The Transition of First-Year Students with Learning Disabilities: A Fourth Year Follow-Up Study

Wanda M. Hadley and Michael T. Miller

Colleges and universities are finding more students with learning disabilities in their populations, and a third of all students with a disability report that to be a learning disability (Costello & English, 2001). The state and federal statutes that support students with learning disabilities differ in terms of institutional requirements for kindergarten through twelfth grade (K-12) and postsecondary education (Thomas, 2002) and subsequently mandate a different behavior toward students in adjusting to their learning disabilities (Hadley, Twale, & Evans, 2003). The college environment does not include the level of monitoring and direct support expected in the K-12 environment, causing a substantial social and cognitive challenge to students with disabilities upon entering college.

In the initial phase of this series of studies, findings indicated that students in transition from secondary to postsecondary education struggled to develop the necessary competence level, to manage their emotions appropriately, and to develop new relationships. The lens provided for the original study was psychosocial theorist Arthur Chickering’s (1969) first three vectors of student development theory: developing competence, managing emotions, and developing autonomy.

The fourth year follow-up study continued to examine the experiences of the same students, now seniors preparing to transition out of college by graduating, through Chickering’s final two vectors of developing purpose and establishing integrity. The purpose for conducting this research was to continue the original study of the cohort of college students with specific learning disabilities as they sought to clarify their career goals, plan for their life after graduation, analyze their core beliefs and values, and come to understand how those beliefs and values shaped their behavior.

Background of the Study

Learning Disabilities and College Students

According to Lerner (2000), learning disabilities are disorders that affect the manner in which students with normal or above average intelligence take in, retain, and express information. A disability may show up as a problem in listening, thinking, speaking, reading, writing, spelling, or in a person’s ability to do math, despite at least average intelligence (Lerner). A learning disability is a general term for a variety of specific
subtypes including dyslexia (reading disability), dyspraxia (speech disability),
dysgraphia (writing disability), and dyscalculia (mathematics disability). The National
Joint Committee on Learning Disabilities (NJCLD, 1997) stressed that learning
disabilities are intrinsic to the student, are presumed to be due to central nervous system
dysfunctions, and may occur across a person’s life span.

Since the passage of Public Law 94-142 (The Education of All Handicapped Children
Act of 1975) and the Individuals with Disabilities Education Act (IDEA, 1990), special
education programs and services have been required in elementary and secondary
schools. According to the American Council on Education, students with learning
disabilities in the K-12 environment have been identified and have been provided special
education instruction unique to their needs (HEATH, 1995). Services offered in K-12
settings include remediation, compensatory techniques to work around the learning
disability, and programs that concentrate on the student’s learning styles. Programs
such as these generally are targeted as examples of services that help students better
understand how they learn while maximizing their strengths.

Although many secondary school students with learning disabilities are being
prepared to attend college, the college environment does not include the degree of
oversight and assistance they experienced in the K-12 setting. Postsecondary institutions
are required by law to provide accommodating services such as note-takers, extra time
to complete exams, and/or alternative test formats, but they are not required to design
special academic programs for students with learning disabilities (Hadley, 2004;
Thomas, 2002). Students with learning disabilities are not likely to find such special
arrangements as multidisciplinary teams, special education classes, or individualized
instruction in the college setting. When they transition to college, they are placed in
inclusive classrooms with other college students who do not have learning disabilities,
and they are expected to compete academically (Hadley et al., 2003). In essence, students
move from an environment where the responsibility for student success is often
perceived to lie with educators, to a college environment where the responsibility for
success lies primarily with the student.

Theoretical Framework

The theoretical assumption of this study is that transitioning from high school to
college can be challenging for many first-year students (Tinto, 1993). The adjustment
for students with learning disabilities may be more difficult because of the type and
level of accommodations and services they have become accustomed to receiving in
their K-12 educational experiences (Hadley & Raisch, 2004).

