

Enhancing the post-secondary campus climate for students with disabilities*

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As a result of a combination of legislative, academic and social changes, increased numbers of students with disabilities are considering post-secondary education as a viable option [2]. Students with disabilities view access to post secondary education as (1) an opportunity to enhance their chances of obtaining and maintaining employment [1], (2) a means of earning a higher annual income [4], and (3) a pathway to life-long independence and a greater quality of life. With a greater number of students with disabilities enrolling in colleges and universities nationwide, it is become more apparent however, that many campuses are not equipped to meet the unique and varied needs of these students. Just because access to post-secondary education is increasing for students with disabilities, it does not always follow that students selecting this option will discover welcoming, supportive campus climates, programming and services that will facilitate choice, independence, and social participation, or adequate supports to promote academic success. Even at universities that have a solid record of developing and implementing model service delivery activities in support of students with disabilities, it is questionable as to whether these activities have, to any significant degree, impacted the underlying campus climate.

Keywords: Post-secondary education, students with disabilities, post-secondary transition, higher education access, academic adjustments, services for students with disabilities, employment outcomes

1. Current practices

The collection of services and supports offered to students with disabilities at any given college or university tends to vary greatly depending on several factors. Most disparities noted are often a result of fundamental philosophical differences, variations in allocated resources (fiscal and personnel) and/or limitations based on administrative and programmatic structure at the institution. Vogel [6] presents a continuum concept of services provided on the college level. One end reflects colleges and universities deemed minimally compliant. That is, their disability services program consists of a single office staffed by one individual, who often has only limited specialized knowledge regarding services for students with disabilities, and who coordinates all disability services on campus. At the opposite end of the spectrum are colleges and universities that have comprehensive programs in which professional staff members, well trained regarding the needs of students with disabilities, assist with everything from identifying needs to advocating for accommodations and modifications, to counseling and monitoring student performance. Additionally, these programs may offer an extensive array of student supports and services (some fee-based) designed to facilitate psychosocial adjustment and academic success.

New Mobility Magazine conducted a study in which 50 public universities and colleges selected from the top tier of US News and World Reports' Annual Ranking were surveyed [5]. The goal was to identify "Disability-Friendly" institutions. With responses from 34 schools, 10 were identified as schools that stood out from the rest, based on a combination of unique programming, opportunity for participation and service delivery approach, or for some relatively subjective attributes that somehow make a campus environment disability-friendly. In general, the top ranked campuses focused on programmatic access rather than physical access. Although not every facility on campus was fully accessible, every aspect of the students' major and related studies was made accessible, even if that entailed al-

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tering classroom locations, field trips or testing procedures. The idea being that the focus is directed at providing students equal access to programs, not fixating on ramps and elevators.

Additionally, these disability-friendly campuses provided a wide array of support services. Many offered a “one-stop” arrangement where a menu of services was coordinated. Some services and accommodations offered might include accessible classrooms and furniture, adaptive equipment assessment and referral, adaptive recreation programs, liaison with faculty and vocational rehabilitation offices, alternative testing formats, grievance resolution, housing advise, TTY/TDD network, curriculum modifications, laboratory and library support, paratransit service and parking accommodations, priority or on-line registration, career counseling, community mental health programs in residence halls, crisis intervention, disability management advice, peer mentoring and support groups.

2. Finding the right match

For students with disabilities who decide to pursue post-secondary education, the selection of a disability-friendly campus is critical to their long-term success and entails a great deal more investigation and consideration than the typical checklist of college attributes and amenities that most non-disabled students consider [3]. Once the student has a sound grasp of the nature of his or her support needs, functional capabilities, academic and psychosocial profile, the evaluation of a variety of determinants can be completed and the best possible match derived. The degree to which a campus may be disability-friendly can often be gleaned by assessing the following institutional attributes:

- Campus Climate: Is the campus atmosphere generally accepting of students with differences in learning styles? Are students considered in the planning process and encouraged to participate fully in a variety of campus-life activities?
- Program Philosophy: Is there a specialized area of emphasis associated with the services? Is there emphasis on learning strategies, remediation or social skills?
- Awareness and Support: Is the school administration and faculty aware of the needs of students with disabilities and the adjustments that will help meet these needs? Is there good communication between all parties with whom the student will rely on for support ?
- Academic Adjustments: How are academic adjustments coordinated? Are there specialized accommodations such as note takers, real-time captioning, and readers/scribes for examinations?
- Waivers and Substitutions: What is the procedure and is assistance available with this procedure? What kind of documentation is required? What is the probability that waivers and/or substitutions are granted?
- Course Load and Graduation Time: Is it possible to maintain a reduced course load? Do students with disabilities generally take longer to complete the requirements for graduation? Is priority registration available for students with disabilities?
- Tutorial Support: Is it scheduled or on an as-needed basis? Is tutoring provided by peers or professional staff? What is the tutor-student ratio? Does the staff receive continual professional development?

