenomenological approach as putting to the side the prevailing social understanding of a phenomenon, and revisiting one's most recent experience of the phenomenon. This allows one to either see new meanings within the phenomenon or to see authentication or enhancement of one's former meaning (Crotty, 1998).

In this study, the phenomenology approach is used in order to understand the structure and essence of the experiences of successful second-semester college freshmen. This approach was selected because of the nature of the research objective—to examine

the students' perceptions and to understand the phenomenon of transition from the students' perspectives. Since individuals see, hear, and feel things differently, each student's story can explain what the academic transition experience was like for each individual. Moreover, it is important in this study to understand the subjects' definitions and perceptions; the phenomenological approach best arrives at these understandings.

Bridges' (1980, 2001, 2003) three phases of transition help explain differences in successful transition from high school to college in terms of the different ways that freshmen adjust to the academic rigors of college. Using his work as a foundation, one can see that successful freshmen learn to reorient themselves in their ways of thinking and doing and they may learn these mechanisms from upperclassmen or peers. His three phases of transition—the ending, the neutral zone, and the beginning—are clearly evidenced in freshmen transitions from high school to college, with high school graduation as the ending, and success in college as the beginning. The transition occurs in the neutral zone (Bridges, 1980, 2001, 2003). Students who are in Bridges' described neutral zone try to find ways of replacing the old way of thinking and doing as quickly as possible. The transition process requires an inner realignment of one's perceptions to fit the reality of his or her experiences, and it is based on this inner realignment that one finds the means to reorient his or her ways of thinking and doing to fit whatever changes are happening (Bridges, 1980, 2001, 2003). It is precisely this realignment that the current study examined.

Significance of the Study

Argyris and Schon (1974) suggest the importance of putting theory into action. This section examines the implications of this study for theory, research, and practice.

Theory

As mentioned previously, this study used the work of Bridges (1980, 2001, 2003) as a framework for students' perceptions on their academic transition from high school to college. Bridges (1980, 2001, 2003) focused his work on life transitions and ways that individuals reorient themselves to make these transitions. This study sought to add to his work by focusing specifically on one life transition—the one from high school to college—and by narrowing the transition perspective to only the academic transition that occurs during the first year of college.

Research

Significant research exists on the academic preparedness of high school students for college and the world of work (Adelman, 1999; Astin et al., 1997; Barth, 2003; Bottoms & Feagin, 2002; Felix, 2002; Grimes, 1999; Horn & Kojaku, 2001; MacLellan, 2001; National Center for Education Statistics [NCES], 2001; Raising Our Sights, 2001; Schneider & Stevenson, 1999). There are also many studies on the social transitions of students from high school to college (Astin, 1993; Hood, 1984; Levine & Cureton, 1998; Pascarella & Terenzini, 1991; Pike, 2000; Upcraft & Gardner, 1989). There is also research on the academic transitions of students from high school to college (Buczynski, 1991; King, Wood & Mines, 1990; Ramsay, Barker, & Jones, 1999; Padilla, Trevino, Gonzales, & Trevino, 1997; Roe, 2003; Shaw Sullivan, 1997; Watzke, 2000; Zhang & Watkins, 2001), but few focus on the phenomenon of the transition experience itself. Some research was found on the ways that college students reorient their ways of thinking and doing to be successful academically (Astin et al., 1997; Light, 2001), but more can be added.

Most significant, however, is that no research was found that explains the high school-to-college academic transition using Bridges' transition phases. This study contributes to this area of research on academic transitions from high school to college because it focuses specifically on the phenomenon of the transition and uses Bridges' three phases of transition as a lens through which to view the transition process. Chapter 2 includes a more in-depth review of the relevant literature.

Practice

This study has several implications for practice in higher education. Across the nation, higher education officials look for ways to increase enrollments, retain students, and cultivate relationships with alumni. Many factors are involved with student retention, and one cited frequently is recruiting qualified students (Tinto, 1993). Nationwide, many colleges and universities have specified high school core curricular requirements that freshman must meet before admission. Theoretically, this curriculum requirement is in place to assure that students are academically prepared and have the knowledge base needed for college. If college and university administrators can understand the factors involved in helping students successfully transition from high school to college academically, all constituencies (parents, institutions, faculty, and students) will be satisfied. Students will be successful, and retention and graduation rates at institutions will be higher.

This study also has implications for the preparation of students for college. High school educators can help students prepare more effectively for college if they have information on what students need to know and be able to do in order to succeed in

college. This study provides qualitative data obtained directly from students on what changes can be made to make the academic transition more successful for all students.

Furthermore, this study has implications for colleges and universities that provide special academic services to students. The students explain in their own words what institutions can do to make the transition more successful.

Research Assurances

Researchers, and thus the research they create, cannot be value-free because knowledge and meaning are acts of interpretation (Crotty, 1998; Fraenkel & Wallen, 2000; Mertens, 1998; Rubin & Rubin, 1995). In qualitative research, however, several steps can be taken to help assure credibility, reliability, and transferability (Mertens, 1998).

Credibility

In qualitative research, credibility refers to the ways of confirmation that the researcher has portrayed the actual viewpoint of the subject (Mertens, 1998). Morse, Barrett, Mayan, Olson, and Spiers (2002) emphasize the importance of verification strategies during the research process, not only after the research has been completed. They advocate the following strategies to ensure the credibility of the research: 1) methodological coherence; 2) an appropriate sample; 3) concurrent collection and analysis of the data; and 4) thinking theoretically (Morse et al., 2002). Each of these strategies was used in this study to ensure credibility.

Methodological coherence was obtained by ensuring that the methodology was congruent with the research question. Since phenomenological research is best done with

direct contact with the participant in the phenomenon (Mertens, 1998), interviews with subjects were the best method for this study. The sample was appropriate for this study because the subjects had recent, personal knowledge of the phenomenon. By interviewing only students who were direct-from-high school college freshmen, no variation could slant the study.

The data for this study were collected and analyzed simultaneously through the use of analytic memos and the creation of lists of analytic statements. The researcher continuously examined the collected data for themes and statements that were similar, and notes were taken on a regular basis. Writing analytic memos and analytic statements are appropriate ways of organizing thoughts while analyzing data (Emerson, Fretz & Shaw, 1995; Rubin & Rubin, 1995). Additionally, Morse et al. (2002) advocate thinking theoretically while collecting data. Because the purpose of this study was to examine the students' perspectives using Bridges' (1980, 2001, 2003) transition phases, thinking theoretically throughout the process was essential. Member-checking, the process of providing a written product to the subjects for confirmation of what was said, was not used in this study.

Reliability

Reliability refers to the consistency of the research methods and how often using the same procedures a researcher would receive the same results (Frankel & Wallen, 2000). By using both the demographic survey and guided interviews, data regarding courses, GPAs and ACT scores were obtained twice. This triangulation process helps assure that the data is correct as reported (Fraenkel & Wallen, 2000). Other acts to assure validity and reliability include asking the same questions of each subject, describing the

settings in which the interviews took place, audio recording the interviews, and using the students' own words (Fraenkel & Wallen, 2000). Each of these methods was used in this study.

To ensure the validity of self-reporting by the subjects, four conditions were in place during this study: 1) the information requested was personal knowledge; 2) the information requested was about the students' recent experiences; 3) the questions were clear and easy to understand; and 4) there were no threatening or embarrassing questions. Evidence shows that students are appropriate reporters of their experiences if questions are clear and they have the information required to accurately answer the questions (Pascarella & Terenzini, 1991).

Researcher bias was controlled for as much as possible. The researcher allowed the students to do almost all of the talking during the interviews. Questions were asked and more description was requested, but the interviews are in the words of the subjects.

Transferability

Transferability refers to how well a study can be generalized and transferred to other settings (Mertens, 1998). Although no guarantee of transferability can be made for this study, the use of multiple cases helps make the case for credibility and transferability (Mertens, 1998). Qualitative studies traditionally have been used as much for ideas to be shared, discussed, and investigated as they have been for generalization and transferability to a larger population (Mertens, 1998). Bridges' (1980, 2001, 2003) phases could be applied to future studies in a similar manner. Additionally, the use of thick description in this study will help others examine what was experienced by the subjects in a detailed manner.

Outline of Work

The chapters that follow include a complete picture of the study undertaken.

Chapter 2 is a review of the relevant literature on transitions, transformation theory, high school academic preparation for college, and cognitive development as it relates to college freshmen. A complete view of the research methodology or procedures of the study follows in Chapter 3, including the method for choosing the subjects, the research instruments, the data collection and recording procedures, and the processes for analyzing the data.

Chapter 4 presents the data collected, including demographics and the relevant information on each subject. In Chapter 5, the data are analyzed and the categories and themes explained based on the subjects' responses. Chapter 6 provides conclusions on the findings of the research, comments on the methods and process, and offers a discussion on further research.

Chapter Two

Literature Review

This chapter provides a review of the literature that framed and guided this study. First, the cognitive development theories related to traditional-aged college freshmen are examined to provide a context for where the students in this study may be developmentally. Second, Bridges' (1980, 2001, 2003) three phases are explained in more detail to provide the framework for the study. The third element of this chapter includes a review of literature on students' high school preparation, a well-documented element of a student's transition to college. Fourth, a brief overview of the literature related to academic transitions is provided. Finally, other relevant literature related to retention, the effects of college on students, and the first year experience are included.

Cognitive Development

Cognition is the act or process of knowing, including both awareness and judgment (Merriam-Webster, 2002). This section explores the factors affecting the cognitive development in traditional-aged college students, especially freshmen. First, it is important to explain that for the purposes of this study, traditional-aged college freshmen are 17 to 19 years of age. It is also important to note that the intention of this section is to look at the cognitive development of students rather than the social development since the purpose of the study is to uncover the perceptions students have of their academic transition. Since cognitive-structural theories assume that as individuals develop their experiences trigger responses that require assimilation or accommodation, they are an important aspect of this study.

Most developmental theories, for children or adults, stem from the theories of Piaget (Pascarella & Terenzini, 1991). His four stages of child development—sensory motor, preoperational, concrete operational, and formal operational—serve as the basis for most research in the field of human development and originally were designed for children. Piaget contended that children reached the Formal Operational stage in late adolescence (Pascarelli & Terenzini, 1991). Several of the studies discussed in this section indicate that most college freshmen are in the Concrete Operational stage, and in the process of mastering the Formal Operational stage, although Piaget believed them to be beyond his stages (Pascarella & Terenzini, 1991).

Galbraith (1991) describes a transactional process that occurs in adult learners. He explains that just because an educator and learner are involved in an educational exchange does not mean that learning is taking place. Galbraith believes that a transactional process must take place within the learner, the process is facilitated by the educator (whom he calls the facilitator), and the learner is interacting with the facilitator, other learners, educational content, materials, ideas, values, and knowledge bases (Galbraith, 1991).

Although traditional-aged freshmen do not have as much life experience as older adults, the experiences they do have are a factor that affects their cognitive development during their freshman year. Knox (1981) points out that changes in personal development occur over a span of time, but very few occur as a result of time. He also infers that earlier experiences shape later characteristics, and for adults, prior experience is a reference for managing and coping with new experience. Wilson (1993) explains that learning is not something that occurs separately from the world in which a learner lives,

but that it is intertwined with the world and greatly affected by it. Knowles (1980) describes four assumptions about adult learner characteristics in his theory of andragogy, two of which are directly related to their life experiences. According to Knowles, the role of the learner's experiences plays an important part in the learning process for adults, and readiness to learn is significantly affected when an adult has an experience that requires new knowledge (1980).

Many changes occur for young people during college. They establish an identity, learn to manage their feelings, achieve social independence, develop their own values and integrity, achieve competence in interpersonal relationships, clarify their purpose in life, and accept differences in others (Astin, 1993; Chickering, 1969; Chickering & Reisser, 1993; Erikson, 1968; Levine & Cureton, 1998; Pascarella & Terenzini, 1991). As far as cognitive development is measured, students' grade point averages tend to decline from high school to college, but most areas of knowledge and skills show substantial growth (Astin, 1993). There is much evidence, however, that suggests that most factual information is forgotten shortly after it is learned (Pascarella & Terenzini, 1991).

The following studies on adult cognition provide insight into the current developmental stage of most college freshmen. Perry (1970, 1999), one of the first to study the cognitive development of college students, found that students' assumptions about teaching and learning change during college and that they have a predictable pattern. He presented four stages of development for college students based on his research of college men: dualism, multiplicity, relativism, and commitment to relativism.

Erickson and Strommer (1991) use the research of Belenky, Clinchy, Goldberger, and Tarule (1986), Kurfiss (1988), and Perry (1970) in their discussion of the intellectual

development of college freshmen. Most of this research found that traditional freshmen are in Perry's dualism stage. In this stage, students believe that knowledge is factual information and that there are distinct right and wrong answers. In college, those in this stage see their faculty as having that factual knowledge and imparting it to the students. The students do not want ambiguities or questions answered with questions—they want answers to what will be on the test and they want them in a direct manner. Students in this stage see things as black and white—there are no gray areas.

As students are asked over and over during their freshmen year what they think, they begin to move into Perry's multiplicity stage (Erickson & Strommer, 1991). They begin to see that in some cases there are no right and wrong answers and that opinions count. Early at this level, students see the complexity, but they are yet unable to articulate why. They see the other opinion as valid, but are not able to justify their position based on informed knowledge. As they move into late multiplicity, they begin to see the need for justification of their answers and realize the value of researching their own opinion to be able to articulate an informed, valid view of an issue (Erickson & Strommer, 1991).

Perry's next stage of relativism transitions students to learn to consider the other side of an issue and alternatives to their own opinions. They learn to weigh the evidence and realize that they may be wrong in their own opinions. Erickson and Strommer (1991) contend that most freshmen are developmentally at either the dualism or multiplicity stage and are not able to move into the relativism stage or Perry's final stage of commitment to relativism.

Pascarella and Terenzini (1991) examined a multitude of studies involving college students. Although these are too numerous to discuss here, it is important to note that

they divided the studies on cognitive skills and intellectual growth into six categories: communication skills, Piagetian formal operational reasoning, critical thinking, learning new concepts, postformal reasoning, and conceptual complexity. Several of these studies examined specifically the effects of various factors on the cognitive development of freshmen, either measured at the beginning of the year and the end of the year, or during the freshman year and during the sophomore year. In every case, significant changes were found in the cognitive development of the students involved. Examples include an increase in formal reasoning (Eisert & Tomlinson-Keasey, 1978; Mentkowski & Strait, 1983); in critical thinking (Dressel & Mayhew, 1954; Lehmann, 1963; Pascarella, 1989) in postformal reasoning (Magolda, 1988); and in conceptual complexity (Khalili & Hood, 1983).

In perhaps one of the most complete studies on college students, Astin (1993) covers everything from environment to self-concept to patterns of behavior in college students. In his section on cognitive development, Astin used several measurement techniques. In the summary on academic and cognitive development, Astin posits that factors contributing to lower grades in college include attending a public institution or one in which other students in a peer group have a very high intellectual self-esteem. Factors that contribute to higher grades include majoring in education, the arts, or the humanities and having financial aid that is merit-based rather than economically based. Most significantly, Astin (1993) points out that the undergraduate GPA is positively related to almost every measure of cognitive development and academic growth, even when controlling for other factors.

Astin (1993) also found that several pedagogical practices related positively to favorable cognitive outcomes. Time devoted to studying and homework, tutoring, cooperative learning, honors or advanced placement courses, racial and cultural awareness workshops, independent research projects, class presentations, essay exams, critiqued class papers, personal computers, and frequent student-student and faculty-student interaction had positive correlations with cognitive development.

Several others have conducted research with implications in the cognitive development of freshmen. A study based on Perry's model and the Scale of Intellectual Development by Buczynski (1991) examined identity and cognitive development. Buczynski found that those who scored higher in cognitive development scored lower on identity and vice versa, possibly reflecting more on self-examination than on cognitive development. King and Kitchener (1994) found that reflective thinking develops in a sequential fashion and thus developed the Reflective Judgment Model. This model has seven stages that correlate well with Perry's stages, with the final stages showing reflective thinking. Their research shows that college freshmen are at a lower reflective level than seniors or graduate students. Mines, King, Hood, and Wood (1990) studied the relationship between critical thinking and development based on Kitchener and King's Reflective Judgment Model. On all four measures, freshmen scored lower than seniors or graduate students, showing the development of reflective thinking during the college years.

Belenky, Clinchy, Goldberger, and Tarule (1986) specifically conducted research on a group of women on their ways of knowing. They developed five categories for ways of knowing—Silence, Received Knowledge, Subjective Knowledge, Procedural

Knowledge, and Constructed Knowledge. These categories also correspond well with the research of Perry (1999). Magolda (1988) also conducted research on college students in the area of postformal reasoning and found significant gains in students' reasoning from the freshmen to sophomore year. She also developed the Epistemological Reflection Model with Four Ways of Knowing—Absolute Knowing, Transitional Knowing, Independent Knowing, and Contextual Knowing. She found that most freshman are in Absolute Knowing, with a smaller number in Transitional Knowing, and that a very small percentage used contextual knowing during any part of college.

Pike (2000) presented a study on the influence of fraternity/sorority membership on students' cognitive development. He determined that a broad range of college experiences influence development, including course work, academic effort, involvement in activities, and interaction with faculty and peers. There was no correlation found between fraternity/sorority membership and cognitive development.

Steele (1986) conducted a study on freshmen and seniors in speaking, writing, and reasoning skills. He found a significant difference between freshmen and seniors in all skills. Hood (1984) measured the same students as freshmen and again as seniors on three cognitive and three psychosocial dimensions and uncovered significant changes in ego development from the freshman to the senior year. Hood also examined the relationship between cognitive development and "various undergraduate experiences" and found no relationship.

Implications of the review of cognitive development literature are complex and the scope of this review is too narrow to cover all of them. First, however, one must understand why there are changes in college students, and in freshmen specifically, and

whether or not they are due to cognitive development, general maturation, or the college experience. Second, there are many factors that affect cognitive development in freshmen, the studies reviewed here cover only a few of those factors. Other factors that should be considered in further reviews include the students' self-efficacy, the type of residence during the freshman year, alcohol use, gender, socioeconomic background, family situation, cultural and ethnic background, and personal experience.

Bridges' Transition Phases

It has been shown that college freshmen have transitional experiences that move them toward academic change for success in college (Birnie-Lefcovich, 2000; Roe, 2003; Shaw Sullivan, 1997; Terenzini et al., 1994; Weissman et al., 1998). If the transition from high school to college is examined using the three phases of transition developed by Bridges (1980, 2001, 2003), the bulk of this change most likely occurs between a student's high school graduation (an ending) and the end of the student's first college year (a beginning). Successful students find ways of reorienting their ways of thinking and doing to meet the new academic challenges they find in college.

Bridges (2001) explains that change and transition are very different concepts. Change is a situational shift. Moving to a new house, having a baby, or starting a new job are life changes. Transition is the process of letting go of the way things were before the change and dealing with the way things have become since the change. He says that change can happen at any time, but transition occurs when a person closes one door and opens another. Transition does not require rejecting an old life, but rather letting go of it. It is important that the individual honor the old life for all that it did. He also asserts that it is not the change that will "do you in," but the transitions (Bridges, 2003, p. 3).

Bridges (2001) believes that reorientation is the essential function of a transition, with personal growth the second function. Even further, transition also can be an authentication process by validating that a person is capable of dealing with the world. He adds that neither development, reorientation, nor authentication could take place without creativity. These four things all require that one let go of the way things were, and the creative opportunity evolves from the transition. Additionally, Bridges (2001) adds that there is a spiritual function and a renewal function of transition and that all six functions are easiest to recognize when a change has forced a reactive transition.

Bridges (1980, 2001, 2003) explains that every transition includes three phases: an ending, a beginning, and the neutral zone. He also says that there are two different kinds of transition—reactive transitions and developmental transitions. A reactive transition is a necessary transition in reaction to a change, while a developmental transition is produced by a “natural, inner unfolding of those aspects of ourselves that are built right into who we are and how we are made” (Bridges, 2001, p. 5). Both types of transition include all three phases of the ending, neutral zone and beginning.

In Bridges’ (2001) first phase—the ending—a person lets go of an old outlook, reality, attitude, value, or self-image. It is in this phase that an individual may resist and may need help dealing with the loss that has occurred (Bridges, 2003). In Bridges’ (2001) third phase—the beginning—an individual finally takes hold of the new belief or attitude and begins a new chapter in his or her life. It is in this stage that an individual develops a new identity, experiences new energy, and understands why the change was necessary and begins to make it work (Bridges, 2003).

The second phase—the neutral zone—is the place between what was and what will be, and where an individual's psychological realignment and repatterning takes place. In this stage, an individual may feel confused, broken apart, lost, and empty (Bridges, 1980, 2001, 2003). People's anxiety rises, motivation falls, they miss work or school, they emphasize their weaknesses, they feel overloaded, become polarized and are vulnerable to attack from the outside and inside.