Chickering’s 1969 theory of psychosocial development and his 1993 revised version
with Reisser provides the theoretical framework for this current study. Building on the
seminal work of Erikson (1968), Chickering postulated that identity development
during the college years (roughly ages 18 to 25) involved the mastery of a series of
developmental tasks or “crises,” which he termed vectors. Each of the seven vectors
arises as the result of a confluence of factors, including internal dynamics and external
environmental demands. According to Chickering, college and university environments can assist students in the identity formation process by creating specific conditions which favor successful resolution of developmental tasks.

This study focused on the final two Chickering (1969) vectors, developing purpose and establishing integrity. Developing purpose calls on students’ increasing ability to assess personal interests and options, to clarify goals, and to persist despite obstacles. Establishing identity has to do with the student’s movement toward an increased congruence between behavior and values.

Because of increasing numbers of students with learning disabilities in colleges and universities and the lack of research on their academic transition (Costello & English, 2001), studying their adjustment to the college environment is useful for both secondary and post-secondary educators. Using Chickering’s vectors of student development, educators can better assist students with learning disabilities in their transition to the adjustment to and persistence in higher education.

The current study addressed two primary research questions, paralleling those previously discussed in prior research. The questions are: (1) How do students with dyslexia or reading problems formulate and prioritize career plans? and (2) What beliefs and values influence the career plans and goals of students with dyslexia or reading problems?

Research Methods

Population and procedures

This fourth year follow-up study continued on the campus of a private, selective, coeducational, four-year college in the Midwest. During the students’ first year, when the study began, the total student enrollment at the institution was 2,106; 100 of these students were identified as having learning disabilities (in the 2000-2001 academic year). Dyslexia or reading-related issues were the primary type of learning disability reported, consistent with national trends (Hadley et al., 2003; Hadley, Morrison, & Hemphill, 2005; Reiff, 1997).

The researcher interviewed and chose the first ten students who responded to a letter from the Director of the Office for Students with Disabilities to voluntarily participate in the study. These students met the criteria of entering the university directly from high school and possessing documentation defining their learning disability as dyslexia or reading-related issues. Students initially were identified by volunteering, and their credentials were validated to ensure they met all criteria.

Participants in the study represented all four of the academic units on campus: arts and sciences, business, education, and engineering. Nine students were identified for participation (7 females and 2 males), who were selected from a total volunteer population of 26 (16 females and 10 males). Those selected were all that were validated to meet the criteria identified. Seven of the original 9 remained part of the study, and the fourth year follow-up was conducted during the 2003-2004 academic year, the cohort’s
senior year. Two of the female students who were a part of the original study left the university at the end of their freshman year. The original study was qualitative in nature, and the data was collected through multiple focus groups and individual interview sessions. For this fourth year follow-up study, the students continued discussing their academic experiences since they transitioned from high school to college and their academic experiences from the first year to senior year of college. Discussions again took place in focus group and individual interview sessions.

Data Collection

Individual student artifacts, a focus group interview, and individual semi-structured interviews were the means of collecting data for the study. Gathering data from multiple sources and through multiple methods ensured triangulation (Glesne & Peshkin, 1992; Newman & Benz, 1998). During this transitional time, students can have setbacks that may interfere with their development (Chickering, 1969). Because of this, the original vectors of developing competence, managing emotions, and developing autonomy were revisited to see how students were progressing along those vectors. The focus group and individual interviews were conducted during the first semester of the student’s senior year.

**Student artifacts.** Student artifacts collected for the original study included class schedules, copies of written assignments for their classes (which included grade and faculty comments), class syllabi, and any available tutoring reports. As graduating seniors, the students as an aggregate reported that they did not have as many writing assignments as in their freshman year. The researcher, however, once again collected a sample of student writing assignments and comment sheets that professors used to give students feedback on their assignments. The researcher hoped to obtain information about the students’ improvement in the areas of style and mechanics of writing, responding to verbal directions, identifying main ideas in their papers, and understanding important concepts in a given assignment (see Hadley et al., 2003).

**Focus groups.** Because the study group size was small, a focus group interview was used for students to share their perceptions and feelings (Stewart & Shamdasani, 1990; Vaughn, Schumm, & Sinagub, 1996) about their transition to postsecondary education. Questions for the focus group were based on revisiting Chickering’s (1969) first vector of developing competence and the third vector, developing autonomy, which had been explored in the original study. The sixth vector of developing purpose was introduced, and students discussed their thoughts about their career future. The focus group was conducted during the middle of the first semester of the senior year. The focus group was two hours long and audiotaped.