In most instances, the outcomes of college level learning for all students should be to develop lifelong learning skills which are applicable in a myriad of situations; to refine abilities related to problem solving and creative thinking; to implement interpersonal and teamwork skills; and to develop written and oral communication abilities [7]. With this in mind, and realizing that the degree to which supports and services required to succeed in a post-secondary setting may be highly individualized, Virginia Commonwealth University (VCU) has set a course to develop and implement a broad, comprehensive disability services program designed to enhance the degree with which it supports and serves its students with disabilities. The institution has placed specific emphasis on the implementation of new, innovative training and professional development programming, and the implementation of a more decentralized disability services model in an effort to foster a more welcoming and supportive campus climate. This manuscript will describe the initial stage of this process, which incorporated a comprehensive evaluation of services and supports for students with disabilities at VCU.

3. Background

Founded in 1838, Virginia Commonwealth University is an urban, public, research, university located in Richmond, Virginia. Composed of two campuses: the Medical College of Virginia Campus, its enrollment

is over 23,000 including undergraduate, graduate, and health professional students. The University annually confers over 3,900 degrees from a variety of colleges, schools and its graduate school.

Like most colleges and universities, VCU, in recent years has seen its enrollment figures increase steadily and as would be expected, the number of students self-identifying and documenting a variety of physical, developmental, sensory and/or learning disabilities has risen proportionally. Based on recent trends and projected enrollment figures, some administrators acknowledged concern regarding (1) the adequacy of the scope of services provided, (2) the efficiency and consistency with which services are delivered, and (3) the appropriateness of staffing, budgeting and the disability services programmatic structure.

The disability services program currently in place includes an Office for Services for Students with Disabilities (OSSD) on both the Medical and Academic campus. Each office is staffed by a Coordinator and at least one program support staff member. Student employees often augment the OSSD staff on the Academic Campus. The OSSD staff primarily serves to coordinate and provide a variety of academic supports and services. Additionally, the OSSD Coordinators conduct faculty and staff training, and serve as an information and referral resource regarding disability-specific issues for perspective students, matriculating students, and student services staff and administrators campus wide.

Although VCU has historically demonstrated compliance with relevant legislative mandates, students, faculty and community-based stakeholders contended that the university was somewhat remiss with regards to the development and implementation of innovative support programming that the aforementioned legislation indirectly seeks to facilitate. In fact, anecdotal data suggest that the very students the ADA and Section 504 were enacted to protect perceived the VCU campus climate to be somewhat unwelcoming. Further, through a variety of avenues, students reported often feeling unsupported, underrepresented, socially unfulfilled, and even hindered academically during their post-secondary experience.

For years, Virginia Commonwealth University has worked to provide comprehensive services for all students. As the population of students with disabilities continues to increase, the entity primarily responsible for Disability Services program management, that is, the Offices of Services for Students with Disabilities have reportedly been under tremendous strain in their efforts to provide continued quality service.

In an effort to (1) provide documentation of unmet needs, (2) assess the need for increased funding, (3) offer recommendations regarding administrative and programmatic model and best practices, and (4) facilitate a comprehensive strategic planning effort, Program Management and Evaluation specialists were commissioned to conduct an external evaluation of disability services campus wide as described below.

4. Methodology

The external review of Services for Students with Disabilities at Virginia Commonwealth University was conducted in four phases. The first phase incorporated an on-site visit to the Office for Services for Students with Disabilities on each campus. Structured interviews, conducted with the program coordinators and staff were designed to allow each OSSD Coordinator an opportunity to:

- (1) provide a detailed description of the nature of their interaction with students, and explain their service delivery protocol,
- (2) discuss the extent to which they are involved in the planning, design and implementation of non-student training, advising, program development and other activities,
- (3) discuss strategies employed with regards to administrative structure, work scope and service delivery, that render the OSSD effective in identifying and meeting the needs of the students,
- (4) offer recommendations regarding organizational structure, program development, and direct service delivery that may impact OSSD efficiency and short- and long-term effectiveness, and,
- (5) characterize the overall impact of OSSD activities on the students' academic success and the university community at large.

The second phase of the review entailed a direct-mail survey of all students currently enrolled at the university who were currently, or had previously received services from one of the OSSD entities (see Appendix 1). The surveys were conducted in an effort to ascertain the students' collective perspective on a variety of disability-related "student-affairs" issues, and their level of satisfaction with the services provided by the OSSDs, faculty and university administration.