Individuals tend to resist transition because it often takes much longer than change and leaves one in what feels like limbo until a new reality is formed (Bridges, 1980). Although the change itself may happen very quickly, the transition does not (Bridges, 2001). Those in the neutral zone try to find ways of replacing what they have lost as quickly as possible. The transition process requires an inner realignment of the way one responds to situations, and it is based on this inner realignment that one reorients his or her way of thinking and doing in relation to whatever changes are happening (Bridges, 1980, 2001, 2003). It is Bridges' second phase, the neutral zone, that is the most relevant to this study on the academic transition of high school students to college (1980, 2001, 2003).

Preparation

The role of college in today's society is very different from the role higher education played in the first half of the twentieth century (Lucas, 1994). Students no longer attend college only to strengthen their societal standing, find themselves, or attend party after party (Astin et al., 1997). Although these things may happen in college, 77% of freshmen say they are attending college to be able to get a better job and 72% say they are attending to be able to make more money (Astin, et al., 1997). Many of today's

college students attend school part-time, work full-time, and have children and spouses at home. They go to college for a formal education, and the subjects they take and the grades they make will determine the course of their lives (Horowitz, 1987). Their college years are not just an interlude between adolescence and adult responsibilities (Lucas, 1994).

As mentioned in Chapter 1, Astin et al. (1997) speculate that grade inflation in high school has given college freshmen higher expectations for their grades in college. Many students enter college with only a vague notion of what undergraduate education is about (Levitz & Noel, 1989). They come to campus with the attitude that they will do well and with uninformed and unrealistic expectations (Levitz & Noel, 1989).

Today's American college freshmen are not academically prepared for college-level work and are not challenged in high school (Arnold & King, 1997; Astin, 1993; Barth, 2003; Barth et al., 2000; Choy, 2002; Dextras, 1993; Erickson & Strommer, 1991; Keller, 2003; Levine & Cureton, 1998; Light, 2001; Mortenson, 2002; Schneider & Stevenson, 1999). American high school graduates are not well-prepared for the world of work, either. Seventy-five percent of professors and 73% of employers say that recent high school graduates do not write clearly, and 74% of professors and 73% of employers say the graduates have problems with grammar and spelling. Additionally, 65% of professors and 63% of employers say graduates do not have basic math skills (Public Agenda: Reality Check, 2002).

In addition, a number of academic assessments of student performance show that American high schools are not performing up to international standards. By the time American students get to the 12th grade, their performance diminishes in comparison to

their foreign peers (Barth et al., 2001). The skills needed in college are the same as the skills needed in the workplace—critical thinking, problem solving, good writing ability, and math skills (Viadero, 2001).

In college, students are expected, for the most part, to take care of themselves in all aspects of their lives—academically, financially, socially, and emotionally. As discussed in Chapter 1, they are expected to know how to study, take notes, read, and listen effectively in order to pass exams, make oral presentations, or write about the topic presented (Arnold & King, 1997; Astin, 1993; Dextras, 1993; Erickson & Strommer, 1991). Evidence shows that many students are not adequately prepared in high school for the academic rigor of college (Arnold & King, 1997; Astin, 1993; Barth, 2003; Barth et al., 2000; Dextras, 1993; Erickson & Strommer, 1991; Klingelhofer & Hollander, 1973; Levine & Cureton, 1998; Light, 2001; Schneider & Stevenson, 1999). Students arrive at college with academic skills that have served them well in high school but are inadequate for college (Walter, Gomon, Guenzel & Smith, 1989).

Several studies on high school academic preparation for college should be examined in the context of this study. In one of the most comprehensive studies on college students, Light (2001) interviewed Harvard students over a 10-year period on several topics related to student success in college. Several students pointed out that what worked for them academically in high school did not work for them in college. For example, one student said he did not get off to a good start in college because he had never really learned to study the large amount of material that was required in college. The general consensus of the students in Light's study was that more effort was required to do well in college. The high demands of college courses, in comparison to what is

required in high school courses, forces students to put forth more effort than they expect (Light, 2001).

In Light's (2001) interviews, he looked for patterns of adjusting to college that led students to struggle academically. One major source of trouble that emerged from the interviews was poor management of time. Another was the way the students organized their work in the same way they did in high school. As a result, a lot of the students had trouble developing new study skills. One student said her high school courses just required her to "give back the facts" (Light, 2001, p. 38). In her college courses, the exams included questions about new situations and the extension of the necessary knowledge to those new situations. A third source of trouble seems to be that students take required courses early in high school but do not remain engaged in the subjects in the later years. A fourth source of trouble was that most students who struggle usually studied alone (Light, 2001).

Adelman (1999) studied a national cohort of students from high school to about the age of 30 for bachelor degree attainment. He found that a student's high school curriculum reflects 41% of the academic resources he or she brings to higher education. He said that the curriculum measure produces a higher percentage of students earning a bachelor's degree than either test scores or high school class rank and GPA.

Other findings from Adelman (1999) are that a more academically intense high school curriculum has a pronounced effect on the bachelor's degree attainment of African American and Latino students. Additionally, the highest level of mathematics a student takes in high school has the strongest influence on bachelor degree attainment. Finishing

a course beyond the level of Algebra 2 more than doubles the chances that a student who enters college will complete a baccalaureate degree (1999).

Horn and Kojaku (2001) found that the rigor level of college students' high school curricula was strongly related to their persistence in postsecondary education. In this national postsecondary study, about two-thirds of the students originally enrolled in four-year institutions were still enrolled after three years. Seventy-nine percent of students who participated in a rigorous high school curriculum were continuously enrolled at the same institution three years after the initial enrollment. Only 62% of those who had taken a mid-level curriculum were still enrolled and only 55% of those who had taken less than the core curriculum were still enrolled after three years (Horn & Kojaku, 2001).

Warburton, Bugarin, and Nunez (2001) examined the high school preparation and postsecondary persistence of students whose parents did not attend college. They found that for these first-generation college students the academic rigor of their high school curriculum was strongly associated with their college GPA, the number of remedial courses they enrolled in, and their rates of persistence and degree attainment. Students who did not exceed the requirements of the basic curriculum defined in the study had lower college GPAs than those who took the more rigorous curriculum. The high school curriculum was also related to the number of remedial courses the students took during their first year of college. The proportion of students in remedial courses decreased in proportion to the students' rigor of high school curriculum. Eighty-four percent of the students who took a more rigorous high school course work had attained a degree within four years. Only 62% of those who took a less rigorous curriculum had done so. Ninety-

three percent of the students who took rigorous course work were still enrolled and working toward a degree within four years, compared to 75% of those who did not take rigorous course work (Warburton et al., 2001).

Barth et al. (2000) studied national data on high school and college students. They found that students who complete a full college preparatory sequence in mathematics, through the pre-calculus or calculus level, scored higher on the National Assessment of Educational Progress (NAEP) than those who only complete one or two courses. They also found that while almost 75% of high school graduates are entering postsecondary education, only about half are completing even a middle level high school curriculum as defined in the study. If foreign language and computer science are included in the college preparatory curriculum, only about 12% of students took what they needed to be successful in college (Barth et al., 2000).

Harvey (2001) addresses the need to strengthen the senior-year curriculum so that students are better prepared for college. He recommends a “triple-A” program as a national goal: improving alignment between high school and college requirements, standards, and assessments; raising achievement by making a college preparatory curriculum the default curriculum for all students; and providing more, and more rigorous, alternatives to high school students. Additionally, he cites successful high school programs such as the Southern Regional Education Board’s “High Schools That Work” initiative and standards-based reforms such as the National Science Education Standards’ push for students to take three years each of mathematics and science to be prepared for college and for work (Harvey, 2001).

The number one strategy of the 12 strategies for reform listed in a report on the New American High Schools initiative of the U.S. Department of Education is to expect all students to master the same rigorous academic material (Beck & Rothstein, 1999). High expectations summarized the climate of the award-winning schools in the New American High School initiative. *Achieving Excellence II*, a report based on the Third International Mathematics and Science Study (Kroeze, 2001), includes as the first point in a discussion of what makes a difference in the scores of students the content and rigor of their curriculum.

ACT provides data to states and schools in several different ways and several different measures. One of these measures includes whether or not the test taker took the ACT-suggested core curriculum. National data shows that students who took the suggested core courses scored more than two points higher on their ACT composite, 21.9 for core takers, versus 19.5 for non-core takers (ACT, 2003). This is a substantial difference in the scores, and can make a difference between admission to a public two-year community college and admission to a comprehensive university.

What many of these and other studies show is that a rigorous high school curriculum can be the best preparation for college (ACT, 2003; Adelman, 1999; Astin, 1993; Barth et al., 2000; Beck & Rothstein, 1999; Harvey, 2001; Horn & Kojaku, 2001; Kelly, 2002; Kirst, 2000; Kroeze, 2001; Levine & Cureton, 1998; Light, 2001; Schneider & Stevenson, 1999; Warburton et al., 2001; Viadero, 2001). The following section describes the parameters of what a rigorous curriculum in high school would entail.

ACT suggests a core curriculum for college-bound high schoolers of: 1) four years or more of English; 2) three years or more of Mathematics that includes Algebra I

and II and Geometry; 3) three years or more of Social Studies that includes American History, World History, and American Government; and 4) three years or more of Natural Sciences that includes General/Physical/Earth Science, Biology, Chemistry and Physics (ACT, 2003).

The College Board (2003) recommends the following to students to ensure academic success in college: English every year of high school including Literature, Writing/Composition, and/or Speech; Math, including Algebra, Geometry, Algebra II, Trigonometry and/or Calculus; six semesters of Science, including two semesters in Biology, two semesters in Chemistry and/or Physics, and two semesters in Earth/Space sciences, advanced Biology, advanced Chemistry, or advanced Physics; six semesters of social studies, including two semesters in U.S. History, one semester of U.S. Government, one semester in Economics, one semester in World History or Geography, and one additional semester in the above or other areas (The College Board, 2003).

Similarly, Adelman (1999) defines a rigorous curriculum as at least three years each of English and Math (including a course beyond Algebra II), at least two years each of Laboratory Science, History, and Foreign Languages, and at least one advanced placement course. Horn and Kojaku (2001) describe a rigorous curriculum as four years of English, four years of Mathematics (including Pre-Calculus or higher), three years each of Science, Social Studies, and a Foreign Language, and at least one advanced placement course. Others define a rigorous curriculum similarly (Barth et al., 2000; Warburton et al., 2001)

In colleges across the nation, retention of students is a major issue (Tinto, 1993). Keeping students in college, and keeping their grade point averages above failing, is an

important goal for higher education (Barth et al., 2001). The implications of high school students' preparation can be seen in the statistics on remedial course work taken by college students. Remedial courses are those offered below college level and usually provide no college credit for the student (Barth et al., 2001).

Remediation statistics differ depending on the source. As mentioned in Chapter 1, Levine and Cureton (1998) say that more than 80% of students at two-year colleges and 64% at four-year colleges need academic remediation in core subjects. Barth et al., (2001) say as many as half of entering college students are required to take remedial courses. Whatever the number, a large percentage of entering college students need remedial courses. As a result, in 2000-01, more than 75% of degree-granting institutions offered remedial services to students (Integrated Postsecondary Education Data System [IPEDS], 2000).

These studies show that academic preparation plays an important role in predicting college success, and in the successful academic transition of students from high school to college. The academic preparation in high school of the subjects of this study is an important component to examine in relation to their transition experiences.

Academic Transition

Several studies were reviewed that covered the phenomenon of academic transition. Shaw Sullivan (1997) examined the development of first-year college students within the context of retention and attrition models. She found that three themes emerged related to separation, transition, and incorporation. These students did not view separation with difficulty, but as a natural occurrence in their lives. Transitions occurred for them in

both their college and home environments, and they each adopted new modes of behavior for dealing with the changes in their lives (Shaw Sullivan, 1997).

Roe (2003), examined how first-year students negotiated the transition to college. She found that three challenges emerged for the students: obstacles, opportunities, and changes and demands. The eight students in her study developed strategies for coping with the changes. Specifically, when undesirable events in the first semester occurred, the students found ways to deal with them in the second semester (Roe, 2003).

Padilla et al. (1997) used three focus groups to elicit responses from minority college students regarding strategies they used to eliminate barriers to academic success. They found three barriers faced by these students: discontinuity, lack of nurturing, lack of presence, and resources. These students felt that being a first-generation college student and losing the cultural continuity from home were the most difficult part of their transitions (Padilla et al., 1997).

Terenzini et al. (1994) examined how students become engaged as they make the transition from work or high school to college. They found that there were two categories of students: those that viewed college as a continuation of their lives and those that viewed college as a disjunction in their lives. They also found that high school friends were both assets and liabilities for students in their transitional experiences, and that students need experiences that validate them as valuable in the college environment. Additionally, these students saw their transition as a cooperative experience with the friends and families, and discovered that real learning is about discovering their own abilities and strengths (Terenzini et al., 1994).

Birnie-Lefcovich (2000) found that students viewed the transition to college as a normative event and felt ownership in the decision to attend college. They believed it was the right time in their lives and felt prepared. However, they were concerned about changes in their personal relationships and felt it was taking longer to adjust than it should have. Low income students and women were more likely to have increased levels of concern about their transitions (Birnie-Lefcovich, 2000).

Weissman et al. (1998) found there were differences in the ways white, black, and Hispanic students viewed the transition to a community college. They found some common experiences between the groups in that they all said there was a direct connection between higher education and a better job and their family members all played an important role in the transition. Remedial education was significantly higher for blacks and Hispanics than for whites, indicating lower levels of preparation. Both blacks and Hispanics expressed the need to set a good example for others, especially if they were the first in the family to attend college. The Hispanic students described being prepared for college, and the white students anticipated the college environment, but the black students were not prepared and had not anticipated the environment.

Sax et al. (2002) found that first-year freshmen were disengaged, intimidated by their professors, concerned about finances, overwhelmed, lonely, and homesick. The majority, however, were satisfied overall with their peer relationships, but not their faculty relationships. Overall, the students' experiences fell short of their expectations, they did not feel their knowledge and skill level either declined or improved, and they spent more time studying, drinking, and socializing than they did in high school.

These studies show that the transition experiences of students from high school to college take many forms. The ethnic and social background of the student, as well as the type of high school and college attended, affect the experiences of that student. This study considered several factors in relation to the transition experiences of the subjects of the study.

Other Relevant Literature

This section includes a brief review of literature on student development theories, students' expectations for college, and student retention. Each of these topics is relevant to this study, but not as significant as the literature reviewed above. In addition to the cognitive development theories discussed earlier, it is important to recognize that theories of student development also lend insight into the subjects of this study. Because the theme of students' expectations emerged in the analysis of the data for this study, a brief review of literature relevant to expectations is included. And finally, no study on the transition of freshmen would be complete without some discussion of the literature of student retention.

Student Development Theories

This review discussed cognitive development theories earlier in this chapter. Also relevant to the process of this study are theories related to student development. Chickering's (1969) theory of identity development and Schlossberg, Waters, and Goodman's (1995) transition theory are the most relevant and will be discussed here.

Chickering's (1969) study of college students proposed seven vectors of development that help form a student's identity. He said these vectors are not often found

in a linear fashion, but more appropriately in a spiral or in steps (Chickering & Reisser, 1993). Students move through the vectors at different rates and sometimes return to a vector they had already left. The seven vectors are: developing competence, managing emotions, moving through autonomy toward independence, developing mature interpersonal relationships, establishing identity, developing purpose, and developing integrity (Chickering, 1969). For this study, developing competence is a key vector to examine. The developing competence vector has three components: intellectual competence, physical and manual skills, and interpersonal competence (Evans, Forney, & Guido-DiBrito, 1998). Intellectual competence includes the gaining of knowledge and skills needed to be successful and feel competent (Chickering & Reisser, 1993).

Schlossberg et al. (1995) present a four-part framework for the transition process as it relates to student development. They posit that there are four variables in an individual's transition: situation, self, support, and strategies. These are the factors that make a difference in how the individual copes with change (1995). The variables of support and strategies are the most relevant to this study. Support includes what help a student receives from the institution, faculty, peers, and/or family (1995). The strategies variable includes ways that students cope with the transition. Several strategies are listed by Schlossberg et al. (1995). Some of these include negotiation, optimistic action, self-reliance, advice-seeking, and selective ignoring. These will be discussed with the analysis of data in Chapter 5.

Students' Expectations of College

Today's generation of college students brings a variety of expectations to college (Erickson & Strommer, 1991). They expect that college will be different, challenging,

and rewarding. Almost all come to college with two objectives: to achieve academically and to succeed socially. Some find out before they even attend the first class that college may not meet their expectations (Erickson & Strommer, 1991).

Students' educational attainment expectations increased between 1983 and 1998 (NCES, 2001). Fifty-five percent of high school seniors in 1998 reported that they definitely planned to attend college, while only 36% said the same in 1983. Women's expectations of attending college also increased. In 1983, there was no significant difference in the percentages of women and men who expected to earn a bachelor's degree. In 1998, more women than men had the expectation of a bachelor's degree (NCES, 2001).

Barth et al. (2001) found that although 71% of students say they expect to attend a four year college after high school, only 52% of their parents expected them to, and only 32% of their teachers had that expectation of their students. As mentioned previously, Astin et al. (1997) propose that college freshmen may have higher expectations for their grades in college because of grade inflation in high school. Levitz & Noel (1989) believe that students' inflated perceptions of their academic ability may give them a false sense of security regarding their academic success in college.

Schneider and Stevenson (1999) found that more than 90% of high school seniors expect to attend college, and more than 70% expect to work in professional jobs that require a college education. They also reported that adolescents in the 1990s are the most "occupationally and educationally ambitious generation of teenagers" (1999, p. 79). They also said, however, that many lacked the basic information needed to make the right choices.

Chizhik (1999) found that providing prematriculation information to students does not prevent disillusionment in college. Instead, she posits that postsecondary institutions need to provide resources for students once they arrive to help in the transition process (1999). To reach that goal, students must learn a multitude of skills. Erickson and Strommer (1991) contend that the larger the discrepancy between what a student expected and what he or she experiences, the higher the stress level. Ross, Niebling, and Heckert (1999) found that two of the highest causes of stress in college students are an increased class workload and a lower grade than expected.

Upcraft and Gardner (1989) suggest that students make progress toward educational attainment by developing academic and intellectual competence, among other ways. Most freshmen come to college with the purpose of graduating but soon find that obtaining an education entails more than they anticipated. Upcraft and Gardner (1989) also claim another dimension to the limited expectations of students. Many freshmen come to campus with a “wait and see” attitude and do not know what to expect. Only 54% said they thought they would be satisfied with their college experience. The other 46% are a significant attrition risk (Upcraft & Gardner, 1989).

Student Retention

Tinto (1993) explains that persistence in college requires more than just adjustment to the transition. His model of student persistence assumes that students who are more integrated into college are more likely to persist (Malaney & Shively, 1995). A student’s expectations, perceptions, and experiences change throughout college, but several studies suggest that persistence is determined mostly by a student’s first year

experiences (Erickson & Strommer, 1991; Gardner, 2001; Levitz & Noel, 1989; Tinto, 1993; Upcraft & Gardner, 1989).

Tinto (1993) examined several sources of national data and found that there are several major causes of student attrition: intention, commitment, adjustment, difficulty, congruence, isolation, obligations, and finances. He distinguishes why students leave into two major categories: academic dismissal and voluntary withdrawal (1993). Most students leave college during the first year, while more selective institutions lose fewer students in the first year. He suggests the coping skills, or lack thereof, create one problem in the adjustment of freshmen to college (1975, 1993). Additionally, he states those who have made smaller, past transitions have acquired better skills and may persist more often in college (1993).

Malaney and Shively (1995) examined the expectations and experiences of first year students of color. Their results show that their expectations and experiences varied greatly by racial/ethnic background at a predominantly white institution. The results of their study correlate significantly with the graduation and retention rates of students at that institution in the same racial/ethnic categories.

Levitz and Noel (1989) contend that fostering student success during the freshmen year is the most significant time for intervention to prevent attrition. The chances that students will succeed increase after the first year by almost 50%. Several factors contribute to attrition: academic boredom, irrelevancy, limited or unrealistic expectations of college, academic underpreparedness, transition or adjustment difficulties, lack of certainty about a major and/or career, and dissonance or

incompatibility. They also point out that contact with teachers, advisors, counselors, and faculty have a significant effect on retention in the first year (Levitz & Noel, 1989).

Astin (1993) studied students in relation to the completion of a bachelor's degree within four years of initial enrollment. Fifty-four percent of the students had completed a degree in the time prescribed. The factors that positively influenced retention included: high grades in high school; high scores on college admission tests; being female; majoring in business, psychology or social sciences; living on campus; student-student and student-faculty interaction; vocational or career counseling; and enrollment in an honors program in college.

