

Essential Standards For Institutional Self-Evaluation of

The Americans with Disabilities Act

by

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(Abstract)

The purpose of this study was to identify standards related to the Americans with Disabilities Act (ADA) that are desirable for colleges conducting a self-study regarding program accessibility. A Delphi technique was used to determine standards and reach agreement among a panel of professionals concerning criteria to evaluate implementation of the ADA during a self-study or during an accreditation process. The panel's standards were compared to information from a focus group of university students with disabilities.

The panel of experts consisted of 30 professionals representing three areas:

- (a) agencies involved in the implementation and enforcement of the ADA,
- (b) postsecondary service providers recognized as leaders in their field by the Association on Higher Education and Disability (AHEAD), and (c) legal professionals specializing in the ADA. Students with various disabilities comprised a focus group to provide different voices of the stakeholders' perspective.

The panel generated standards from an open questionnaire in the first round of the Delphi. The results were compiled and organized into questionnaire form for phase II. The questionnaire was structured with a four point Likert-type scale allowing the panel to react positively or negatively to including each standard in the evaluation criteria. The scale consisted of: (4) critical, (3) valuable, (2) minimal, and (1) unnecessary. The panel was able to add or change standards in Phase II. In Phase III the standards were listed, and the mean from the ratings in Phase II were reported along with a reminder of the individual's rating in Phase II. The panel could change their ratings to agree with the mean, or they could provide their argument for keeping their original ranking if not matching the mean.

The mean was recalculated after Phase III, and data from this round was used to establish the acceptable standards. All standards receiving a total of two-thirds of the responding panel members' votes in the critical and valuable categories were included in the proposed evaluation model. This information was then compared to information collected in the student focus group.

The results of both the student focus group and the Delphi technique indicated a difference in perspectives of the stakeholders and experts. The research study revealed that the students were more concerned about services for high-schoolers prior to entering college. In contrast, the experts focused more on policy and administrative responsibilities. The Delphi panel and student focus group agreed on several issues

important to program access. Both groups saw financial assistance, including support of assistive technology, as critical. They also agreed on the importance of training faculty, administrators and students about accommodations, as well as legal rights and responsibilities under the ADA. Students and panelists acknowledged a shared responsibility between the college and agencies such as the Department of Rehabilitative Services. However, the panelists did not agree with the students on the areas of outreach and collaboration. Although students valued strengthened transition services and training sessions in secondary schools, the Delphi panel did not mention these as areas for an ADA self-evaluation.

It was recommended that the accepted standards be shared with AHEAD, the National Association of ADA Coordinators (NAADAC) and the Council for the Advancement of Standards for Student Services/Development Programs (CAS). AHEAD and NAADAC can use the standards as guidelines for self-evaluation and as a resource for training. It was also recommended that CAS and other accreditation agencies use the developed standards to add more guidance regarding accessibility to the accreditation and self-study process.

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Chapter 1

Introduction to the Study

The purpose of this study is to develop standards for institutions conducting a self-evaluation of implementation of the American with Disabilities Act (ADA; 42 U.S.C. § 12101 et seq.). In 1992, two years after the signing of the law, the ADA mandated all covered entities conduct a self-evaluation for accessibility. Many institutions looked only at physical access, excluding policy and procedure. However, since most individuals covered by the ADA have invisible disabilities, they are affected by each institution's policies and procedures, rather than practices covering physical accessibility. Thus, the service providers and administrators charged with the responsibility of the ADA, had no substantive guidelines. Likewise, the existing form of evaluation on accessibility has been primarily informal reports from campus disability offices and their currently enrolled students. Thus, this research project was warranted to provide uniformity and comprehensive guidelines.

Definition of Disability

The ADA has a rather broad definition of disability that is comparable to the definition in the Rehabilitation Act of 1973. Both acts cover (a) a physical or mental impairment that substantially limits one or more of the major life activities of such individual; (b) a record of such an impairment; or (c) being regarded as having such an impairment (ADA, 1990). Sections of annotated text from the ADA indicate the House

and Senate conviction that the law should cover people with AIDS and those who are infected with the HIV virus (U.S. Equal Employment Opportunity Commission, 1992). This coverage is especially relevant for colleges with residential programs. Also essential for four year colleges to realize is the fact that the ADA covers graduate students and is not limited to US citizens; thus, international students with disabilities are covered. Excluded from the definition are homosexuality, bisexuality, transvestitism, transsexualism, and sexual behavior disorders. Congress also specifically excluded individuals engaged in the use of illegal drugs. However, with the ADA they amended the Rehabilitation Act to cover an individual who has successfully completed drug treatment or has otherwise been rehabilitated and is no longer engaged in illegal drug use (Miles, Russo, & Gordon, 1992).