Phase three of the review included personal interviews with 49 "key informants", that were identified in conjunction with the OSSD Coordinators. The key in-

formants included administrators, faculty, and support staff from a variety of university schools and administrative divisions who serve in integral student support roles. Additionally, students representing a variety of developmental, sensory, physical, psychiatric and learning disability groups were interviewed during this phase. A scripted, face to face interview format was used (see Appendices 2 and 3) to gather pertinent information in the following areas:

4.1. Faculty/administrators

- Current level and nature of interaction with students with disabilities
- Level of awareness and understanding of issues pertinent to students with disabilities
- Perception of university's general responsiveness to needs of students with disabilities
- Perception of university's support of faculty/administrators in serving students with disabilities
- Recommended strategies for improving delivery of services to students with disabilities

4.2. Students

- Perception of VCU campus climate (acceptance/inclusion of students with disabilities)
- Level of cooperation and support from key faculty and administrators
- Perceived level of awareness and sensitivity to students' needs in planning activities and programs
- Level of participation in typical "campus life" activities
- Unmet support needs

The final phase of this evaluation activity encompassed a systematic review of OSSD programs nationwide, selected based on their enrollment figures. A multi-faceted approach was taken to gather information including a world-wide-web search, review of professional literature, site visits and telephone interviews.

5. Results

5.1. Student survey

Using OSSD intake data, 532 student surveys were mailed out (450 from Academic Campus and 82 from Medical Campus). Additional surveys were placed in strategic locations across campus to include dormitories, the student activities center, the OSSD offices on

Table 1
Student demographics

	Frequency
Gender	
Male	33%
Female	67%
Age (years)	
< 23	36%
23–25	13%
26–30	13%
30–35	10%
> 35	28%
Primary residence	
On campus	4%
Off campus	96%
Transportation	
Paratransit	4%
Private vehicle	81%
Public transportation	15%
Employment status	
Employed	33%
Not Employed	64%

both campuses, and the University Counseling Center. The student survey yielded a 12% return rate.

Survey respondents included one-third males and two-thirds females and fell into three age groups: < 23 years (36%), 23–35 years (36%), and > 35 years (28%). Most students lived off-campus (96%) and were not employed (64%) at the time of the survey (see Table 1).

Table 2 presents the distribution of the students' primary disability category. Students, who identified specific learning disabilities, including the Attention Deficit Disorder (ADD) and Attention Deficit Hyperactivity Disorder (ADHD) as their primary disability, composed over one half (53%) of all students responding to the survey. Although none of the respondents revealed visual impairment and speech/language disorder as their primary disability, approximately 8% of respondents identified one of those categories as a secondary disability. Survey participants represented 16 academic majors, from 11 university schools. Summary data that including major field of study, matriculation classification and admission status of the participants are summarized in Table 3.

Part II of the student survey requested information regarding the utilization of services in 7 broad categories: (1) Physical Accessibility Assistance, (2) Special Media or Adaptive Equipment, (3) Registration, Curriculum or Instructional Modifications, (4) Personal Assistance, (5) Specialized Support Services, (6) Generic Services and (7) Student Services. Table 4 summarizes specific services within each category that stu-

Table 2
Primary disability classification

Disability classification	Primary
ADD/ADHD	38%
Specific learning disability	15%
Emotional disorder	15%
Chronic health problem	15%
Head injury	4%
Hearing impairment	4%
Neurologic impairment	4%
Physical impairment	4%
Visual impairment	0
Speech/language impairment	0

Table 3
Academic profile

	Frequency
Academic major (by school)	
Mass Communications	25%
Humanities/Sciences	24%
Business	15%
Allied Health	11%
Education	11%
Social Work	9%
Arts	6%
Medicine	5%
Community Programs	3%
Dentistry	2%
Nursing	2%
Undeclared	23%
Academic classification	
Graduate/Professional	26%
Freshman	23%
Sophomore	15%
Junior	18%
Senior	18%
Admission status	
Full-time	77%
Part-time	23%

dents identified as most utilized and/or needed. For the purposes of this survey, service utilization indicated that a service that had been used in the past or was currently being used by the student at the time of survey. Service need indicated that a service had been requested that was unavailable, or for which the student was deemed ineligible.

Students were also asked to respond to 12 questions regarding their satisfaction with the current level of services provided by the OSSDs and/or other university entities. Most of the students that responded were somewhat/reasonably satisfied with the services they have received. Table 5 provides specific data regarding the students' responses to each of the 12 items.

The final part of the student survey included 9 open-ended questions. The following four major themes emerged from these data:

1. Students strongly believe that the instructional faculty, more so than any other campus entity, can impact their academic success. In numerous ways, the students expressed that without full cooperation and support of the classroom faculty, they had little chance of succeeding academically. Additionally, many students perceived the faculty as generally lacking sensitivity and awareness regarding students with disabilities. No matter how much the university administrators worked to create a supportive environment, or how well informed the students were regarding the gamut of campus support services, or how creative or innovative the OSSDs were developing and delivering services, the level of cooperation from the faculty was always perceived as the final determinant of success in the classroom.

- “I have worked extremely hard to overcome comprehension difficulties resulting from my learning disability. After 3 semesters here [at VCU], I’ve had maybe two instructors who offered me more than an impatient attitude and unreasonable expectations.”
- “Spending my own time and money to finally get my disability documented was a waste. I’m in more debt and further behind in my classes. . . All the documentation in the world won’t help to change the attitudes of some of attitudes of some of my teachers.”
- “I’m trying to be a responsible adult and make the best of a difficult situation. I should not suffer because certain faculty are not informed about working with students with disabilities. . . They just don’t believe my disability is real.”
- “Even with the help from the OSSD, the professors need programs to make them more aware for our special needs.”

