

Enhancing Transition and Empowering Students with Disabilities in Higher Education

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Abstract College Achievement Training Seminars is a first-year transition program that consists of a series of 15 non-credit workshops with a mentoring component that pairs the first-year participants with upper-class or graduate mentors who are active members of Delta Alpha Pi International Honor Society, the primary collegiate honorary recognizing high-achieving students with disabilities. This qualitative, comparative study examined the first-semester grade point average and first-to-second year retention rates for students with disabilities who successfully completed College Achievement Training Seminars with those who were eligible for and invited to participate but chose not to attend. Participating students had a higher first-semester grade point average and higher first-to-second year retention rates. The mean aggregate retention rate over an eight-year period was 91% for students who completed College Achievement Training Seminars versus 52% for those who did not participate in the program.

Keywords: *transition, mentoring, retention, students with disabilities, honor society*

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1. Introduction

Research has been contradictory regarding the persistence of students with disabilities to graduation in higher education. Results of most studies have indicated that students with disabilities at post-secondary institutions are less likely to persist in educational goals and to attain a degree than students without disabilities (defur, Getzel, & Trossi, 1996; Horn, Berkthold, & Bobbitt, 1999; Murray, Goldstien, Nourse, & Edgar, 2000). On the other hand several studies indicate equivalent persistence for students with disabilities (Miller & Albiero-Walton, 2003; Wessel, Jones, Markle, & Westfall, 2009).

Research focusing on personality constructs that contribute to academic achievement fails to show any significant differences between individuals with and without disabilities in post-secondary institutions (Benshoff, Fried, & Roberto, 1990; Fichten, Bourdon, Amsel Fox, 1987; Gambrell, Florian & Splaver, 1986; Graham, Schwartz & MacArthur, 1993; Houck, Englehard & Geller, 1989; Kriegsman & Hershenson, 1987; Leone & Burns, 1997; Schieman & Turner, 1998; Shiftlet, Cator & Meggenson, 1994; Whilite, S., 1990). Although they are similar to individuals without disabilities in many characteristics including: ego development, self-actualization, motivation, maturity, locus of control and self-concept, college students with disabilities continue to persist and graduate from post-

secondary institutions at a lower percentage than college students without disabilities (Henderson, 1999; Kriegsman & Hershenson, 1987; Murray, Goldstien, Nourse, & Edgar, 2000).

Additionally, more than 30 years of research into the retention and persistence of students from varying backgrounds in post-secondary education indicates that many students (e.g., minority, first-generation, students with disabilities) do not acclimate easily to the culture of a college or university. Such difficulty with transition can have an impact on retention for these populations. Professionals at post-secondary institutions remain concerned about retention and graduation rates for the growing population of students with disabilities. Statistics from the U.S. Department of Education, National Center for Education Statistics (2013) indicate the 10.9% of students in post-secondary education during the 2007-2008 academic year identified as a student with a disability. Therefore, exploring constructs that enhance academic success for college students with disabilities is important to educational research.

Successful retention requires "...high quality, caring, and concerned faculty and staff..." (Tinto, 1993, p. 201). In other words, successful retention of students with disabilities is everyone's responsibility. "Effective retention calls for sustained effort on the part of all institutional members to give each and every student serious and honest attention on a daily basis" (Tinto, 1993, p. 201). Students need to connect with someone they trust in order to enhance their opportunity to succeed

(Richardson & Fisk Skinner, 1991, 1992; Tinto, 1975, 1993, 1999, 2000, 2004, 2007). Getzel (2008) reported several factors that enhanced retention of students with disabilities and included: development of stronger self-determination skills, self-management skills, and use of assistive technology. Veenstra (2009) discussed the need for a student-focused culture to enhance retention. Crosling, Heagney & Thomas (2009) emphasized the importance of student engagement. According to Budny, Paul, & Bon (2006) trained peer mentors can assist in providing that type of support and connection to assist with the transition process.