Statement of the Problem

The goal of accreditation or self-evaluation is to bring a measure of uniformity, quality, accountability and order to the educational arena (Rogers, 1995; Isaac & Michael, 1987). Currently, the measures of quality that exist specific to accessibility for students with disabilities are the word of campus service providers, informal surveys by college handbook companies (usually completed by the service provider), and the subjective comments of currently enrolled students. Along with these subjective measures, some estimate of physical accessibility may be obtained for those campuses that come under a regional accrediting body (W. D. Conn, personal communication, September, 1996).

Another measure of access is the self-evaluation mandated by the ADA, but that comes with its own problems that will be discussed later. Consequently, there is great variation in physical and program accessibility between college campuses, making comparison shopping and choices difficult for parents and their student with a disability. In a study by the Virginia Board of Education, the consistency of access to support services available on college campuses, and retention of students with disabilities were identified as significant concerns (Scott, 1995).

The ADA provided qualified students with disabilities the opportunity to access all colleges and universities in the United States. The mainstreaming and inclusion movement have resulted in larger numbers of students with disabilities in the K-12 system graduating and having expectations and goals that include college. This expectation becomes a significant factor for colleges experiencing the growth of this population. In 1978, 2.6 percent of all first time, full-time college freshmen reported that they had one or more disabilities; by 1994 the proportion had grown to 9.2 percent (Postsecondary Education, 1996). Approximately 6 percent of all undergraduates and 4 percent of all graduate students reported some form of disability in the 1992-93 academic year (Knopp, 1995). The publicity around the implementation of the ADA increased students' awareness that accommodations were available at college.

As these students have arrived in greater numbers on college campuses,

administrators and faculty have also been expected to deal with more severe disabilities and requests for accommodations that may call for reevaluation of policies and procedures (Brinckerhoff, Shaw, & McGuire, 1993). The increased incidence of psychiatric disabilities, students with personal attendants or assist animals, and hard to define “invisible” disabilities such as learning disabilities and attention deficit disorder have resulted in confusion on how to accommodate the myriad of needs (Milani, 1996; McCusker, 1995; Rothstein, 1991).

Additionally, the service providers, program directors and ADA coordinators lack clarity in their duties. Blosser (1984) found ambiguity among directors of 234 Services for Students with Disabilities (SSD) offices concerning their role as service providers. Although not described in their present duties, the directors reported a desire to increase their role in research and evaluation reflecting a growing concern about program effectiveness and accountability.

Compounding the concern for college administrators is the increase in investigations of discrimination by the U.S. Department of Education Office of Civil Rights (OCR) and increased litigation from students with disabilities. OCR found that 44 colleges violated the rights of students or employees with disabilities in 1992; this number jumped to 86 in 1993 (Jaschik, 1994). In this situation, the importance of articulating to every faculty member and administrator standards for meeting the ADA mandates becomes a critical concern. Heyward, Lawton & Associates (1995) in their study of

disability cases found, “It is becoming increasingly difficult for disability service providers to ensure that a) students are properly accommodated and b) institutions fully comply with federal statutes and regulations” (p. 1). The authors advised increased education and training for faculty and administration to raise awareness of disability and ADA issues.

College personnel have often found physical disabilities easier to recognize and thus, to accommodate. They could refer to standards for physical access developed and listed in the Americans with Disabilities Act Architectural Guidelines (ADAAG). When all college campuses were required to conduct a self-evaluation upon enactment of the ADA, these guidelines were useful. However, most institutions concentrated on the physical access to their campus, rather than the program access (Petersen, 1993; McCarthy & Campbell, 1993). Many areas of college services were neglected in the self-evaluation process such as safety, evacuation, service animals, and the range of academic accommodations. Program access covers the entire university including, the physical plant, residence and dining, academic faculty, and administration. Thus, standards of evaluation are needed not only for the office providing services to the students with disabilities but for the entire campus operation.