**Semi-structured interviews.** Individual interviews also were conducted as a means for students to share feelings and views that differed from the group (Krathwohl, 1998). The semi-structured individual interviews were 1 hour long and audiotaped. Students responded to questions reviewed from Chickering’s (1969) second vector of managing emotions, which had been part of the original study, to see if students were continuing to
grow along this vector. Additionally, the seventh and last vector of *establishing integrity* was introduced. To study how they were *establishing integrity*, students responded to questions regarding their beliefs and values related to their career plans and goals. The individual interviews were conducted over a 3-week time frame, after midterm exams, following the focus group interview, and prior to final exams.

**Data Analysis**

The inductive analysis process (Creswell, 1994; Patton, 2002) of going through the transcripts and giving meaning to words, phrases, and scenarios that continually emerge was used to interpret the data. The researcher named what was potentially important to the study’s findings by selectively attaching meaningful tags to words, phrases, events, and situations (Krathwohl, 1998; Preissle & LeCompte, 1984). The coding scheme required that the researcher go through the transcripts and color code each meaningful word, phrase, event, and situation with a different color highlighter. Those highlighted themes were then transferred to note cards where the researcher attached meaning to those themes (Creswell; Preissle & LeCompte) and theorized how the answers to the two research questions did or did not fit with Chickering’s (1969) vectors of *developing purpose* and *establishing integrity*.

**Results**

**Question 1**

The major emerging theme related to the first question about developing purpose was that the students did not seem to have a defined/firm academic plan for the upcoming year. Each of the students reported that they were looking forward to graduation so that they could “finish with school” and “do something rather than homework.” But no students were able to clearly define what they planned to do after graduation. None expressed interest in attending graduate school; each one hoped to find a job and work. In discussing if he would go on to do graduate work, the male engineering major said, “It depends on whether I get a job or not.” Several of them, however, said that they might be interested in attending graduate school after getting some work experience. The male business student said that he did not plan to go to graduate school “right away.” He would like to “maybe move somewhere for a while or find a serious job and [later] come back to graduate school.”

The second theme that surfaced was that the students had not given much thought to the challenges that they might face as they graduated and moved beyond their undergraduate experience. Part of this may be due to the fact that the students were not sure what kind of job they would land or what type of work environment they would be in. It seems as though the students either put off seriously thinking about the next part of their lives or had not considered that the work world could be completely different than college in terms of the expectations placed on them.
In comparing her student teaching work experience with being a college student, the female education major shared that the work environment was much more demanding. According to her, in the work environment, “I have to do everything on my own.” The male engineering student shared that he was “leaning away” from engineering as a possible area for graduate studies. He admitted, however, that he had “not given much thought” to how graduate school or the work environment would be, only that “I expect graduate school to be different.” As a group the students had been relatively proactive about seeking employment and using available campus resources to lead them to job opportunities. One of the female business majors said that she wanted to “get through all her classes” and “hopefully, one of the options from the campus career fair will work out for a job.”

The third theme related to developing purpose was that students did not have a plan in place to contend with obstacles that they might encounter in graduate school or in the workplace. It appeared that the students had not thought through the possible challenges they might face when moving from their undergraduate to their post graduation experience. They, therefore, had no plans in place to deal with any potential issues the next setting might present, whether it was graduate school or the workplace. The male business major dismissed any potential problems by rationalizing that he “will be all right” because he “has made it this far.” His major within business was entrepreneurship, and he said he wanted to “test the waters” and look at various options before “worrying about graduate school.”

It appeared that the students had decided that they did not need to worry about any possible problematic issues related to their learning disability since they did not plan to attend graduate school. It seemed as though they had decided that their learning disability was only an issue in an academic setting and/or they would have more capability to “avoid” problems in the workplace. In discussing her need to take the medication Adderall to focus and concentrate on her classes, one of the female business majors said, “I want to be in a job that I enjoy as opposed to a job where I have to take my Adderall to concentrate and understand.”