2. Too much emphasis is placed on the removal of the architectural barriers without adequate consideration of the “service-oriented” barriers, which are most critical to student success. Approximately two-thirds of the OSSD caseload on each campus includes students with learning and/or psychological disorders. Although these students were sensitive to the needs of those with physical limitations, they strongly expressed the need to place more attention on programmatic and/or instructional barriers to academic success

Table 4
Service utilization and need

Service type	Utilized	Needed
Physical accessibility assistance		
Accessible on-campus transportation		×
Handicap access parking spaces	×	×
Accessible seating in rooms, auditorium, etc.		×
Special media or adaptive equipment		
Textbook tape recording	×	×
Special equipment for learning disabled students		×
Computer adaptations		×
Registration, curriculum or instructional modifications		
Information about service availability		×
Flexible testing arrangements/exam modifications	×	×
Program modifications	×	
Personal assistants		
Note-takers	×	×
Tutors	×	×
Specialized support services		
Personal skills training		×
Study skills training		×
Support groups or clubs		×
Typing or word processing assistance		×
Resource library	×	×
Generic services		
Personal counseling	×	×
Career counseling	×	×
Financial aid		×
Student services		
Recreation facilities	×	
Auditorium/theaters		×
Cafeterias	×	
Student commons	×	

instead of physical access. They see the lack of efficient delivery of support and services as the primary barrier to their academic success, and want the university to focus its efforts in this area.

- “It’s been great to see more accessible doorways, ramps and bathrooms, but I won’t be here to enjoy them if my needs in the classroom are not met. What about special programs for students with learning disabilities?”
 - “Something as simple as scheduling an exam took me 11 phone calls to confirm. Don’t make the students work so hard to get the services they need. . .”
 - “I spend so much time trying to figure out where to go and who to see [for services]. It just puts me behind even further and I get frustrated. . . the community college I transferred from offered so many programs . . . they made sure I had a fair chance like all of the other students.”
- “I’m so busy trying to get the services I need to get through my classes, I don’t get to participate in other activities going on on-campus.”

3. Coordination of services, on- and off-campus, is crucial to students as they attempt to successfully manage their disabilities in the context of post-secondary education. Most students expressed an interest in gaining as much support and as many services as are available. Further, they stated their willingness to accept these services in just about any format and source, on- or off-campus, that will facilitate a smooth transition into post-secondary education and foster their academic success. That many students were already successfully working with community-based agencies such as the Department of Rehabilitative Services (DRS), private counseling and community support centers, and academic support agencies, may indicate that (1) these agencies can play an invaluable role, either primary or supplemental, in the provision and/or coordination of services and (2) more formalized inter-

Table 5
Satisfaction with services

Survey item	Not satisfied	Somewhat/ reasonably satisfied	Very satisfied	Not applicable
Physical accessibility of public use areas on campus	4%	24%	19%	53%
University's efforts to increase accessibility in campus	6%	30%	15%	49%
Availability of special equipment or academic aids	15%	44%	8%	33%
Availability of classroom, course and program requirement modifications	10%	64%	17%	19%
Availability of registration accommodations	9%	45%	26%	21%
Quality and quantity of assistive technology	15%	30%	13%	42%
Availability of technology training	10%	23%	6%	60%
Coordination and implementation of accommodations	21%	38%	33%	8%
Student participation in policy and planning of services	11%	49%	17%	23%
Cooperation of faculty in implementation of accommodations/modifications	17%	56%	25%	2%
Coordination of services	17%	40%	23%	21%
Level of involvement in campus life	10%	57%	14%	14%

action should be taking place with these types of agencies. As the university engages in its efforts to provide efficient, effective, coordinated support programming and services, there are numerous agencies that can provide disability-specific expertise, program guidance, and technical assistance to on-campus entities as well as provide direct service and support to students.

- “VCU expects us to be as resourceful as we can in getting through our coursework, I don't think they are being very resourceful . . . If the school can't provide the service, at least try to help us find what we need in the community. . . My DRS counselor can't do much but the little support and encouragement she gives goes a long way sometimes.”
- “After 5 years of undergraduate coursework and one semester as a grad student I have finally figured out how to get what I need . . . too much wasted . . . it's not a matter of what services VCU has to offer, but how willing they are to work with students like me, doing whatever it takes to get us the support we need to be successful. Believe it or not I still go back to my community college counselor to get support from time to time.”
- “I have only been here one semester, but it has be a hard one. Going from high school to

college with a learning disability is very hard to handle. Compared to where I came from, VCU doesn't seem to be very organized. I know I should take more responsibility for myself, but with all the money I pay for tuition I think that VCU would have more to offer.”

