Review

Student support services for post-secondary students with visual disabilities

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Increasingly, students with visual disabilities are pursuing higher education. The students need to face the challenges and difficulties of disorganized services and technology to be independent learners. Institutions should provide the support services to meet the requirements of the students. Such students in the United States expressed their general satisfaction with the accommodations they received, but questioned the level and types of support services. This paper, which reviews the literature regarding the challenges post-secondary students faced with student support services the institutions provided, discusses selection of an appropriate college, online learners with visual disabilities, gaining access to textbooks and student services based on universal design (UD).

Key words: Visual disabilities, student support services, post-secondary students.

INTRODUCTION

According to the National Center for Educational Statistics (NCES) of the United States Department of Education (Horn and Nevill, 2006), 11% of post-secondary students had documented disabilities; the population included 3.8% of students who were visually impaired, such as blindness or poor vision that could not be corrected by wearing glasses. With the increasing population of students with documented disabilities, institutions need to provide academic courses and access to services such as admissions, registration, financial aid, residential life and housing, and advising offices. Students with disabilities may obtain the required services in the colleges after they identified themselves by submitting documentation to the appropriate office that might have staff members with academic backgrounds or individuals who came from counseling centers. However, fear of the unknown, inadequate knowledge, and false assumptions of faculty and administrators caused difficulties in providing appropriate education and

communication for students with disabilities (Myers and Bastian, 2010). Institutions may design training projects to focus on the needs of the students and ensure the ability of staff in the student service office for helping the students (Burgstahler and Moore, 2009).

This paper aims to review the literature about the context of visually impaired post-secondary students in learning requirements. Beginning with selecting an appropriate college, differences between services provided in high schools and colleges encountered by students with visual disabilities (SWVD) are addressed. Included are access difficulties of online learners with visual disabilities, such as the compatibility of assistive technology devices and software used by institutions and access to textbooks, and the concepts providing the current services for students with visual impairments (SWVI) and improvement of student services toward UD were provided.

REVIEW OF LITERATURE

A review of the literature on student services for post-secondary SWVD includes: selecting a college for

students with visual disabilities, online learners with visual disabilities, gaining access to textbooks, and student services based on UD. The first three areas focus on the services students received and the last area concentrates on the improvement of the student support services.

Selecting a college for students with visual disabilities

Selecting an appropriate college is the first step faced in pursuit of post-secondary study. Differences of services and accommodations offered between high schools and colleges might cause the students great stress or anxiety or make them doubt their ability to succeed (Hamblet, 2009). In the K-12 system, students with visual impairments are covered by the Individuals with Disabilities Act (IDEA) (Gilson et al., 2007; Hamblet, 2009). Procedures and documentation in high schools, including Individualized Education Plans, require parents' signature. Evaluation documents might be acquired with the assistance of the schools, and the students needed fewer or were not involved in the arrangement of their accommodations (Hamblet, 2009). The IDEA no longer applies after high school graduation. In order to obtain the required services in colleges, the students must identify themselves to the appropriate office or dean by submitting documentation to prove their disability and meeting with a disability coordinator (Barnard-Brak et al., 2010; Hamblet, 2009).

However, the requirement of learners to be independent is emphasized in college. Hamblet (2009) found that the services available in high schools but unavailable at post-secondary institutions included tutoring, study guides, alternative format examinations, and extended time to complete papers and out-of-class assignments. The law does not require colleges to provide the students with disabilities one-on-one tutoring, instruction in special strategies or techniques, or tutoring by an experienced, qualified teacher. Study guides were another accommodation that could not be obtained from professors or tutors because the colleges expect independent learners to find information they needed on their own or to obtain assistance from a tutoring center. In addition, colleges are not required to provide alternative format examinations such as Braille or auditory formats that were free services in the high school. The students also found that they needed to use text-to-speech software for examinations and assignments because their institution did not offer human readers (Hamblet, 2009). The students have to use compensatory strategies and assistive technology (AT) to help them overcome their areas of weakness. Compared with the services obtained in high school, the students with visual disabilities in the United States have to handle their learning in college more independently.

Online learners with visual disabilities

Online learning has advantages of convenience, flexibility of scheduling, and elimination of transportation problems that attract people with visual impairments (Candido, 2008). However, as the number of college students opting for online learning expands rapidly, blind students and SWVI have difficulties in achieving success. Muwanguzi and Lin (2010) found that SWVD encountered challenges in accessing online educational materials to obtain their academic goals, with online technologies especially among the experiences of accessibility and usability. Through vital instructional media such as course management systems (CMS), the majority of students could communicate with faculty and peers, but the CMS such as blackboard could be a problem of information access for the blind or visually impaired students who relied on adaptive software for web navigation. The adaptive software that was used to access and retrieve electronic information from computers limited the ability of students with visual disabilities to pursue their academic goals. Candido (2008) found that the students faced an obstacle in the compatibility of the online course websites with the screen readers they utilized.