The fourth theme that emerged was that the students did not seem overly concerned that the support services they had become accustomed to in their educational experience probably would not be available in the work setting or graduate school. The students remained protective of the fact that they had a learning disability and continued to voice discomfort about sharing that information with a supervisor. Most of the students said they would not reveal that they had a learning disability to a supervisor because having a learning disability carries a stigma. Several of the students seemed to think that their learning disability emerged more in pressure situations, such as in-class writing assignments or exams, and could not imagine the work place creating a comparable situation. The male business major rationalized, “I am going to be looking for a job where I can play up my strengths, and it is probably not going to be in a job where I need to write a whole lot of papers. So that is why I am not too worried about it.” One of the female business majors said she needed Adderall and extra help to concentrate because her school work was “torture.” She went on to say that while she was working her summer job she found that “when I am doing something I enjoy, all my problems go
away.” Another female business major disagreed with the group. She said that it was important to communicate with supervisors because, according to her, “that is the only way things can get done.” She went on to say that she would make sure before taking a job that the company would be willing to “work with me.”

The fifth theme was that the students’ ultimate goals stayed fairly stable since their first year in college. Several of the students joked that consistency remained in the fact that they were still not sure what they wanted to do. A couple of the business majors spoke about internship and co-op experiences that had exposed them to the workplace and various careers. But for the most part, the students could not voice specific career goals for their future. In acknowledging that his career plans had stayed the same since freshman year, the male business major said, “they stay the same just by the fact that I am still not sure what I want to do.”

One of the female business majors added, “Freshman year, I just came in and I was undecided. I think it is always been [that] I am not sure what I want to do.” After thinking for a few minutes, this same student said, “I…have three main focuses I want to go into. Human resources is the big one, and I also enjoy something related to health care or fitness or maybe the airlines.” She said that her family and friends thought those areas were a good match for her personality. Another female business major admitted that she did not know what she wanted to do as a career, either. Her major was public relations, and in discussing her inability to decide what she wanted to do in the future, she said, “No, I really don’t know what I want to do. My major is PR but I really don’t want to do that. I just picked that freshman year and thought I would enjoy it.” Although students were not set on a specific occupation, several discussed campus resources such as student teaching, internships, and co-op jobs as instrumental in narrowing their interest.

The final theme that the students revealed was that they were optimistic about their career futures, even though they were not clear about what they would be doing. The male engineering student added a second major after his freshman year and “hopes to be using both majors,” but was not sure where he would be working a year from then. He went on to say, “I don’t know exactly what I am going to be doing but I know [in] what area I want to be doing something. And I think I have a pretty good chance of getting something in that general area.” Because of state licensure requirements, the female education major said that if she went on to teach, the State of Ohio has certain expectations laid out for her, such as passing the Praxis examination. She credited her field experience as extensive and because of this felt prepared to teach “prekindergarten, which is three years old to eight years old.” She said it was ultimately up to her to decide which setting she wanted to teach in. But according to her, “I still don’t know which one I like the best.”

Students talked about expediting the job search process the following semester since they would be closer to graduation. Participating in campus career fairs, networking with others, participating in upcoming interviews, and sending out resumes were steps students planned to take over the course of the next year to prepare them for careers after graduation.
The first theme to emerge related to establishing integrity was that students reported that their work ethic in terms of preparing for classes had not changed much from freshman year. They stated that the time invested in preparing for classes remained high because of the demands of their courses. The male engineering major summed up the feelings of the group with his comment, “It really hasn’t changed too much, only the time input has gone up because there has been more of it.” When comparing the first-year experience with senior year, the male business student countered, “It is hard to compare the classes.” From his perspective the classes were just as “serious,” but he did not think he was putting in as many “book hours.” The female education major submitted that the quality of her work was now “more in depth, more current, more knowledge-theory based, more cohesive.”