In fall 2003, the two researchers who were also faculty members in the Office of Disability Services (ODS) at a state university in the Mid-Atlantic region, developed and implemented a first-year seminar series designed to assist students with disabilities in the transition to higher education through increased self-efficacy/self-advocacy, academic strategies, and social skills; the program was titled College Achievement Training Seminars (CATS). The following fall a peer mentoring component was added. Mentors were selected from applicants who were upper-class or graduate students with disabilities and who were members of Delta Alpha Pi International Honor Society (DAPI), the primary collegiate honor society in the country that specifically recognizing high-achieving students with disabilities. In summation, the program consisted of CATS, DAPI, and mentoring which connected the first two components and, as proposed by the creators, created as unique synergy that would lead to academic success and retention. Data were collected over an eight-year period (2003-2004 through 2010-2011) and analyzed to compare first-semester grade point averages and the first-to-second year retention rates for students who completed the transition program successfully with those students who were eligible and invited to attend CATS but chose not to participate in the program. First semester grade point averages were used for comparison because students were actively engaged in the CATS program at that time. First-to-second year retention rates were selected because that is the period immediately following completion of the program and because research shows this is a time when attrition is high (Miller & Albiero-Walton, 2003). Due to the variation in cell sizes between and among groups over the eight-year period, statistical analysis was not attempted.

2. College Achievement Training Seminars (CATS)

After reviewing the retention research, the faculty members in ODS distilled the recommendations to four specific aspects that support retention:

- Connect – Students connect with at least one significant individual at the college or university.
- Accept – Students feel accepted by their peer group.
- Trust – Students develop a level of trust with their advisor and/or mentor.
- Support – Students feel supported in their academic endeavors.

From this information the faculty members created the acronym CATS which stands for College Achievement

Training Seminars. Students who participate in the program connect with their Disability Services advisor and with their peer mentor; they are accepted by the peer group participating in CATS; they develop a level of trust through their involvement and interaction with their advisor and mentor; and they are supported through advising and development of study and compensatory strategies.

CATS is a structured, non-credit seminar series offered during a 50-minute period when there are no classes scheduled. Initially, the workshops run weekly, and then bi-weekly and finally are offered monthly during the second semester for a total of 15 sessions. Based on research, the workshops assist in metacognitive development, self-regulated learning, self-efficacy, and self-advocacy (Albiero-Walton, 2001; Bandura, 1977.).

Previous research has shown that self-efficacy is associated with positive academic achievement (Jones, B. D., Paretti, M. C., Hein, S. F., & Knott, T. W., 2010; Komarraju, M. & Nadler, D. 2013; Liem, A. D., Lau, S., & Nie, Y., 2008; Louis, R. A., & Mistele, J. M., 2011; Pampaka, M., Kleanthous, I., Hutcheson, G. D., & Wake, G., 2011; Pajares, 1996). Individuals with a high degree of self-efficacy can complete tasks and be successful in academic pursuits (Bandura, 1997). The hypothesis that college students with disabilities have different personality constructs responsible for academic achievement from college students without disabilities has not been proven. Studies of self-efficacy and academic achievement are consistent in finding that a greater self-efficacy has an influence on academic achievement regardless of individual differences of students. (Jones et al., 2010; Liem et al., 2008; Louis et al., 2011; Pampaka et al., 2011) College students with disabilities may have physical, cognitive or emotional differences, but research has shown they do not exhibit differences in many personality constructs that are important to academic success (Benshoff et al., 1990; Graham & Weiner, 1996; King, Schultz, Steel, Gilpin, & Cathers, 1993; Kriegsman & Hershenson, 1987; Low, 1996; Schieman & Turner, 1998; Zimmerman, 1996). A general sense of self-efficacy may be a predictor of generalized performance (Pajares, 1996, Zimmerman, Bandura, & Martinez-Pons, 1992) even though Bandura (1986) cautions against this wide sweeping theory. Pajares (1996) states "... the direct effect of self-efficacy on performance was as strong as the effect of ability" (p. 9).