Conclusions

To summarize, it is important to understand the stage of development of college freshmen for the purposes of this study. The literature reviewed indicates that as each individual subject of this study is examined, changes may be due to cognitive development, general maturation, or the college experience. Bridges (1980, 2001, 2003) transition theory provides three phases in which to examine the subjects of this study, and the literature on students' high school preparation is very clear on one point: the rigor of a student's high school curriculum has a direct effect on the student's academic transition to college. Additionally, transition experiences for students take many forms.

The other literature reviewed provides a broader view of the college experience, especially the freshman year experience, and shows that students' expectations of college usually differ from what they actually experience, and retention in college depends on many factors, some that can be controlled and some that cannot.

Collectively, the body of literature reviewed provided a basis for this study by developing a framework that showed the factors that have an affect on the transition experiences of students as they move from high school to college. It is important to understand the factors of cognitive development, high school preparation, academic transition, student development, retention, and students' expectations for college in order to have a full view of the implications of this study. The research already conducted in this area serves as the foundation for the current study. Likewise, this study contributes to this body of literature by examining transition experiences using Bridges' (1980, 2001, 2003) three phases of transition. No research from this perspective has been found in a review of literature. The next chapter describes the methodology used in the study.

Chapter Three

Procedures

In this study I sought to understand the transition experiences of students from high school to college using a qualitative approach. This chapter presents the procedures used in conducting this study, including an introduction to the researcher, the research methods, and the selection of subjects. A brief description of the subjects is included, as well as the data collection process and a description of the collection instruments. Also included are a brief description of the pilot study, the recording procedures, the processes for analyzing the data, and the scope and limitations of the study.

Researcher

My interest in the topic of this study began several years ago when I simultaneously taught a basic orientation course to college freshmen at a Midwestern university and had two children struggling to succeed in their first attempts at college. I observed some of the same difficulties in all of these students, including my own children, and I began to wonder what similarities these students may have had that led them to college, even though they did not seem prepared for the academics of college.

After 13 years working in higher education, and a master's degree in adult education, I felt that I should be able to see some explanation for this phenomenon. Thus, this study was born.

Research Methods

As discussed in the previous chapter, this study was conducted from an interpretivist perspective using a phenomenological approach. The research methods employed were individual guided interviews and a short demographic survey. It was important that the students be allowed to speak for themselves and tell their own stories because individuals experience reality in their own ways (Mertens, 1998). For this reason, the students' views on their academic experiences as they transition from high school to college were the focus of this study. A pilot study helped guide the format of the interviews and survey used.

Only students who were perceived as successfully making the academic transition from high school to college were considered. For this study, a successful student was defined as one who completed his or her first semester of college and was academically eligible to return for a second semester to the same institution. The subjects were chosen from freshmen who returned for a second semester, eliminating the possibility that the successful transition had not taken place. Additionally, the study focused on the positive aspects of the students' transitions, such as people or mechanisms that were helpful in each student's successful transition. Rather than focus on students who drop out of college, this study asked second-semester freshmen what changes they made academically and how they coped with the changes required to maintain success in college in one semester and enroll in a second semester.

Approval of the Institutional Review Board (IRB) at Oklahoma State University was obtained once before research began, and a second time to continue the study a second year. A copy of the approval letters is included in Appendix A. Permission was

not needed to gain entrance to the institution since the study is based on the individual subjects' experiences and not the institution itself.

IRB guidelines regarding informed consent were followed and included full disclosure of the nature of the research, and the nature of the subjects' participation. It was explained to each subject that the interview would take approximately one hour, would be audio-taped with their consent, and that the questions would revolve around experiences in high school and college as they related to academics. Each subject signed the consent form and was provided with a copy. (See Appendix B for a copy of the Informed Consent Form).

Selection of Subjects

In a phenomenological study, the need to have all participants experience the phenomenon is essential (Creswell, 1998). In this study, the phenomenon was the transition from high school academics to college academics. Fraenkel and Wallen (2000) explain that for qualitative researchers, obtaining a purposive sample is most appropriate since the researcher wants to obtain a sample that is uniquely suited to the intent of the study. It was necessary for the subjects of this study to still be close enough to the transition process that they be able to recall their high school experiences, but at the same time have enough time in college to be able to speak to the differences they see and to the successes they have had in college. For this reason, second-semester freshmen who were direct from high school the year before were chosen for this study.

These students self-reported that they had successfully completed one full semester and were in their second semester at the university at the time of the interviews. Since these students already had persisted for more than one semester, it was assumed

they would be able to speak about their academic success and also recognize any academic changes made from high school to college and from the first semester of college to the second semester.

For convenience, Midwestern State University (MSU, a pseudonym) was chosen as the institution from which subjects would be drawn. The subjects were chosen from only one institution to moderate differences in students that could be related to the type of institution. MSU is a doctoral/research university—extensive (Carnegie Classification, 2000), with an average annual enrollment of about 26,000 students and an annual first-time freshmen enrollment of more than 3,000 students (Student Data Report, 2002). The majority of its students are full-time, and the majority of its freshmen are direct from high school (Student Data Report, 2002).

To obtain the subjects, I first met with the coordinator of freshmen programs at the institution. Since MSU has courses that are explicitly for freshmen, it was determined that choosing students from these courses would be the most efficient way to ensure that the subjects fit the criteria needed for the study. MSU has two types of freshmen courses, a basic orientation course and seminar courses that revolve around specific subjects. Although the fall semester generally includes more courses for freshmen, this study took place during the spring semester for the reasons outlined above.

Seven subjects were obtained from a spring 2003 course titled “Unraveling the Real You: Finding Your Academic Passion.” Three more subjects were obtained from a spring 2004 course titled “Do What You Are.” One subject was a friend of another subject who volunteered to be interviewed, and the final subject was working in the office of academic records at the institution and volunteered to participate. The two

courses were chosen as the source for subjects because the subjects were broad enough to attract a variety of students, rather than a narrow topic, like law or engineering, which would attract a more narrow audience. Both courses were designed to assist students in determining a major and/or career based on their interests. Students from a third freshman seminar course were asked to participate, but none volunteered. The regular orientation courses were not chosen because students in those courses tend to be first semester freshmen, and many are not direct from high school.

For the first seven subjects from the spring 2003 course, the instructor of the course agreed to administer the demographic survey (see Appendix C) to any of her students who volunteered, and offered extra credit in her course if they did so. She also agreed to ask those who volunteered to participate for contact information so that individual interviews could be scheduled. Seven of the 14 students in the class completed the demographic survey and volunteered to participate in an interview.

Since equity and gender might have been a concern, the seven demographic surveys were analyzed prior to the interviews to assure balance in the demographics of the subjects. It was also discovered through the demographic survey that one student had already earned 32 college hours, thus classifying him as a junior. However, since the student earned all of those hours while still in high school, either through concurrent enrollment or advanced placement courses, he still fit the criteria for a second-semester freshman as defined by the study and was kept as a subject.

For the subjects from the spring 2004 course, the instructor provided phone numbers for four students who volunteered to complete the demographic survey and be

interviewed. The class had a total enrollment of 19. Three interviews were subsequently scheduled. One student declined to be interviewed after being contacted.

These three students completed the demographic survey just prior to the interview.

One subject was a friend of one of the spring 2004 students interviewed. This subject participated in the interview with the friend and completed the demographic survey. The final subject was working for an acquaintance of mine in the office of academic records at the university. I contacted the subject by phone and he agreed to an interview. He also completed the demographic survey at the time of the interview. With five males and seven females, the sample was deemed to be representative of the institution.

Although a sample size of 12 would not be adequate for quantitative studies, or for some types of qualitative studies, it is a reasonable number for a phenomenological study. Mertens' (1998) recommended sample size for a phenomenological study is six. Mertens and others agree that when a researcher finds that themes and examples are repeating instead of extending the research, enough subjects have been utilized (Lincoln and Guba, 1985; Mertens, 1998). Moreover, fewer studies provided the opportunity for a more in-depth analysis of each student's responses.

Data Collection

A short demographic survey (see Appendix C) instrument was used. The survey was designed to extract basic personal information that may have impacted the subject's high school and/or college academic experiences. One-on-one guided interviews with each student were also used. (See Appendix D for the interview protocol.) Pseudonyms have been used in the study to protect the students' privacy. The names of the subjects

have been retained only on the informed consent forms signed by each subject. Each interview was audio-taped by the researcher and transcribed by a paid professional. The tapes and transcriptions were stored at the researcher's home in a locked cabinet, and only the researcher had access to them. Each subject was given the option of having the tape returned to him or her once the interviews had been transcribed. None requested the tape be returned.

Demographic Survey

The demographic survey included questions that might be relevant to the subjects' answers during the interview. The survey asked the age, gender, ethnic background, and parents' college attendance of each subject to help determine if any of these factors had bearing on the students' high school, college, or transition experiences. Information on the type, size, and location of the students' high school was also collected. This information was necessary to control for factors related to suburban or private schools that may tend to have a more college-preparatory curriculum than rural or urban schools.

Each student's high school GPA, curriculum, and activities were recorded to compare with the college GPA, curriculum, and activities, which were also collected. Types of courses and outside activities can influence a student's in-class experiences in both settings. This information was used to analyze any differences among the students that might be related to this variable.

Two other pieces of data collected on the survey were the student's ACT or SAT score, and the types of financial aid, if any, the student was receiving to attend college. The ACT or SAT exam is required for admission to MSU. Financial aid information was collected to give some indication of the student's socioeconomic status. In order to

maintain the study's focus on the positive aspects of college, it was determined that asking family income might be too personal and intrusive.

The demographic survey also served as a spontaneous springboard for discussion during the interview. If information was unclear or left unanswered, it was discussed in the interview session.

Interview Protocol

Semi-structured interviews, standardized using the same questions worded in an open-ended format to allow for individual responses, were used (see Appendix D). This type of interview was chosen because it reduces interview bias on the part of the researcher, facilitates the organization and analysis of the data, and alleviates the possibility of leaving out crucial questions (Fraenkel & Wallen, 2000; Rubin & Rubin, 1995).

Some constraints of this type of interview are that it provides little flexibility for natural conversation and may be constraining to the researcher and the subjects (Fraenkel & Wallen, 2000). To compensate for these limitations, the subjects were allowed to veer from the questions at times. Subjects were also asked during the interview if there was anything else he or she thought needed to be discussed. I also felt an interview conducted on the student's own campus would provide a non-threatening and more comfortable environment for the subjects. In addition, this method allowed the students to express opinions they might not have otherwise voiced if in a focus group or in written communication. Each interview was audio-taped, lasted approximately one hour, and the interview protocol included questions on the students' expectations about college

academics, and how those expectations might be different from what they have actually experienced.

The first and second interview questions were designed to make the subject comfortable, set the tone for the interview, and provide more description on the student's courses in high school and college. Questions 3 and 4 asked about the student's expectations for college, since according to the literature reviewed in Chapter 2, what students expect and what they experience may be different (Astin et al., 1997; Levitz & Noel, 1989; Light, 2001). Question 5 asked about the transition experience, and specifically about the student's GPA in college and how it might be different from the GPA in high school. GPAs are a common indicator for students regarding their progress (Astin, 1993).

Questions 6-9 were designed to ask about high school preparation for college, and to identify areas where the students might see they were or were not prepared academically. Question 10 asked again about the student's expectation for college, specifically if the student's perception of his or her academic success had changed since high school. Questions 11 and 12 delved further into the transition experience by asking about the student's successes and progress in college. Questions 13 and 14 asked what positive and negative forces may have had impact on the student's transition experience.

Questions 15-17 were designed to ask who or what has had impact on the student's transition experience. These specifically asked how the student had helped himself or herself, if there were any people specifically who had helped the student make the transition, and whether or not the institution itself had an impact on the student's

transition. Question 18 asked about the student's time management skills and whether or not time management had an effect on his or her academic transition.

Pilot Study

A pilot study was conducted with two students who met the criteria of successful students as defined by the study (first-time freshmen in their second semester). Although one was at a different institution than the subjects in this study, and the other had skipped one semester to participate in an internship, their responses were used to help shape the content of the demographic survey and the interview questions. Amy and Jay (pseudonyms), both relatives of the researcher, agreed to complete the demographic survey and participate in interviews.

Amy's and Jay's interviews, which were audio-taped and conducted in my home, led to some minor changes in the format of the interview. Most questions remained the same, as did the order of the questions, but I learned that more depth was needed in each question rather than allowing the first answer the subject gave stand alone. I also learned how to ask more open-ended questions and elicit more descriptive responses. These two interviews provided the experience needed to know what follow-up questions might need to be asked, and how to make the subjects and myself comfortable in the interview settings.

These pilot interviews also revealed that time management could be an important aspect of the transition experience for students. In the final study, Question 18, which asked about time management, was included in the interview protocol. (See Appendix D for the full interview protocol.) Also, a question regarding a students' perception of

whether academic ability was learned or inherent was removed. The question did not serve a purpose in the study and seemed to interrupt the flow of the other questions.

Analysis of Data

The demographic surveys were analyzed first to determine the subjects' similarities and differences in ethnic background, age, socioeconomic status, or high school type. It was determined that the subjects were representative of the demographics of the institution (Student Data Report, 2002) and therefore all 12 subjects were included in further analysis.

The interview transcripts were then analyzed by first reading each transcript on its own, and then again with the tape recording on to catch any missed statements or intentions. The transcripts were then selectively color coded (Strauss, 2001) for comments related to Bridges' (1980, 2001, 2003) transition phases. Once this selective coding was completed, additional comments of interest related to reorienting ways of thinking and doing were also marked and coded.

After reading all of the transcripts three times, themes began to emerge in the areas of high school academic preparation and students' expectations for college. Since these seemed to be common among the subjects, more literature in these areas was reviewed before continuing with the coding process.

The final round of selective coding included searching specifically for comments on high school preparation and students' expectations for college. These comments were also coded. As a final analysis, the transcripts and demographic surveys were examined to determine if students' ethnic background, socioeconomic status, or high school type appeared to influence the students' transition experiences.

Lincoln and Guba (1985) suggest that analysis should end when coding procedures begin to uncover the same themes repeatedly. Strauss (2001) defines theoretical saturation as the point when additional analysis no longer contributes to discovering anything new about a theme or category. This study prescribed to both of these practices.

Additionally, an analyst should not assume that variables such as age, gender, socioeconomic status and race are important unless they emerge as relevant (Strauss, 2001). Only factors that appear relevant to this study are included in the analysis. Finally, Strauss (2001) explains that sociologically constructed codes are those used by professionals and researchers while in-vivo codes are those used by the subjects themselves. In this study, in-vivo codes, the terms used by the subjects, are used when appropriate.

The Subjects

Five of the subjects were male, and seven were female. All were 18 or 19 years old at the time of the study. One subject is African American, another Indonesian, and the remaining 10 are white. Ten had at least one parent who attended college, with six reporting that both parents attended college.

Three of the subjects went to high school out of state, and two attended private high schools. Seven were from small or rural towns, one was from a suburban area, and four were from a large city. Three graduated from very large high schools with more than 1,500 students, two from mid-sized high schools with 749 to 1,499 students, three from smaller high schools with 300-749 students, and four from very small high schools with less than 300 students.

Four reported receiving no financial aid for college, four reported receiving grants, and two reported receiving scholarships. All but one had a computer in the home while in high school. Five worked during high school and five reported working during college, although not the same five.

The lowest high school GPA reported by any subject was 2.5, and the highest on a 4.0 scale was a 4.0. One subject reported a 4.6 GPA on a five-point scale. All but one graduated in at least the top 25% of his or her class, with six reporting graduating in the top 10%. The lowest composite ACT or equivalent was an 18, and the highest a 31.

Data were collected on each subject's high school and college course work as well as high school and college activities. Chapter 4 presents more detailed information on each student.

Scope and Limitations

This study is limited to a small set of subjects at one university. This institution has the highest level of admission criteria of any public institution in its state, and attracts many students from out of state. Additionally, the institution boasts of attracting more national merit scholars than any other institution in its state. In some instances, these factors may contribute to a higher self-efficacy in the students interviewed than might have been found at other institutions.

Although the state in which the university resides has several two-year community colleges and four-year regional universities, and another comprehensive university, the students in this study are not comparable with those at other institutions. It was decided that the subjects for this study should be chosen from only one institution to

allow for a fair comparison of students because of differing admission standards and demographics among the various institutions.

A limitation of this study is that all data used in this study was self-reported. The subjects are asked for ACT scores and grade point averages. In order to maintain the students' privacy, there was no cross-checking of this information with the institution. However, since the study is an examination of the transition experience, and not a comparison of academic merit, no suppositions are made based on the self-reported data.

Another limitation of this study may be the narrow pool of subjects that were not randomly selected. Students from only three freshmen courses were asked to participate in the study. Only 10 of 54 students in those courses agreed to an interview. These students, one of their friends, and a student worker at the institution are the subjects of the study. No suppositions or generalizations can be made regarding these students' representation of this university's student population or to any student population. The themes uncovered still are valid, however, but it cannot be determined from this study how often they would occur in a larger, more representative sample.

A final limitation of this study is that all subjects were volunteers. Students who volunteer for activities outside of class generally have better grades and are more successful (Pascarella & Terezini, 1991). Using volunteers may have affected this study's results.

In the following chapters, the subjects and data are analyzed in relation to the theories discussed earlier. Chapter 4 presents the data collected. Chapter 5 presents the findings from the analysis of the interview transcripts and demographic survey.

Chapter Four

Data Presentation

This chapter presents data collected during the spring semester of 2003 and the spring semester of 2004 using the demographic survey and guided interviews described in Chapter 3. Twelve subjects completed the demographic survey and participated in guided interviews (see Appendixes C and D). The chapter is divided into six sections, each examining the subjects' responses as they fit in the following categories: background factors, high school factors, college factors, preparation, expectations, and transition. The preparation and expectations categories emerged from the coding process.

Background Factors

This section is an analysis of the factors in the students' backgrounds that may have had an effect on the students' transition. The students' ages, ethnic backgrounds, and factors related to socioeconomic status are compared here. Table 1 presents self-reported demographics including age, race, gender and parents' higher educational attainment. A pseudonym for each subject was used.

Table 1
Background Factors of Students Related to Academic Transition

Name	Gender	Age	Race	Parents' College	Computer in the home during high school	Financial Aid
Aaron	Male	19	White	No	Yes	Scholarship and loans
Anna	Female	18	Indonesian	Yes, father	Yes	Grants and loans
Bob	Male	19	White	Yes, both	Yes	No
Chris	Male	18	White	No	No	Loans
Eve	Female	18	White	Yes, both	Yes	Small scholarship
Kay	Female	19	African American	Yes, father	Yes	Grants and loans
Kim	Female	18	White	Yes, both	Yes	No
Lisa	Female	18	White	Yes, both	Yes	Grants
Mary	Female	18	White	Yes, mother	Yes	No
Steve	Male	18	White	Yes, mother	Yes	Loans
Susan	Female	18	White	Yes, both	Yes	No
Tom	Male	18	White	Yes, both	Yes	Grants and loans

Since all students were either 18 or 19 years old, age was not a discriminatory factor in this study. Five subjects were male; seven subjects were female. Anna is Indonesian, Kay is African American, and all other subjects were white. Neither gender nor ethnic background appeared to be a factor in the transition of these students, as these seemed to be somewhat representative of the demographics of MSU (Student Data Report, 2002).

It is important to note that all subjects except Chris reported having a computer in the household during high school and that at least one parent of each subject except Chris and Aaron attended college. Since the demographic survey was given only to the subjects

of this study, it cannot be determined specifically if these are typical responses for the demographics of the institution. However, since 65% of all households in the United States with children aged 3 to 17 had a computer in 2000 (Home Computers, 2001), and 90% of children aged 5 to 17 now use computers (Pastore, 2002), it can be reasonably assumed that the subjects of this study are typical of college-bound students in the U.S. Additionally, each subject met or exceeded the admission criteria of MSU, which is higher than that of any other public institution in the institution's state.

Table 2 includes the three admission options at the time the first seven students interviewed were admitted for the 2002-03 academic year.

Table 2

MSU Admission Requirements (2002-03 Admission Standards, 2001)

Requirement	State Residents	Non-Residents
Composite ACT/SAT score	24/1090	26/1170*
High School GPA/Class Rank	3.0/Top 30%	3.5/Top 25%
GPA in the State Regents Required 15-Unit Core Courses	3.0 with a required ACT composite of 22	N/A
<i>*Non-Residents not meeting this criteria but otherwise meeting the criteria set forth for state residents are placed on a waiting list and admitted on a space available basis.</i>		

For the 2003-04 academic year, MSU's admission standards were increased.

Table 3 shows the three admission options for the final five students interviewed.