The students agreed that, while they were not as overwhelmed with the number of writing assignments as they were in their freshman year, there was still quite a bit of work to do. One female business major offered that she tried to be consistent in striking a balance between her academic work and extracurricular activities. She could not decide whether she worked harder as a freshman or a senior. She reported that every year since freshman year there had been “a class or classes” that had demanded a great deal of her time. Another female business student admitted battling “procrastination phases” when her workload became too heavy. Several of the students discussed the notion of creating a balance between classes and activities and said they were improving at striking a balance.

The second theme was that the struggles the students encountered related to their learning disability influenced their career plans and goals. Most of the students talked about pursuing jobs where they could avoid responsibilities that would possibly elevate symptoms of their learning disability. Students seemed to have a clear understanding of the kinds of tasks or duties that would elicit or encourage symptoms of their learning disability to surface. In discussing her desire to avoid a job that has a lot of reading responsibilities, one of the female business majors said, “I have to read things a few times because I have a hard time comprehending. I am going to go into a field… like sales, marketing, or advertising where I can play on my strengths as opposed to weaknesses.” This student reported taking the medication Adderall to help her “focus and concentrate” and, on more than one occasion, had expressed a desire to wean herself off the medication. There seemed to be a general consensus among the students that if they stayed away from certain tasks and gravitated to ones they “enjoyed,” they could be more successful in the work environment.

The third theme was that the students valued hard work and believed that a willingness to work hard was an important characteristic to carry into the workplace. Students still viewed themselves as having to work hard for their achievements and felt this work ethic was one important factor for success in the workplace. In talking about her desire to achieve, one of the female business students said, “I have always…and inside myself that I want to do the best that I can do.” Another female business student described her parents as serving as role models for hard work, and this developed her
work ethic at an early age. She went on to say she valued hard work because she believed “it pays off in the end.” Students shared that their work load remained demanding but that they had learned “shortcuts” along the way.

Several of the students reported that they had learned to manage their work load. The male engineering student who had dysgraphia as well as dyslexia talked about the “shortcuts” he had learned since freshman year, often with homework assignments. He discussed how, as a first-year student, he was compelled to work mathematics problems to the final stages and suffered physical pain afterwards because of the dysgraphia. He said as a senior he had learned to weigh the “cost-benefit” factor of writing so extensively.

The final theme was that the students viewed their learning disability as something they would have to contend with as they planned and prepared for their careers. While the students talked about their futures optimistically, they admitted that having a learning disability still undermined their confidence and caused them concern as they prepared for the next phase of life. They shared that they often thought about how they would handle situations that could reveal their learning disability; most said they would keep their learning disability private. Most of the students believed that disclosing their learning disability in the workplace would somehow be held against them.

The male engineering student spoke matter-of-factly when he described possible scenarios to deal with his disability. When questioned about how he would manage his learning disability in the work environment, he said he would “figure out some kind of way to handle it.” One of the female business students rationalized her feelings about her disability possibly being an issue in the workplace by offering that “everyone” has things that concern them. The female education major contemplated her future as a teacher and seemed concerned when she discussed the “bigness” of the teaching role in light of having a learning disability. She was student teaching the semester of the study and described herself as “stressed” because the experience was much more intense than she imagined. She expressed doubt that teaching was something she wanted to do right after graduation. She went on to share that she often thought about the impact teaching had on a student and the responsibility teachers have to their students. In discussing the impact teachers could have in students’ lives she said, “What I do matters, but not like it does for a child. If I mess up, I could mess up their learning.”

Discussion

Developing Purpose

Findings related to the first research question reveal that students prioritize and plan for their careers by deciding upon employment rather than graduate school as the option for them; giving very little thought to how the workplace would be different from the college setting; not having a plan in place to contend with possible obstacles in the workplace; giving very little thought to the challenges they may face without the availability of accommodations/services in the workplace; not solidifying career interests
and goals; and remaining optimistic about their career future. Chickering (1969) submitted that as students learn to develop purpose they attempt to coherently compose their lives. They seek ways and skills to help them shape the big picture for themselves. This task is overarching particularly because the focus is on the next stage of life, the first stage of life beyond the college years. Resolving this vector requires that students give thought to transitioning into a world that will be new for them. Especially for students with learning disabilities, they must enter this new world without the security and support of teaching styles, academic accommodations, and support services that have been available to them throughout their schooling.

