Case Studies that Illustrate Achieving Career Success in Postsecondary Education through Self-Determination and Problem-Solving Skills

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Abstract: Conditions for students with disabilities in postsecondary education are improving and numbers are increasing. The potential for better outcomes may well be addressed through personal examples of effective support and accommodations. This article presents three case studies across a spectrum of conditions. These adults, with sensory, emotional, and/or cognitive disabilities, were 29 to 44 years of age, with a variety of life choices. They sought participatory guidance and support from a program at Virginia Commonwealth University. They explored career options around which to build degree programs in administration, exercise science, and photography. The emerging theme was the ability to create personal futures through self-determination and problem-solving.

Key Words: post secondary education, career planning, students with disabilities, self-determination, problem solving

Introduction

Research to identify strategies and practices that contribute to improved employment outcomes are imperative for enhancing career opportunities and quality of life outcomes for people with disabilities (Sharpe, Johnson, Mavis, & Rosen, 2001). The participation rate of these individuals in the United States (U.S.) labor force is alarmingly low compared to employment rates among people without disabilities (Gilmore, Schuster, Zaft, & Hart, 2003). In addition, individuals with disabilities experience lower average earnings, limited access to employee benefits, disproportionally high representation in low skilled jobs, and higher rates of poverty (Stodden & Dowrick, 2000). The completion of a postsecondary education that includes vocational training significantly improves the chances of employment success for men and women with disabilities (Gilson, 1996). Indeed, employment and salaries in the workforce have become increasingly skewed in favor of adults with a higher education (Dowrick & Crespo, 2004), and this difference is exacerbated for people with disabilities. Overall, educational opportunities maximize preparedness for careers in today’s changing economy when students with disabilities learn higher order thinking and technical skills necessary to take advantage of current and future job market trends (Stodden, 2001).

In the 1990s, there was a 90% increase in the number of universities, technical institutions, community colleges, and vocational technical centers offering supports for adults with disabilities to continue their education (Stodden & Dowrick, 2000). In our best estimate, the percentage of students with disabilities enrolled in postsecondary education doubled in the late 1990s. In a National Center for Educational Statistics (NCES) study of 16 million U.S. students, 9% reported a disability in 1999-2000,
although NCES (2002) cautioned this figure may not be comparable to previous years when a different set of questions was used. While increasing numbers of individuals with disabilities enroll in postsecondary education, many individuals experience difficulty continuing or completing their program of study (Heiman & Precel, 2003; N.O.D., 1998; Witte, Philips & Kakela, 1998). Factors contributing to low enrollment and high dropout rates for students with disabilities are not limited to the need for supports or services – they also include a host of systemic, socio-cultural, financial, and personal factors that impede academic progress (Stodden, 2001). While a considerable body of theoretical knowledge exists regarding the effectiveness of various services, supports, and programs in postsecondary education for persons with disabilities, much less information is available about the personal attributes that facilitate career growth and those that lead to successful futures (Dowrick & Skouge, 2001; Gartin, Rumrill, & Serebreni, 1996; Tindal, Heath, Hollenbeck, Almond, & Harniss, 1998).

In the last decade, there has been a substantial increase in the promotion of self-determination throughout the disability community. In their review of the link between education and employment, Stodden and Dowrick (2000) note “self-advocacy and self-determination—the abilities to express one’s needs and to make informed decisions—are considered to be among the most important skills for students with disabilities to have before beginning their postsecondary educational experience” (p.21). The main elements of self-determination applicable in this context are typically described to include: Self-awareness (including self-assessment); Self-advocacy (recognizing and acting upon one’s rights); Self-efficacy (a person’s belief that he or she can perform an identified task); Decision-making (goal-setting and planning), and Independence (initiating tasks and adjusting goals) (Yuen & Shaughnessy, 2000).

Educators who facilitate self-determination for people with disabilities enable those individuals to play an active role in developing their own careers (Kilsby & Beyer, 2002). Similarly, goal-setting, problem-solving, and decision-making and other skills that lead to enhanced self-determination enable students to assume greater responsibility and control over their lives (Ward, 1996). Multiple studies indicate that students who obtain self-determination skills while attending school have a greater chance of achieving positive post-school outcomes than do students who have not acquired these skills (e.g., Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1998).