Table 3

MSU Admission Requirements (2003-04 Admission Standards, 2002)

Requirement	State Residents	Non-Residents
Composite ACT/SAT score	24/1090	26/1170*
High School GPA/Class Rank	3.0/Top 25%**	3.5/Top 25%
GPA in the State Regents Required 15-Unit Core Courses	3.0 with a required ACT composite of 22**	N/A
<i>*Non-Residents not meeting this criteria but otherwise meeting the criteria set forth for state residents are placed on a waiting list and admitted on a space available basis.</i>		
<i>**Residents in the top 30% of the graduating class and/or meeting the standards in option 3 are placed on a waiting list and admitted on a space available basis.</i>		

Anna's father has a Ph.D. and an M.D. and her mother went to college for "a few years." Kay's father attended college but her mother did not. Bob, Eve, Kim, Lisa, Susan, and Tom all reported that both parents went to college. Mary and Steve both reported that their mothers attended college but their fathers did not. Chris and Aaron were first-generation college students. Although the question regarding other family members attending college was not asked, Anna said she had two brothers in college in different states and Kay had a brother at another state university. Lisa's older brother was a National Merit Scholar at MSU and she said she was "sort of living in his shadow or something." Her parents, aunts and uncles also all attended MSU. Kim's older sister, brother-in-law, and sister-in-law all attended MSU. Susan had an older sister in college at another state university, and another sister in college in Canada. She also had a twin brother who is not in college. Aaron had a brother who attended another college on a baseball scholarship, but did not finish his degree.

Financial aid for the subjects varied. Anna paid for college with loans and grants and some financial assistance from her parents. Lisa received a grant, and Tom received grants and loans. Aaron received a scholarship and supplemented with loans. Eve reported receiving a small scholarship of \$1,000. Kay's father did not want her to attend this university, so she was paying for it herself. She received loans and grants and paid for her room and board by working in the student cafeteria. However, her father gave her money for "allowances and stuff." She said that if she needed money he probably would give it to her, but she said he would never let her "hear the end of it." Steve and Chris both reported using loans to pay for college, and Chris paid for his room and board by

working in the same cafeteria program that Kay did. Bob, Kim, Mary, and Susan received no financial aid.

High School Factors

This section examines factors from the students' high school experiences that may have had an effect on their transition. School information, GPA, class rank, ACT composite score, high school course work, and school activities were included here.

Table 4 presents high school factors related to academic transition. All data were self-reported by the subject, including ACT scores, GPAs, and class rank. Additionally, for the table, the descriptors on the high school size were from the NCES (2003) as follows:

- A = school size of 1-99 students
- B = school size of 100-299 students
- C = school size of 300-749 students
- D = school size of 750-1,499 students
- E = school size of more than 1,500 students

Since students reported only the approximate size of the graduating senior class, the size reported by the students was multiplied by four, indicative of the typical number of grades in a typical high school. This was the number used as the high school size in Table 4.

Descriptors on the town in which the high school was located were determined by NCES locale codes (2003):

- 1 = Large central city (Central City of a Metropolitan Statistical Area [MSA] with a population greater than 250,000)

- 2 = Mid-size central city (Central city of an MSA with a population less than 250,000)
- 3 = Urban fringe of a large city (Place within an MSA of a large central city and defined as urban by the Census Bureau)
- 4 = Urban fringe of a larger city (Place within an MSA of mid-size central city and defined as urban by the Census Bureau)
- 5 = Large town (Town not within an MSA, with a population greater than or equal to 25,000)
- 6 = Small town (Town not within an MSA, with a population less than 25,000 and greater than or equal to 2,500 people)
- 7 = Rural, outside MSA (A place with less than 2,500 people and coded rural and outside an MSA by the Census Bureau)
- 8 = Rural, inside MSA (A place with less than 2,500 people and coded rural and inside an MSA by the Census Bureau)

As described in Chapter 2, both the vendors of the ACT and SAT college entrance exams recommend certain high school core course work as preparation for college (ACT, 2003; The College Board, 2003). The “Rigor of Coursework” column includes the courses the subjects took in these recommended subject areas and only the courses at or above the rigor recommended by these organizations or Advanced Placement (AP) courses. If a subject reported working during school, this is included in the high school activities column.

Table 4

High School Factors of Students Related to Academic Transition

Name	HS Size and Type (Graduating Class Size), Town Size	HS GPA, Class Rank, ACT	Rigor of Coursework	High School Activities
Aaron	School size A Locale code 7	4.0 GPA Top 10% 28 ACT	<u>Math</u> : Geometry, Algebra II, Advanced Algebra I <u>English</u> : AP English (1 year) <u>Science</u> : Chemistry, AP Physics, Biology II, Biology I <u>Other</u> : Spanish (2 years), college concurrent enrollment	Student Council, National Honor Society
Anna	School size E Locale code 3	3.8 GPA Top 25% 950 SAT (20 ACT conversion)	<u>Math</u> : Algebra I, Geometry, Algebra II, College Algebra <u>English</u> : Expository Writing Minority/Women's Literature <u>Science</u> : Biology, Chemistry, Physics <u>Other</u> : French (4 years)	French club, chemistry club, national honor society
Bob	School size E Locale code 1	3.95 GPA Top 25% 25 ACT	<u>Math</u> : Calculus, Calculus 2, Trigonometry, Geometry, Algebra <u>English</u> : AP English/History (1 year) <u>Science</u> : Not reported <u>Other</u> : college concurrent enrollment	Golf, football, worked 25 hours/week
Chris	School size D Locale code 1	3.99 GPA Top 25% 22 ACT	<u>Math</u> : Algebra III, Trigonometry, Algebra II, Geometry <u>English</u> : Honors English (3 years) <u>Science</u> : Zoology, Anatomy, Chemistry, Biology <u>Other</u> : AP US History, AP World History, Ceramics	Student Council, basketball, worked 15 hours/week
Eve	School size C Locale code 1	4.5 GPA top 10% 26 ACT	<u>Math</u> : AP Calculus, Honors Pre-Calculus, Algebra II, Geometry <u>English</u> : AP English (2 years) <u>Science</u> : Honors Physics, AP Biology, Chemistry, Biology <u>Other</u> : AP Economics, AP U.S. History, AP Government, Spanish (4 years)	Soccer, Softball, Student Council, National Honor Society, worked 5 hours/week
Kay	School size C Locale code 6	3.7 GPA top 25% 19 ACT	<u>Math</u> : Statistics, Trigonometry, Algebra II <u>English</u> : Not reported <u>Science</u> : Not reported	Band, Piano, Community Leaders, worked 12 hours/week
Kim	School size E Locale code 1	3.78 GPA Top 10% 1120 SAT (24 ACT conversion)	<u>Math</u> : Pre-Calculus, Algebra II, Algebra I, Geometry <u>English</u> : AP English (4 years) <u>Science</u> : Physics, Chemistry, Integrated Physics, Biology	Volleyball, cheerleading, dance team, Honor Society, Student Council
Lisa	School size D Locale code 6	3.79 GPA top 10% 31 ACT	<u>Math</u> : AP Calculus, Algebra III, Algebra II, Trigonometry <u>English</u> : AP English (1 year) <u>Science</u> : Physics, Physiology/Anatomy <u>Other</u> : AP Art	Volleyball, Art Club, Honor Society,
Mary	School size C Locale code 6	3.27 GPA Top 25% 18 ACT	<u>Math</u> : Trigonometry, Algebra II, Geometry, Algebra I <u>English</u> : AP English (3 years) <u>Science</u> : Physics, Physical Science <u>Other</u> : Art (2 years), Spanish (2 years)	Choir, tennis, basketball

Steve	School size A Locale code 7	2.5 GPA Below 50% 24 ACT	<u>Math</u> : Trigonometry, Geometry, Algebra II, Advanced Algebra <u>English</u> : AP English (1 year) <u>Science</u> : Biology I, Biology II	
Susan	School size B Locale code 6	4.0 GPA top 10% 26 ACT	<u>Math</u> : Calculus, Algebra II, Algebra I <u>English</u> : English Literature <u>Science</u> : College Anatomy <u>Other</u> : Art (3 years)	Choir, Band, Swimming, Cheerleading
Tom	School size B Locale code 7	3.95 top 10% 23 ACT	<u>Math</u> : Algebra II, Geometry, Algebra I <u>English</u> : AP English (1 year) <u>Science</u> : AP Biology, Chemistry, Biology, General Science	Wrestling, Golf, Student Council, Key Club, worked (hours not specified)

School Size, Type, and Location

Eve and Susan both attended private Catholic high schools—Susan in a small, rural town in another state, and Eve in a large city about 20 miles from MSU. Susan’s school was small with only 27 in her graduating class. Eve’s school was much larger, with approximately 150 in her graduating class. Susan relocated the most of all the subjects, having attended school in Canada, the Caribbean, and graduating in another Midwestern state.

The other nine students graduated from public schools. Bob, Chris, Kim and Anna attended large public schools in suburban areas. Bob had 630 and Chris had 280 in their graduating classes and their schools were located in the same city as Eve’s, not far from MSU. Anna’s and Kim’s schools were in other states. Anna had 1,000 students who graduated with her, and Kim had 900. Anna attended a high school in the state during her freshman year, but attended the high school from which she graduated for the last three years of high school. Tom attended a public school with a graduating class of 50 in a small, rural town about 70 miles from MSU. Steve and Aaron graduated from the smallest high school of the students in the study with only 22 in their graduating class in a small, rural town. Kay, Mary and Lisa all attended mid-sized high schools in suburban areas of the state. Kay’s school, with a graduating class of 177, is about 50 miles from

MSU. Lisa's school, with a graduating class of 200, is just 15 miles from MSU and Mary's school, with 100 in the graduating class, is in the northeast part of MSU's state.

GPA, Class Rank, and ACT

Susan and Aaron had the highest high school GPAs with perfect 4.0s. Steve reported the lowest GPA at 2.5. Eve reported a 4.5 GPA on a 5.0 scale. All but Steve reported being in the top 25% of his or her graduating class. Aaron, Eve, Kim, Lisa, Susan, and Tom were in the top 10%. Aaron was valedictorian. Lisa had the top ACT composite score in the group with a 31, but said she took the exam three times to get the score she wanted. The lowest ACT was Mary's at 18, with Kay just above at 19. Anna and Kim's scores are a conversion from the SAT exam, on which they scored a 950 and 1120 respectively (Unitized Data System, 2002).

Coursework

Each of the subjects appeared to have taken what could be described as an average college preparatory curriculum in high school. Some did not report all courses in all subjects, so the following sections will report what was discovered about each subject.

Math Courses. All of the subjects had at least three years of math, with the lowest level of math among them being Algebra I. Only Kay did not mention taking Algebra II. She is the only one, however, who took Statistics. Five had Calculus, nine Geometry, and six Trigonometry. Anna had College Algebra.

English Courses. Nine students reported taking AP or honors English courses. Anna and Susan had literature courses, and the others reported taking the basic four years of English.

Science Courses. Science courses were not reported as consistently as the math courses. For instance, Kay did not list any science courses and Susan only listed College Anatomy. Biology, Chemistry, and Physics were the most common science courses among the subjects.

AP, Honors, and Concurrent Courses. Anna, Kay and Susan did not take any honors, AP, or concurrent courses in high school. All three, however, felt they took the more challenging courses offered at their schools. Only Bob completed concurrent college courses, and he also had honors and AP courses. Tom and Aaron each took two AP courses, Steve took one, and Lisa, Chris and Mary had several. Eve took mostly AP and honors courses all through high school, and only AP or honors courses during her junior and senior year.

Other Courses. Other than AP courses, six students reported courses that fell outside of the regular required high school curriculum in most states. Anna took four years of French, Eve took four years of Spanish, and Mary had two years of Spanish and two years of Art. Aaron had two years of Spanish. Susan had three years of art courses, and Chris had one art course.

Activities

Bob, Chris, Eve, Kay, and Tom all held jobs during high school. Bob worked about 25 hours per week, Chris about 15 hours per week, Kay about 12 hours per week, and Eve about five hours per week. Tom did not specify a number of hours. Susan said her parents would never let her have a job.

All of the students except Steve were involved in some type of activity in high school. Bob, Chris, Eve, Kim, Lisa, Mary, Susan, and Tom each participated in at least

one sport. Aaron, Anna, Eve, Kim, and Lisa were in the National Honor Society. Kay and Susan were in the band, and Aaron, Eve, Chris, Kim, and Tom were a part of the student council. Anna and Kay each did volunteer work.

College Factors

This section examines factors from the students' first semester college experiences that may have had an effect on their transition. These include course work, activities, number of hours, and GPA. Table 5 presents college factors related to academic transition. As with Table 4, if a subject reported working during school, this is included in the college activities column.

Table 5
College Factors of Students Related to Academic Transition

Name	Living situation	Major	First Semester GPA	First Semester Hours Completed	College Courses	College Activities
Aaron	Dorm	Political Science	4.0	14	English composition I and II, Freshman Seminar, Politics in America, Nutrition, Introduction to Math Analysis, Introduction to Fine Arts	Student congress
Anna	Dorm	Undecided	4.0	12	Drama, Zoology, Composition I, Intermediate Algebra	Sorority, volunteer work
Bob	Dorm	Criminology, Accounting, and International Business	2.2	13	Geology and Geophysics, Microeconomics, Calculus, Sociology	Fraternity, intramural sports
Chris	Dorm	Political Science	2.8	15	English Composition 1, Astronomy, Freshman Seminar; Logic; American Federal	Working 20 hours/week

					Government	
Eve	Dorm	Started at Education, now Letters	3.8	16	Geography, Political Science, English Composition 2, Pre-Calculus, Intermediate Spanish	None
Kay	Dorm	Advertising	2.7	14	Film, English I and II, Fundamentals of Algebra, Sociology, African American History, Pre-Calculus, Mass Communications	Working, dorm advisor
Kim	Dorm	Communications	3.0	15	Political Science, Gateway to College Learning, Principles of Communication, Human Geography, Statistics, Communication Theories, Public Speaking, Freshman Seminar, Understanding Music, Psychology	Campus Crusades
Lisa	Home owned by her parents	Started as Art, now Physics	4.0	12	Art, Sociology	Working
Mary	Dorms	Started as Pre-Med, now Philosophy	0.75	3 completed, attempted 13	Psychology, English Composition, Gateway to College Learning, History, Math, Probation Class, Philosophy, Writing, African American Studies	Pre-Med Club
Steve	Dorm	Computer Science	1.6	9	American Federal Government, English Composition I, Introduction to Psychology (twice), Gateway to College	Working 15 hours/week

					Learning, Health Professions, Freshman Seminar, Introduction to Elementary Functions, African American Studies	
Susan	Dorm	Education	3.5	18	Prerequisite to Calculus I, Freshmen English I and II, Music Appreciation, Meteorology, Gateway to College Learning	Crew Team
Tom	Dorm	Zoology	4.0	11	English Composition I, General Chemistry I, Anthropology	Working

First semester college GPAs for the subjects ranged from Mary's 0.75 to Aaron, Anna, Lisa, and Tom's 4.0s. If Bob included his hours while concurrently enrolled in high school, his GPA would be higher than the 2.2 reported above and be a 3.2. The number of hours completed by the subjects ranged from three by Mary to 18 by Susan. Aaron, Chris, Steve, Kay, Lisa and Tom reported working during college. Anna was a member of a sorority, Bob was in a fraternity, and Susan was on the crew team. Kay was a dorm advisor and Aaron was a member of student congress.

All but Lisa lived in a dormitory on campus. Kay had a room to herself because she had a fight with her roommate and the roommate moved out. Lisa lived officially with her parents, but unofficially in a house they rented to her and her roommates.

The subjects had a variety of majors, with only Chris and Aaron majoring in the same fields—political science. Anna was the only undecided major. Kay was an advertising major, Bob claimed a triple major in criminology, accounting, and international business, and Tom was a zoology and biomedical sciences major. Eve was a

letters major, a degree pursued for many in fields that require post-baccalaureate work such as law and medicine. Lisa was a physics major, Susan an education major, Kim a communications major, and Steve a computer science major. Mary changed her major from Pre-Medicine to Philosophy after not doing well her first semester.

Except for Lisa, who took almost exclusively art courses her first semester, all were enrolled in common general education courses for freshmen which included composition I or II, a math and/or science course, and a social studies or humanities course. Only Anna and Mary reported having remedial courses—both algebra.

Expectations

This section includes comments made by the students on their expectations of college before arriving. All of the students said they expected college to be difficult. It appears to have been more difficult for some than for others.

Aaron, Eve, Lisa and Mary all said that it had not been as difficult as they expected. Aaron said it is easier academically than he thought it would be, and said it was similar to high school because some courses are difficult and some are not. Eve attributes her more positive experience to her high school preparation. She said she learned to manage her time better than most because she was in so many activities and demanding classes.

Lisa admitted that it has been easier for her than she expected because she took mostly art courses her first semester and they were not very “intellectually demanding.” She thought the professors would question students “a lot more than they do.” She said she expected the next semester, when she would change her major to physics, to be more difficult. Mary said she had family and friends who said the professors would not care

about her and that she would have to do all of her work. She said she “always had a feeling” in the back of her mind that she “wouldn’t do good,” but that it seemed easy when she got there.

Anna, Chris, Kay, Kim, and Tom all said they knew it would be more difficult than high school and all reported that it has been for them. Anna thought it would be “really, really challenging” but found that there was a balance with some courses challenging and some not as challenging. Chris also thought college would be “ridiculously hard.” During the first semester, he was not sure how he would do and lacked confidence. His professors, however, were a lot more personal than he expected.

Kay said she knew academically college was going to be difficult, but she expected to do better than she was doing. She expected it to be hard because of how family members and television have portrayed college. Kim said is it exactly as she expected. She knew she would have to work hard because she has family members who attended MSU and they said it was difficult.

Bob’s experience with concurrent enrollment at a community college made him think college would be a little less difficult than it proved to be. In essence, he had two college transitions—one to adjust to his concurrent college courses while in high school, and one when he moved to the university. In high school before concurrent courses, Bob thought he would have to do a lot more work and study a lot more than he actually ended up having to do. After the concurrent courses, he thought moving to the university would be only a little harder than his concurrent courses. Like Kay, he said it was actually a lot harder, “the classes keep getting harder...”

Susan and Steve said they did not know what to expect. Susan took a summer school course at MSU the summer between high school and college that she said was really tough at first but got easier. Steve said he did not really think about it a lot, but thought that if it was too hard at MSU and did not work out, he could go to a community college instead.

Preparation

This section includes comments made by the subjects on their academic preparation in high school and how it did or did not prepare them for college. Some students felt prepared academically for college, but others did not. Students commented on the effect of honors, AP, or concurrent courses on their perception of preparation, the amount of homework they had during high school, their math and writing preparation, and the effect teachers had on their experience.

Honors, AP, and Concurrent Courses

Aaron, Bob, Eve, and Lisa entered their freshmen year with several credit hours earned from AP or CLEP exams, or concurrent college courses. Aaron and Bob completed several concurrent college courses while in high school and also had AP courses. Aaron felt that his concurrent courses were college-level and prepared him for further college-level work. They were taken either by correspondence or interactive television.

In addition to concurrent and AP courses, Bob had honors courses. He entered college with 36 college credit hours. He did not feel that the concurrent courses helped prepare him academically, but did say they helped ease the transition. He also said he was

always forced to take honors courses because his older sister had. Both he and Lisa said their parents convinced them to take harder classes because they knew the regular curriculum might not be enough to prepare them for college. Lisa had several AP courses and started college with nine credit hours. She said she took the hardest courses her high school offered.

Eve took mostly AP and honors courses all through high school, and only AP or honors courses her junior and senior year. She said AP classes “would require a lot more of you” than other classes because they would spend more time with the materials, rather than on “worksheets, like a regular class would do.” For instance in AP English she read seven novels while some in other classes only read three. Eve started college with 19 hours of college credit from AP and CLEP exams.

Kim had four years of AP English and said those classes were not very different from the regular English courses at her school except that the books “would be discussed in a completely different way...(they) went a lot deeper.” Mary had three years of AP English and said her English teachers were very good, and very strict.

Aaron reported having one year of AP English, and one year of AP Physics. He said he did not feel that his AP courses were any different than the regular courses at his school. He also was not able to take the AP exams because his principal did not order the exams early enough.

Chris had AP U.S. History and an honors English course. He felt that they were geared more for the students to earn an A, rather than focused on teaching the subject. He did not feel they prepared him for college. Tom said he only had one hard class, AP English. He also had AP Biology, but said the teacher was not very good and the class

was not very hard. He did not pass either of the AP exams. Steve had one AP English course, and said it was the only course where he really had to do writing assignments.

Anna, Kay, and Susan did not report taking any honors, AP, or concurrent courses, but Anna and Kay felt they took challenging courses. Anna says it was because of the high school she attended and Kay said it was because she would have gotten bored taking the same subjects again.

Homework

Bob, Chris, Kay, Kim, and Tom all said they hardly ever had homework, and Lisa said that the only homework she had in high school was math. Tom did specify that he had homework in his AP English course. Eve said she had an hour or two of homework every night, and Susan said she had what was “probably normal” for homework in high school. She had more homework in the Caribbean because “they really expected a lot of us,” but she also had “quite a bit” in boarding school as well. Anna said she had a lot of homework, but did not specify a quantity. Aaron only had one course he felt was difficult and where he had a good amount of homework. Steve said he had homework, but never did it, and Mary did not comment about homework specifically.