Purpose and Significance of the Study

While the ADA is having an increasing effect on college campuses, a set of

criteria has not been designed to evaluate the policies, procedures and practices for effective accessibility to public campuses. The purpose of this study is to design substantive and worthwhile standards universities could use for a meaningful ADA self-study and could serve as a companion aid for evaluation by accreditation associations. There are several levels at which the ADA affects a college; those not included in this study are the sections of the mandate that affect employment, telecommunications, or privately owned entities.

The importance of the development of standards is seen in the activities by the Association on Higher Education and Disability (AHEAD) during the last several years. The July 1995 conference for AHEAD had two sessions on developing standards for the profession. A Professional Standards Task Force was formed to identify the essential preparation, roles and functions of administrators of programs for students with disabilities and to formulate standards for disabled student services programs. During the 1996 AHEAD Conference, approximately eight workshops or roundtables were held regarding standards. The metaphor of a three-legged stool dominated the organization's efforts to strengthen the profession through the development of standards for (a) professional expertise, (b) service delivery for learning disabilities, and (c) a statement of professional ethics. However, these areas do not encompass the fourth leg of the stool, which is the self-study standards needed for an entire

campus accessibility evaluation.

A review of the literature reveals several studies concerned with establishing standards for services for students with disabilities (Anderson, 1996; Blosser, 1984; Cullen, 1995; Gerber, Ginsberg, & Reiff, 1992; Shaw, Cullen, & McGuire, 1993). However, these studies focused on programs limited to students with learning disabilities, or they were limited to the services of the SSD office, not the policies and procedures or accessibility of the entire institution.

All college campuses were required by the ADA to conduct a self-study by January 26, 1993. No criteria were developed for universities conducting the self-study, and perceptions of those receiving services under the ADA were not always included in the process (Nagler, 1993; Percy, 1989). Consequently, there is little consistency of policies, procedures, programs, or services offered by four year colleges for students with disabilities. A common set of standards, incorporating such important areas in the literature as physical accessibility, safety, program accessibility, attitudes, and education/awareness, do not exist on which to base criteria for the self-study component of accreditation. The criteria identified in this study will be useful in implementing improved self-evaluations that are more meaningful than mere surveys of physical access.

The historical background of disability mandates and recent developments in assistive technology have transformed many colleges into more inviting and

accessible environments. However, there is a great need for further study of the implementation of the ADA for all universities. Brinckerhoff et al. (1993) stated, “The concern, however, is that it is now time for professionals in this field to identify “best practices” so that service delivery can be improved based upon current research” (p. 284).

Delimitations

This study will be delimited to the use of panel members in agencies charged with oversight of the ADA, administrators/service providers of model programs identified by AHEAD, and legal experts familiar with the ADA and postsecondary education. The standards identified will be mainly for four year postsecondary institutions.

Limitations

This study is limited to student accommodations under Title II, Section A of the ADA and does not address employment issues. The limitations of this study are framed by this researcher’s bias and the generalizability of the results. For example the matrix to analyze overlap of the Delphi panel and focus group data is based on this researcher’s information in working with the data. The study is further limited by two decisions: (a) to accept only standards meeting the critical and valuable ratings and not those with minimal ratings, and (b) to use the .10 level of significance in the exploratory analysis. The marginal significance level was used to find indicators for further study of the standards.

The focus group with students is limited to students representing different disabilities at Virginia Polytechnic Institute and State University. Generalizability of results are limited by use of one focus group consisting of five students. Although one student in the group is hard of hearing, no students who are deaf were available to participate.

Summary and Overview

The ADA is a Congressional mandate for improved services for people with disabilities. However, the ADA is complicated, with many pages of regulations, and is now being refined by judicial interpretation. Students and their parents have become much more aware of their rights under Section 504 and the ADA. Furthermore, they are finding a lack of consistency between institutions in their provision of accommodations for disabilities. Colleges experiencing an increase in the litigation of disability cases are anxious for clarification of some of the more ambiguous areas of the ADA. The Association on Higher Education and Disability (AHEAD) has implemented studies on standards for professional personnel and for offices of disability services, but the broader areas of responsibility under ADA have not been addressed.