Today’s growing body of knowledge suggests that providing opportunities for teaching and demonstrating decision-making and problem-solving skills greatly enhances a person’s sense of self-determination. In the field of disabilities research, frameworks have been developed for teaching students self-determination. For example, Wehmeyer and Palmer (2003) describe students being taught to solve a series of problems to construct a causal sequence to move them from where they are to where they want to be. Research on academic success and problem-solving skills indicates that teaching problem-solving skills, such as the ability to devise strategies, techniques, and compensatory methods to adjust for a particular disability, greatly enhances students’ ability to perform well in their present situations while building potential resolutions for encountering future obstacles (Columbus & Mithaug, 2003).
Case Studies on Disabilities in Postsecondary Education

Case studies may “put a human face on the postsecondary education issues” (Dowrick, 2000) and give full voice to consumer perspectives on topics such as postsecondary supports, scope and effectiveness of services, and employment outcomes. In particular, case illustrations offer details not available in surveys or aggregated data. The following three case studies emphasize how attributes such as self-determination and problem-solving may be fostered through postsecondary educational services. These traits may then promote career mobility and create foundations for future career success. The underlying themes of each case are presented and discussed, offering conclusions and recommendations for future teaching, policies, and research efforts.

The Career Connections Program at Virginia Commonwealth University (VCU) offers students with disabilities access to services and supports, provides internships, and maximizes university and community services (Briel & Getzel, 2001) to encourage positive career outcomes. Students are self-identified in their need for assistance and they direct the implementation of services provided. The VCU program offers job placement assistance, on-site strategies to facilitate learning, and coordination of community supports. The following three case examples illustrate the significant impact of VCU support services on access to career opportunities and life-long goals. These studies also demonstrate the strategies used in creating futures through problem-solving skills to attain career success and improved quality of life.

Case Example #1

“Dawn,” 36 years old, completed her undergraduate degree in history with a minor in political science. Dawn obtained services through the federally funded comprehensive VCU Career Connections Program for postsecondary students with disabilities. Dawn developed Stargardt’s Disease at a young age and became legally blind. While attending VCU, she contacted the Career Connections Program for assistance in securing employment. Dawn had minimal financially compensated work experience, but she had gained 10 years of leadership background in a volunteer organization. Dawn was frustrated with her lack of opportunity for professional employment. She had applied for many positions, but thought employers, after they discovered her visual impairment, would not call her for a second interview, let alone hire her.

The VCU staff worked with Dawn to develop an Individualized Career Plan to help focus on areas she needed to strengthen. Two primary areas emerged. First, she needed to revise her resume to emphasize her skills and abilities gained through her volunteer experience. The second area was learning how community services (e.g. The Virginia Department for the Blind and Vision Impaired) could assist with the provision of computer technology at the work site and how to communicate this information during an interview. She also took the initiative to research the skills requested by employers and gained proficiency in a variety of computer programs.
With assistance from the VCU Career Connections staff, a job lead was identified through the university career center. The VCU Career Connections staff contacted the employer and arranged a short meeting to establish a supportive relationship, further identify job duties, clarify work processes, assess the work environment of the company, and determine if the position would be a good match for the student. Information gathered reflected an independent position in which the employee would have his or her own computer and would communicate with representatives in 22 states. It was learned that the employer, a VCU alumnus, had never worked with anyone with a visual impairment and had little understanding of how technology could be used to enhance production. After a brief explanation of magnification software and closed circuit television screens, the employer reviewed Dawn’s resume and eagerly set up an interview.

As a result, Dawn secured a 30-hour per-week position as a research associate for a non-profit organization that served over 400 cities, counties, and towns in 22 states. Dawn worked for the organization for almost 2 years. She remained in contact with the VCU Career Connections Program keeping them informed on how she was performing in her position. While in this position, Dawn enrolled in a Master’s degree program at VCU and reconnected again with the Career Connections staff.

While working and going to school, Dawn decided to pursue another position and leave her Master’s degree program. After resigning her position and before leaving her degree program, Dawn expressed an interest in pursuing a position in events planning and sought to capitalize on her strengths, her personal communication skills, ability to coordinate details, and ability to organize multiple levels of information. She wanted to see if ultimately she would seek an advanced degree to help her in this field. Several informational interviews were arranged for Dawn to learn more about the events planning field. Dawn secured a position on a medical campus coordinating physicians’ schedules and education rotations. She brought with her the closed circuit television screen she had used in her previous position, and she installed Zoom Text software on her computer. Less than a year later, Dawn secured another position at the corporate headquarters of a company that manufactured and distributed credit cards. She was hired as an administrative assistant and received a salary $10,000 greater than in her previous job. Dawn worked in the distribution department, still using the closed circuit television screen originally purchased by the Department for the Blind and Vision Impaired. She then considered supplementing her education with a post-baccalaureate certificate in business management.