Math

Aaron, Anna, Tom, and Kay specifically recognized their lack of preparation in math. Anna and Tom said they did not take a math course during their senior year but thought if they had it would have prepared them better for the college math they needed. Aaron said he had a bad math teacher in high school and hated math because of it. He

said the teacher was brilliant, but would get frustrated when students asked questions, and that most everyone in his graduating class who went to college is in remedial math.

Bob said in high school he was able to do the whole week's worth of math work during the first period and then sleep in class the rest of the week. Kim said her high school math prepared her somewhat for her college statistics course. None of the other students mentioned math preparation.

Writing

Aaron, Bob, Chris, Eve, Kay, Kim and Tom all felt their writing skills were good enough for college. Aaron, Eve, Kim and Tom especially said their writing skills were enhanced by an AP English course that required a lot of writing. Kim said she did "a ton" of writing in her AP English courses and not only did they help her writing, they helped her learn time management because she had to learn how long it was going to take to write a paper. Chris, however, said he never took an essay exam in high school, though his honors English teacher tried to teach them. Steve said he was an "awful writer" and not good at expressing himself on paper. He said, though, that he usually knew what the teacher expected and could do it when asked.

Bob also did a lot of writing in high school, and Kay just said writing is not hard for her because she loves it. Eve commented: "Some people come to college and they had never written a paper before, and I am shocked at that. I've been writing papers since the 7th grade." Steve said his AP English course was the only one where he had to write, but it was not really enough to prepare him for college.

Anna said her writing skills were lacking, even though she took "mechanics tests" every year in high school and did a lot of writing in high school. Her reasons, she said,

were because she only learned what she had to in order to pass the test and that her high school teachers “graded a little too nice.” During her senior year, however, she said she got better because she had a “really excellent teacher and he just hounded through your paper.” She said his remarks helped her improve.

Teachers

Several students mentioned the impact of teachers on their high school academic experience. Aaron, Anna, Kay, Kim, Lisa, Mary, Susan, and Tom all said their classes were hard or easy depending on the teacher. They also explained that the teacher they had made a difference in how they performed in the class. When the teacher had higher expectations, the course was harder but they learned more.

Lisa said specifically that her college government class was her hardest because her instructor had high standards. Susan said that some of the courses were challenging in high school, but it really depended on the teacher. Susan had teachers in the Caribbean who had high expectations which made the courses more difficult. Tom said the same about his high school chemistry teacher, and Aaron said the same about his high school government teacher.

Tom said his high school English course prepared him because it was an “AP class and (he) knew the teacher was good...” He said he had never had that kind of rigor before, and that he liked the teacher so he “worked hard for her.” He also had AP Biology, but said he did not have a very good teacher and it was not very hard. He did not pass either the AP English or AP Biology exams.

At the same time, several mentioned that they had “bad” teachers who contributed to either a bad grade, bad experience, or not passing the AP exam for that class. Eve said

her AP History class was a “bad class” because “that wasn’t a very good teacher.” Eve also took pre-calculus in high school and said even though she had a bad teacher, she still liked her.

Chris felt that there were “always ulterior motives behind everything” in his high school classes. He said the teachers seemed to be “more worried about their appearance to everyone else than the actual education” the students received.

Each of these comments explains that a student’s view of his or her teacher influenced how that class impacted his or her learning and college preparation.

Transition

This section includes comments made by the students on their transition experiences from high school to college, other than those related to expectations and preparation as described above. The issues of time management; study habits; class attendance; and peer, faculty, and family support all seem to have had an effect on the transition of these students.

Time Management

Anna, Kay, Lisa, Mary, Susan and Tom all said that managing their time had been difficult and that it was easy to procrastinate. Aaron, Kay, Susan, and Tom all said they focus on just getting work done before it is due. Anna was overwhelmed by all that she had to do and realized that she had to allow more time for preparation for class than before. She said her ability to keep track of everything helped, but she still had a hard time finding time for everything. Lisa explained it this way:

In high school it was very regimented, you had this time for this class, this time for this class, you didn't have to try to hard to fit in a time to study for every class and you didn't have to study for every class. Now, aside from wanting to do social activities, which are presented to you everywhere, which all sound pretty cool... "maybe I'll go do that," you gotta choose to be wise and sometimes you have to choose to be wise and stay home because there is just not enough hours in the day.

Mary worked on time management her second semester because it was such a problem during the first semester. She said she used a planner the second semester and it helped.

Aaron, Bob Chris, and Eve said they personally did not have a problem, but they recognized time management as an issue for success in college. Eve said she learned to balance sports, school activities and homework during high school, and college was not very different. Bob had the most interesting comment on time management:

I think I do a pretty good job of keeping everything balanced. I study Sunday through Wednesday nights, and Thursday, Friday, and Saturday party, and Sunday just kind of relax, and then Saturday just usually do something. If I have a big test or something I'll start studying beforehand. Like I have a test on Thursday, so tonight [Monday] I'll start studying hard core, but every night after class that night I will go back through and read my stuff. If I have homework, I'll do that then while it's fresh in my mind and the next day, since I forget in between, I'll re-read for the next class, so it's just constant.

Study Habits

Every one of the students mentioned having to adjust their study habits from what they did in high school in order to be successful in college. Anna, Chris, Eve, and Lisa changed the way they studied for tests. Anna tried to study in smaller increments rather than cramming the night before. Eve spent more time studying and also went back to the books and re-read and highlighted. Lisa also went back to the books but she tried to summarize everything. Chris learned that everything presented in a class and also anything from a textbook could show up on a test. He said when he got a test there would be questions on it that he had never even seen, because he did not realize that things not discussed in class would be on an exam.

Bob learned to read before he went to class, but Kay and Susan realized they did not have to read everything. Kay skimmed instead of reading in the interest of time. Susan said a lot of what she was given was just for information and as long as she did the work and understood it she did not have to read everything.

Both Bob and Kay learned it was easier to do homework every night. Kim increased the amount of time she studied and Aaron had to learn to use notes for studying because in high school he said he could remember the lectures without notes. He also had a difficult time at first in one specific class discerning what he needed to write in his notes in order to study for the exam.

Class Attendance

Bob, Eve, Kay, Kim and Susan each mentioned that class attendance was an important part of transitioning to college. Bob said his uncle instructed him to go to class. Bob said, "I show up now and it makes a lot more sense." Eve, Chris, Kay, and Kim all

said they did not miss class unless they had to. Eve went to every class her first semester, even the earliest ones. She said she felt like she needed to show up to class, even if there was no attendance credit, because “it really helps.”

Kay said she saved her absences for when she might really need them, for instance when she might get sick or was really tired, but said in the end, not going was “not worth it.” Chris said he felt guilty the one time when he did skip class intentionally.

Susan, Steve, and Mary all indicated that not going to class had a negative effect on their transitions. If Susan did not go to class she said she fell behind, and then found herself not wanting to go the next time because she was behind. Steve only attended a few meetings of each his classes. He said it probably had a negative impact on his transition because he might “have picked up a lot more” if he had gone to the lectures. One exception for Steve was his Gateway to College Learning course that he said he only missed once. It was one of the courses he passed.

Mary missed the most classes and exams of all of the subjects. She said she was sick most of the semester and some of the instructors did not accept her doctor’s notes. She said of some of her classes, “I never went to class, that’s why I failed everything.” Susan said not going to class had a negative effect on her transition. She said she fell behind and then she did not go again because she was behind and just got farther behind.

Peer, Faculty, and Family Support

Anna and Tom both said that getting to know people helps. Anna was a member of a sorority and Tom’s roommate was in a fraternity. Bob was in a fraternity and said it had both a positive and negative effect for him. The study groups and test files were the most helpful, but some of his peers did not study as often as he thought they should. Kay

had a boyfriend from Nigeria that provided her with motivation, and Lisa said her friends helped her and that she had a “good balance” with them. Lisa also said living in the dorms helped her because they were all “in the same boat.” Kim had a group of close friends she said she could “cling to.” Steve said he really came out of his shell and met a lot of new and diverse people. Both Aaron and Chris said it had been difficult to meet people because they did not feel they fit in very well with the normal crowds of college students who liked to drink, do drugs, and attend parties.

Anna, Kay, Lisa, Mary, and Susan each said that faculty had an effect on how they have done. Anna and Kay both said they talk to instructors after class to help them understand the material better. Lisa developed a close relationship with an art teacher who was “real motivational.” Susan’s summer English teacher helped her develop a love for writing. Mary was in a “probation” course that helped her see what she needed to do to be successful. The faculty member for that course was also her discussion group leader, and she said that had been helpful for her.

Steve liked the personal contact with instructors in his smaller classes. He said it helped him do better in a class if he could have that contact. Chris said the faculty took time to make sure the students understood the material more than he expected and were good about e-mail and having office hours. Aaron said the advisors in the honors college had been the most helpful to him.

Bob, Chris, Kay, Lisa and Susan all said their families had a positive effect on their transition. Lisa said her family had made her a little more self-motivated because of their expectations. Susan talked to her sister regularly and received advice. Bob and Kay both said their parents were always helping by giving them advice. Chris was very close

to his mother in high school and remained in frequent contact with her in college. He said she was very supportive and helped him with his confidence. Steve said his mother “nagged” him constantly, but he did not say if this had a positive effect or a negative effect on his college transition, only that he did not appreciate it.

Summary

In this chapter, I have explored the students’ responses as they related to the categories of background factors, high school factors, college factors, expectations, preparation, and transition. The age, ethnic background, and gender of the subjects appeared to not be a factor in the transition for these students. The financial aid these students received varied from none to work study and grants.

In high school, most of these students had high GPAs in high school and all but one were in at least the top 25% of their graduating class. Their ACT composite scores ranged from 18 to 31, a large variation. Five of the students worked during high school, and all but one were involved in some activity in high school. The type, size, and location of their high school varied. In college, these students had various majors, some changing during their first semester. The students each carried an average load for a first semester in college (between 11 and 18 credit hours) and all but one took general education courses. Also, all but one lived in a dormitory on campus. Five reported working during college, although not the same five worked during high school.

Most reported expecting college to be difficult, and to varying degrees it had been for each one. Academic preparation in high school, especially in math and writing, was an issue among the students. Teachers and courses with higher expectations were said by several of the subjects to provide better preparation. Time management, class attendance,

and support from others had varying effects on the students in their transition from high school to college. All said they had to adjust their studying habits to maintain success in college.

Chapter 5 includes an analysis of the data presented in this chapter. The subjects' responses are evaluated through the theoretical lens of Bridges (1980, 2001, 2003) transition phases, and the ways in which the students reorient their ways of thinking and doing in the context of the academic transition are examined. Additionally, Chapter 5 presents themes that emerged from coding related to the students' high school academic preparation and expectations for college.

Chapter Five

Data Analysis

This chapter will provide an analysis of the data described in Chapter 4. The first section examines the data using Bridges' (1980, 2001, 2003) transition phases. Following is an examination of these students' means of reorienting their ways of thinking and doing to become and remain successful in college. The third section examines the subjects' comments related to high school preparation, and the fourth examines the subjects' expectations of college. The next section examines other themes of relevance to the study. The findings are included in the last section.

To begin, it is important to note that some items collected have proven to have no relevance to this study. All subjects were 18 or 19 years old at the time of the study. Seven of the subjects were female, and five were male. There was no evidence that gender or age had an effect on the results of this study. One subject was African American, a second Indonesian, and the remaining 10 were white. These demographics are somewhat typical of MSU (Student Data Report, 2002), and race/ethnic background proved to not be a factor in these students' responses.

Also, all but one subject reported having a computer in the household during high school. Research shows that 65% of all households in the U.S. with children aged 3 to 17 had a computer in 2000 (Home Computers, 2001) and that 90% of children in the U.S. between the ages of 5 and 17 now use computers (Pastore, 2002). This evidence and a lack of significant differences in any of the variables of this study show that not having a computer was not an important factor in this study. This data was presented in Chapter 4 as collected, but will not be included in the analysis.

Bridges' Transition Phases

As discussed in Chapter 2, Bridges (1980, 2001, 2003) surmises that every transition includes three phases: an ending, the neutral zone, and a beginning. For the students in this study, the ending experienced is leaving high school and the beginning experienced is success in college academics. Most students in this study showed some evidence of being in Bridges' neutral zone, although some were closer to the successful transition at the new beginning and some were lagging behind and hanging on to the old ending. If one views the neutral zone as a continuum with the end of high school at the beginning of the line and the successful transition to college at the end of the line, most of the subjects of this study would fall somewhere on the line. Some were closer to the old ending (the beginning of the line), and some were about to cross over to the new beginning (the end of the line), but all showed evidence of being somewhere on the neutral zone line.

The Ending Phase

Although all students had physically left high school, and high school academics, two seemed to have more difficulty than others transitioning to college and the rigors of the courses. Mary and Steve both missed the most classes and also had the lowest first semester GPAs—0.75 and 1.6, respectively. Both also showed some signs of having difficulty letting go of their old ways of thinking and doing.

Mary seemed to be in a denial phase. Although her GPA was 0.75, she said that her college courses were much easier than she expected. In fact, she said her remedial algebra class was so easy she found it boring so she dropped it when she got behind because she missed too many classes. She said her Gateway to College Learning class

was “so easy it was unbelievable” and her psychology teacher was “just really, really easy.” In spite of how easy college seemed to be to her, she passed only one course her first semester—English composition. At the same time, however, she said she really does not know what her “problem” is, and that she feels like a “loser” for only passing one class. She mentioned also that she had gone home every weekend and that she calls home and cries so that her family will feel sorry for her and take her shopping. Mary acknowledged that she was physically ill much of the first semester and was in a special class for students on probation in her second semester, which seemed to help.

Steve had decided to drop out of college by the time the interview for this study was conducted. He admitted that he hardly went to class in either the first or second semester and that he did very little reading or studying. He did not say anything about trying to change his behavior to be more successful, but said he would rather be working. He found his classes boring, and spent his time working or socializing rather than studying or going to class.

Neither Mary nor Steve showed signs of making the academic transition to college. Mary seemed to be a little further along the continuum than Steve, but only time would tell if that would remain the case.

The Neutral Zone

Every student in this study showed some evidence of Bridges’ neutral zone. Bridges (1980, 2001, 2003) says the neutral zone is the place between what was, and what will be, and where an individual’s psychological realignment and repatterning will take place. In this stage, an individual may feel confused, broken apart, lost, and empty. It is a time when people’s anxiety rises, motivation falls, they miss work or school, they

emphasize their weaknesses, they are overloaded, become polarized and are vulnerable to attack from the outside and inside. The students in this study showed signs of being scared, worried, and nervous, having a hard time in classes and with time management, concerned about their performance, and procrastinating because it is hard to balance their lives academically. Even though they had started their new beginning, it would appear that many were still in the transition process and partially in the neutral zone, if not completely.

Words and phrases such as “nervous,” “worried,” “really hard,” “overwhelmed,” “really tough,” “concerned,” “procrastinate,” “more difficult,” and “not enough time” can be found throughout these students’ comments. This time of “lostness” (Bridges, 1980) is evident in every interview, but especially in the comments from Anna, Bob, Chris, Kay, Lisa and Susan.

Anna said her drama class was really hard and she is not doing well in her zoology lab because it is not structured like she is used to classes being. One of her first professors used “this high vocabulary” and talked about things that went “way over” her head. She was overwhelmed by all the syllabi: “I was like, how am I going to do it all?” She said keeping track of everything was hard and that time management has been “tough.” Her words demonstrate the lostness of the early stages of the neutral zone.

Bob said he was not prepared for how much time he would need to study. His classes keep getting harder and he procrastinated on studying: “I was like man I gotta study and I would study for about 30 minutes and I’d go insane because I wasn’t used to it.” Bob’s stress at changing his study habits is also an example of the feeling of lostness in the neutral zone.

Chris confided that he had a problem with confidence and that he still was not sure he was going to make it at MSU. He felt unprepared for college and for the lower GPA he had received after his first semester, and said he always “freaks out” when it comes to tests.

Kay said bluntly that her classes were hard and she did not like college. She worked too many hours outside of college and had to push herself harder. She skimmed assignments rather than read them, to get just what she needed to know. She said she could have done better at her grades, but that she “earned what she got.” She also said she procrastinated on assignments often, and did just what she had to do to get by. Kay seemed the most lost of the students. She was doing what she had to do, but felt that the changes were out of her control.

Lisa had a difficult government class because of a lot of reading and “hard” tests. She had a lot of writing she was not used to. She thought studying was going to be easy, just like it had been in high school. She said knowing what to study was tough and time management was hard because “you have to choose to study.” Lisa’s comments show that she was having difficulty letting go of her old ways and using new tactics for success.

Susan dropped a chemistry course because she found she was getting so far behind there was no time for anything else. She “got nervous” about being a meteorology major and changed it. Her classes were difficult and she said she was “supposed to just absorb everything.” Her classes were too big, and she said they handed her the information and she had to “learn it, love it, and know it.” Susan’s GPA from high school to college dropped she said because there were other things to do besides study and she

“put things off.” She said she doesn’t like reading, so she procrastinates “then it takes forever to do it, so I don’t ever actually get it done.” Not going to class created a problem for her and made her fall farther behind: “That happened with me in my math class yesterday and I love math, so that wasn’t...that was really crushing. Mentally, I was just like, this was my favorite subject and I can’t even go to class.” Susan had the most negative comments overall, providing examples of the overwhelming feelings of lostness. She does show, however, signs of making progress toward her new beginning.

Although the six students above did not seem to be trying to hold on to their old lives and ways of thinking and doing, neither had they completely made the successful transition to college academics. They still did not feel completely confident about their transition and felt somewhat unsure and lost regarding continuation through the transition. Meanwhile some of the students who would seem to have most successfully made the transition to the new beginning—Aaron, Kim, Eve and Tom—also showed some signs of lostness from the neutral zone.

Aaron described going to one of his first college math classes and hearing the instructor say he should have had some of this content in fifth or sixth grade. He did not recognize any of it so he felt overwhelmed. This is most likely attributed to Aaron’s poor high school preparation in math, however, rather than to Aaron’s own difficulty with transition. He also had trouble in the first few weeks of one course with determining what to write in his notes in order to study for the exam. The most telling aspect of Aaron’s comments regarding still being at least partially in the neutral zone is the fact that he said he went home every single weekend.

Kim said she “breezed” through high school so she had to adjust the way she took notes and the amount of time she studied. She described one course as very difficult and frustrating, and said it made her have to “really think deeper.” She had the most trouble with her roommate and said her first semester was “horrible” although the cause was not academics. She went home about every three weeks.

Eve said her second semester was more difficult because there was a lot more reading. She had a teacher she said could not translate the information well to the class and it frustrated her. After that experience she said she was “not doing any more math, ever.” She also said she had to work hard in all of her classes and she was not used to that. Eve’s frustration is a sign of her realignment process to her new beginning.

Tom said his semester was going to be tough with 2 or 3 tests in one week, and he was “worried and nervous.” He said his math skills were “lacking,” and he dropped an engineering course because it was “too tough” at that time.

Each of these four students used some words and phrases that are indicative of the neutral zone, but as the next section will explain, they have more successfully made the academic transition into the new beginning.

The Beginning

Other than a few comments about their earliest college courses, Aaron, Eve, Kim, Tom seemed to have successfully made the transition to college academics. Some evidence in the data supports the idea that they had made quite a bit of progress in the transition to the new beginning.

Aaron, who had a 4.0 GPA and was valedictorian at his high school, had maintained his 4.0 GPA after his first semester of college. He had not yet made a grade

lower than an A, but was mentally preparing himself for that to happen. He said his attitude toward grades had changed, and that Bs “don’t look so bad now.” Aaron used an electronic calendar to manage his time and also started studying for his tests a day or two before they were due. He adjusted his note-taking and studying to fit what his instructors expected, and had not had trouble adjusting to the more difficult course work.

Eve said she was doing fine because she managed her time well and knew how to study. She had a job that forced her to make time to study and she said she fit in well. She worked hard when she had to and was open to the changes in her life.

Kim said she had to study and “really think” for one of her courses, but the difficulty did not worry her. She enjoyed the larger classes, and understood the expectations of her. She said she started going home less often and her academics were better than she expected.

Tom had earned a 4.0 GPA his first semester of college, and seemed on track to continue doing well. He seemed to know that in order to reach his goal of being a chiropractor he would have to work hard in college. He knew the classes would get harder, and he was successful at managing his time to get assignments done.

These four students seemed to have made the transition successfully to college academics. They managed their time well, did assignments on time, went to class, and earned high first semester GPAs. Their comments seemed to explain that if there were difficulties, they would handle them and move on to the next stage. The next section explains how most students were able to reorient their ways of thinking and doing, signs of a positive transition to the new beginning (Bridges, 1980, 2001, 2003).

Reorienting Ways of Thinking and Doing

All but one of the students in this study demonstrated a reorientation of their ways of thinking and doing to continue to be successful in college. Steve, as mentioned previously, had already planned to drop out of college before the interview and did not mention any strategies he had used or planned to use to change his progress in college.