Adelman and Vogel (1993) found that most graduates of four-year programs who transition to the workplace discover that their learning disability affects their work performance, particularly in the areas of processing information, retaining information, and the amount of time to complete assignments. These are some of the same skills the students in the study have reservations about needing in the workplace.

Chickering (1969) theorized that during the vector of developing purpose, students become skilled in consciously choosing priorities, in aligning action with purpose, and in motivating themselves consistently toward goals. The students in this study seemed to struggle with firming up choices. As a group, they lacked a sense of clarity about what they wanted to do and where they wanted to be as they moved closer to graduation. The interviews took place in the fall semester, so the students might become more emphatic about plans during the second semester of the school year.

Chickering and Riesser (1993) found that students, as they progress through the vector of developing purpose, are required to formulate plans for action that include their vocational plans and aspirations, personal interests, and interpersonal family commitments. Several of the students discussed how their personal interests did somewhat connect with their future plans. But for the most part, the students could only speak about their interests and plans in generic terms. Durlak, Rose, and Bursuck (1994) underscored the importance of the college environment as the appropriate setting for successful exploration of career ideas and job placement for students with learning disabilities.

Establishing Integrity

Data on the beliefs and values that influence the career plans and goals of students with learning disabilities indicate that students invest a great deal of time in their classes, that struggles related to their learning disability influences their career goals and interests, that students believe that hard work is an important characteristic to carry into the workplace, and that their learning disability is something they will have to contend with as they plan and prepare for their career future.

According to Chickering (1969), developing integrity is closely related to developing purpose. During this vector, students learn to recognize how their core values and beliefs provide the foundation for interpreting experience and guiding behavior. When transitioning to college, students bring with them a host of core values and beliefs or
assumptions about what is true and false, right and wrong, good and bad, and important and unimportant. Developing integrity requires that students review personal values in an environment which emphasizes critical thinking, the use of evidence, and experimentation. As students discuss their development along this vector they seem contemplative and serious.

Several of the students in this study were introspective and unsure of their capabilities as they discussed a future in their particular fields. Chickering and Reisser (1993) found introspection about values to be a valid “tug-of-war” during the vector of developing integrity. Movement toward integrity means congruence between behavior and values. It is, therefore, natural for students to not only seriously evaluate their career choices in terms of interests, but also their potential for their careers. When the female education major, for example, shared a concern that she could negatively impact a student’s educational future, this deliberation was a natural part of processing or contemplation in the integrity vector (Chickering). The student’s balancing her interest in the field of teaching with the well-being of those she would be teaching is what Chickering and Reisser refer to as “humanizing values.”

Several of the students were on the prescription medication Adderall for the attention deficit disorder that accompanies their learning disability. Two of the female business majors, in particular, discussed their concern about entering the work place while using this medication and their hope of weaning themselves off the medication. In discussing their need to take the medication to “concentrate and focus,” both shared feelings of embarrassment and shame as they admitted they performed better when taking the medicine. Chickering (1969) described this phenomenon as signifying that the students are wrestling with and personalizing their ethical concerns. Both students discussed the use of this medication as if it were wrong or inappropriate. One student expressed strong concern about the “right and wrong” aspect of using the medication. As a developmental change occurs during this vector, she may come to soften her stance because, as Chickering submitted, growth along this vector includes learning to modify values and beliefs to include more humane frames of references.

Conclusion

Although the number of students with learning disabilities pursuing postsecondary education is increasing, research suggests that many of these students experience difficulty remaining in and completing postsecondary programs (Janiga & Costenbader, 2002). It would, therefore, seem essential to help this student population develop the necessary skills to be successful (Tinto, 1998) in the college environment. The students in this study were seniors preparing to graduate and had been researched since their freshman year. They had been successful at their institution, but because of systemic differences in the secondary and higher education setting, they faced numerous academic barriers as they transitioned from high school to college. Conducting more research through the framework of student development theorists such as Chickering (1969) and Chickering and Reisser (1993) could, perhaps, provide a better understanding of the
issues related to assisting the transition and success of students with learning disabilities in the college setting.

References