Dawn’s example of career success illustrates the self-advocacy skills that are essential to the development of self-determination—for example, the ability to express her needs, to make informed decisions, and to advocate for those decisions (Yuen & Shaughnessy, 2000). Dawn also demonstrated the ability to “reframe” her disability experience through the understanding of her strengths and limitations, and her belief in herself as being able to overcome the challenges by moving from a reactive to proactive stance (Shessel & Reiff, 1999). The promotion of self-determination was further
nurtured through Dawn’s encounters with the VCU Career Connections staff, which modeled effective education and advocacy skills with employers and consistently provided Dawn with opportunities to choose her goals according to her own interests. The VCU staff worked to maximize her strengths and problem solving. By providing connections to appropriate supports and opportunities for potential jobs relevant to Dawn’s own interests, the staff worked to foster Dawn’s persistence in pursuit of future success. The Career Connections program was able to identify locations for informational interviews using the VCU alumni office, the university career center, and other business contacts established through the program. This assisted Dawn to network with individuals in the field and offered an opportunity to discuss her strengths in a more comfortable setting than a formal job interview. Dawn often expressed that the VCU Career Connections program provided her an upper hand in the job market by educating employers about individuals with disabilities. The program staff members had the expertise about accommodating individuals with disabilities in the workplace and to work with these students on developing skills to manage their careers.

Case Example #2

“Bill,” 29 years of age, had been diagnosed with anxiety and depression while in high school. In college, he majored in community wellness and exercise science. Bill contacted the VCU Career Connections Program after reading an article published in the local newspaper. He had experienced difficulties getting an internship site for his senior year and had chosen not to receive support through the college’s services for students with disabilities.

Bill participated with the Career Connections staff to develop an Individualized Career Plan that focused first on securing an internship site. His work preferences were based on his recognized abilities and he was provided with direct assistance to secure a suitably appropriate internship. When the employer asked about learner accommodations, Bill was taught to indicate how important it was for him to repeatedly practice a new skill and to proceed at a moderate pace. He communicated how he could become easily stressed and that he dealt with stress through physical reactions. Previously, Bill had held a position as a grocery bagger for 2 years before being fired for a public outburst. Bill was not aware of stress management techniques and was unsure of what strategies to apply when under stress.

The VCU staff supported Bill and provided him with appropriate coaching to secure an internship at a local athletic club. On the second day of work, Bill asked the fitness director if he could go home, as he was not “feeling well.” On the third day, the VCU Career Connections staff came on-site to assist Bill in structuring his time at work. They identified specific duties that could be completed throughout the day, such as helping at the front desk or cleaning the equipment. It soon became apparent to the Career Connections staff that when Bill had any idle time, he became agitated and wanted to leave the work place. To alleviate this problem, the staff modeled certain strategies for Bill including greeting customers, talking to co-workers, and taking a break in the staff office.
VCU staff again intervened when Bill had difficulty explaining how exercise machines worked. After repeated observations of workouts, Bill still could not explain how the machines worked. The Career Connections staff recommended Bill actively participate. To help him learn about the weight machines, Bill was asked to write the name of each machine and muscle group strengthened by it on a 3” x 5” card. He would then identify something important to remember about the specific machine and note it on the card. A refined strategy was later developed in which VCU staff modeled the explanation and demonstration of each machine, followed by Bill performing the same functions. The VCU staff also brought in customers to participate in sharpening Bill’s skills.

Later in the year, Bill walked out of the club after a verbal exchange with the fitness director. Bill was frustrated with his inability to understand a specific job function he needed to complete. VCU staff encouraged Bill to identify potential stress management strategies including exercise, taking a break, and reading. With support from the VCU staff, Bill initiated a discussion with the fitness director about his disability and his need for accommodations when feeling stressed. He selected the tactic of excusing himself for a few minutes and walking outside in the parking lot as one primary strategy for coping with stress. The VCU Career Connections staff modeled this behavior for Bill and he later initiated this strategy independently while prodding a student with an introduction to the weight machines. Another useful strategy suggested for Bill by VCU staff was keeping a daily log of his activities and feelings to identify potential stressors. He was taught to review the previous day’s entries and to remember the frequent stress-free days he had experienced to support his growing self-efficacy.