In order to build and enhance self-efficacy skills, the instructors focus on learning strengths to assist students in developing or enhancing compensatory strategies and skills in a variety of reading and study areas (Miller, 1994; Miller, 1998; Miller, 2005; Mooney & Cole, 2000). The program motto is: "What matters most is how you see yourself." Following factors of student engagement delineated by Crosling, Heagney & Thomas (2009), the program facilitators incorporate opportunities for student-centered active learning, integrating study strategies, and access to other support as needed.

CATS topics include: Self-efficacy, self-advocacy, acclimation to higher education, mentor/mentee responsibilities and requesting accommodations (two sessions); introduction to assistive technology and working with note takers, readers and/or scribes; learning styles, modality assessment and study strategies based on

learning strengths; test taking strategies; effective note taking from texts and in class; efficient/effective textbook reading strategies; critical reasoning and problem solving; communal living, communication and conflict resolution; stress proofing and test anxiety; research and plagiarism; memory and mnemonic techniques; goal setting, organization and time management; vocabulary in context; and internships and career planning.

Incoming first-year students with disabilities and their parents receive letters, information and an application during the summer prior to their matriculation. A nominal fee of \$50 for the program is charged to cover the cost of materials and a mentor stipend of \$100. Any student unable to pay the fee provides service hours to the Office of Disability Services in lieu of the monetary charge. All CATS participants receive a three-ring binder at the first session; all handouts are three-hole punched so that students can collect and maintain materials in their binders.

3. Delta Alpha Pi Honor Society

Delta Alpha Pi Honor Society is the primary collegiate honorary dedicated to recognizing high-achieving students with disabilities. Delta Alpha Pi was founded at East Stroudsburg University of Pennsylvania in 2004 by the authors of this article. The three Greek letters were selected for a specific reason: Delta – D for disability; Alpha – A for achievement; and Pi – P for pride. The honor society motto is: “Working for an aDAPable world.”

Membership in Delta Alpha Pi is by invitation and is open to undergraduate and graduate students who meet the following criteria: Students must have a documented disability, work with one of the faculty or staff members in the Office of Disability Services (or the equivalent), and demonstrate an interest in disability issues. Undergraduate students must have completed a minimum of 24 credits and earned an overall Quality Point Average of 3.10 (on a 4.00 scale). Graduate students must have completed a minimum of 18 credits and earned an overall Quality Point Average of 3.30 (on a 4.00 scale).

The founders developed the idea of an honor society for students with disabilities after they realized that there were a number of collegiate honoraries based on a population-specific characteristic rather than only based on discipline. For example Alpha Sigma Lambda exists for non-traditional aged students; Alpha Kappa Mu is available to students who are African American; Chi Alpha Epsilon involves students who participate in grant-funded programs (e.g., the federal TRIO program); Mortar Board is all female; and SALUTE recognizes veterans. However, an internet search revealed that there were no collegiate honor societies for students with disabilities.

The constitution for Delta Alpha Pi was developed based on the constitutions of four other collegiate honor societies: Psi Chi (psychology); Iota Iota Iota (women’s studies); Sigma Pi Epsilon Delta (special education); and Chi Alpha Epsilon (grant-funded programs). The criteria for membership are similar to other national honor societies.

Between 2004 and 2006 two additional chapters were established at universities within the Pennsylvania State System of Higher Education. In 2006 the founders and

two charter members of the Alpha Chapter of Delta Alpha Pi Honor Society attended the annual conference of the Association on Higher Education and Disability (AHEAD) in San Diego, California, and staffed a booth in the exhibit hall. Following this national exposure, the honor society began to grow at the rate of approximately ten chapters per year between 2006 and 2013.

