The Process: Development of the Revised AHEAD Program Standards and Performance Indicators

Lyman Dukes, III
University of South Florida St. Petersburg

Abstract

In 1999, AHEAD *formally approved its first set of Program Standards. The Standards spelled out the services considered essential for ensuring equal access to education for students with disabilities. In addition, the Standards were intended to establish the parameters of what practitioners do as well as assert the credibility and uniqueness of the Office For Students With Disabilities (Jarrow, 1997). The Standard's utility diminished due to a number of factors, but especially the changing nature of disability services. Thus, a survey consisting of 30 service components and 147 performance indicators was completed by a group of postsecondary disability services experts to get a current look at today's services. This survey led to the updated* AHEAD *Program Standards and Performance Indicators, which were formally approved in November 2004.*

Postsecondary institutions have rapidly expanded their programs and services for students with disabilities during the past 30 years. The Association on Higher Education and Disability (AHEAD), established in the 1970s as the professional organization representing postsecondary disability service providers, had more than 1,900 members by the end of the 1990's (Dukes & Shaw, 1999). Though services for college-level students with disabilities expanded throughout the eighties and nineties, there were no empirical data upon which to develop model programs until the late 1990s, leaving disability service providers to develop services based upon intuition or best guess (Gajar, 1992). Similarly, Office for Students with Disabilities (OSD) personnel have had to make judgments in the absence of firm guidelines or best practice (Dukes & Shaw, 2004). Not surprisingly, there have been many calls in the literature for services that are better planned and organized (Brinckerhoff, McGuire, & Shaw, 2002; Bursuck, Rose, Cowen, & Yahaya, 1989; Dukes & Shaw, 2004; Sergent, Carter, Sedlacek, & Scales, 1988).

In response, AHEAD, in 1994, convened a set of task forces to develop a code of ethics, professional standards, and program standards for the profession. In 1996, the AHEAD Professional Standards and Code of Ethics were approved by the organization's Board, and in 1999 the AHEAD Program Standards were formally approved. A revision of the original Program Standards is now warranted for a number of reasons. First, the field has changed dramatically since the first Standards were approved. For example, OSD administrators are now encouraged to rely more upon a collaborative decision-making model and have become keenly aware of the importance of faculty members in the service-delivery process. Second, college administrators are requesting that OSD directors specify criteria to evaluate their programs. Third, the original Standards used a research method that yielded data that were merely the conventional wisdom of the study participants. Finally, the original Standards did not specify *how* to meet criteria spelled out in the Standards. That is, service providers were saying they appreciated having Standards but they did not necessarily know how to apply them to their daily professional duties. The research method in the current study was specifically chosen to address these concerns.

CAS Standards

In 1986, the Council for the Advancement of Standards in Higher Education (CAS) published its first set of standards entitled *The CAS Standards and Guidelines for Student/Development Programs*. The publication included general statements that were intended to apply to all student affairs programs and standards and guidelines specifically applicable to each functional area, including standards and guidelines for offices for students with disabilities. According to Miller (1997), these standards represent the minimum criteria an institution and its programs should satisfactorily meet over time. The standards

and guidelines "were established for institutions and their student support service programs to use for program development, program self-study, and staff development purposes" (Miller, p. 3). In a more recent publication, CAS has set forth standards and guidelines for the OSD that consist of 13 parts, including area such as ethics, legal responsibilities, campus and community relations, and mission (Miller).

Though the Council has published standards for the OSD, they are not widely recognized. In fact, some in the disability services profession consider the standards too general to be of use to practitioners and their programs (L.S. Block, personal communication, July 18, 1997; D. Korbel, personal communication, November 19, 1997). Thus, Madaus (1996) stated that "while the publication of these standards was intended to 'establish criteria and guidelines for the field' (CAS, 1988, p. 113), there was little follow-up or discussion of the standards in the professional literature" (p. 38). Blosser (1997) echoed this position stating, "we do not really know how much the CAS Standards … are used by disability service programs, but it is this writer's impression that its availability is not widely known" (p. 49). Moreover, the standards and guidelines for disability support service programs, though developed by experts within the student affairs profession, were not identified using empirical methods.