As Bill neared the completion of his internship, the VCU staff and the Virginia Department of Rehabilitative Services helped Bill to arrange informal interviews at health clubs, YMCAs, and recreational centers to network with employers and provide opportunities to practice his interviewing skills. He also received services from a job coach. Bill obtained a part-time position as a program assistant at a local YMCA near his home. Bill and the Career Connections staff discussed successful support strategies identified during Bill’s internship at an informal meeting with his job coach. They then modified these effective strategies to fit the environment of Bill’s new job in the aquatic department. For example, Bill’s stress management technique of taking walks was modified at his new site to include swimming laps in the pool between aquatic sessions. Bill also maintained a journal and received one-on-one instruction from his job coach. Overall, Bill enjoyed his new job, demonstrated consistent attendance, and participated in various employee social activities on the weekends.

This case study illustrates the concept of creating futures, which includes divergent approaches to problem-solving and requires a person to invent new approaches that capitalize on the individual’s strengths and that are not jeopardized by the individual’s weaknesses (Dowrick & Skouge, 2001). Such strategies can be employed by adults with disabilities to enhance long-term employment success. When individuals generate unique solutions to fit their individual learning styles through brainstorming and
problem-solving, they create images of future success that they have not previously achieved—known as feedforward (Dowrick, 1999).

Bill’s ability to collaborate and problem-solve with his VCU Career Connections team and health club staff resulted in the development of unique methods and interventions specific to his challenges. Activities such as role playing, stress management, tasks development, and memorizing exemplify methods to facilitate success on multiple levels. Successful interventions and strategies were transferred into the subsequent work environment to ensure ongoing success.

Case Example #3

At 44 years of age, “Steve” elected to pursue a career in professional photography. He had previously completed several years of coursework at a college in Rhode Island and later moved with his parents to Virginia. He transferred to Virginia Commonwealth University to complete his degree. In his late thirties, Steve was in a car accident and subsequently experienced depression. He was later diagnosed with attention deficit disorder and a learning disability. Steve’s psychiatrist prescribed medication to assist with managing the attention deficits.

Steve contacted the VCU Career Connections program, wanting a part-time job in photography, his main field of interest. His long-term goals revolved around photography at special events, for magazines, or in studio work. He also had an interest in filmmaking. Steve felt intimidated by the interview process and lacked confidence about his ability to be successful in the photography field. He had not been interviewed in a long time and was uncertain about expectations in that profession.

Steve registered with the Disability Support Services on campus and received accommodations in his classes. He received extended time for tests and assignments and he taped his lectures, but still struggled to maintain a grade point average of 2.3. He had difficulty with short-term memory and he transposed letters when reading and writing. Steve learned best in his “hands on” classes and he benefited from immediate feedback on his performance. His technical skills were excellent.

Steve’s work history included several years of service in the Navy after high school, mill operator for 10 years, and a variety of odd jobs, including work as a substitute teacher and security officer. He reported that he required extra time to learn job tasks and that he used strategies to assist himself with learning (e.g., he wrote out formulas on 3” x 5” cards for mixing dyes at the mill). For recreation, Steve enjoyed camping, fishing, scuba diving, and boating. He had also been an assistant Scoutmaster for several years during which he taught boys photography and electronics for their merit badges.

To address Steve’s academic issues, the Career Connections Program provided Steve with information about other campus resources such as the Writing Center, and regular workshops on topics including how to decode textbooks or prepare for finals.
Fortunately, many of Steve’s classes focused on technical skills. Since Steve’s diagnosis had been relatively recent, contact information was also given regarding a support group for adults with attention deficit disorder.

It was agreed that participation in informal interviews would be a less threatening way for Steve to explore the photography profession. Steve preferred not to disclose his disability to his employers. VCU staff arranged several informational interviews with photographers, including specialists in a private studio, in a fine arts museum, and in aviation photography. The interviews were informal and included a review of Steve’s portfolio, a review of his photographic equipment, and discussions concerning career options. VCU Career Connections staff provided Steve with suggestions of organizations to join and ways to get started in the field. The process built Steve’s confidence in his abilities and his career choice.