In meeting the ADA requirement for a self-study in 1992, universities lacked substantive standards to guide their evaluations, and input from the adult students with disabilities was rarely sought in this process. The institutions most often based their self-evaluation on physical access to the neglect of program access, education/awareness,

safety and evacuation, and other areas that are now appearing in the literature and in the court cases.

Chapter 2 contains a brief legislative history of the development of the ADA, and its present status on college campuses. Since many universities presently rely on case law for interpretation of the ADA, some of the seminal cases will be examined to explain the history and present status of the mandate. The development of standards is discussed along with the accreditation process. Additionally, the Delphi and focus group techniques are reviewed, and the appropriateness of these techniques for this study is presented.

Chapter 3 explains the use of the multiple measures of the Delphi and focus group for this study. The selection of the Delphi panel and the focus group participants is discussed. The methodology section also explains the analysis of the focus group information and the succeeding rounds of the Delphi panel information.

The findings of the three-round Delphi and the focus group are presented in Chapter 4. Responses from each round of the Delphi are discussed. Characteristics of the Delphi panel and focus group are explained, and a comparison of the data from each group is provided.

The summary, conclusions, and discussion based on the findings of the study are presented in Chapter 5. The discussion includes areas of agreement and differences between the panel of experts and the students.

Chapter 6 provides recommendations for further study and the final list of standards. The final categories and standards are recommended as a handbook for professionals serving students with disabilities and for ADA Coordinators.

Chapter 2

Literature Review

History of the ADA

In our society, the prevailing philosophy governing people with disabilities stemmed from a Judaeo-Christian tradition of charity, welfare and pity (Nagler, 1993; Rioux, 1993). As with many personal and social changes in our history, federal laws to assist persons with disabilities grew out of war efforts created for disabled veterans. These early efforts often ended in a permanent status of dependency and segregation for those with mental disabilities, blindness, physical disabilities, and for families of disabled persons (Percy, 1989; Rothstein, 1995).

The trend of paternalistic services and income support changed with the wave of the Civil Rights movement. The Brown v. The Board of Education of Topeka decision articulated the right to equal educational opportunity. This case served as a catalyst, not only for the Civil Rights movement, but also for children with disabilities who had been placed in separate schools and special classes (Brinckerhoff et al., 1993). Likewise, the Elementary and Secondary Education Act (ESEA) of 1965 (PL 80-10) “the most comprehensive and ambitious education bill ever envisioned” (Worthen, & Sanders, 1987, p. 17), improved schooling for those with disabilities and began the trend toward education and independence.

This trend was strengthened by two landmark cases, Pennsylvania Association for Retarded Citizens (PARC) v. Commonwealth of Pennsylvania (1971) and Mills v. The Board of Education of the District of Columbia (1972) which resulted in The Education for All Handicapped Children Act, P.L. 94-142. This statute, now known as IDEA (Individuals with Disabilities Education Act), outlines procedural rights for all children with disabilities in public schools. It guarantees all children, regardless of disability, a free, appropriate public education in the least restrictive environment, (Brinckerhoff et al., 1993; Percy, 1989).

The massive changes in K-12 education resulted in well-educated and trained individuals who expected the same rights in their postsecondary experience. The Rehabilitation Act of 1973 met this need but only in institutions receiving federal funds (Jarrow, 1992). Unlike the explicit guidance in P.L. 94-142, Section 504 of the Rehabilitation Act was stronger on symbolic statement than on guidelines for implementation, and some colleges took a narrow interpretation of the 504 mandate.

The Civil Rights Restoration Act of 1987 eliminated many of these limitations for postsecondary students and served as an impetus of vast change (Hill, 1992). In 1990, President George Bush signed the Americans with Disabilities Act extending the provisions of the Rehabilitation Act to the private sector and to all state and local government activities. The ADA has focused attention on disability related issues as never before.

The ADA does not replace the Rehabilitation Act but draws substantive framework from the earlier mandate. Structured much like the sections of the Rehabilitation Act, the ADA is organized around five titles each addressing a different area of protection for individuals with disabilities. The five titles cover the following: (a) Title I prohibits discrimination in employment; (b) Title II prohibits discrimination in connection with state and local government and transportation; (c) Title III prohibits discrimination in public accommodations of non-governmental agencies such as hotels, restaurants, theaters and private colleges; (d) Title IV prohibits discrimination in telecommunication; (e) Title V contains general rules and provides that state and federal laws, that may provide greater protection for those with disabilities, not be preempted by the ADA.

