Development of a UD Checklist for Postsecondary Student Services

Sheryl E. Burgstahler and Elizabeth Moore, University of Washington

Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 and its 2008 amendments require postsecondary institutions to provide access to courses and services for qualified students with disabilities. However, little guidance is available to help a student service unit take proactive steps toward becoming more welcoming and accessible to individuals with disabilities.

Administrators from twenty-three postsecondary institutions nationwide partnered to explore ways to make their student services more welcoming and accessible to students with disabilities (DO-IT, 2008). The project was led by the Disabilities, Opportunities, Internetworking, and Technology (DO-IT) Center at the University of Washington. Project participants drafted a checklist of qualities of an accessible student service office based on literature review, experiences at their schools, and preliminary data collected about accessibility issues from participants in fourteen focus groups with a total of seventy-two student service personnel and thirteen groups with a total of fifty-three students with disabilities nationwide (Burgstahler & Moore, 2009).

Project team members piloted the draft instrument on their campuses (Anderson, Cory, Griffin, Richter, Ferguson, Patterson, & Reed, 2008), and with that experience and their professional opinions, produced iterative revisions of the draft checklist over a two-year period resulting in a list of forty-four accessibility strategies in six application areas (Burgstahler, 2010). Project team members suggested that the checklist would be more useful in the field if it was shortened by retaining only those items that knowledgeable practitioners considered to be both most important and most easily attainable. To take this step and to further test the face validity of the instrument and improve its usefulness, they recommended seeking input from other student service personnel knowledgeable about working with students with disabilities.

METHODS

A questionnaire was developed to seek expert opinions regarding the relevance of items on the student service checklist for accessibility. An invitation to participate in the survey was sent to student service personnel at US two-year and four-year "nonprofit" colleges and universities with enrollments of more than one thousand students.

Mailing labels were purchased from Higher Education Publications, Inc. (HEP) and surveys were sent to "Disability Services Director" and "Director of Career Center/Student Placement" at each institution.

Two hundred ninety-six individuals completed the survey; eighty percent were women; twenty-nine percent had disabilities; and thirty-nine percent worked in a disability service center. Another thirty-nine percent worked in general "student services," student life, counseling, and student affairs. The others were distributed across different units, including academic affairs, instructional services, academic support, learning center, career services, admissions, advising, and general administration. Most respondents worked at four-year institutions with graduate programs (forty-nine percent) or two-year colleges (forty-four percent). A large majority (ninety-three percent) reported having a high or moderate level of responsibility for serving students with disabilities. It is not possible to compute a meaningful response rate, since it is expected that many who received the survey were not part of the target group for the study because of low levels of experience in the content area.

For each strategy on the checklist, respondents rated (1) its importance as a measure of the accessibility of a postsecondary student services unit on a scale from one ("Irrelevant") to four ("Essential"), and (2) the ease of its implementation on a scale from one ("Easily Attainable") to four ("Very Difficult to Attain"). For analysis, the numerical values of the attainability responses were reversed so that one meant "Very Difficult to Attain" and four meant ("Easily Attainable"). In this way higher attainability ratings indicated more attainable strategies, just as higher importance ratings indicated more important strategies.

The importance and attainability ratings of the checklist items were analyzed separately. In addition, the importance and attainability ratings were combined into a single composite rating for each strategy, resulting in composite scores between two (indicating both "Irrelevant" and "Very difficult to attain") and eight (indicating both "Essential" and "Easily attainable"). This composite rating has the disadvantage of giving equal priority to strategies that are "Irrelevant" but "Easily attainable" and those that are "Essential" but "Very difficult to Attain." To overcome this shortcoming, the composite ratings were weighted (multiplied) by their importance rating, resulting in a priority score on a scale from two ("Irrelevant" and "Very Difficult to Attain") to thirty-two ("Essential" and "Easily attainable"). These would be the "high impact" strategies. Through this process strategies considered to be very important and very attainable received the highest scores, while strategies that were seen as unimportant and difficult to attain received the lowest scores. In a final step, a second set of priority scores was produced, which was weighted by attainability instead of importance, pointing to "quick fix" strategies.