In 2008 the honorary incorporated as a not-for-profit organization with the title of Delta Alpha Pi International Honor Society (DAPI) and received a tax identification number. DAPI established four officer positions and a Board of Directors with six rotating positions of three years each. The annual business meeting for the organization is held during the Association on Higher Education and Disability Conference. In order to advance the educational opportunities for members of DAPI, a scholarship fund was established in 2010. Fund-raising activities continue in order to reach the minimum goal of \$20,000 when the organization can begin to offer a scholarship.

As Delta Alpha Pi International Honor Society has continued to grow, chapters have been established at community colleges, private liberal arts colleges, faith-based institutions, state universities, large research universities, and one Ivy League school. Chapters engage in a variety of activities depending on the interests of their members and the size of the chapter. Many chapters include a mentoring component; some have conducted joint activities with other campus organizations; several have hosted educational programs; and a few are involved with Project Eye-to-Eye. Chapters are also engaged in raising funds for the DAPI scholarship, which allows students to feel that they are “giving ahead” in order to fund the scholarship for future members. In addition, the two founders are working currently in a project that will result in an annotated bibliography of contemporary fiction that includes a protagonist with a disability who is three-dimensional and not portrayed in a stereo-typical fashion. The bibliography will be posted on the DAPI website: www.deltaalphapihonorsociety.org

4. Mentoring

During each summer a mentoring application is sent to members of Delta Alpha Pi Honor Society who will be returning in fall. Students who wish to be considered for the mentor positions complete and return the application. The chapter advisors review the applications and select mentors based on the number of students participating in CATS with preference given to those who participated in CATS when they were first-year students. Each mentor is assigned to four-five first-year students.

Mentors meet with the chapter advisors prior to the first meeting of CATS in order to complete training and receive mentee assignments. Training includes a review of mentor characteristics, building trust and good listening skills, and suggestions for discussion topics when meeting with mentees (e.g., how to request accommodations from professors and delivering accommodation letters, attending CATS, using individual tutors and participating in group sessions, and priority registration.) Mentors also receive a list of their responsibilities to the program and to their mentees. Mentors share expertise in negotiating

campus life, requesting and using academic accommodations, and developing appropriate study strategies. Mentors benefit from their participation by increasing their skills in leadership, communication and advocacy.

During the first two meetings of CATS first-year participants and their mentors have the opportunity to get to know one another through formal activities (e.g., campus “jeopardy”) and informal group discussions. Mentors role-play delivering accommodation letters and requesting accommodations from professors to help acquaint students with the process. First-year students also receive a list of their responsibilities to their mentor and to the program.

The connection between first-year students and upper-class or graduate students with disabilities who are honor students creates a powerful synergy. First-year students benefit from interacting with a successful upper-class student who also has a disability; learning strategies and developing skills through working with a peer; receiving a positive message about success in a university setting; and developing a relationship with a positive role model. Anecdotally, the positive result can be observed by the fact that a majority of students who complete CATS successfully apply to be mentors when they are eligible to do so. Most mention in their application that they want to be mentors because their mentor relationship when they were first-year students was so beneficial for them. In 2008, two student mentors accompanied the program facilitators to present a concurrent session at the annual conference for the Association on Higher Education and Disability held in Reno, Nevada. The mentors spoke about their activities and involvement with first-year students and CATS as well as the benefits they felt they gained from serving as mentors.

5. Method and Results

Two research questions were developed:

1. Is there a difference in first-semester fall grade point averages between students who participate in CATS and those who are eligible but choose not to participate in the program?
2. Is there a difference in first-to-second year retention rate between students who participate in CATS and those who are eligible but choose not to participate in the program?