AHEAD Program Standards

As is true of an emerging profession, OSD personnel were interested in establishing an identity apart from other student affairs programs. Just as other student affairs program personnel have developed and maintained their own standards and ethics (e.g., counseling centers), disability student services personnel were steadfast in their desire to form a distinctive identity. A separate identity is intended to establish the parameters of what practitioners do as well as assert the credibility and uniqueness of the office for students with disabilities (Jarrow, 1997). Blosser (1997), when discussing program standards stated, "to a large degree, program standards should help define what we as professionals do in our programs" (p. 49).

Based upon research completed in 1997, program standards were developed that spelled out which service components were essential to ensure equal educational access (Dukes, 2001). The original AHEAD Program Standards specified that the OSD provide services under the following nine function categories: (a) consultation/collaboration/awareness, (b) information dissemination, (c) faculty/staff awareness, (d) academic adjustments, (e) instructional interventions, (f) program development and evaluation, (g) policies and procedures, (h) program development and evaluation, and (i) training and professional development (Shaw & Dukes, 2001). The nine

categories collectively contained 27 standards. These standards were the first benchmarks derived using empirical methods available to postsecondary disability service providers.

Methodology

The current study was designed to identify essential service components that should be available to ensure equal access to postsecondary education for students with disabilities. In addition, the study sought to identify the indicators for each standard that would lead to appropriate performance on that standard. AHEAD, the sole professional organization that represents postsecondary disability service providers, sponsored the study. A cadre of postsecondary disability experts, rated the importance of 30 service components and 147 performance indicators across 9 categories using a 5-point Likert scale (1 – Not Important, 2 – Slightly Important, 3 – Moderately Important, 4 – Very Important, 5 – Essential).

Research Design

The Delphi technique is a "method for the systematic solicitation and collection of judgments on a particular topic through a set of carefully designed sequential questionnaires interspersed with summarized information and feedback of opinions derived from earlier responses" (Delbecq, Van de Ven, & Gustafson, 1975, p. 10, as cited in Friend, 2000). The Delphi method was chosen for the present study for a number of reasons (Anderson, 1998). First, it allows for both quantitative and qualitative measures. That is, participants provided both a numerical ranking of each service component and indicator and also had the opportunity to provide written comments regarding items. Comments regarding items had the potential to impact the language, location, and even the inclusion of an item in subsequent rounds of the survey. Second, the method allowed for group discussion among participants geographically dispersed throughout a wide region of North America. Third, results achieved through the use of the Delphi method are considered more accurate than an average rating achieved through a participant ranking. In addition, Anderson (1998) noted that the Delphi process concludes with a "sense of closure and accomplishment" that is, perhaps, valuable following a lengthy study process such as the Delphi.

Expert panelists were asked to rank service components for students with disabilities according to their importance and to provide comments regarding their rankings. In addition, they were given the occasion to reconsider their rankings (i.e., Rounds 2 and 3) after having the opportunity to examine average item rankings and comments provided by the entire panel. Throughout the

process, participants remained anonymous; thus, each responded to group feedback without the influence potentially present in a face-to-face gathering.

Questionnaire Development

A modified Delphi technique was used to identify which service components are considered essential in order to ensure equal access to postsecondary education for students with disabilities in North America. Expert panelists participated in three rounds of a survey, which involved rating a list of service components organized by category and providing written responses to those items. Rounds 2 and 3 involved re-rating items based upon panel feedback (i.e., written responses). An initial questionnaire was prepared based on a broad literature review and by compiling a list of service components founded, to a large degree, upon the previous AHEAD Program Standards.