4. Students are eager to participate in all phases of service planning and policy making in an effort to improve services for students with disabilities. In no uncertain terms, the students expressed that they do not perceive that there is adequate representation of students with disabilities on planning and policy-making committees. The students revealed a strong interest in participating in not only development and implementation of university wide policy and planning programming and activities for students, but on an individual level, reviewing service options, designing their service plans and monitoring and assessing the effectiveness of the services to effect long-term change.
 - “If the university had been listening to students with disabilities they would know by now that things are not working the way they are.”
 - “I don't think that students with disabilities are represented. As a student with a learning

disability I can provide first-hand information that will help the professors and other staff to understand what I'm going through and what kinds of special needs I have. Only someone with a disability knows."

- "Take a look at some of the universities out west. There programs offer just about every thing a student could need because they listen to what the students have to say and take it seriously. This is the first time in three and one-half years that anyone has asked me what I think about disability services."
- "I have been denied services that were mandatory for my success in classes. Shouldn't I be the one who knows what works best for me? I don't think that VCU always knows what is best for the students . . . they never ask what we want or what we think. I had to locate what I needed off-campus and pay out of my own pocket."

5.2. Key informant interviews

A total of 49 key informant interviews were conducted. Key informant interview participants included 38 faculty and administrators, and 11 students representing the following 11 university schools and support programs: Medicine, Dentistry, Allied Health, University Career Center, Nursing, Humanities and Sciences, Arts, Social Work, Education, Health Careers Opportunity Program and Business. All of the data gathered through the interview process were compiled and incorporated into the discussion of the overall findings and proposed recommendations.

6. Findings

Although the character of the academic programs and the demographic nature of the student populations were somewhat different between the Academic and Medical campuses, the framework for the delivery of services to students with disabilities was relatively uniform. The actual findings revealed little difference in the thoughts, ideas and recommendations expressed by administrators, faculty and students between campuses regarding the identified unmet administrative, fiscal and programmatic needs. Below, seven major findings of this review are discussed.

1. There was a marked dichotomy between the collective perception of the students and that of the administration and faculty that support them, with regards to VCU's "commitment" to providing the necessary support services to students with disabilities. Both the student survey and key informant phases of this review posed questions to ascertain the perceptions of students, faculty and administrators regarding the university's commitment to provision of services. Students overwhelmingly felt that there was little or no university commitment to them. The students felt that (1) there was a lack of qualified staff dedicated to the provision of services, (2) the facilities in which current services were provided were inadequate, and (3) very few, if any long-term support programs were in place that address the changing needs of students with disabilities as they matriculate. In contrast, key interviews revealed that faculty and staff felt that in most instances, the university was not only addressing students' needs, but putting forth maximal effort to create a supportive, inclusive and encouraging campus environment and promoting academic success.
2. The lack of OSSD staff available to assist in the direction, coordination and provision of services has impacted the efficiency and effectiveness with which services are delivered to students with disabilities. On the Academic and Medical campuses the OSSD coordinators report being understaffed and managing caseloads that are ever-increasing. In addition to the provision of direct services to students, the coordinators reported a host of other additional activities that they provide in support of faculty and administrators, which absorb a great deal of time, and dramatically impact their capability to effectively plan, implement and coordinate specialized programs, and counsel and advise students. Although administrators in some schools had established effective protocols which streamlined many of the required activities, numerous faculty members still expressed frustration with the inefficiency with which their students were serviced by the OSSDs. Faculty, administrators and students expressed two major concerns. First, there was a perception that the services for students with disabilities were relatively the same from one student to the next. There appeared to be little consideration for degree or severity

of disability, classroom context, academic major or any other factors that would warrant a more individualized delivery of counseling, advising and academic planning services. Second, faculty and administrators were concerned that the OSSD coordinators were independently making recommendations regarding academic accommodations and modifications without adequate input from faculty. It was strongly recommended that a more collaborative approach to this decision-making process be instituted in an effort to allow for greater contribution from appropriate faculty.

3. The lack of administrative staff identified specifically to manage and direct a coordinated, university-wide effort has resulted in a service delivery continuum that is haphazard and disjointed. This finding results primarily from key informant interviews. As previously stated, some schools within VCU have attempted to address this issue by implementing internal protocols and designating staff to facilitate a more smooth progression through the process of referral, documentation, identification and implementation of accommodations and/or modifications, and ongoing follow-up. In many instances, however, faculty and administrators felt that they and their students were hampered by forced dependence on a haphazard system. The only recourse an administrator may have is to refer a student to the OSSD, and wait on recommendations. Some specific areas of concern were:

- Timeliness of services – Faculty and administrators were cognizant of the fact that the OSSDs were servicing large caseloads, with less than adequate personnel, however, they maintained that the lack of timely services from the OSSDs diminished their internal efficiency regarding assessment of student needs and effectiveness in the provision of supports and accommodations to students, with minimal disruption in their academic course work.
- Access to information and resources – Acknowledging that they are not well equipped to deal with disability related issues within and outside of the classroom, faculty revealed concerned that pertinent information and resources has heretofore been unavailable and/or inaccessible to them. OSSD personnel appeared to be overtaxed with providing

direct service to students, and have provided only limited support, on a case-by-case basis. They would like access to data regarding disability legislation, specific disabilities and associated academic success strategies, and any other disability-related information deemed relevant.