Next, a summer internship was secured for him at a local newspaper by the Career Connections staff. The VCU School of the Arts encouraged qualified students to enter into limited and carefully selected internship arrangements, but did not have any available for the summer. The Career Connections staff and Steve felt that an internship opportunity would greatly assist him in learning more about the photography field and to gain further experience. Steve was provided with assistance in identifying opportunities and completing the application process. He took full advantage of the potential networking opportunities. He initiated travel to a local movie set connected with a film photographer. Steve’s photograph of the movie set made the front page of the local newspaper and he delivered several copies to the film photographer. He developed and maintained a friendship with the film photographer, learned about additional ways to get started in the field, and job-shadowed this photographer at another movie location.

Throughout the next year, Steve participated in additional informational interviews with free-lance photographers, university media services, newspaper photographers, field producers, and job fair representatives. He eagerly followed suggestions made by employers, such as joining the National Press Photographers Association, a local film office, and the International Freelance Photographer’s Organization, which enabled his photos to appear on their website. Through Steve’s multiple contacts, he secured a position working as a photographer for a large agency through which he had the opportunity to photograph Rod Stewart and Reba McIntyre in concert. Steve now plans on marketing his photographs to various magazines to continue building his reputation and personal business.

The previous case scenario demonstrates how an internship setting can be an optimal place for developing self-determination skills. There is a positive relationship between individuals who develop an internal locus of control and the demonstration of self-determination. Research has indicated that as people have the opportunity to choose, and to make decisions and actions according to their own environment, they develop an internal locus of control (Lefcourt, 1984) and individuals with disabilities gain control over major life events (Wehmeyer & Garner, 2003). Several researchers have questioned the possibility of developing self-determination for some individuals with disabilities.
who are consistently limited or denied the opportunity to make their own decisions (see Dowrick & Skouge, 2001). Steve’s decision to enter the field of photography was an internally driven choice that was based on his interests and skill level. With the assistance of the VCU staff, Steve was able to self-advocate for his needed supports and to gain access to opportunities within his chosen field. Steve also demonstrated decision-making skills (e.g., setting goals and standards, identifying information upon which to base his decisions, generating new solutions when needed, and choosing the best option to develop a plan).

Discussion

This article summarizes experiences in the lives of three individuals. In each situation there were moments in which the system could have worked better for these students. In each case, the individuals were able to avail themselves of staff and other advocates from within their environment to give leverage to their own self-determination, often through considerable problem-solving and experimentation to find out what worked as a solution acceptable for them. There were instances of making connections between early employment experiences and current opportunities. Here it was mostly university-based staff who initiated a series of experiences that proved substantially responsible for the success of the graduating student in the workplace. Another evident theme which emerges is the students’ considerable inner strength, perhaps the biggest factor in achieving their educational goals.

“Dawn” benefited from an early job success in launching a career. Her story illustrates the way in which prior employment can help employers focus their attention on previous work qualities, instead of her disability. This focus was partially brought about with Dawn learning about community supports available to her, and informing a potential employer about how technology enhanced her work performance.

Postsecondary educational training that provides internship experience can be crucial to preparation for employment. “Bill” succeeded in adapting to and compensating for his psychiatric disability. He benefited from working with support through on-the-job training situations that differed from college training. He was able to practice disclosing his disability, incorporating strategies into his work routine to help him learn a new work routine or to reduce his stress.

“Steve” elected not to disclose his disabilities to employers; however, he worked with the Career Connections staff to establish informational interviews to learn as much as possible about his profession. Steve’s internship proved to be an invaluable experience for him. It enabled him to learn how to assess the demands of his work environment, and to determine if supports were needed to assist him in successfully meeting these demands.

The case studies presented in this article provide examples of students with disabilities who needed varying levels of support to better understand how to problem solve and request accommodations within their work environments. Each student needed
to affirm their strengths and abilities, and used informational interviewing, job
shadowing, or internships as mechanisms to test new strategies to effectively interact in
the work place. As a result, these three students were able to pursue their chosen careers.

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References

students with disabilities. *Disabilities Studies Quarterly*. Retrieved February
/2001/Winter/dsq_2001_Winter_06.pdf

solving instruction on the self-determination of secondary students with
disabilities. In D. E. Mithaug & D. K. Mithaug (Eds.), *Self-determined learning
theory: Construction, verification, and evaluation* (pp. 172-189). Mahwah, NJ:
Erlbaum.


Dowrick, P. W. (2000). *Research findings brief: Case reports on students with
disabilities in postsecondary education*. National Center for the Study of
Postsecondary Education Supports, University of Hawaii at Manoa.


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