Questionnaire Validation

The design of the survey followed specifications identified in the survey development literature (Gable & Wolf, 1993). A review of the original Program Standards and an extensive literature review yielded 31 service components and 129 performance indicators across 9 categories. The literature review investigated publications spanning the past four decades, which included the discussion of services for students with disabilities from the inception of Gallaudet College (now Gallaudet University) in the 1800s to the CAS in Higher Education program standards for disability services publication in 1997 to the original AHEAD Program Standards. An initial panel of 12 postsecondary disability experts, identified by the AHEAD leadership based on their expert knowledge of service provision for college students with disabilities, participated in content validation of the survey. The initial panel adequately spanned the diversity of postsecondary institutions in the United States. and Canada (e.g., two- vs. four-year, public vs. private, open enrollment vs. competitive enrollment), and all were members of AHEAD. The content experts were asked to comment on item clarity, relevance, and potential repetition. Specifically, panelists provided feedback about the (a) wording of the service components and indicators, (b) whether there were any missing components or indicators, (c) the goodness-of-fit of an item with its category, and the elimination of any components or indicators that were repetitive. Further, the panel was asked to provide feedback about the clarity of directions, the length of time required to complete the instrument, and the ease of use of the website used to deliver the instrument. Lastly, the panel each nominated 10-20 other postsecondary disability experts for participation in the Delphi process.

The comments of the panel of 12 content experts were reviewed using a focus group format. Members of the focus group also had extensive experience in the postsecondary disability services profession. Based upon the described levels of review, adjustments were made to the survey. Upon deployment, it consisted of 30 service components and 147 performance indicators representing 9 categories.

Website

All rounds of the survey were conducted via a website developed and maintained by the researcher. Adobe Go Live software was used to develop both the website and survey instrument. Feedback about site accessibility was provided by the initial panel of 12 experts.. In addition, AHEAD's Information Technology specialist provided feedback about both the website and the questionnaire prior to deployment. Lastly, the website and questionnaire were subject to analysis to ensure each met Web Content Accessibility Guidelines criteria.

Panel Selection

Participants in a Delphi study are required to have knowledge and expertise to share regarding the research topic (Friend, 2000). In the present inquiry, 55 disability service professionals in North America agreed to serve as expert panelists in the study (see list of experts in Table 1). As mentioned, the initial panel of 12 postsecondary disability service experts was nominated by the Board of Directors of AHEAD. These 12 experts each provided a list of 10 to 20 disability service practitioners they considered to be experts in the profession. These individuals were contacted in order to determine their interest in participation in the project and whether they met the criteria for involvement.

Criteria for participation were as follows: Panel participants must have at least five years of recent experience in postsecondary disability services. In addition, participants must have one or more of the following: (a) a reputation developed through publications regarding disability services, (b) a reputation established through presentations related to disability services, or (c) experience providing training related to services for college students with disabilities. Panelist selection was also impacted by the need to ensure that a diverse array of service providers (e.g., two-/four-year, public/private institutions, U.S./Canadian programs, open enrollment / competitive entrance criteria) was represented.

Expert panelists responded to the questionnaire across three rounds. During round 1 demographic data were collected in addition to item ratings and comments. Participants were asked to respond to what students with disabilities require in order to facilitate equal educational