- Lack of long-term planning and coordination – Faculty members noted that they continue to see increased numbers of students with disabilities who require accommodations and/or program modifications. They and students alike questioned whether adequate long-term strategic planning was taking place to facilitate management of the growing needs of the students, coordination of service delivery at the departmental level, and support the faculty and administrators who are somewhat reluctant and relatively unprepared to deal with disability related issues in the classroom.
 - Consistency of service delivery – Although there were no instances of blatant inconsistency noted, concern was expressed that the lack of formal OSSD policy and procedure guidelines may lead to services be provided in an inconsistent manner between campuses and across disability groups.
4. Administrators and faculty felt somewhat unsupported in terms of the university's provision of relevant training, information and resources necessary to facilitate successful interaction with students with disabilities. Invariably, the numbers of students self-disclosing their disabilities and requesting accommodations, course modifications and the like, are increasing campus wide. With few exceptions, the faculty members interviewed had either in the recent past, or are presently teaching courses in which one or more students with disabilities is enrolled. In each of these instances, the students disclosed the existence of learning disabilities, psychiatric disabilities, and sensory disabilities. Faculty and administrators both reported having relatively limited knowledge of disability specific legislation and other related issues, and were generally uninformed regarding resources, accommodations and assistive technology. It was fully recognized that generally, there continues to be an increased demand on faculty and administrators alike. However, there was still a shared feeling among administrators and faculty that (1) they

were obliged to gain essential tools necessary to foster the classroom success of their students with disabilities, and, (2) the university should make a greater effort to ensure opportunities to gain those tools.

5. Students were generally dissatisfied with the degree to which faculty and administrators were knowledgeable and aware of their disability-specific needs and the level of cooperation received during the implementation of prescribed modifications and accommodations. Both the student survey and the interviews revealed the students' perception that generally, the faculty and administrators were often lacking the knowledge and resources necessary to adequately address their needs. Most students recognized that students with disabilities made up a very small percentage of classroom enrollment, however, they believed it to be a realistic expectation that the faculty and administrators maintain, at minimum, a rudimentary level of knowledge regarding academic issues for students with disabilities and that they act in a cooperative and professional manner when interacting with them to plan and implement modifications and accommodations. Students felt that the university should place this issue of professional development and preparedness as a higher priority, as it directly impacted their capability to succeed in the classroom.
6. Students were generally satisfied with the willingness of the OSSDs to provide support, but felt that the scope of services was inadequate and uncoordinated and the logistical management of the programs inefficient. Almost all students interviewed and/or surveyed agreed that generally, the OSSD coordinators and staff were making a good faith effort to provide supports and services and, in many cases, offered services adequate to support and meet the students' needs. However, many students felt that the services offered were limited in scope, inadequately administered and coordinated and were delivered in less than desirable conditions. Further, students reported that the process for obtaining services was (1) time consuming, (2) laborious and (3) anxiety provoking. Ultimately, it discouraged students from seeking supports and services that could have potentially facilitated their academic success. Some specific categories in which students deemed services inadequate or unavailable were:

- Specialized support services – comprehensive orientation, ongoing follow-up (freshman to graduation), and mentoring
 - Coordination of services – long range academic planning, career and personal counseling
 - Academic support services – disability-specific academic success coaching and study skills training
 - Special media and adaptive technology – textbook taping, special equipment (hardware, software and other equipment) for mobility, learning and sensory impaired students
7. The real and/or perceived lack of consideration of special needs by Student Activities personnel has directly impacted the capability of students with disabilities to “fully” participate and become actively involved in campus life. Students responding to the survey and during the interview revealed that they felt that there was little or no consideration given to them regarding special needs that they may have, that could hinder them from attending and/or participating in the full range of student activities offered by the university. Further, it was noted that no programming had been planned specifically with students with disabilities in mind. The students felt that in the course of planning, student affairs personnel should give some consideration to designing programs, trips and other extracurricular activities around the interests and capabilities of students with physical and/or sensory disabilities. Many students felt that although special adaptations and accommodations were available for students with disabilities to participate in programming designed for the general campus population, some structured adapted programming and activities would serve to promote participation by more students with disabilities.

7. Recommendations

The following recommendations are provided based on findings compiled from all phases of this review. These recommendations are organized into three categories, (1) Program Design and Implementation, (2) Personnel and Administrative Management and (3) Training and Evaluation.