Anna and Susan both used writing as a coping mechanism. Anna gathered her syllabi and “wrote it all down” her first semester. She said she wrote everything down. Susan also wrote everything down in an organizer and would go “home later and try to find another day that [she] can put those to.” She said that was how she dealt with her tendency to procrastinate.

Eve and Kay both learned to accommodate within their time constraints. However, both said they had problems with time management. Eve said she used every hour that she had to study because she did not feel there were enough hours in the day. Kay said she completed things as they were due, and that whichever was due first, got completed.

Bob, Chris, Eve, Kay and Kim all assimilated to their environments in one way by going to class. Eve and Chris specifically said they even went to the 8:30 a.m. courses and Kay said she saved her absences for when she was really sick or very tired. Bob’s friend of the family told him that going to class was the best advice he could give, and Bob took him up on it, saying it made sense. Eve said it was important to show up to class, even though there was no “attendance credit.”

Several students mentioned reading as a way of coping. Ann read to find information, and Bob read ahead before class. Eve read and reread before tests, and Lisa

summarized what she read and also went back over it before going on to something else. Kay knew she was “supposed to read the books,” but said she skimmed for important information and skimming was better than not reading at all. Along the same line, Susan said she figured out that she does not really have to read all of the pages she is assigned and that what her instructors tell her can just be suggestions to help her. Aaron said he always read before going to bed.

Accommodating better study habits were also mentioned by Anna, Bob, Kay, and Susan. Anna said she tried to break studying down into a schedule to see when things were due. She tried to do as much as possible at one time and spaced things out. Bob said he used his fraternity’s test files and studied in groups for exams. He said he studied a couple of hours every night. Kay said she learned to do math homework every night, and Susan said being on the crew team has helped her a lot because she had to get up early and had a lot of time between her practices and class and in which to do her schoolwork. Aaron knew how much time he had to study, and made sure he started studying for tests a couple of days before.

The students also learned to assimilate by handling issues with faculty. Bob had to discuss with an instructor having his grade changed when he thought the instructor had given him the wrong grade. He ended up with the A he felt he deserved only because he took the initiative to talk to the instructor. Kay said she tried to meet with her teachers individually because they “throw you a bone sometimes when you need it.” Similarly, Susan said she did not put her hand up in class but would talk to teachers afterward when she has questions. At the same time, Lisa said she had learned that college professors did not tell you what you need to do; you had to take the initiative. Chris had differing moral

views than one of his instructors, but learned to handle it and even said he liked the instructor by the end of the course.

Anna, Bob, and Tom learned which courses to enroll in. Anna said she tried to balance her course load so that she had some easy courses and some challenging courses. Bob enrolled in extra classes so he could drop the ones that he felt were not going to work out. Anna talked to others and used her older sorority sisters for information. Tom was not in a fraternity, but he used his roommate's fraternity brothers for information.

Only Kay and Susan mentioned using services provided by the institution. Kay used the writing center and one of the tutoring services. She did not like the tutoring service because it was group tutoring and she did not feel she learned much. Susan also said she had used the writing center and found it helpful.

Several mentioned other people as being beneficial to their transition and helping them to assimilate. Anna said she talked to others and used her older sorority sisters for information and help. Chris talked to his mom frequently because she gave him confidence. He also had a roommate that helped him study and stay motivated. Lisa surrounded herself with people who had the same study habits as she did, and disassociated with those who did not. Susan talked to her sister a lot for advice. She also had her friends proofread her papers. Kim had a close group of friends that she used as a support group. Tom said getting to know people helped him. One other interesting coping mechanism: Kay chewed gum in class to stay awake.

These students have learned to cope by going to class, writing things down, reading ahead before class even if it is just skimming for basic information, and working studying into their schedules in spite of the temptations to do other things. They were

managing the information they received in ways that made them successful in their courses. They were assimilating by talking to others for information and study help, including their instructors, peers and family, and using some of the services the institution offered. They used others to help them understand what needed to be done for success.

To accommodate, they were spacing out their study times and studied more often, enrolled in extra classes so they could drop the ones they decided were too difficult, and balanced their course loads each semester. Some of these coping, assimilating, and accommodating skills they had used before, however, many of these students were adjusting to the new college environment in spite of the lack of exposure to these skills in high school. The next section addresses the academic preparation these students received in high school.

High School Academic Preparation

For this study, each student was asked about his or her high school course work. As mentioned previously, research has shown that in many high schools in the United States, students are not being adequately prepared for the rigor of college (Astin, 1993; Barth et al., 2000; Klingelhofer & Hollander, 1973; Schneider & Stevenson, 1999). This section examines the subjects' responses to their high school experience in relation to the school size, type, and location, the high school teachers' expectations of students, and the rigor of the courses.

School Size, Type, and Location

Understanding the context of each student's high school background is important. The size, type and location of the school may have a direct effect on the rigor of course work and the students' perceptions of the transition-to-college experience. Chapter 4 provides an overview of each student's school size, type and location. The impact of these factors were examined in the next three sections within the context of the high school teachers' expectations, the rigor of the students' course work in high school, and the students' first-semester college GPA.

Teachers' Expectations

The expectation of the students' high school teachers seemed to have an effect on how well the student perceived the class prepared him or her for college. Aaron, Anna, Kim, Susan, and Tom all said that how difficult or easy a course was in high school depended on the teacher. For example, during Anna's senior year, she said she got better because she had a "really excellent teacher [who] just hounded through your paper." She said her teacher's remarks helped her improve her writing skills. Tom said the AP English pushed him "a little bit" and that he worked hard in that class because he liked the teacher. He also had a chemistry teacher who helped him study and manage his time because he "wasn't just holding your hand like they do in high school all the way through there." Aaron's government class prepared him best for college because he was expected to take notes and study in that class.

These students' experiences show that the teacher's expectations made a difference in how the student viewed the course and how well they felt it prepared them for college. Each of these students was from a different type, size, and location of school,

so this did not appear to be a common factor in the area of teacher expectation. It would seem that small, large, rural, urban, private, and public high school students could be positively affected by higher teacher expectations.

Rigor of Coursework

As discussed in Chapter 2, there is much research showing that the rigor of course work has an effect on how well students are prepared for college (ACT, 2003; Adelman, 1999; Astin, 1993; Barth et al., 2000; Beck & Rothstein, 1999; Harvey, 2001; Horn & Kojaku, 2001; Kelly, 2002; Kirst, 2000; Kroeze, 2001; Levine & Cureton, 1998; Light, 2001; Schneider & Stevenson, 1999; Viadero, 2001; Warburton et al., 2001). The students in this study described their perception of the academic preparation they received in relation to their high school course work. They were asked what skills they needed in college and which of those skills their high schools prepared them for. They were also asked what skills they did not have that they felt they should have learned in high school. This study examined student responses and their first-semester college GPAs as they related to the size, type and location of the high school in four ways: 1) whether or not they had honors, AP, or concurrent college courses; 2) the amount of homework each had in high school; 3) the quality of math preparation; and 4) the quality of writing preparation.

Honors, AP, and Concurrent College Courses. All but Anna, Kay and Susan had honors, AP, or concurrent courses in high school. Eve had, by far, the most advanced course work overall. She expressed a great deal of satisfaction with her transition during her interview. She said her “transition from high school to college was very positive, it

was great.” She felt like she fit in “great.” Eve’s composite ACT score of 26 and college GPA of 3.81 in 16 hours also showed evidence of quality preparation for college.

Anna and Kay, who reported having no advanced courses, had two of the lowest composite ACT scores of 20 and 19, respectively. Anna, however, had a 4.0 GPA in her first semester of college, while Kay had one of the lower first semester GPAs at 2.6. Susan, who also reported no AP, concurrent, or honors courses, had a 26 ACT and a 3.5 first semester GPA. Although Bob had a low first semester GPA of 2.2, he had a relatively high ACT composite score of 25, and had several concurrent courses and one AP course in high school. Aaron, who also had concurrent courses and two AP courses, had a 28 composite ACT and earned a 4.0 GPA in his first semester. Several others reported taking AP or honors courses in high school, and their composite ACT scores ranged from 31 to 18. At the same time, their first semester GPAs ranged from a 4.0 to a 0.75.

Based on the data above and in Table 4, the AP, concurrent or honors courses appeared to make no difference on either the ACT scores or their first semester GPAs. Each of these students attended a high school that offered AP or honors courses. Although some high schools may offer more of these courses than others, no comparisons of high school type, size, and location can be made regarding AP or honors courses based on these students’ responses since most report taking these types of courses, and they come from a variety of schools.

Amount of Homework. Bob, Chris, Kay, Kim, and Tom all said they hardly ever had homework, and Lisa said that the only homework she had in high school was math. All attended public schools. Eve said she had an hour or two of homework every night.

Susan said she had what was “probably normal” for homework in high school and Susan had “quite a bit” of homework. Eve and Susan both attended private schools, although different sized schools. Based on this data, it could be determined that private schools require more outside homework than public schools. Although Eve and Susan had high ACT composite scores, both at 26, ACT composite scores may not correlate with the amount of homework required. Lisa had a 31 ACT and reported very little homework, although she did have some. Kay, with one of the lowest ACT scores of 19, reported having no homework.

The students’ first semester college GPAs do not appear to be affected by the amount of homework required in high school for these students. Aaron, Lisa, and Tom report a 4.0 first semester college GPA, but none had much homework in high school. Steve, Bob and Kay, however, with some of the lowest first semester GPAs, also had no homework. Anna had a 4.0, and said she had a lot of homework in high school.

Math Preparation. Anna did not take a math course her last semester of high school and said because of this she enrolled in a remedial course her freshmen year of college. Tom did not take math his senior year and said his math skills are “not up to par.” These two students support the research on the importance of math instruction in all four years of high school (Adelman, 1999; Barth et al., 2000; Harvey, 2001; Horn & Kojaku, 2001; Kelly, 2002; Kirst, 2000). They both earned a 4.0 during their first semester, however.

Five other students made comments related to math preparation. Bob said he would do the whole week’s worth of math during the first period of class in high school and then sleep in class the rest of the week. His first semester college GPA was a 2.2.

Lisa said that calculus and physics were challenging, but the tests were not very hard. She could just “go over it the night before and maybe brush up a little bit the day of the test” and make an A or B easily. Her first semester GPA was a 4.0. Aaron did not take math his senior year and said he did not learn much in any of his math courses in high school because he did not like the math teacher. His first semester GPA was a 4.0. Mary was the only other student enrolled in a remedial math course her first semester. She dropped it because it was boring. She had the lowest first semester GPA of 0.75.

None of these students appeared to have received very rigorous math preparation in high school. Since no comments were obtained from the others on math preparation, no comparisons can be made to type of course or size, location, and type of high school. First semester GPAs did not seem to be correlated directly to math preparation for these students.

Writing Preparation. Anna thought her writing skills were “pretty good” because she took grammar mechanical tests all through high school. She said, however, she learned the rules only enough to pass the tests. When she arrived at college and got her first papers back, she said “there are all these red marks and I’m like ‘Wow, I really need to relearn everything.’” Writing is the one thing she said she should have been better prepared for from high school. She earned a 4.0 her first semester in college, however. Bob said in high school he had a combined English and history course where the focus was on writing papers. He said “after you do so many, they become routine after a while.” Bob’s first semester GPA was a 2.2.

Aaron, Eve and Kim said they did a lot of writing in their AP English courses. Their first semester GPAs ranged from 4.0 to 3.0. Tom said his AP English course was

harder than any he had before and that he had homework in that class. He also had to write research papers and that it “kinda pushed” him because he had to “really work” and manage his time. Tom earned a 4.0 his first semester. Steve and Chris did some writing in high school, mostly in English courses. Their GPAs were 1.6 and 2.8, respectively.

Writing preparation appeared to be important to the success of these students. Only Anna said that she should have been better prepared in writing. Additionally, for these students, AP English seems to have been a rigorous course that prepared them for college-level writing. Eve attended a large private high school and Tom a small public high school, and both report a rigorous preparation in writing. In this instance, the type of course seemed to have more effect on writing preparation than the size, type, or location of the high school. Additionally, writing preparation appeared to have no direct correlation to first semester college GPAs.

Summary

According to these students, the rigor of course work made a difference in how prepared they felt for college, especially in math and writing. They also felt a course prepared them better for college when the high school teacher had higher expectations of them. Except for the amount of homework, the size, type, and location of the student’s school appears to have no effect on the perception of preparation for college. Additionally, the size, type, and location of the student’s school did not appear to have an effect on the students’ composite ACT scores or first semester GPAs. The following section examines these students’ expectations for college and whether or not the experience had met their expectations.

Students' Expectations for College

Each student was asked what he or she expected from college academically and how what they expected was the same or different from what they experienced. Most of the students in this study expected college to be more difficult than high school, but not as difficult as it has turned out to be. They did not expect the difficulty of the courses in content and in the amount of work required. For some it was the amount of reading required that was unexpected, and for others the amount of writing. It appears to have been more difficult for some than for others.

Aaron, Eve, Lisa, and Mary all said college has not been as difficult as they expected. Anna, Chris, Kay, Kim and Tom all expected college to be more difficult than high school, and it was. Bob's concurrent experiences were easier than he expected, but his first semester of college was harder than he expected. Susan said college was mostly what she expected and Steve said he did not know what to expect.

Those who found college easier than expected had some of the higher high school GPAs—Aaron had a 4.0, Eve a 4.5 (on a 5-point scale), Lisa a 3.79, and Mary a 3.27. Aaron, Eve and Lisa also earned first semester college GPAs over 3.8. Mary, however, had the lowest first semester GPA of 0.75. It could be ascertained that a higher GPA in high school leads a student to expect college to be harder, but more evidence would be needed.

Additionally, it is difficult to make comparisons regarding students' expectations in relation to first semester GPA because of Mary's lower performance in college. Neither high school size, type, location, nor course preparation appear to have an effect on students' expectations for college. Based on the interview data presented in Chapter 4,

comments from family and friends before coming to college appeared to have the most influence on their expectations.

Other Themes of Relevance

Two other themes emerged during the coding and analysis of the data. Several students revealed their perceptions of certain teachers, both in high school and college. Additionally, almost every student mentioned the effect of attending, or not attending, class in college.

Students' Perceptions of Teachers

As discussed earlier, high school teachers' expectations are directly related to how academically prepared these students felt for college. A related theme emerged to the surprise of the researcher. Almost all students said something about their perceptions of teachers. Several said the quality of their high school or college experience depended on the teacher. Aaron, Anna, Kay, Kim, Mary, Susan, and Tom all said that how challenging a course was depended on the teacher. Aaron, Eve, Kim, and Tom mentioned experiences with teachers.

Several other comments related to teachers are important to note. Aaron and Bob both said that when they had a coach for a teacher, they did not learn anything in that class. Mary, however, had her own basketball coach and did not think there was a difference in what she learned in that class. Anna said some of the teachers she had "graded a little too nice." These comments speak to the possibility that these students might have a higher expectation for success in college because their high school classes were not as rigorous as they could have been.

These students' comments suggest that if a student likes a teacher, he or she is more apt to work harder and perform better in the class. At the same time, if a student dislikes a teacher, he or she may not have as good an experience and not learn as much as they would otherwise. Since this was not a part of this study, more literature on this topic would need to be reviewed before any conclusions can be drawn.

Attendance

Another theme emerged, but one not as surprising to the researcher. Eight of the subjects reported that attending class had a positive effect on their transition, or that not attending class had a negative effect. Bob, when asked if the concurrent courses helped him at all, said "no" because he only went to those half the time and still earned good grades. He said he went to class "probably 90% of the time" his first semester at MSU.

Chris, Eve, Kay, and Kim all said they did not miss class unless they had to. Chris earned a 2.8 first semester GPA, Eve a 3.8, Kay a 2.7, and Kim a 3.0. Although they are not the highest GPAs in the group, they are not the lowest. Susan, Steve, and Mary all indicated that not going to class had a negative effect on their transition. Susan earned a 3.5 first semester GPA, but said it only got better after she started going to class. Steve and Mary had the lowest GPAs in the group at 1.6 and 0.75, respectively. Class attendance, then, can be directly correlated with first semester GPAs for these students. Based on their comments and first semester GPAs, it would seem that these students have discovered a secret to success for many college students, one that has been preached many times before: going to class helps improve grades in college (Astin, 1993; Light, 2001; Pascarella & Terenzini, 1991).

Findings

This section is a summary of the findings explained in the data analysis in previous sections. The three research questions are answered, and other themes of relevance are explained.

Transition Experiences

What do successful college freshmen experience as they transition academically to college? Based on the subjects of this study, they were excited about a new beginning, but also nervous. They expected differences and difficulty, but were surprised by the gap in the differences, especially in the difficulty of the course work. They learned fairly quickly that some of the skills they learned in high school may work, but that others may have to be adapted to fit the demands of college work. They adjusted to college by learning new study habits, meeting new peers who could help them, and by balancing their academics and social life. They went to class and learned to read and study what they needed to be successful. This is consistent with other studies on college students and the changes they made academically to adjust to college (Astin, 1993; Levine & Cureton, 1998; Light, 2001).

Theoretical View

By examining these students and their transitional experiences through the lens of Bridges' transition phases (1980, 2001, 2003), it was determined that most college freshmen did show signs of being in the neutral zone. Most of the students in this study indicated they were somewhat overwhelmed by the differences between college and high school courses. They procrastinated, were worried and nervous, described courses as

“really tough,” “way over” their heads, and “difficult.” They experienced frustration and described their academic skills as “lacking.” They were concerned about their performance in their classes and about their management of time. Bridges (1980, 2001, 2003) explained that the neutral zone is a time of frustration. These students showed the signs of rising anxiety that Bridges describes.

At the same time, two students showed signs of not quite moving from the ending. They went home more often than others, and were doing poorly academically without having strategies in place to do better. A few students showed they were closer to making the successful transition to the new beginning than the others. They described being overwhelmed and lost at first, but their current experiences and coping mechanisms were more successful and they had strategies in place for being successful.

Reorienting Ways of Thinking and Doing

Most of these students, although still in the neutral zone, exhibited signs of moving toward their new beginnings by reorienting their ways of thinking and doing to ensure success in college. They used friends, family, faculty, and institutional services to help with the transition. They learned to read and skim only what they needed to get through a test and to choose a balanced course load. They learned to balance their time so that they could study, work, and have a social life. This is also consistent with Chickering & Reisser’s findings (1993) that students gain the knowledge and skills needed to be successful and feel competent.

Other Themes

Two major themes emerged during the coding of these interviews. A student's high school academic preparation emerged as very important in a student's academic transition. Additionally, what the student expected of college while in high school and what the students experienced appear to be important in the transition process. Finally two minor themes emerged during the coding process. Class attendance in college seemed to be important to these students' transition, and was the one variable that could be directly correlated to a successful transition. The students' perception of their teachers, both in high school and college, was also a factor in their success.

Preparation. In this study, several aspects of a student's high school preparation for college in relation to school size, type, location, the high school teachers' expectations, and the rigor of the students' course work were examined. Several of the students stated that a teacher's expectations for them in a class made a difference in how they performed in that class and whether or not they felt the class prepared them for college. Students who took AP courses tended to have higher ACT composite scores but not necessarily higher first semester college GPAs.

Only two of the students said they had a lot of homework in high school, and both graduated from private schools. Several students did not feel they had adequate math preparation, but most felt their high school curriculum prepared them for the writing they were doing in college. There was very little evidence that the type, size, or location of the school had anything to do with these students' academic preparation for high school. These findings are consistent with those of others who have examined the preparation of

high school students for college (Adelman, 1999; Barth et al., 2000; Horn & Kojaku, 2001; Light, 2001).

Expectations. Also in this study, what students expected from college and what they actually saw as their experience was examined. All students interviewed indicated that what they expected from college while in high school was different from what they had actually experienced. The students in Light's (2001) study also seemed to support the same argument. These findings are consistent with others showing that college students do bring a variety of expectations to college and some have an inflated perception of their success (Erickson & Strommer, 1991; Levitz & Noel, 1989).

Minor Themes. Two other themes emerged from the interviews. Several of the students mentioned that the teacher made a difference in the quality of the course. In both high school and college, it seemed important that a student like and respect a teacher in order to feel they had a good educational experience. A second theme, but not a surprising one, is that almost all of these students said that going to class had a positive effect on their transition or that not going to class had a negative effect on their transition. This directly correlated with the students' first semester GPAs. The two students who did not attend class the most often had the lowest first semester GPAs.

Summary

This chapter presented an analysis of the data collected for this study as it relates to several themes. First, the students' responses were examined through the lens of Bridges' transition phases. Each student's responses were then analyzed for reorienting ways of thinking and doing in order to remain successful in college.