Table 1

Expert Panelists and Institutional Affiliation

Expert Panelist	Institutional Affiliation	Expert Panelist	Institutional Affiliation
Jennifer Aitken	New Jersey City University	Bonnie Martin	University of Clemson
Richard Allegra	AHEAD	JoAnne Martin	Greenriver Community College
Cheryl Ashcroft	Lehigh University	Marylou Massey-Henderson	City College of San Francisco
Jean Ashmore	Rice University	Suelaine Matthews	St. Louis Community College
Patricia Bailey	University of North Carolina Greensboro	Kathy McGillivray	Bethel College
Joan Bisagno	Stanford University	Marshall Mitchell	Washington State University
G. Ruth Bork	Northeastern University	Linda Nissenbaum	St. Louis Community College
Randy Borst	Buffalo University	Kathy Patus	University of Louisville
Patricia Carlton	Ohio State University	Rodney Pennamon	North Georgia College
Beth Case	North Harris College	Ross Pollack	Manhattan College, New York
Gene Chelberg	San Francisco State University	Bruce Pomeroy	State University of New York Broome
Wayne Cocchi	Columbus State Community College	Anne Reber	Texas A&M University
Rosemary Coffman	Lee College	Maureen Reustle	Ocean County Community College
Catalina Colaci	Yukon College	Barbara Roberts	Queens University
Wendy Cole	Muhlenberg College	Anita Stockbauer	University of Nevada
Kathy Cook	Everett Community College	David Sweeney	Texas A&M University
Sue Cunningham	New England Community College	Tom Thompson	Harper College
Julie Edwards	Ozarks Community College	Lynnette Van Slyke	University of Pittsburgh
Joanie Friend	KC Metro Community College	Vinnie Varrassi	Farleigh Dickenson University
Susan Gjolmesli	Bellevue Community College	Linda Walter	Seton Hall University
Sam Goodin	University of Michigan	Ruth Warick	University of British Columbia
Duraese' Hall	University of Houston – Downtown	RoseMary Watkins	Oglethorpe University
Dyane Haynes	University of Washington	Ben Webinger	Spokane Falls Community College
JoAnne Hill	Willamette University	Christy Willis	George Washington University
Laurie Keenan	University of Victoria	Joan Wolforth	McGill University
Donna Korbel	University of Connecticut		
Pierre Laliberte	University of Victoria		
Carol Lamb	Paul Smith's College		
Grady Landrum	Wichita State University		
Jim Marks	University of Montana		

access, *not* what is currently available to students at particular institutions. Respondent names and their respective institutional affiliation are listed in Table 1. The request for participation was prepared by both the researcher and AHEAD leaders. Respondents were assured that results would be analyzed and reported at the group level only. Two weeks following each an electronic request to complete the survey, electronic reminder mail message was sent to non-respondents. A total of 85% of expert panelists responded to Round 1 of the survey, 82% responded during Round 2, and 71% during Round 3.

Results

The research question guiding the determination of essential service components was: "What service components do practicing OSD administrators perceive as essential in order to ensure equal educational access for students with disabilities?" In order for an item to be considered an "essential service component," it must have had a mean rating of 4.2 or greater on a 5.0 scale. In addition, 80% or more of the expert panel must have rated each service component in either the same or an adjacent category (e.g., rating of 5, or in the adjacent category, 4). Prior studies of comparable information using the Delphi method have employed similar rating criteria (e.g., Anderson, 1998; Friend, 2000). In sum, 28 of 30 proposed standards were rated essential and 90 of 147 proposed performance indicators were rated essential. Results related to each category and its proposed standards and indicators may be found in Table 2 (Standards and Indicators *not* rated essential) and in Shaw and Dukes (this issue) (Standards and Indicators rated essential).

Table 2

Service Components and Performance Indicators NOT RATED ESSENTIAL

To facilitate equal access to postsecondary education for students with disabilities, the office that provides services to students with disabilities should ...

---

1. Consultation/Collaboration

1.1 Serve as an advocate for issues regarding students with disabilities to ensure equal access.
- Promote and celebrate disability awareness (*3.7, 85%*).
- Work collaboratively with human resources regarding accessibility and equal access information for prospective/new staff (indicator deleted).
- Network with community disability personnel to elicit support in meeting student needs (*3.6, 84%*).
- Participate on a team of service providers and faculty for the purposes of dispute resolution regarding documentation, academic adjustments, or program accommodations for students with disabilities (*3.9, 73%*).