Table 1. Fall Grade Point Average (GPA) Comparison: CATS and Non-Cats for 2009 & 2010

CATS		Non-CATS	
Fall 2009	Fall 2010	Fall 2009	Fall 2010
GPA Range	GPA Range	GPA Range	GPA Range
1.15-3.75	2.39-3.77	0.50-3.57	0.75-3.60
Mean GPA	Mean GPA	Mean GPA	Mean GPA
2.63	3.14	2.34	2.56
%2.0 or Higher	%2.0 or Higher	%2.0 or Higher	%2.0 or Higher
80%	100%	73%	90%
%3.0 or Higher	%3.0 or Higher	%3.0 or Higher	%3.0 or Higher
47%	70%	33%	35%

Data for fall grade point averages (GPA) were collected and analyzed for the two groups for fall 2009 and fall 2010. Data indicate that students in both fall 2009 and 2010 who participated in CATS had a higher grade point average range and higher mean GPA than did those who

were invited but chose not attend. CATS participants also had a higher percentage for grade point averages over 2.00 and 3.00 in both years than did non-participants. See [Table 1](#).

Retention data for program participants were collected over an eight-year period beginning with fall 2003 and terminating with fall 2010 with the exception of fall 2008 when no data were collected due to the limited number of students who applied to attend CATS (four) and the fact that half transferred after the first semester. Data for students who did not participate in the program were collected from fall 2005 through fall 2010 with the exception of fall 2008. Retention rates for students who participate in CATS ranged from 93% to 100% with a consistent rate of 100% for the final two years of data collection. Data analysis indicates an aggregate mean first-second year retention rate of 91% for students who completed CATS successfully as compared with a 52% for those who were eligible but did not participate in the program. See [Table 2](#).

Table 2. CATS Retention Data: 1st – 2nd Year

Year Entered	CATS Retention Rate	Non-CATS Retention Rate
2003	92%	
2004	83%	
2005	88%	57%
2006	91%	61%
2007	83%	53%
2008	No Data	No Data
2009	100%	25%
2010	100%	64%
Mean	91%	52%

6. Discussion and Conclusion

Although statistical analysis was not completed due to the variation in cell sizes between and among groups over the eight-year period, a difference in mean aggregate retention rate between 91% and 52% is educationally significant and demonstrates the fact that students with disabilities can persist and achieve success in higher education.

Although many factors contribute to the academic success and retention of university students with and without disabilities, the results of this study reveal a correlation between participation in a structured, research-based first-year program with a mentoring component and higher first-semester grade point averages and stronger retention rates. Students who participate in CATS enhance a variety of skills (e.g., self-efficacy and self-advocacy) and strategies (e.g., effective study techniques using learning strengths) that contribute to academic and personal success. In addition they develop relationships with significant adults and peers who serve as successful role models. While the connection between CATS participation and academic success cannot be viewed as cause-and-effect, students do appear to benefit from completing the program successfully and from interacting with their mentors. While this qualitative, comparative study was limited due to the fact that only one university was involved, and numbers did not support statistical analysis, successful completion of this type of structured program can be viewed as one factor in enhancing persistence and retention. Further research is needed to study the many complicated factors (e.g., motivation, high

school preparation, or familiarity with appropriate assistive technology) that contribute both to consistent attendance and participation in a structured program and to academic performance and persistence to graduation.