Candido (2008) recommended online learners with visual impairments to investigate website compatibility aspects of online learning prior to making a decision to take a course and also indicated that a basic level of computer knowledge and technical ability were important for them. A demonstration or trial connection can be requested to test the platform or the connection before taking the course. In addition, an individual evaluation could be done based on the students' experience with the system. Further, the online learners needed to find out if the staff of the Office of Disability Services at the institution was familiar with the online curriculum and platforms they used. When the students encountered technical problems, they might postpone completing their assignments because college technical support teams were unfamiliar with the assistive technology (AT) and could not assist the students (Candido, 2008). Therefore, prior working-experiences of the office staff in assistance to the SWVD would be helpful to support the students.

Though computing tasks caused loss of time and a lag in academic progress, the SWVD still exhibited a high degree of perseverance and commitment toward their educational goals. The students were motivated and optimistic about their academic success despite the frustrations and feelings of marginalization resulting from computer tasks (Muwanguzi and Lin, 2010). In order for online learners to succeed in an online educational context, Candido (2008) recommended that the online learners could communicate with faculty and the technical help desk to know the way that the institution handled materials and resources such as electronic textbooks. The students need to confirm that the

platforms used for online learning are compatible with AT products and the institutions can provide websites based on UD that benefit the students with and without disabilities.

Gaining access to textbooks

Post-secondary SWVI utilized services offered by various providers to gain access to textbooks. Gilson et al. (2007) found that the students might procure their textbooks through various options, such as self-scanning, using the services of the Office of Disability Services, acquiring available textbooks via commercial or specialized providers, and depending on human readers. The Americans with Disabilities Act (ADA) of 1990 does not mandate that book publishers offer accessible formats of books for individuals with print reading disabilities. In the states of Kentucky and New York, which have passed textbook legislation for post-secondary institutions, the students with print reading disabilities had electronic textbooks for their college courses (Gilson et al., 2007; Kaplan et al., 2006). The students who were not covered by textbook legislation had to depend on the Office of Disability Services at the university or college or other providers such as Recording for the Blind and Dyslexic (the RFB&D). Gilson et al. (2007) found that the RFB&D and publishers were primary sources for accessible textbooks, and the Office of Disability Services at the universities and colleges also provided the service.

However, the experiences of people with visual impairments or blindness who were full-time college students identified difficulties to gain access to their textbooks for the courses (Gilson et al., 2007; Wolfe and Lee, 2007). The RFB&D supported text conversion services to SWVI, but the students found the textbooks they received were from the older versions. The discrepancy in page numbers or content between editions procured and course syllabi required caused inconvenience. Some college students obtained assistance from the Office of Disability Services. But the offices tended to provide sections of textbooks based on the requirements of the syllabus instead of providing entire textbooks that could aid the students to study at their own pace (Gilson et al., 2007).

In addition, the SWVI wish to obtain up-to-date textbooks for the coming semester as much as their non-disabled peers do, but the students identified delays in receiving accessible textbooks even though they could succeed in accessing textbooks. It was important for the students to have available book lists made by professors one or two weeks before a semester commenced, to obtain textbooks in stock purchased by a bookstore earlier, and to have adequate time for providers to scan. If any earlier steps were delayed, delays in receiving accessible textbooks could occur (Gilson et al., 2007). Therefore, before the semester commences, releasing available book lists by the professors and selling textbooks by the bookstore early will be helpful to the SWVI. The students, prior to the coming semester, need to find proper options and providers to obtain their textbooks base on their own requirements and context.

Student services based on universal design (UD)

Institutions offer student services to post-secondary students with disabilities to meet their academic related needs. Based on Federal legislation, Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, post-secondary institutions must provide reasonable accommodations to qualified students who disclose their disabilities and submit appropriate documentation and ensure equal access to programs offered (Burgstahler and Moore, 2009). Burgstahler and Moore reported that institutions, to comply with the legislation, have developed policies, procedures, and specialized staff to provide students who disclose their disabilities reasonable accommodations, including access to classes and other campus facilities, products, and services. Further, most post-secondary students who disclosed their disabilities expressed their general satisfaction with the accommodations they received, but questioned the level and types of support services provided to students with disabilities, such as accessing courses, financial aid, housing, and other services.

In order to increase faculty and academic administrator knowledge and skills in educating students with disabilities for providing better services, a project, Disabilities, Opportunities, Internetworking, and Technology (DO-IT), was conducted (Burgstahler and Moore, 2009). The DO-IT project was funded by the United States Department of Education and provided various options including printed checklists and other materials, on-site instruction, video presentations, and a comprehensive Web site for designing and delivering professional development for faculty and academic administrators. The training helped faculty and academic administrators to improve their knowledge and skills in regard to students with disabilities. Further, the trained instructors applied accessible practices in their classes and brought the average course grades of students with documented disabilities closer to those of students without disabilities (Burgstahler and Moore, 2009).