1.2 Provide disability representation on relevant campus committees.
- Participate on relevant campus academic committees (*4.1, 84%*).
- Participate on campus administrative committees such as renovations / physical plant advisory or transportation (*3.6, 71%*).
- Participate on campus administrative committees such as technology / IT committees (*4.1, 80%*).
- Participate on campus administrative committees such as the campus diversity committee (*4.1, 80%*).

2. Information Dissemination

2.1 Disseminate information through institutional electronic and printed publications regarding disability services and how to access them.
- Promote availability of institutional publications in alternate formats (*4.0, 84%*).

continues

Table 2 Continued

2.2 Provide services that promote access to the campus community.
- Assist campus facilities to assess the need to post signs near campus telephones and maps indicating the location of telecommunications devices for individuals who are deaf or hearing-impaired (*3.7, 81%*).
- Collaborate with other campus departments to clearly identify accessible entrances and handicapped parking (*3.8, 78%*).
- Collaborate with other departments to assure availability of accessible signs to individuals with sight impairments (*3.7, 79%*).
- Consult with other departments regarding online course delivery and classroom technology (e.g., WebCT, Blackboard) accessible (*4.0, 92%*).
- Consult with other departments regarding university website accessibility (*4.0, 82%*).
- Collaborate with other departments to make online applications accessible (*3.8, 76%*).

2.3 Disseminate information to students with disabilities regarding available campus and community disability resources.
- Collaborate with the admissions office on outreach to local secondary schools (*3.6, 76%*).
- Conduct on-going assessments of community resources (*3.0, 81%*).
- Assemble a resource guide (e.g., online or printed publication) identifying services designed for students with disabilities and available on campus (*4.1, 89%*).
- Assemble a resource guide (e.g., online or printed publication) identifying services designed for students with disabilities and available off campus (*3.0, 78%*).
- Create an information and referral function to assist students in navigating community resources (*2.9, 81%*).

3. Faculty / Staff Awareness

3.1 Inform faculty regarding academic accommodations, compliance with legal responsibilities, as well as instructional, programmatic, and curriculum modifications.
- Encourage faculty implementation of Universal Design to enhance access to instruction for all (*3.9, 86%*).

3.2 Provide consultation with administrators regarding academic accommodations, compliance with legal responsibilities, as well as instructional, programmatic, physical, and curriculum modifications.
- Present information on the impact of college policies and procedures on students with disabilities (*4.1, 80%*).
- Disseminate information on court decisions to administrators (*3.4, 83%*).

3.3 Provide disability awareness training for campus constituencies such as faculty, staff, and administrators.
- *All indicators rated essential.*

3.4 Provide information to faculty about services available to students with disabilities.
- Provide information to faculty (e.g., web-based workshops) to increase understanding of the availability and type of support services on campus (*4.1, 83%*).

Table 2 Continued

4. Academic Adjustments

4.1 Maintain records that document the student's plan for the provision of selected accommodations.

- *All indicators rated essential.*

4.2 Determine with students, appropriate academic accommodations and services.
- Participates with other institutional faculty/staff to determine if the student is (otherwise) qualified (*3.8, 73%*).

- Coordinate assessment services for potential students with disabilities (*2.6, 68%*).

4.3 Collaborate with faculty to ensure that reasonable academic accommodations do not fundamentally alter the program of study.
- *All indicators rated essential.*

5. Instructional Interventions

NOTE: The Service Components noted under instructional interventions (5.1 and 5.2) did not meet criteria to be identified as essential. Therefore the entire instructional interventions category was rated as "Not Essential" and is not included in the Program Standards and Performance Indicators (see Shaw & Dukes, this issue).

5.1 Advocate for the availability of instruction in learning strategies (e.g., attention and memory strategies, time management, organization) for students with disabilities (*3.9, 81%*).
- Encourage students with disabilities to articulate learning strengths and weaknesses in understandable terms (*4.4, 88%*).
- Identify resources (e.g., learning center, writing center, math center) that will train students in strategies and skills for effective learning (*4.4, 88%*).
- Refer students to centers and workshops for instructional support to foster strategic learning (*4.3, 91%*).
- Provide students with training on the effective use of individualized accommodations (i.e., tape recorders, calculators, assistive technologies) (*4.1, 80%*).
- Assist students in determining when to self-disclose disability (*3.9, 78%*).