RESULTS AND DISCUSSION

Nearly half (forty-five percent) of the items on the checklist were rated as "Essential" for an assessment of the accessibility of a student services unit by more than half of the respondents. One-fourth (twenty-five percent) of the items were rated as "Essential" by at least sixty-five percent of the respondents. Strategies in the Planning, Policies, and Evaluation section were rated as most important, with more than half (fifty-seven percent) of those rated as "Essential" by at least seventy percent of the respondents, but as relatively difficult to attain. Strategies in the Computers, Software, and Assistive Technology section received the fewest "Essential" ratings with between seventeen and thirty-seven percent of the respondents rating these as "Essential."

Section I: Planning, Policies, and Evaluation

ID	Strategy	Importance mean (SD)	% Essential	Attainability mean (SD)	Priority score by importance mean (SD)
I.2	Policies assure access to facilities for people with disabilities (pwd).	3.8 (.40)	86%	3.0 (.61)	26.7 (4.8)
I.4	Policies assure access to computers for pwd.	3.8 (.49)	78%	3.0 (.65)	25.8 (5.5)
I.3	Policies assure access to printed materials for pwd.	3.8 (.48)	79%	2.9 (.75)	25.4 (5.6)
I.5	Policies assure access to electronic resources.	3.7 (.52)	70%	2.8 (.67)	24.3 (5.7)
I.6	Accessibility is considered in the procurement process for resources and equipment.	3.5 (.61)	58%	2.6 (.81)	22.0 (6.2)
I.7	Disability-related issues are addressed in evaluation methods.	3.4 (.67)	46%	2.7 (.78)	21.1 (6.9)
I.1	People with disabilities are included in student service planning, review processes, and advisory committees.	3.4 (.67)	46%	2.7 (.79)	21.0 (7.2)

Section II: Facilities and Environment

ID	Strategy	Importance mean (SD)	% Essential	Attainability mean (SD)	Priority score by importance mean (SD)
*II.7	Wheelchair accessible restrooms are available.	3.9 (.39)	87%	3.1 (.66)	27.1 (4.7)
*II.1	Wheelchair accessible parking areas are identified.	3.7 (.54)	73%	3.5 (.63)	27.0 (6.0)
*II.3	Wheelchair accessible entrances to buildings are clearly identified.	3.6 (.53)	65%	3.3 (.72)	25.3 (6.0)
II.9	Aisles are wide and clear for wheelchair users.	3.6 (.53)	67%	3.0 (.67)	24.4 (5.9)
II.2	Wheelchair accessible pathways are identified.	3.5 (.61)	55%	3.1 (.71)	23.6 (6.4)
II.10	Objects and protrusions are removed or minimized.	3.4 (.62)	41%	3.1 (.72)	23.0 (6.7)
II.14	Telecommunication devices (TTY/TDD) are available for people who are deaf or have speech impediments.	3.3 (.72)	48%	3.1 (.72)	22.2 (7.7)
II.4	All levels of a facility are connected via an accessible route of travel.	3.5 (.62)	46%	2.5 (.83)	21.5 (6.7)
II.8	At least part of a service counter is at a height available to a person in a seated position.	3.3 (.66)	44%	2.8 (.73)	21.1 (6.7)
II.13	Quiet work areas are available where noise and other distractions are minimized.	3.2 (.64)	35%	3.0 (.73)	20.8 (6.8)
II.6	Elevators have auditory, visual, tactile signals, and controls that are reachable from a seated position.	3.3 (.70)	46%	2.7 (.81)	20.7 (7.3)
II.5	High-contrast, large-print signs direct visitors.	3.0 (.67)	23%	2.9 (.80)	18.3 (6.4)
II.12	Window drapes are available to reduce glare.	2.7 (.76)	13%	2.7 (.83)	14.9 (6.9)
II.11	Lighting is adjustable by the individual.	2.7 (.73)	12%	2.3 (.77)	13.9 (6.6)

* indicates "quick fix" items — those in top ten when weighted by attainability.