A UD strategy as part of the DO-IT project could benefit students with a wide range of abilities and disabilities when the staffs of the student service office (SSO) and faculty need to assist all students. The UD strategy included creating accessible environments and products such as publications and Web sites, changing facilities slightly, such as lowering the placement of postings on a wall in order to enable them to be read more easily from a lower point; reminding tutors to write in large print with contrasting ink; improving the communication skills of

SSO staff to treat all students with respect, courtesy, and patience; and dealing with disability issues as other diversity issues. When UD is applied to as many students as possible (Barnard-Brak et al., 2010), fewer students with disabilities may need accommodations and a number of problems such as other students claiming that the SWVD receives unfair advantages will be reduced. Following UD principles increases efficiency and reduces the range of accommodations and strategies that the SSO staff need to be familiar with, the need to know about a student's undisclosed disability, and the time required to provide reasonable accommodations. Further, when UD is applied to education, faculty proactively designs teaching materials, delivery methods, and environments for potential students. The designed instruction can maximize its range to benefit all the students including students with disabilities who do not disclose their disabilities rather than assisting specific students with disabilities (Burgstahler, 2009; Burgstahler and Moore, 2009; Morra and Reynolds, 2010).

Improving the SSO staff's ability to employ UD strategies can increase the accessibility and usability of their services for all students and minimize the need for special accommodations (Burgstahler and Moore, 2009). Making student services accessible through accommodations and UD can enhance post-secondary students with disabilities in academic, social, and career success. In addition, the types and the level of support services under the UD strategy can be expected to benefit the students without disabilities and the SWVDs, whether or not the latter disclose their disabilities to the Office of Disability Services.

CONCLUSION

As post-secondary SWVD enter colleges without the services they had in the high schools and face the qualities and the types of student support services that may be inadequate to reach their expectations, the transitioning students need to select a college carefully and make preparations prior to taking a course or a program. The college students have to consider their requirements and investigate the services provided by the institution they are interested in to meet their needs. Before the course or the program start, it is the responsibility of the students to ensure accessibility,

because compatibility between AT devices and the CMS is essential to success in online learning. Timely procurement of textbooks is also important for the SWVD to acquire their learning smoothly. On the other hand, student services with a concept of UD provided by the institutions can enhance the types and the level of student support services and benefit students with a wide range of abilities and disabilities, including those with undisclosed disabilities.

REFERENCES

Barnard-Brak L, Lechtenberger D, Lan WY (2010). Accommodation strategies of college students with disabilities. The Qual. Rep. 15(2):411-429.

Burgstahler S (2009). Universal design of instruction: Definition, principles, and examples. University of Washington. Retrieved February 19, 2011, from http://www.washington.edu/doit/Brochures/Academics/instruction.html

Burgstahler S, Moore E (2009). Making student services welcoming and accessible through accommodations and universal design. J. Post Secondary Edu. Disabil. 21(3):155-174.

Candido JP (2008). Visual impairment in a visual medium: Perspectives of online learners with visual impairment. Diss. Abstr. Int. 69(11):180A. (UMI No. 3338731).

Gilson CL, Dymond SK, Chadsey JG, Hsu SYF (2007). Gaining access to textbooks for postsecondary students with visual impairments. J. Postsecondary Edu. Disabil. 20(1):28-39.

Hamblet EC (2009). Helping your students with disabilities during their college search. J. College Adm. 205:6-15.

Horn L, Nevill S (2006). Profile of undergraduates in U.S. postsecondary education institutions: 2003–04: With a special analysis of community college students (NCES 2006-184). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Kaplan S, Weiss S, Allen M (2006). Promising practices of accessible information technology in K-12 educational settings. In C. Crawford et al. (Eds.), Proceedings of Society for Inf. Technol. Teacher Edu. Int. Conference 2006, pp. 2284-2289.

Morra T, Reynolds J (2010). Universal Design for Learning: Application for Technology-Enhanced Learning. Inquiry 15(1):43-51.

Muwanguzi S, Lin L (2010). Wrestling with online learning technologies: Blind students' struggle to achieve academic success. Int. J. Distance Edu. Technol. 8(2):43-57.

Myers KA, Bastian JJ (2010). Understanding communication preferences of college students with visual disabilities. J. College Student Dev. 51(3):265-278.

Wolfe GL, Lee C (2007). Promising practices for providing alternative media to postsecondary students with print disabilities. Learn. Disabil. Res. Pract. 22(4):256–263.