5.2 Advocate for Universal Design in instruction to reduce need for accommodations and enhance learning for all (*3.7, 89%*).
- Collaborate with campus offices such as the faculty development center to foster inclusive teaching (*4.0, 88%*).
- Collaborate with other campus units to provide training and supports for faculty to implement Universal Design in their classrooms (*3.6, 86%*).

6. Counseling and Self-Determination

6.1 Use a service delivery model which encourages students with disabilities to develop independence.
- Advocate for support in such forms as counseling, peer support groups, and self-advocacy instruction (*3.8, 86%*).
- Foster student knowledge of legal rights and protections under the law (*4.1, 85%*).
- Present students with the opportunity to learn and use compensatory skills (*4.0, 80%*).
- Assist students with disabilities to enhance their self-determination (*4.0, 80%*).
- Provide training for students with disabilities to foster self-advocacy and self-determination (*3.8, 84%*).

continues

Table 2 Continued

- Role-play and model approaches for identifying and requesting accommodations (*3.8, 83%*).
- Encourage and foster participation in employment readiness activities such as internships, study abroad, and volunteer opportunities (*3.7, 75%*).
- Develop a plan that encourages students to use accommodations appropriately and selectively (*4.1, 88%*).
- Prepare students to clearly articulate academic strengths and weaknesses to faculty as it relates to their disabilities (*4.1, 82%*).

7. Policies and Procedures

7.1 Develop, review and revise written policies and guidelines regarding procedures for determining and accessing "reasonable accommodations."
- Develop, review, and revise policies with respect to international students with disabilities (indicator deleted).

7.2 Assist with the development, review, or revision of written policies and guidelines for institutional rights and responsibilities with respect to service provision.
- Assist with the development, review, or revision of policy and procedures regarding accessible or modified campus housing (*3.7, 73%*).
- Participate in the development, review, and revision of policies regarding off-campus activities (e.g., study abroad, internships, student teaching) (*3.9, 83%*).

7.3 Develop, review and revise written policies and guidelines for student rights and responsibilities with respect to receiving services.
- *All indicators rated essential.*

7.4 Develop, review and revise written policies and guidelines regarding confidentiality of disability information.
- *All indicators rated essential.*

7.5 Assist with the development, review, or revision of policies and guidelines for settling a formal complaint regarding the determination of a "reasonable accommodation."
- *All indicators rated essential.*

8. Program Administration and Evaluation

8.1 Provide services that are aligned with the institution's mission or services philosophy.
- *All indicators rated essential.*

8.2 Coordinate services for students with disabilities through a full-time professional.
- *All indicators rated essential.*

8.3 Collect student feedback to measure satisfaction with disability services.
- Assess student's ability to advocate for themselves with respect to the policies of the institution (*3.5, 80%*).

- Ongoing data on student satisfaction is collected (*4.1, 84%*).

Table 2 Continued

8.4 Collect data to monitor use of disability services.
- Assist the institution to implement an evaluation process regarding program access (*3.9, 80%*).
- Collect data to determine whether faculty and staff are satisfied with the services (*4.0, 81%*).
- Use AHEAD Program Standards as a framework when determining the overall quality of the services personnel are providing their students with disabilities (*3.9, 80%*).
- Monitor the implementation of disability policies (*4.1, 84%*).

8.5 Report program evaluation data to administrators.
- Provide an executive summary of your annual report to all key campus administrators (*3.9, 83%*).

8.6 Provide fiscal management of the office that serves students with disabilities.
- *All indicators rated essential.*

8.7 Collaborate in establishing procedures for purchasing the adaptive equipment needed to assure equal access.
- Assist with identification and evaluation of currently available assistive technology and adaptive equipment (*3.9, 93%*).