Section III: Staff

ID	Strategy	Importance mean (SD)	% Essential	Attainability mean (SD)	Priority score by importance mean (SD)
*III.5	Staff members know how to respond to requests for disability-related accommodations.	3.7 (.52)	68%	3.2 (.62)	25.5 (6.0)
III.6	Staff members are aware of issues related to communicating with pwd.	3.5 (.56)	58%	3.1 (.62)	24.1 (6.3)
III.4	Staff members are familiar with the availability and use of alternate document formats.	3.2 (.65)	33%	2.9 (.67)	20.0 (6.7)
III.3	Staff members are familiar with the availability and use of assistive technology.	3.2 (.62)	28%	2.8 (.69)	19.4 (6.5)
III.2	Staff members are familiar with the availability and use of the Telecommunications Relay Service.	3.0 (.71)	23%	2.9 (.69)	18.3 (7.1)
III.1	Staff members are familiar with the availability and use of a TTY/TDD.	2.9 (.71)	18%	2.9 (.68)	17.3 (6.8)

* indicates "quick fix" items — those in top ten when weighted by attainability.

Section IV: Information Resources

ID	Strategy	Importance mean (SD)	% Essential	Attainability mean (SD)	Priority score by importance mean (SD)
*IV.3	Key publications include procedures for requesting disability-related accommodations.	3.6 (.52)	65%	3.5 (.62)	26.2 (6.2)
*IV.2	Key publications include a statement of commitment to universal access.	3.3 (.69)	45%	3.3 (.74)	22.6 (7.6)
IV.6	Electronic resources, including web pages, adhere to accessibility guidelines or standards adopted by your institution or your specific project or funding source.	3.5 (.59)	52%	2.9 (.68)	22.5 (6.3)
*IV.1	Pictures in your publications and website include people with diverse characteristics with respect to race, gender, age, and disability.	3.2 (.70)	36%	3.3 (.69)	21.5 (7.1)
IV.4	All printed publications are available in alternate formats such as Braille, large print, and electronic text.	3.3 (.65)	41%	2.7 (.74)	20.4 (7.1)
IV.5	Printed materials are within easy reach from a variety of heights and without furniture blocking access.	3.1 (.70)	29%	3.0 (.67)	19.7 (7.1)
IV.7	Videos and DVDs are captioned.	3.2 (.73)	37%	2.5 (.67)	18.9 (6.8)

* indicates "quick fix" items — those in top ten when weighted by attainability.

Section V: Computers, Software, and Assistive Technology

ID	Strategy	Importance mean (SD)	% Essential	Attainability mean (SD)	Priority score by importance mean (SD)
V.4	Software to enlarge screen images and large monitor is available at computer workstations.	3.2 (.68)	37%	2.9 (.65)	20.6 (7.0)
V.1	An adjustable-height table is available for each type of workstation.	3.1 (.72)	31%	2.8 (.70)	19.2 (7.1)
V.2	Workstations offer adequate work space for both left- and right-handed users.	3.0 (.71)	24%	2.9 (.66)	18.6 (6.8)
V.5	A trackball or other alternative to a mouse is available at computer workstations.	2.9 (.74)	23%	2.9 (.67)	17.8 (7.2)
V.6	Wrist/forearm rests are available at computers.	2.8 (.77)	19%	3.0 (.70)	16.8 (7.4)
V.3	Large-print key labels are available on computers.	2.8 (.73)	17%	2.8 (.68)	16.2 (6.8)

Section VI: Events

ID	Strategy	Importance mean (SD)	% Essential	Attainability mean (SD)	Priority score by importance mean (SD)
*VI.2	The accessible entrance is clearly marked.	3.6 (.54)	64%	3.3 (.60)	25.4 (6.2)
*VI.1	Events are located in wheelchair-accessible facilities.	3.7 (.50)	69%	3.1 (.62)	25.4 (5.9)
*VI.3	Info about how to request disability-related accommodations is included in publications promoting events.	3.5 (.59)	57%	3.3 (.70)	24.5 (6.8)
VI.4	Accessible transportation is available if transportation is arranged for other participants.	3.5 (.67)	58%	2.7 (.73)	22.2 (6.9)

* indicates "quick fix" items — those in top ten when weighted by attainability.

These tables present the average Importance and (reversed) Attainability ratings of all forty-four strategies on a scale from one ("Irrelevant"/"Very difficult to attain") to four ("Essential"/"Easily attainable"), along with the percentage of respondents who rated the strategy as "Essential," and the strategy's priority score weighted by importance. Respondents provided a diversity of ratings for each strategy. Each strategy was rated as "Essential" and "Easily attainable" (producing a priority score of thirty-two) by at least one person while the minimum priority scores for these same strategies ranged from two to ten. This diversity indicates that some of the strategies may be more important to some student services units than to others. Despite this diversity, overall trends emerged with average priority scores ranging from a high of 27.1 (II.7 Wheelchair accessible restrooms are available) to a low of 13.9 in the same section (II.11 Lighting is adjustable by the individual). The strategies with the highest ratings also tended to have the least diversity of scores indicating more widespread agreement about the importance and attainability of these strategies.