7.1. Program design and implementation

1. Design a comprehensive program structure that incorporates all services to be provided, develop an implementation plan and phase in as appropriate. A review of recent literature and survey of a myriad of university disability service programs nationwide revealed relative uniformity in the scope of services, and two basic variations regarding the nature of service delivery. The centralized models incorporated a substantial team of professional, administrative and support staff, exclusively responsible management and coordination of a comprehensive, support program for students with disabilities on campus. In contrast, the decentralized models serviced students through a meticulously managed network of professionals from a variety of university entities. In this model a core team served a program management and coordination function that monitored and facilitated a “satellite” method of service delivery. Upon review of the current staffing levels and the existing OSSD frame it is recommended that a relatively decentralized model be implemented. The recommended model should incorporate the following broad categories of services:

- Admissions
- Academic Counseling and Support
- Disability-related Counseling, Assessment and Evaluation
- Advocacy and Liaison Services
- Information and Referral Services
- Data collection and Program Evaluation

To varying degrees, some of these services areas are currently being addressed, however, the lack of coordination of services has rendered much of the efforts ineffective. Figure 1 identifies some recommended supports and services within each broad service category, and specifies the primary and collaborative university entities that may serve a role in service delivery.

2. Formalize cooperative agreements with both on-campus entities and community based collaborators that will participate in delivery of services. Regardless of the disability service model that is ultimately employed, a myriad of university and community-based entities may be involved in service delivery (Academic Success Center, University Counseling Services, University Ca-

reer Center, Admissions, Department of Rehabilitative Services, Centers for Independent Living, etc.). Through the use of formal agreements, there will be little confusion regarding specific roles, responsibilities and expectations.

3. Develop and widely disseminate a comprehensive OSSD program policy and procedures manual for students, faculty and administrators. Every phase of the review revealed the need for clearly defined guidelines regarding the scope and nature of service delivery to students with disabilities. It is imperative that an update and/or new policy and procedures manual address the students, faculty and administrators and their unique roles in the service delivery process.
4. Develop new marketing tools and information dissemination strategies directed toward faculty, administrators, students and community-based stakeholders. Currently, broad program and service descriptions are identified in several campus and publications and resource materials, however, no materials exist that provide a comprehensive description of services available or procedures for accessing these services. Minimally, there should be materials developed and disseminated that provide detailed information regarding (1) the scope and nature of services available to students with disabilities, (2) the process by which students access these services, (3) students’ rights and responsibilities, and (4) faculty responsibilities. Potential dissemination avenues include the university’s web page, student and faculty orientation materials, departmental in-service training activities, community/public awareness activities, direct student mailing and via student organizations.

7.2. Administrative management and personnel

1. Establish an advisory council to assist in the strategic planning and monitoring of OSSD activities. The process of planning, developing and implementing new and/or existing programs and services will involve a variety of university entities.

Undoubtedly, informal interaction has in the past, and will continue to take place between OSSD personnel and others involved in the process however, a formal advisory council can be established to serve in support of the OSSD program and personnel. At minimum, this coun-

Services and Supports	Primary & Collaborative Organization(s)
Admissions	
● Pre-enrollment Planning – provision of program policy and procedures, information and referral, description of availability of support services, and informal needs assessment.	Admissions Office, OSSD
● Comprehensive Orientation – 1-2 day on-campus orientation designed specifically to address needs and issues relevant to students with disabilities (above and beyond standard student orientation process.)	OSSD, Academic Support Center (ASC)
● Academic Service Planning – Review of preliminary individualized needs assessment and development of short- and long-term service plan for students (possibly in conjunction with the orientation process.)	OSSD, ASC
Academic Advising and Support Services	
● Support Services - Scribes, Readers, Test Aides/Proctors, Sign Language Interpreters, Classroom Assistants, and Campus Attendants	OSSD
● Specialized Accommodations - Computer-Assisted Instruction, Adaptive Equipment, Technology Assessment and Evaluation, Taped-Textbooks, Mobility Access	OSSD, University Library Services (ULS), Rehabilitation Research and Training Center (RRTC)
● Training and Advising – Course Selection and Scheduling, Tutoring, Mentoring, Academic Skills Assessment and Training, Self-Advocacy Training	OSSD, ASC, UCS, University Counseling Services (UCS), RRTC
Advocacy and Liaison Services	
● Faculty/Administration, Family/Care Attendant and Community based services – advise, coordinate and provide technical assistance and follow-up regarding modifications, accommodations and other disability related issues.	OSSD
Counseling, Assessment and Evaluation	
● Disability-Related Counseling	UCS, OSSD
● Disability-Related Support Groups	OSSD, UCS
● Career Planning	University Career Center (UCC), OSSD, RRTC
● Psycho-educational Testing and Disability Documentation	UCS
Information and Referral Services	
● Miscellaneous Campus-wide Disability-Related Issues – serve as primary source for information and referral regarding special university and community-based services and programs.	OSSD
Program Evaluation and Data Collection	
● Process Evaluation – internal monitoring and evaluation of program and service delivery processes for efficiency and effectiveness.	OSSD, RRTC
● Satisfaction with Services – establish method of assessing students, faculty and administrators to ascertain level of satisfaction with services delivered.	OSSD, RRTC
● Student/Service Data Collection – develop system of data collection, tracking and assessment of student demographics, service utilization, unmet demand, etc.	OSSD, RRTC
In the provision of most services, the school in which the students' academic major is located would also serve in a primary consultation/coordination role.	