9. Training and Professional Development

9.1 Provide disability services staff with on going opportunities for professional development.
- *All indicators rated essential.*

9.2 Provide services by personnel with training and experience working with college students with disabilities (e.g., student development, degree programs).
- Use the AHEAD Professional Standards as a needs assessment of training needs for disability personnel (*3.2, 83%*).
- Use the AHEAD Professional Standards as a guideline for hiring personnel (*3.6, 81%*).

9.3 Assure that personnel adhere to relevant Codes of Ethics (e.g., AHEAD, APA).
- Post a relevant code of ethics in Affirmative Action, Student Affairs, Provost, and other related administrative offices (*2.9, 78%*).
- Post a relevant professional code of ethics in the disability services office (*3.7, 78%*).

Round 1

During Round 1, in addition to responding to the survey questionnaire items, participants also completed a section used to collect demographic data. Descriptive analyses (i.e., mean, percentages) were used to determine whether an item met the criteria to be considered "essential." Following Round 1, the expert panel had identified 27 service components and 80 performance indicators as being essential. Participants also provided comments that influenced both the wording and the inclusion of items in Round 2. A total of 85% of the expert panel submitted responses that were included in the analysis of Round 1 data.

Round 2

The Round 2 electronic survey was identical to the Round 1 survey; however, items where consensus had been reached were noted as such and did not require further rating. Additionally, panelists received an individualized feedback form concerning items on which consensus had not been reached. Also in the document were the panelists' rating of each item and group panel statistics, including the item mean rating, consensus level, and panel comments regarding each item. All participants were asked to re-rate items on which consensus had not been reached during Round 1. Furthermore, if an expert chose not to agree with the mean rating of the group dur-

ing the re-rating process, she/he was asked to provide a written justification. The experts identified one additional service component and 10 performance indicators as essential during this round. Eighty two percent of the survey participants provided responses during this round of the study.

Round 3

The Round 3 format was identical to that used in the previous two rounds. Only items on which consensus had not been reached required re-rating, while those service components and indicators that had reached consensus were noted as such. Once again, panelists received an individualized feedback form concerning items that had not reached consensus during Round 2. The document contained the panelists' ratings of each item and a summary of group statistics, including the mean rating of the item, its current level of consensus, and comments provided by the group regarding each item. As in the previous round, participants were asked to re-rate items on which consensus had not been reached. In instructions for this round, panelists were oriented to the study goal of consensus; however, if they chose to rate an item outside the current group mean rating, they were free to do so. The culmination of Round 3 determined which service components and indicators reached consensus and which did not.

The experts did not identify any additional service components or performance indicators as essential during this round. Seventy one percent of the survey participants provided responses during Round 3. In total, consensus was reached on 28 service components and 90 performance indicators representing 8 categories (see Shaw & Dukes, this issue).

Limitations

The implications of the findings of the study must be considered in light of its limitations. The results of a study employing the Delphi technique are dependent upon the expert panel participants (Anderson, 1998; Friend, 2000). Participants for the current study were nominated by a nationally recognized body of 12 postsecondary disability service professionals who themselves had been identified by the AHEAD Board of Directors. Expert panelists all met specific criteria in order to be involved in the study (see criteria above). The panel also represented a wide array of postsecondary institutions across North America (e.g., two-/four-year, competitive/open enrollment).

Concerns regarding the considerable time required to participate in a Delphi study may have an impact upon the commitment of the study participants (Anderson). The average response rate for all rounds of the survey was 79%, which suggests that the panel understood the importance of its charge and significance of its commitment. Also noteworthy is the fact that it took less time to complete the questionnaire with each successive round. Thus, the most significant obligation was during Round 1.