References

- [1] Albiero-Walton, J. (2001). A comparison study and structural dimensions of the Multidimensional Scale of Perceived Self-Efficacy for college students with and without disabilities. 3046594: Dissertation Abstracts International.
- [2] Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- [3] Bandura, A. (1989). The multidimensional scale of perceived self-efficacy (MSPS). Unpublished test, Stanford University, Stanford, CA.
- [4] Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- [5] Benschoff, J.T., Fried, J.H. & Roberto, K.A. (1990). Developmental skill attainment among college students with disabilities. *Rehabilitation Counseling Bulletin*, 34, 44-52.
- [6] Budny, D., Paul, C.A., & Bon, L. (2006). The impact peer mentoring can have on freshman students. 2013 IEEE Frontiers in Education Conference (FIE), 1-6.
- [7] Crosling, G., Heagney, M., & Thomas, L. (2009). Improving student retention in higher education. *Australian University Review*, 51 (2), 9-18.
- [8] deFur, S.H., Getzel, E.E., & Trossi, K.I. (1996). Making the postsecondary education match: A role for transition planning. *Journal of Vocational Rehabilitation*, 6, 231-241.
- [9] Fichten, C.S., Bourdon, C.V., Amsel, R & Fox, L. (1987). Validation of the college interaction self- efficacy questionnaire: Students with and without disabilities. *Journal of College Students Personnel*, 28, 449-458.
- [10] Gambrell, E., Florian, V. & Splaver, G. (1986). Assertion, loneliness, and perceived control among students with and without physical disabilities. *Rehabilitation Counseling Bulletin*, 30, 4-11.
- [11] Getzel, E.E. (2008). Addressing the persistence and retention of students with disabilities in higher education: Incorporating key strategies and support on campus. *Exceptionality: A Special Education Journal*, 16 (4), 207-219.
- [12] Graham, S., Schwartz, S.S. & MacArthur, C.A (1993). Knowledge of writing and the composing process, attitude toward writing, and self-efficacy for students with and without learning disabilities. *Journal of Learning Disabilities*, 26, 237-249.
- [13] Graham, S. & Weiner, B. (1996). Theories and principles of motivation. In D.C. Berlinger & R.C. Calfee (Eds.)
- [14] *Handbook of Educational Psychology*, (pp. 63-84). New York: Macmillan Library Reference.
- [15] Henderson, C. (1999). College freshman with disabilities. A statistical profile. American Council on Education, Washington, DC. HEATH Resource Center.
- [16] Horn, L., Berktold, J. & Bobbitt, L. (1999). Students with disabilities in post-secondary education: A profile of preparation, participation and outcomes. US Department of Education, Office of Educational Research and Improvement, NCES 1999-187.
- [17] Houck, C., Englehard, J. & Geller, C. (1989). Self assessment of Learning Disabled and nondisabled college student: A comparative study. *Learning Disabilities Research*, 5, 61-67.
- [18] Jones, B. D., Paretto, M. C., Hein, S. F., & Knott, T. W. (2010). An analysis of motivation constructs with first-year engineering students: Relationships among expectancies, values, achievement and career plans. *Journal of Engineering Education*, 99 (4), 319-336.
- [19] King, G.A., Schultz, I.Z., Steel, K., Gilpin, M & Cathers, T. (1993). Self-evaluation and self-concept of adolescents with physical disabilities. *American Journal of Occupational Therapy*, 47, 132-140.
- [20] Komarraju, M. & Nadler, D. (2013). Self-efficacy and academic achievement: Why do implicit beliefs, goals, and effort regulation matter? *Learning and Individual Differences*, 25, 67-72.
- [21] Kriegsmann, K.H. & Hershenson, D.B. (1987). A comparison of able-bodied and disabled college students on Erikson's ego stages and Maslow's need level. *Journal of College Student Personnel*, 8, 48-53.
- [22] Leone, C. & Burns, J.T. (1997). Assessing contingency, power and efficacy: A psychometric investigation of social motivation. *Journal of Social Psychology*, 137, 255-266.
- [23] Liem, A. D., Lau, S., & Nie, Y. (2008). The role of self-efficacy, task value and achievement goals in predicting learning strategies, task disengagement, peer relationship, and achievement outcome. *Contemporary Educational Psychology*, 33, 486-512.