Fig. 1. Recommended programs and services.

cil should have student, faculty and administrative representation as well as community-based stakeholders such as the Department of Rehabilitative Services and Regional Centers for Independent Living.

2. Incorporate more students with disabilities on student-affairs related program planning and policy boards. Students interviewed were ready and willing to serve on program committees and planning/policy boards and advisory coun-

cils in an effort to gain adequate representation and greater visibility on campus. Realizing that many boards already have representation from the student body at large, the students with disabilities felt that they would bring a unique perspective of students' needs and interests that may not otherwise be considered or addressed.

3. Consider the administrative re-assignment of the OSSD offices such that they serve as more autonomous entities within the University framework. Both administratively and programmatically the disability services office on the Academic Campus has been identified with the University Counseling Services (UCS). Although UCS should be an integral partner in the delivery of services, it is recommended that for programmatic purposes, the disability services office be deemed an autonomous organization with which numerous campus and community entities collaborate to facilitate delivery of services to students. The current placement of OSSD under UCS creates unnecessary administrative bureaucracy, and reduces visibility of the program and its services. Also, in many instances, students are deterred from seeking supports and services because they are fearful of "psychological" documentation on their academic records.
4. Hire at least one additional full-time administrative staff person and one full-time professional in each of the OSSD locations to assist in the implementation of program activities. Limited and vague data has made it difficult to accurately ascertain the current level of service provision to students, or project future service demands. It is apparent, however, that each of the offices would benefit programmatically from at least one additional staff person who would assist in direct service provision to students. Once a standardized data collection procedure is in place, it will be much easier to evaluate service demands, identify service needs, make long-term staffing and budget projections, and clearly identify additional staffing needs. In the meantime, student and graduate assistant positions may continue to fill the intermittent staffing voids.

7.3. Evaluation and training

1. Design and implement a comprehensive program evaluation and data collection plan. For the purposes of short and long term strategic plan-

ning and budgeting, it is recommended that the OSSD programs develop and implement an internal evaluation plan. This plan should include a formal process for assessing overall program effectiveness including student satisfaction with services. In addition, provisions should be made for standardized collection (MCV and VCU), of student demographic, service utilization and unmet student needs data.

2. Develop disability-specific professional development modules for faculty and administrators. Some efforts are being made by OSSD personnel to provide training and information to faculty and administrators that request it, however, it is recommended that a comprehensive training program be implemented that will provide all stakeholders with adequate baseline information to deal with students with disabilities. Some avenues of training may be existing faculty development programs, departmental in-service training, internet short-courses, and new faculty orientation. A variety of university entities, to include the RRTC and School of Education, have staff that are equipped to serve as potential trainers.
3. Ensure that OSSD personnel are provided ongoing professional development and specialty training. As the disability arena is ever growing and changing, it is recommended that OSSD personnel be encouraged to take full advantage of ongoing professional development opportunities. It is imperative that as they continue to offer supports and services to students with disabilities, and serve as a resource for relevant disability-related information, they must be aware of pertinent legislation, policy and programming trends and knowledgeable of current technology, instructional strategies and the variety of other support services deemed best practices within the disability services arenas.

8. Study implications

Upon completion of the study and submission of the final report to University administrators, a variety of follow-up activities have taken place. First, there has been a wide dissemination the study findings and gain feedback and input regarding the recommendations from administrators, students, faculty and staff. Secondly, efforts were directed toward the develop-

ment of a work plan to guide the implementation of accepted recommendations. Finally, steps have been taken to secure external funding to support some of the recommended activities.

The study findings and recommendations were widely endorsed by the university community, and as a result will serve to:

- Facilitate an increased level of involvement by university and community-based entities.
- Initiate an expansion of the University's strategic planning efforts to consider disability-specific issues in a more comprehensive way.
- Foster a greater level of awareness and sensitivity throughout the campus community. Lay the foundation for the implementation of innovative training and professional development activities and creative service delivery paradigms.

Encourage long-term documentation and evaluation of disability-specific and related programs and services.

9. Conclusion

The purpose of this manuscript was to provide an overview of the initial evaluation phase of Virginia Commonwealth University's efforts toward making its campus more welcoming and supportive of students with disabilities. Based on this review, there is no question that the services provided heretofore have served to facilitate a measure of academic success for some students. However, faculty, administrators and students alike believe that there are numerous administrative and programmatic issues that must be addressed to render these programs more efficient and effective.

In the last 5 years, the disability service caseloads have increased by approximately 35%, and are projected to continue to rise. The OSSD Coordinators

as well as university administrators consistently express concern and apprehension as VCU strives to meet the long-term challenges of providing quality programming and support services under the constraints of an inadequate framework and insufficient resources. However, VCU is well on its way to addressing all of the pertinent issues through a coordinated, strategic planning effort and systematic implementation of the recommendations resulting from the initial evaluation.

Most assuredly, the result will be a disability service model that can immeasurably impact the VCU community at large, and more specifically, the students with disabilities who work so diligently to attain academic success.

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