The strategies listed in these tables are sorted in descending order of "impact" priority within each application areas. These scores appear in the final column of the tables. Items in the table marked with an asterisk (*) are the top ten strategies on the "quick fix" scale. Significantly, none of the strategies in Section I: Planning, Policies, and Evaluation, nor in Section V: Computers, Software, and Assistive Technology appeared in the "quick fix" list. The "high impact" strategies that also appeared at the top of the "quick fix" rating are listed below with their importance-weighted priority rating.

*II.7 Wheelchair accessible restrooms are available (27.1).

*II.1 Wheelchair accessible parking areas are identified (27.0).

*II.3 Wheelchair accessible entrances to buildings are clearly identified (25.3).

*III.5 Staff members know how to respond to requests for disability-related accommodations (25.5).

*IV.2 Key publications include a statement of commitment to universal access (22.6).

*IV.3 Key publications include procedures for requesting disability-related accommodations (26.2).

*IV.1 Pictures in your publications and website include people with diverse characteristics with respect to race, gender, age, and disability (21.5).

*VI.2 The accessible entrance is clearly marked (25.4).

*VI.1 Events are located in wheelchair-accessible facilities (25.4).

*VI.3 Info about how to request disability-related accommodations is included in publications promoting events (24.5).

Overall, the data shows that respondents found the checklist's strategies to be relevant—nearly half were rated as "Essential" measures of accessibility by at least half of the respondents. Further, respondents were discerning—a quarter of the checklist's strategies were rated as less than "Essential" by more than 70% of the respondents.

Policies ensuring access to facilities, printed materials, computers, and electronic resources were given the highest priority ratings, as were wheelchair accessible locations used for student services, including events. Respondents agreed that it is very important for staff members to know how to respond to requests for disability-related accommodations, and that key publications should include procedures for requesting such accommodations. These high ratings may reflect that respondents believe that access to student services, not just classes, are important to the success of all students. The high ratings of strategies in the Planning, Policies, and Evaluation section suggest that these are important strategies to address, but the attainability ratings warn that it will be difficult to make the changes here that will make student service offerings more welcoming and accessible to all students. Student services personnel seeking to transform their units to be more welcoming and accessible to all students might be wise to address some of the "quick fix" strategies, while continuing to work on the important planning and policy strategies. The low ratings for computer-related items (e.g., computers, window lighting) might be because they are not relevant to all student service facilities and/or the particular product/strategy is perceived to be useful to only a small percentage of student service users. The low rating of the need for staff to be familiar with TTY/TDD technology may reflect the now common use of email and texting for long distance communication with a person who is deaf.

IMPLICATIONS FOR RESEARCH AND PRACTICE

Results of the current study were used by the DO-IT Center to fine-tune the UD checklist for student services units. Strategies given the lowest priority ratings for these settings were removed from the instrument. They included the ability of staff to use TTY/TDDs for deaf students as well as the availability of individually-adjustable lighting, window drapes to reduce glare, large-print key labels on computer keyboards, and wrist and forearm rests. Strategies in the now reduced Computers, Software, and Technology section were then combined with Information Resources strategies. To make the checklist more concise, several similar strategies were combined into one—for example, the those related to policy statements for access to printed materials, computers, and electronic resources were combined; as were several strategies related to facilities such as wheelchair accessible parking, pathways, and entrances. In addition, several items were reworded for greater clarity. The revised instrument is provided below and is available online (*www.uw.edu/doit/Brochures/Academics/equal_access_ss.html*). Survey respondents and focus group participants in an earlier study expressed the need for guidance regarding communication with students with disabilities; in response, "Communication Hints" were added to the last page of the checklist.

The checklist can be used by student service offices to assess their baseline accessibility for students with disabilities, to prioritize steps for making their offices more welcoming and accessible to everyone, and to track the progress of their changes. Practitioners and researchers are encouraged to provide suggestions to improve the instrument and to conduct further studies to establish instrument validity and maximize its usefulness.

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