A third way the data were examined was to search for the themes of preparation and expectations as found in the literature reviewed in Chapter 2. Finally, two new themes: students' perceptions of their high school teachers; and class attendance in college were also found to be relevant. The findings are summarized into the categories of the three research questions, and the categories of themes that emerged. Chapter 6 will examine the effectiveness of the research methods used, offer conclusions on the relevance of the study, and provide suggestions for further research.

Chapter Six

Summary of the Study

The purpose of this study was to examine the experiences of successful college freshmen that guided and assisted in their academic transition from high school to college. In this context, the study examined how high school prepared students for college, if confidence in high school academics carried into college academics, and students' means of reorienting ways of thinking and doing during their transition from high school to college. It also examined whether or not the students' experiences fit within Bridges' three phases of transition (1980, 2001, 2003).

This study used a demographic survey and guided interviews to ask 12 traditional-aged college freshmen at a Midwestern university about their academic transition experiences from high school to college. Interviews were used to allow the students to speak for themselves about their experiences. To fit the criteria of the study, the subjects were direct from high school the spring before the study, and also had persisted to a second semester at MSU. This allowed for the determination that these students had been successful enough to return for a second semester.

This study used the work of Bridges (1980, 2001, 2003) as a framework for examining students' perceptions on their academic transition from high school to college. Bridges (1980, 2001, 2003) focused his work on life transitions and ways that individuals cope with these transitions within three phases—the ending, the neutral zone, and the beginning.

The interviews were transcribed and coded to answer the following research questions that guided the study:

1. What do successful college freshmen experience as they transition academically to college?
2. How do the perceptions of successful college freshmen fit within Bridges' (1980, 2001, 2003) three phases of transition?
3. What mechanisms do successful college freshmen use to reorient their ways of thinking and doing into the college academic environment?

Other themes related to the academic preparation these students received in high school and their expectations of college emerged during the coding process and are also discussed in this chapter. Additionally, this chapter examines the effectiveness of the research methods used, offers implications of the study for practice, theory, and research, provides suggestions for further research, and discusses conclusions that can be drawn from the research conducted.

Discussion of Methods

This study was conducted from an interpretivist perspective using a phenomenological approach. The research methods employed were individual subject interviews and a short demographic survey. A pilot study helped guide the format of the interviews and survey used. Only students who were perceived as successfully making the academic transition from high school to college by returning for a second semester were considered. This eliminated the possibility that a successful transition had not taken place. Additionally, the study focused on the positive aspects of the students' transitions such as people or mechanisms that were helpful in each student's successful transition. Rather than focusing on students who drop out of college, this study asked freshmen what

changes they had made academically and how they had coped with the changes required to maintain success in college for a second semester.

In spring 2003, the demographic surveys were given to 14 students in a freshmen seminar course. Seven students returned the surveys and agreed to participate in interviews. In spring 2004, four students from a freshmen seminar course volunteered to participate; only three completed interviews. Two additional students not from freshman seminar courses also agreed to participate and were interviewed.

Each audio-taped interview lasted approximately one hour and all were conducted on the students' campus. The interviews were coded for Bridges' three phases of transition, and also for reorienting ways of thinking and doing by the students. Several themes began to emerge during the coding process, so those were included in the coding as well.

Categories and Themes

In addition to the coding for Bridges' phases and the presuppositions of reorienting ways of thinking and doing, other categories and themes emerged that were relevant to the analysis. The interviews elicited comments about high school academic preparation for college, and especially the rigor of the high school course work each student had. Also, the interviews elicited comments on what these students expected from college and how it was different or the same as they expected.

To organize these new themes with the ones that were expected, the following categories were used in the study: background factors (age, ethnic background, socioeconomic status); high school factors (school size, type, and location, GPA, class rank, ACT score, coursework, and activities); college factors (course work, activities,

number of hours, and first semester GPA); expectations (what the student expected); preparation (homework, advanced coursework, math and science courses, and teachers); transition (time management, study habits, class attendance, and support); Bridges' transition phases; and reorientation of ways of thinking and doing.

Effectiveness of the Methods

The qualitative methods used in this study were appropriate for the topics discussed. The interviews were successful and extracted the needed information from the students. Although the instruments did not provide as much information as expected about cognitive development, they provided much more information about high school preparation than expected.

Obtaining subjects for the study was much more difficult than expected. Unless the students were offered extra credit in a course, they did not want to take the time to participate. In the first freshman seminar course, seven of 14 agreed to participate. This instructor provided extra credit in the course. In the second freshman seminar course with 19 students, only four volunteered, and only three actually participated. In the third freshmen seminar course with 21 students, there were no volunteers to participate. These instructors did not offer extra credit to the students. Most subjects were asked if they had friends who might be willing to participate, but none offered contact information for them. When some subjects were called back to see if friends might be willing to participate, they either did not call back or said their friends were too busy or not interested.

If this study were to be repeated, a more systematic way of collecting data should be used, and only instructors willing to provide extra credit to students should be solicited for student participants.

Additionally, the demographic survey should include questions about the students' academic major and current living situation. This information was collected from each student, but only by coincidence and in the context of conversation during the interview. I had to call one student after the interview to ask his major because it was omitted from both the interview and the demographic survey. Also, the question regarding college coursework should have segregated classes successfully completed in the first semester, classes attempted but not completed in the first semester, and second semester classes in which the student was currently enrolled. Some of the information reported on college courses was not as clear as it could have been.

Additionally, a quantitative component should be added to statistically compare ACT scores, including the subject scores which were not collected for this study, individual course grades in high school and college, and cumulative high school and college GPAs. Much could be learned from this information, and it would add another dimension to the study. The use of a national survey instrument such as the College Student Inventory (Stratil, 1988) could also have been used to validate the responses in the interviews.

This study is difficult to generalize to the larger population of college freshmen, although the methods of this study could be easily transferred to other college settings, thus providing useful information to other researchers. As mentioned in Chapter 1, this study is limited to a small set of subjects at one university. The institution has the highest

level of admission criteria of any public institution in its state, and attracts many students from out of state, including more national merit scholars than any other institution in its state. These factors may contribute to a higher self-efficacy in the students interviewed than might have been found at other institutions. Another limitation of the methods used is that all of the data used is self-reported. In order to maintain the students' privacy, there was no cross-checking of this information with the institution.

Finally, two other factors may have skewed the results of this study. The use of volunteers makes it more likely that the subjects are in the sector of students who do better naturally in college (Pascarella & Terenzini, 1991), and selective institutions such as the one in this study are more likely to enroll students who have a more rigorous high school curriculum (Horn & Kojaku, 2001).

Findings

This section includes a summary of the findings of the study, including the theoretical view using Bridges' three phases of transition, the students' means of reorienting ways of thinking and doing, and other themes that emerged. Also included is the relevance of the current study and how it links to the literature reviewed in Chapter 2.

First, the study found that students had the transitional experiences as described by Bridges and exhibited signs of passing through the three phases of transition (1980, 2001, 2003). The ending, beginning, and neutral zones of the transition process were evident in each of the subjects' responses.

The students in this study provided evidence of having a hard time letting go of their old lives, including their old self-image and parents' values (Bridges, 2003). At the same time, they showed evidence of moving into the new beginning by exhibiting signs

of developing a new identity and new understandings of the world around them (Bridges, 2001).

Bridges' neutral zone, however, was the most prominent phase displayed by these students. The time of lostness described by Bridges is especially prominent. The students described their experiences as overwhelming, confusing, difficult, and challenging, just as Bridges would describe the feelings of those in the neutral zone (1980, 2001, 2003). They missed classes, suffered from anxiety, and felt vulnerable to the changes around them. The results of this study show that Bridges' transition phases are a useful lens from which to view the high school to college academic transition.

The results of this study also show that students found the means to reorient their ways of thinking and doing as Bridges described (2003) and as expected by the researcher. They used friends, family, and faculty to assist them in their transition by asking questions and taking advice from them. They adjusted their study habits when faced with bad grades or performance that did not meet their personal standard. They also learned to manage their time by completing assignments at least by the due date and by finding time to work, participate in activities, and hang out with friends while still maintaining study and reading time. These findings are consistent with findings of others who examined these factors (Shaw Sullivan, 1997; Roe, 2003; Schlossberg et al., 1995).

A student's expectation for college was also a factor in the students' transition. The students who felt they had a rigorous high school experience expected college to be difficult, but not as difficult as it turned out to be. The students' expectation seemed to be correlated with their high school preparation. The more rigorous a high school curriculum, the better a student expected to do in college.

This study supported the literature on the academic preparation of high school students for college (ACT, 2003; Adelman, 1999; Horn & Kojaku, 2001). Adelman (1999) found that a rigorous curriculum was one of the best predictors for college graduation, a fact that is supported by these students' comments. Astin (1993) found that AP and honors courses taken in high school resulted in a higher first semester college GPA, and ACT data (2003) suggests that those who take a more rigorous curriculum have a higher ACT composite score. This study supports both of these suppositions.

These students are also good examples of the importance of fourth year of math in high school. Adelman (1999) found that the best predictor of degree attainment was a student's highest level of high school math. Horn & Kojaku (2001) found that persistence in college was directly correlated with a student's high school math curriculum, and Barth et al. (2000) found that students who took higher levels of high school math did better on the NAEP exam. These students expressed almost collectively that more, and more rigorous, math courses in high school, especially during their senior year, either helped or would have helped them do better in college.

Additionally, this study supports literature that suggests the more rigorous a high school course was, the better prepared a student felt for college courses in that subject overall. This was especially true for African American, Latino, and first-generation students in the literature (Adelman, 1999; Warburton et al., 2001). The sample of these students was not representative of these backgrounds, however, so no comparisons can be made.

The students in this study felt better prepared if a high school teacher had higher expectations for their performance in the class. Grading too nicely did not help students

feel prepared for college. As Kroeze (2001) found, higher expectations yield better results for student success.

Conclusions

Based on the data in this study and the literature reviewed, several conclusions can be drawn. First, one of the most important aspects of a student's transition from high school to college was the academic preparation they received in high school. This research supports the findings of others (Adelman, 1999; Astin, 1993; Barth et al., 2000; Horn & Kojaku, 2001).

Second, successful students found ways to adjust the way they viewed and reacted to situations to fit their new environment. This was what made them successful. They were able to pass through the neutral zone, make the transition, and start the new beginning with new skills and knowledge that allow success (Bridges, 1980, 2001, 2003). This conclusion was also reached by Shaw Sullivan (1997), Roe (2003), and Schlossberg et al. (1995) in their studies of students' transitional experiences. There was evidence of Chickering's (1969) developing competence vector in this study as well as support for the Terenzini et al. (1994) study, which found that students' friends were both assets and liabilities in their transition.

Third, what students expect from college is an important aspect of their transition (Erickson and Strommer, 1991). In this study, if students expected college to be easy, they were surprised at the rigor and did not do as well as those who expected it to be hard and were surprised when it was not as hard as anticipated. Sax et al. (2002) and Light (2001) also found that students' expectations were not the same as the reality. Light (2001) found that the students' ways of thinking and doing had to be adjusted to fit the

new experiences in college. This study found that the ideal situation for student success is for them to expect college to be hard, and to be prepared for the rigor. This led to a more successful transition.

Fourth, time management and class attendance were the most common problem areas for the students in this study. Those who were having academic difficulty missed class more often than those who were doing well and they also struggled to fit studying and social time into their schedules. Light (2001) also found this to be the case in his study. There is a direct correlation in this study of students' class attendance and first semester college GPAs.

Finally, using Bridges three phases of transition (1980, 2001, 2003) was a helpful tool for data analysis in the area of student transition. Much evidence of the neutral zone was found in the students of this study, with some evidence of transitioning from the ending and some evidence of transitioning to a new beginning. These subjects, and those in a Sax et al. (2002) study on first-year students, used some of the same words for the college transition as Bridges' does when describing the neutral zone: overwhelmed, lonely, homesick, vulnerable, and confused (Bridges, 2003). Bridges' three phases of transition lend themselves well to this type of study, and should be used more often when examining the transition from high school to college.

Implications of the Study

There are implications of this study for practice, theory, and research.

Practice

This study has several implications for practice in higher education. Across the nation, higher education officials are looking for ways to increase enrollments, retain students, and reduce remediation. If institutions understand the factors involved in helping students successfully transition from high school to college academically as these students have, all constituencies (parents, institutions, faculty, and students) will be satisfied. Fewer students will require expensive remediation, more students will be successful, and graduation rates will rise. Colleges and universities should require a more rigorous high school curriculum for admission. High schools would ultimately begin to offer a more rigorous curriculum as a result.

This study also has implications for the preparation of students for college. It has been proven that when students are challenged, they rise to meet the expectations set for them (Kelly, 2002; Kirst, 2000; Schneider & Stevenson, 1999; Viadero, 2001). The subjects of this study describe their high school curriculum in ways that indicate a more challenging high school curriculum better prepared them for college level work. High school educators can help students prepare more effectively for college if they have information on what students need to know and be able to do in order to succeed in college.

The findings of this study are also of value to parents of children planning their high school course work, and to high school students planning their own high school course work. All students should plan and take a more rigorous curriculum to be successful in high school. Colleges and universities need to do a better job of getting this information to students.

These findings are also relevant for faculty who teach first-year students and to administrators of programs that include college freshmen. Institutions should offer programs and services for students that help them transition successfully to the collegiate academic environment. Freshman level courses should include components on studying, taking notes, taking tests, and time management, regardless of the topic of the course. College faculty should also directly relate course grades with attendance in the first year. This study shows that attendance in class has a direct correlation with a student's first-year GPA, and that many students do not attend class because it is not required for their grade.

Theory

No literature was found using Bridges' (1980, 2001, 2003) three phases of transition in the setting of a high school to college transition. This study helps lend credibility to Bridges phases by examining them from the perspective of the high school to college transition. This study adds new research to the body of literature on the study of academic transition, and is especially helpful in linking Bridges' phases of transition to the college student setting. Other researchers could replicate this study in other college settings to further validate Bridges' phases as a theory relevant to the college transition.

Research

This study adds to the general body of research on college freshmen. Although it may not be generalizable to the entire college freshmen population, the results are consistent with other studies in the areas of first-year experiences, retention, remediation, and students' expectations (Astin, 1993; Barth et al., 2000; Klingelhofer & Hollander,

1973; Levine & Cureton, 1998; Light, 2001; Schneider & Stevenson, 1999, Tinto, 1993). These students' comments are especially similar to those made by the students in Light's (2001) study. Poor management of time created problems for them, the methods that worked for studying in high school no longer worked in college, and the extra effort it took to make good grades in college made it difficult for students to do as well as they expected.

The methods and themes that emerged from this study can be transferred to other populations of college students by other researchers. These results could be compared with results from students at two-year colleges, from different ethnic backgrounds, and in other regions of the country. This study also adds a unique data set to the body of literature since no other studies using Bridges' three phases of transition specifically applied to the transition from high school to college were found.

Recommendations for Further Research

Several areas are suggested for further research. First, the surprising theme of how students perceive their teachers should be examined more closely in future studies related to high school academic preparation for college. This study revealed that students' perceptions of both their high school and college teachers had an affect on how well the student did in that class.

Second, interviewing students at this institution who are not successful and leave after only their first semester would also add to this research. This might add more insight into the transition experiences of first-year students at this particular institution. Additionally, a study of students at differing types of institutions, such as private colleges, community colleges, or colleges in rural versus suburban areas would be

beneficial to this body of knowledge. The demographics of students are generally different at different types of institutions.

Asking from where these students' expectations of college came would also add another dimension to the study. This could be done during a replication of this study at another institution.

Finally, there are many other themes that could have been explored in the data collected for this study. Identity, extracurricular activities, instructor feedback, effort, self-esteem, messages of failure/defeat, support at home, in school, in college, size of institution, minority/disadvantaged, faculty expectations, and the students' perceptions of learning are just a few. Extending this type of study to the population of non-traditional students might also add further to that body of knowledge.

Summary

This study examined the transitional experiences of successful college freshmen from a variety of perspectives. Each perspective lent itself well to helping understand how students transition from high school to college academics. Using Bridges (1980, 2001, 2003), one can easily see that students pass through three phases of transition. Examining students' means of reorienting ways of thinking and doing showed what students do in order to be successful. Understanding high school preparation and students' expectations for college are also essential aspects of a student's transition to college, because it is these experiences that provide the basis for the transition and help lead students to a successful academic career.

Personally, this research process has been the most educational of my life. I have learned not only to delve deeper into my questions during interviews with subjects, I have

learned to delve deeper into my thought processing to extract bits of information that at first seemed to have no relevance. I have learned why some of my students are successful and others are not, and I have learned what might be done to solve transitional problems for my college-aged children. These are valuable life lessons.

In my career, I talk to students, faculty, administrators, parents, counselors, and staff at both high schools and colleges on a regular basis. Conducting this study has opened my eyes to new ways of handling these constituents, for various reasons. With faculty, conducting research of my own provides me with insight into their daily lives. With administrators, this study has provided me with tools to back up my beliefs about the transition to college. With students, parents, and counselors, I will be more informed in ways to assist their questions on transitions. I have been humbled by this experience, and I am thankful for it.

References

- 2002-03 admission standards.* (2001). Oklahoma State Regents for Higher Education. Oklahoma City, Oklahoma.
- 2003-04 admission standards.* (2002). Oklahoma State Regents for Higher Education. Oklahoma City, Oklahoma.
- ACT assessment 2003 results: Summary report for Oklahoma.* (2003). Iowa City, IA: American College Testing Educational Services.
- Adelman, C. (1999, June). *Answers in the toolbox: Academic intensity, attendance patterns, and bachelor's degree attainment.* Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.
- Argyris, C. & Schon, D.A. (1974). *Theory in practice: Increasing professional effectiveness.* San Francisco: Jossey-Bass.
- Arnold, K. & King, I. (1997). *College student development and academic life: Psychosocial, intellectual, social, and moral issues.* New York: Garland.
- Astin, A.W. (1993). *What matters in college? Four critical years revisited.* San Francisco: Jossey-Bass.
- Astin, A.W., Parrott, S., Korn, W.S. & Sax, L.J. (1997). *The American freshman: Thirty year trends.* Los Angeles: University of California-Los Angeles, Cooperative Institutional Research Program.
- Barth, P. (2003, Winter). A common core curriculum for the new century. *Thinking K-16: A Publication of The Education Trust*, 7(1), 3-31.
- Barth, P., Haycock, K., Huang, S. & Richardson, A. (2000). *Youth at the crossroads: Facing high school and beyond.* Washington, DC: The Education Trust.

- Beck, S. & Rothstein, F. (1999). *In their own words: Students and educators talk about what matters*. Washington, DC: U.S. Department of Education.
- Belenky, M., Clinchy, B., Goldberger, N., & Tarule, J. (1996). *Women's ways of knowing: The development of self, voice, and mind*. New York: Basic.
- Birnie-Lefcovich, S. (2000). Student perceptions of the transition from high school to university: Implications for preventative programming. *Journal of the First-Year Experience*, 12, 61-88.
- Bogdan, R. & Biklen, S. (1992). *Qualitative research for education: An introduction to theory and methods*. Boston: Allyn and Bacon.
- Bottoms, G. & Feagin, C. (2002). *Research brief: Improving achievement is about focus and completing the right courses*. High Schools That Work Project. Atlanta, GA: Southern Regional Education Board.
- Bridges, W. (1980). *Transitions: Making sense of life's changes*. Cambridge, MA: Perseus.
- Bridges, W. (2001). *The way of transition: Embracing life's most difficult moments*. Cambridge, MA: Perseus
- Bridges, W. (2003). *Managing transitions: Making the most of change* (2nd ed.). Cambridge, MA: Perseus.
- Buczynski, P.L. (1991). The relationship between identity and cognitive development in college freshmen: A structural equation modeling analysis. *Journal of College Student Development*, 32, 212-222.

- Carnegie classification of institutions of higher education*. (2000). Menlo Park, CA: The Carnegie Foundation for the Advancement of Teaching. Retrieved February 27, 2004 from <http://www.carnegiefoundation.org/Classification>.
- Chickering, A.W. & Reisser, L. (1993). *Education and identity* (2nd ed.). San Francisco: Jossey-Bass.
- Chickering, A.W. (1969). *Education and identity*. San Francisco: Jossey-Bass.
- Chizhik, E.W. (1999). The relationship between prematriculation college knowledge and disillusionment: Was college what students expected? *NACADA Journal*, 19(1), 12-21.
- Choy, S. (2002). *Access and persistence: Findings from 10 years of longitudinal research on students*. Washington, DC: American Council on Education.
- Creswell, J.W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. London: Sage.
- Dextras, S. (1993). *Freshmen perceptions of academic and social changes during the first year of college*. Unpublished doctoral dissertation, Oklahoma State University, Stillwater, Oklahoma.
- Dressel, P. & Mayhew, L. (1954). *General education: Explorations in evaluation*. Westport, CT: Greenwood.
- Eisert, D. & Tomlinson-Keasey, C. (1978). Cognitive and interpersonal growth during the college freshman year: A structural analysis. *Perceptual and Motor Skills*, 46, 995-1005.