Another possible limitation of the study is the likelihood that the survey instrument did not wholly represent all services available to students with disabilities at postsecondary institutions. The survey was predicated upon an extensive literature review, and prior to deployment, it was examined for comprehensiveness by a group of 12 postsecondary disability experts and a focus group. Thus, all efforts were made to ensure the questionnaire adequately spanned the universe of content.

Finally, the clarity of survey items must be considered as a possible limitation. The survey was examined by an initial group of 12 postsecondary disability professionals prior to Round 1. These participants also examined the instrument directions and the website used to collect survey data. In addition, the Delphi method allows participants to examine and receive any necessary clarification regarding survey items.

Conclusion

The principal purpose of this article was to describe the research process used to determine what service components disability service professionals consider essential for ensuring equal educational access for postsecondary level students with disabilities. In addition, service providers identified performance indicators for each service component rated essential. Performance indicators are intended to serve as examples of *how* a service component looks in practice. Shaw and Dukes (this issue) describe the implications of the results, as well as the value of program standards for the disability services profession.

Special Recognition

The author would like to acknowledge the unique efforts of a number of persons involved in the research project, all of whom participated in extraordinary ways. These include Joanie Friend of Kansas City Metro Community College, Randy Borst of Buffalo University, and Patricia Anderson, Ph.D. whose dissertation provided significant guidance. Without their participation, this project would not be complete.

References

Anderson, P.L. (1998). *Essential support service components for students with learning disabilities at postsecondary institutions in North America: A consensus based determination.* Unpublished doctoral dissertation, University of Connecticut, Storrs.

Blosser, R.E. (1997). Progress toward professionalism: What we are and do. *Journal of Postsecondary Education and Disability, 12*(3), 45-52.

Brinckerhoff, L.C., McGuire, J.M., & Shaw, S.F. (2002). *Postsecondary education and transition for students with learning disabilities.* Austin,TX: Pro-Ed.

Bursuck, W.D., Rose, E., Cowen, S., & Yahaya, M.A. (1989). Nationwide survey of postsecondary education services for students with learning disabilities. *Exceptional Children, 56*, 236-245.

Dukes, L.L., III. (2001). The process: Development of AHEAD Program Standards. *Journal of Postsecondary Education and Disability, 14*(2), 62-80.

Dukes, L.L., III, & Shaw, S. F. (1999). Postsecondary disability personnel: Professional standards and staff development. *Journal of Developmental Education, 23*(1), 26-31.

Dukes, L.L., III, & Shaw, S.F. (2004). A profile of postsecondary disability service personnel: A discussion of perceived personnel development needs. *Teacher Education and Special Education, 27*(2), 134-145.

Friend, J.G. (2000). *A delphi study to identify the essential tasks and functions for ADA coordinators in public higher education.* Unpublished doctoral dissertation, University of Missouri-Columbia.

Gable, R.A., & Wolf, M.B. (1993). *Instrument development in the affective domain: Measuring attitudes and values in corporate and school settings.* Boston: Kluwer Academic.

Gajar, A. (1992). Adults with learning disabilities: Current and future research priorities. *Journal of Learning Disabilities, 25,* 507-519.

Jarrow, J.E. (1997). Why we need professional standards. *Journal of Postsecondary Education and Disability, 12*(3), 5-7.

Madaus, J.W. (1996). *Administration of postsecondary offices for students with disabilities: Perceptions of essential job functions.* Unpublished doctoral dissertation, University of Connecticut, Storrs.

Miller, T.K. (Ed.). (1997). *The book of professional standards for higher education.* Washington, DC: Council for the Advancement of Standards in Higher Education.

Sergent, M..T., Carter, R.T., Sedlacek, W.R., & Scales, W.R. (1988). A five-year analysis of disabled student services in higher education. *Journal of Postsecondary Education and Disability, 6*, 21-27.

Shaw, S.F., & Dukes, L.L., III. (2001). Program standards for disability services in higher education. *Journal of Postsecondary Education and Disability, 14*(2), 81-90.