- [24] Louis, R. A., & Mistele, J. M. (2011). The differences in scores and self-efficacy by student gender in mathematics and science. *International Journal of Science and Mathematics Education*, Online First, 1-28.
- [25] Low, J. (1996). *Negotiating identities, negotiating environments: An interpretation of the experiences of students with disabilities*. *Disability & Society*, 11, 235-248.
- [26] Miller, E.F. (1994). *The Effect of Reading Instruction of the Academic Success of Underprepared College Freshmen*. Dissertation, Temple University, Philadelphia, PA.
- [27] Miller, E.F., (1998). *Effective Strategies for Tutoring Students with LD and ADHD*. Bethlehem, PA: Rabbit Hill Press.
- [28] Miller, E. F., (2005). "PAR for the course": A technique for reading and studying. *Learning Strategies, Study Skills, & Paired Courses: Practices for the College Classroom*. Learning and Study Strategies Special Interest Group, College Reading & Learning Association, 17.
- [29] Miller, E.F., & Albiero-Walton, J. (2003, November). New field data: One college's comparison of the academic success of students with and without disabilities. Information from HEATH. www.heath.gwu.edu/Templates/Newsletter/Issue8/AcademicSuccess.htm
- [30] Mooney, J., & Cole, D. (2000). *Learning Outside the Lines*. New York: Simon & Schuster Murray, C. Goldstein, D.D., Nourse, S., & Edgar, E. (2000). The postsecondary school attendance and completion rates of higher graduates with learning disabilities. *Learning Disabilities Research & Practice*, 15, 119-127.
- [31] Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, 66, 543-578.
- [32] Pampaka, M., Kleanthous, I., Hutcheson, G. D., & Wake, G. (2011). Measuring mathematics self-efficacy as a learning outcome. *Research in Mathematics Education*, 13 (2), 169-190.
- [33] Richardson, R.C., & Skinner, E. F. (1991). *Achieving Quality and Diversity: Universities in a Multicultural Society*. New York: Macmillan, American Council on Education.
- [34] Richardson, R. C., & Skinner, E. F. (1992). *Helping first-generation minority students achieve degrees*. *New Directions for Community Colleges*, 80, 29-43.
- [35] Schieman, S. & Turner, H.A (1998). Age, disability and the sense of mastery. *Journal of Health and Social Behavior*, 39, 169-186.
- [36] Shiftlet, B., Cator, C. & Meggenson, N. (1994). Active lifestyle adherence among individuals with and without disabilities. *Adapted Physical Activity Quarterly*, 11, 359-367.
- [37] Tinto, V. (1975). Dropouts from higher education: A theoretical synthesis of recent literature. *A Review of Educational Research*, 45, 89-125.
- [38] Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. (2nd ed.). Chicago: University of Chicago Press.
- [39] Tinto, V. (1999). Taking retention seriously: Rethinking the first year of college. *NACADA Journal*, 19 (2), 5-9.
- [40] Tinto, V. (2000). Linking learning and leaving: Exploring the role of the college classroom in student departure. In J. M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 81-94). Nashville, TN: Vanderbilt University Press.
- [41] Tinto, V. (2004). *Student retention and graduation: Facing the truth, living with the consequences*. Washington, D.D.: the Pell Institute.
- [42] Tinto, V. (2007). Research and practice of student retention: What next? *Journal of College Student Retention: Research, Theory & Practice*, 8 (1), 1-19.
- [43] U.S. Department of Education, National Center for Education Statistics (2013). *Digest of Education Statistics, 2012* (2014-015), Chapter 3.
- [44] Veenstra, C.P. (2009). A strategy for improving freshman college retention. *Journal for Quality and Participation*, 31 (4), 19-23.
- [45] Wessel, R.D., Jones, J.A., Markle, L, & Westfall, C. (2009). Retention and graduation of students with disabilities: Facilitating student success. *Journal of Postsecondary Education and Disability*, 21 (3), 116-125.

- [47] Whilite, S. (1990). Self-efficacy, locus of control assessment of memory ability and study activities as predictors of college course. *Journal of Educational Psychology*, 82, 696-700.
- [48] Zimmerman, B.J. (1996). Enhancing student academic and health functioning: A self-regulatory perspective. *School Psychology Quarterly*, 11, 47-66.
- [49] Zimmerman, B.J., Bandura, A. & Martinez-Pons, M. (1992). Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal setting. *American Educational Research Journal*, 29, 663-676.