- Emerson, R.M., Fretz, R.I. & Shaw, L.L. (1995). *Writing ethnographic fieldnotes*. Chicago: University of Chicago Press.
- Erikson, E.H. (1968). *Identity: Youth and crisis*. New York: Norton
- Erickson, B.L. & Strommer, D.W. (1991). *Teaching college freshmen*. San Francisco: Jossey-Bass.
- Evans, N.J., Forney, D.S., & Guido-DiBrito, F. (1998). *Student development in college: Theory, research and practice*. San Francisco: Jossey-Bass.
- Felix, O. (2002). Success factors of underprepared students: A phenomenological study. *UMI Dissertation Services*, 3053420.
- Fraenkel, J.R. & Wallen, N.E. (2000). *How to design and evaluate research in education* (4th ed.). Boston: McGraw-Hill.
- Galbraith, M.W. (1991). The adult learning transactional process. In M. Galbraith (Ed.), *Facilitating Adult Learning* (pp. 1-32). Malabar, FL: Krieger.
- Gardner, J.N. (2001, fall). Focusing on the first year student. *Priorities*, 17, 2-18.
- Grimes, S.K. (1999, fall). Underprepared community college students: Implications of attitudinal and experiential differences. *Community College Review*. Retrieved April 26, 2002 from http://www.findarticles.com/cf_dls/m0HCZ/2_27/63323069/print.jhtml
- Guffey, J., Rampp, L., & Masters, M. (1998, September). A paradigm shift in teaching the academically unprepared student: Building a case for an andragogical methodology. *College Student Journal*, 32, 423-30.
- Harvey, J. (2001, October). *Raising our sights: No high school senior left behind*. Washington, DC: National Commission on the High School Senior Year.

- Home computers and internet use in the United States: August 2000*. (2001) Washington, DC: Department of Commerce, U.S. Census Bureau.
- Hood, A.A. (1984). Student development: Does participation affect growth? *Association of College Unions-International Bulletin*, 52(6), 16-19.
- Horn, L. & Kojaku, L. (2001, August). *High school academic curriculum and the persistence path through college*. Washington, DC: National Center for Education Statistics.
- Horowitz, H. (1987). *Campus life*. New York: Knopf.
- Integrated postsecondary education data system*. (2000, fall). U.S. Department of Education, National Center for Education Statistics.
- Keller, B. (2003, April 23). Less than awesome. *Education Week*, 22(32), 3-6. Retrieved October 26, 2003, from <http://www.edweek.org/ew/ewstory.cfm?slug=32youth.h22&keywords=keller>
- Kelly, K. (2002, January/February). Seeking a cure for senior-year slump. *Harvard Education Letter*. Retrieved March 8, 2002, from www.edletter.org/research/senioryear.shtml
- Khalili, H. & Hood, A. (1983). A longitudinal study of change in conceptual level in college. *Journal of College Student Personnel*, 24, 389-394.
- King, P. & Kitchener, K. (1994). *Developing reflective judgment*. San Francisco: Jossey-Bass.
- King, P.M., Wood, P.K., & Mines, R.A. (1990). Critical thinking among college and graduate students. *The Review of Higher Education*, 13, 167-86.

- Kirst, M.W. (2000, fall). The senior slump: Making the most of high school preparation. *National Crosstalk*. Retrieved March 8, 2002, from www.highereducation.org/crosstalk/ct1000/voices1000-kirst.shtml
- Klingelhofer, E. & Hollander, L. (1973). *Educational characteristics and needs of new students*. Berkeley, CA: University of California-Berkeley, Center for Research and Development in Higher Education.
- Knowles, M.S. (1980). *The Modern practice of adult education*. Chicago: Follett.
- Knox, A.B. (1981). *Adult development and learning*. San Francisco: Jossey-Bass.
- Kroeze, D. (2001, April). *Achieving excellence II: A report of initial findings of first in the world eighth-grade performance from the third international mathematics and science study-repeat*. Naperville, IL: North Central Regional Educational Laboratory. Retrieved March 11, 2002, from www.ncrel.org/re/ae2
- Kurfiss, J. (1988). *Critical thinking: Theory, research, practice, and possibilities* (ASHE-ERIC Higher Education Report No. 2). Washington, DC: Association for the Study of Higher Education. (ERIC Document Reproduction Service No. ED304041)
- Lehmann, I. (1963). Changes in critical thinking, attitudes, and values from freshman to senior years. *Journal of Educational Psychology*, 54, 305-315.
- Levine, A. & Cureton, J.S. (1998). *When hope and fear collide: A portrait of today's college student*. San Francisco: Jossey-Bass.
- Levitz, R. & Noel, L. (1989). Connecting students to institutions: Keys to retention and success. In Upcraft, M. & Gardner, J. (Eds.), *The freshman year experience* (pp. 65-81). San Francisco: Jossey-Bass.

- Light, R.J. (2001). *Making the most of college: Students speak their minds*. Cambridge, MA: Harvard University Press.
- Lincoln, Y.S. & Guba, E.G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications.
- Lucas, C. (1994). American academe in the early twentieth century. In *American Higher Education: A History* (pp. 201-22). New York: St. Martin's Griffin.
- MacLellan, A.M. (2001). An exploration of academic underpreparedness and its relationship to community college student persistence. *Dissertation Abstracts International*, AAT 3024944.
- Magolda, B. (1988). *The impact of the freshman year on epistemological development: Gender differences*. Paper presented at the meeting of the American Educational Research Association, New Orleans, LA.
- Malaney, G.D., & Shively, M. (1995). Academic and social expectations of and experiences of first-year students of color. *NASPA Journal*, 33, 3-18.
- Mentkowski, M. & Strait, M. (1983). *A longitudinal study of student change in cognitive development, learning styles, and generic abilities in an outcome-centered liberal arts curriculum* (Final report to the National Institute of Education, Research Report No. 6). Milwaukee, WI: Alverno College, Office of Research and Evaluation. (ERIC Document Reproduction Service No. ED239562)
- Merriam-Webster Online (2002). Accessed October 15, 2003 at <http://www.m-w.com>
- Mertens, D.M. (1998). *Research methods in education and psychology*. Thousand Oaks, CA: Sage.

- Mines, R.A., King, P.M., Hood, A.B. & Wood, P.K. (1990). Stages of intellectual development and associated critical thinking skills in college students. *Journal of College Student Development*, 31, 538-47.
- Morse, J.M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods* 1(2), Article 2. Retrieved October 26, 2003, from <http://www.ualberta.ca/~ijqm>
- Mortenson, T. (2002, April). Higher education equity indices by race/ethnicity and gender 1940-2000. *Postsecondary Education Opportunity*. Oskaloosa, IA.
- National Center for Education Statistics. (2001). *The condition of education*. Washington, DC: U.S. Department of Education.
- National Center for Education Statistics. (2003). *Overview of public elementary and secondary schools and districts: School year 2001-02*. Report No. NCES 2003-411. Washington, DC: U.S. Department of Education.
- Padilla, R.V., Trevino, J., Gonzales, K. & Trevino, J. (1997). Developing local models of minority student success in college. *Journal of College Student Development*, 38, 125-135.
- Pascarella, E.T. (1989). The development of critical thinking: Does college make a difference? *Journal of College Student Development*, 30, 19-26.
- Pascarella, E.T. and Terenzini, P.T. (1991). *How college affects students*. San Francisco: Jossey-Bass.

- Pastore, M. (2002, February 8). *U.S. Internet population continues to grow*. ISP Planet, Market Research web site. Retrieved October 31, 2003, from http://www.isp-planet.com/research/2002/us_020208.htm.
- Patton, M. (1990). *Qualitative evaluation and research methods*. Newbury Park: Sage.
- Perry, W. (1970). *Forms of ethical and intellectual development in the college years*. New York: Holt, Rinehart, & Winston.
- Perry, W. (1999). *Forms of ethical and intellectual development in the college years: A scheme*. San Francisco: Jossey-Bass.
- Pike, G.R. (2000). The influence of fraternity or sorority membership on students' college experiences and cognitive development. *Research in Higher Education*, 41, 117-39.
- Pitts, J., White, W., & Harrison, A. (1999). Student academic underpreparedness: Effects on faculty. *The Review of Higher Education*, 22, 343-65.
- Public agenda: Reality check. (2002, March 6). *Education Week*, 21(25), s1-s8. Retrieved March 6, 2002, from www.edweek.org/ew/ew_printstory.cfm?slug=25realitycheck.h21
- Raising our sights: No high school senior left behind*. (2001). Report from the National Commission on the High School Senior Year. Princeton, NJ: The Woodrow Wilson National Fellowship Foundation.
- Ramsay, S., Barker, M. & Jones, E. (1999). Academic adjustment and learning processes: A comparison of international and local students in first-year university. *Higher Education Research and Development*, 18(1), 129-44. Retrieved May 30, 2002, from www.aom.pace.edu/rmd/1999_RMD_Forum_Paradigms_and_Research_

- Roe, M.M. (2003, April). *Negotiating the freshman year: Strategy situations and influences among first-year college students*. Paper presented at the annual conference of the American Educational Research Association, Chicago, IL.
- Ross, S.E., Niebling, B.C., & Heckert, T.M. (1999). Sources of stress among college students. *College Student Journal*, 33, 312-18.
- Rubin, H. & Rubin, I. (1995). *Qualitative interviewing: The art of hearing data*. Thousand Oaks, CA: Sage.
- Sax, L.J., Keup, J.R., Gilmartin, S.K., Stolzenberg, E.B. & Harper, C. (2002). *Findings from the 2002 administration of Your First College Year (YCFY): National aggregates*. Los Angeles, CA: Higher Education Research Institute, University of California.
- Schlossberg, N.K., Waters, E.B., & Goodman, J. (1995). *Counseling adults in transition: Linking practice with theory* (2nd ed.). New York: Springer.
- Schneider, B. & Stevenson, D. (1999). *The ambitious generation: America's teenagers motivated but directionless*. New Haven, CT: Yale University Press.
- Shaw Sullivan, A.V. (1997). Rites and passages: Students' views of academic and social integration. *College Student Affairs Journal*, 16(2), 4-14.
- Steele, J.M. (1986, April). *Assessing reasoning and communicating skills in college*. Paper presented at the Annual Meeting of the American Education Research Association, San Francisco. (ERIC Document Reproduction Service No. ED267121)

- Stratil, M. (1988). *College student inventory*. Iowa City, IA: Noel-Levitz Centers for Institutional Effectiveness and Innovation, Inc.
- Strauss, A.L. (2001). *Qualitative analysis for social scientists*. Cambridge, UK: Cambridge University Press.
- Student data report*. (2002). Oklahoma State Regents for Higher Education. Oklahoma City, Oklahoma.
- Terenzini, P.T., Rendon, L.I., Upcraft, M.L., Millar, S.B., Allison, K.W., Gregg, P.L. & Jalomo, R. (1994). The transition to college: Diverse students, diverse stories. *Research in Higher Education*, 35, 57-73.
- Tesch, R. (1990). *Qualitative research analysis types and software tools*. New York: Falmer.
- The College Board (2003). *How to select your courses: Create a solid academic portfolio*. Retrieved September 4, 2003 from <http://www.collegeboard.com/article/0,3868,2-7-0-33,00.html>
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago: University of Chicago Press.
- Tinto, V. (1996). Reconstructing the first year of college. *Planning for Higher Education*, 25, 1-6.
- Tinto, V. (1999). Taking retention seriously: Rethinking the first year of college. *NACADA Journal*, 19(2), 5-9.
- Unitized Data System. (2002). *Data request manual*. Oklahoma State Regents for Higher Education. Oklahoma City, Oklahoma.

- Upcraft, M.L. & Gardner, J.N. (1989). *The freshman year experience*. San Francisco: Jossey-Bass.
- Viadero, D. (April 11, 2001). *Getting serious about high school*. *Education Week*, 20(30), 18-22. Retrieved March 6, 2002, from www.edweek.com/ew/ew_printstory.cfm?slug=30highschool.h20
- Walter, T.L, Gomon, A., Guenzel, P.J., & Smith, D.E.P. (1989). Academic support programs. In Upcraft, M. & Gardner, J. (Eds.). *The Freshman Year Experience* (pp. 108-117). San Francisco: Jossey-Bass.
- Warburton, E., Bugarin, R., & Nunez, A. (2001, May). *Bridging the gap: Academic preparation and postsecondary success of first-generation students*. (NCES 2001-153), Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.
- Watzke, J. (2000). Student transitions from the high school classroom; Implications for reform. *ADFL Bulletin*, 31(3), 45-52.
- Weissman, J., Bulakowski, C. & Jumisko, M. (1998). A study of white, black, and Hispanic students' transition to a community college. *Community College Review*, 26(2), 19-42.
- Wilson, A.L. (1993, spring). The promise of situated cognition. In Merriam, R. (Ed.). *New directions for adult and continuing education: An update on adult learning theory*, 57, 71-79.
- Zhang, L. & Watkins, D. (2001). Cognitive development and student approaches to learning: An investigation of Perry's theory with Chinese and U.S. university students. *Higher Education*, 41, 239-61.

Appendix A

IRB First Approval

Oklahoma State University Institutional Review Board

Protocol Expires: 1/5/2004

Date: Monday, January 06, 2003

IRB Application No ED0358

Proposal Title: THE PERCEPTIONS OF TRADITIONAL COLLEGE FRESHMEN OF THEIR ACADEMIC
TRANSITION EXPERIENCES FROM HIGH SCHOOL TO COLLEGE

Principal
Investigator(s):

Shelley Jones
2609 Featherstone Rd. #248
Oklahoma City, OK 73120

Adrienne Hyle
314 Willard Hall
Stillwater, OK 74078

Reviewed and
Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

Dear PI:

Your IRB application referenced above has been approved for one calendar year. Please make note of the expiration date indicated above. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved projects are subject to monitoring by the IRB. If you have questions about the IRB procedures or need any assistance from the Board, please contact Sharon Bacher, the Executive Secretary to the IRB, in 415 Whitehurst (phone: 405-744-5700, sbacher@okstate.edu).

Sincerely,



Carol Olson, Chair
Institutional Review Board

IRB Second Approval

Oklahoma State University Institutional Review Board

Protocol Expires: 2/5/2005

Date: Friday, February 06, 2004

IRB Application No ED0476

Proposal Title: The Perceptions of Traditional College Freshmen of Their Academic Transition
Experiences from High School to College

Principal
Investigator(s):

Shelley A. Howell
2424 Tredington Way
Edmond, OK 73034

Adrienne Hyle
106 Willard Hall
Stillwater, OK 74078

Reviewed and
Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

Dear PI:

Your IRB application referenced above has been approved for one calendar year. Please make note of the expiration date indicated above. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved projects are subject to monitoring by the IRB. If you have questions about the IRB procedures or need any assistance from the Board, please contact me in 415 Whitehurst (phone: 405-744-5700, colson@okstate.edu).

Sincerely,



Carol Olson, Chair
Institutional Review Board

Appendix B

Informed Consent Form

AUTHORIZATION

I, _____, hereby authorize or direct Shelley A. Howell to perform the following procedure.

DESCRIPTION OF RESEARCH AND ASSOCIATED RISKS/BENEFITS

This study, entitled *The Perceptions of Traditional College Freshmen of Their Academic Transition Experiences from High School to College* involves research for a doctoral dissertation and is being conducted through Oklahoma State University by Shelley A. Howell, a doctoral candidate in the College of Education under the academic advisement of Dr. Adrienne Hyle, Associate Dean and Director of Education Extension.

The study will examine, from the students' perspective, the experiences of college freshmen that guide and assist in their academic transition from high school to college. It is expected that you will participate in the study for approximately one hour. As part of this study, you will be asked to complete a one page survey of basic information related to your college and high school courses, grades, and family background. In addition, you will be asked several interview questions about your high school and college academic experiences.

There are no foreseeable risks or benefits to you from this study. You may disclose as little or as much information as you wish and you may discontinue your participation at any time during the session.

Neither your name nor any identifying information will be used in the reporting of this study. Pseudonyms will be used to protect your identity. The interview will be audio-taped, and then transcribed. All files, documents, and tapes will be kept in a locked cabinet accessible only to the researcher and her faculty advisor. Once the study is complete, the tapes will be erased and the transcriptions and other documents shredded.

Any questions or concerns about this research can be directed to:
Ms. Shelley Howell, Researcher
2424 Tredington Way, Edmond, OK 73034
Phone: 405-844-0454; E-mail: shelleyannhowell@osrhe.edu

Dr. Adrienne Hyle, Faculty Advisor
Oklahoma State University, 106 Willard, Stillwater, OK 74078
Phone: 405-744-6254; E-mail: aeh@okstate.edu

For more information on your rights as a participant, contact:
Carol Olson, Chair, Institutional Review Board
Oklahoma State University, 415 Whitehurst, Stillwater, OK 74078
Phone: 405-744-5700; E-mail: colson@okstate.edu

VOLUNTARY PARTICIPATION

I understand that participation is voluntary and that I will not be penalized if I choose not to participate. I also understand that I am free to withdraw my consent and end my participation in this project at any time without penalty by contacting the project director, Ms. Shelley Howell, 2424 Tredington Way, Edmond, OK, 73034, Phone: 405-844-0454, E-mail: shelleyannhowell@aol.com.

CONSENT DOCUMENTATION FOR WRITTEN INFORMED CONSENT

I have read and fully understand the consent form. I sign it freely and voluntarily. A copy has been given to me.

Date: _____ Time: _____ (a.m./p.m.)

Printed Name

Signature

Signature of person authorized to sign for subject, if required

I certify that I have personally explained all elements of this form to the subject or his/her representative before requesting the subject or his/her representative to sign it.

Signed: _____
Project director or authorized representative

Appendix C

Demographic Survey

1. Age: _____
2. Gender: ☐ Male ☐ Female
3. What is your ethnic background? ☐ White ☐ African American
☐ Native American ☐ Asian
☐ Hispanic ☐ Other
4. Approximately how many students were in your high school graduating class? _____
5. Where is your high school located? _____
6. What type of high school was it? ☐ Public ☐ Private ☐ Special ☐ Alternative
7. What was your class rank? ☐ Top 10% ☐ Top 11-25%
☐ Top 26-50% ☐ Below 50%
8. What is the approximate population of the city/town where you graduated? _____
9. What was your high school GPA? _____
10. What was your ACT/SAT composite score? _____
11. What courses did you take in your four years of high school?
Senior year: _____
Junior year: _____
Sophomore year: _____
Freshman year: _____
12. What activities did you participate in at your high school? _____

13. Did you work during high school? ☐ Yes ☐ No If so, how many hours per week? _____
14. Did your parents attend college? Father: ☐ Yes ☐ No Mother: ☐ Yes ☐ No
15. How many of your siblings or other relatives have attended college? _____
16. Are you receiving financial aid to attend college? ☐ Yes ☐ No
If so, what type? _____
17. What courses have you now taken in college? _____

18. Are you currently working? ☐ Yes ☐ No If so, how many hours per week? _____

19. What was your first semester college GPA? _____ How many hours did you complete? _____

20. What activities have you been involved in at college? _____

Appendix D

Interview Protocol

1. Describe your high school courses.
2. Describe your first semester and current college courses. Have you taken remedial courses?
3. What did you expect in college academically? How is what you are experiencing different from what you expected? What were you nervous about? What were you confident about?
4. Were you ready for college?
5. Did your GPA change from high school to college? Why do you think it changed?
6. Looking back at your freshmen year, what skills did you need in college?
7. Which did your high school courses prepare you for?
8. What skills would have helped you be more effective?
9. Where could you have gotten those?
10. How has your perception of your academic success in college changed?
11. What success have you had in college?
12. What progress have you made?
13. Describe some things that had a positive impact on your transition.
14. Describe some things that had a negative impact on your transition.
15. How did you help yourself?
16. Who helped you? How?
17. Did the institution have services or people that you feel helped you? What could they have done to make your academic transition better?
18. How have you been managing your time?

Vita

2

Shelley Ann Howell

Edmond, Oklahoma

Education

- State Fair Community College, Associate of Arts degree in English/Journalism, May 1986
- Southern Illinois University, Bachelor of Science degree in Vocational Education Studies, December 1990
- The University of Oklahoma, Master of Education degree in Adult Education, August 1993
- Completed the requirements for the Doctor of Education degree in Higher Education Administration at Oklahoma State University in May 2004

Higher Education Background

- Oklahoma State Regents for Higher Education, December 2001 to present, Coordinator of Academic Affairs Projects
- Business Circle for Arts Education, November 2000 to December 2001, Executive Director
- The University of Oklahoma, Fall 1999 to Fall 2001, Gateway to College Learning Instructor
- The University of Oklahoma, August 1991 to November 2000, Senior Program Development Specialist
- Authored the "Freshman Survival Guide" for University of Oklahoma students, 2001
- Public board member of the American Art Therapy Association Education Program Approval Board, 2000 to present
- Wrote and/or directed grants from state and national entities for continuing higher education and arts education, 1992 to 2001