Just as the Rehabilitation Act accomplished some access for colleges in 1973, the ADA has opened the doors a little wider. Students with disabilities can now enter colleges with expectations of access to the campus transportation, accommodation in academics and housing, and provision of their preferred means of communication.

Standard Setting

Colleges must evaluate how they are implementing the ADA to ensure the university meets the expectations of the students, protects their procedural safeguards and provides the best practices for delivery of services. One means of self-evaluation is

by measuring against a set of standards which is usually done during an accreditation process.

Standards and standard setting has been defined by many authors and organizations. The National Center on Educational Outcomes (NCEO, 1993) defined standards as statements of criteria against which comparisons can be made. These are often value statements about what is important and are usually established for the purpose of changing an existing situation. The Council for the Advancement of Standards for Student Services/Development Programs (CAS) defines standards as “...the minimum essential elements expected of any institution and student services and student development programs” (Materniak & Williams, 1987, p.13). The term standard is also used to refer to what a practitioner must be able to do to provide an appropriate level of service for a particular purpose (Norcini, 1994).

The initial setting of standards can occur in many ways. This process may begin with a mandate from federal or state legislators, or states may form a consortium with other states/professional groups to create standards. Additionally, professional groups, such as the National Council of Teachers of Mathematics, may promulgate standards. Piphio (1996) commented, “In true democratic fashion, this country has used committees, task forces, commissions, and other assorted mechanisms to create the broadest array of standards ever assembled for our schools and colleges” (p. 399). Often, these efforts have been organized to formulate standards that become part of the accreditation process in

schools and colleges. Thus, educational standards are based upon social judgments and the opinion of expert panels.

Standard setting is such a difficult and multi-faceted task that there is no consensus on a set of criteria that can operationally define the best method (Berk, 1995; Hambleton & Plake, 1994; Mills, 1995). However, there is agreement on the importance of choosing a group of experts for the procedure who are knowledgeable and experienced in the area of study (Berk, 1995; Chang, Dziuban & Hynes, 1994; Norcini, 1994). All subjectively derived standards reflect the competency of the people who promulgate them. Berk (1995) goes so far as to state, “Human judgment is the epicenter of every standard-setting method” (p.100).

Several writers have looked at factors affecting panelists during a standard setting process and have made recommendations for further research. If the expert panel is establishing socially important standards, they must be informed of the meaningfulness of their judgments and the purpose of the process (Putnam, Pence, & Jaeger, 1995). The researcher is cautioned that standards set by the panel will be affected by the political, economic, social or educational consequences of the decision (Berk, 1995). Standards will also be affected by judges of different professions, different training, varying vocational focuses and differing perceptions of minimal competencies (Chang, et al., 1994). These cautions will be considered in the present study through communication with the panel

and analysis of standards from the three types of panelists (agency, service provider, legal experts).

Other cautions concern involvement of stakeholders in the process. Brandau (1993) found in her ethnographic study of schools, a disjuncture between the home, school, and the role of standards. She cautioned that when setting standards, there must be a tacit agreement between those who set the standard, those who must carry them out, and the community the standards serve. In the area of disability, our nation has a history of assessing schools in a manner that excludes those with disabilities. The NCEO (1993) found people with disabilities or people familiar with disability issues have not been included in the standard setting process. The present study involves a focus group representing the community of students with disabilities. Additionally, the panel of experts represents administrators who must execute the standards; many of the panelists also have disabilities.

The Delphi Technique

For standards to be defensible, the researcher must focus on the method used to set the standards and how the collection of judgments was managed. The defensibility depends on inclusion of a number of experts who are familiar in the area of study, and a process for collecting judgments that is easily explainable, systematic and free of undesirable influences (Norcini, 1994). The Delphi Technique meets these requirements.

Definition. The Delphi Technique is a systematic method of soliciting and refining the knowledge, judgment or opinions from a panel of experts regarding a complex issue without engaging in direct discussion (Fendt 1978; Linstone & Turoff, 1975; Strauss and Zeigler, 1975). The unique characteristics of the Delphi include (a) anonymity of response, (b) multiple iterations, (c) convergence of the distribution of answers, and (d) a statistical group response reported in the form of means or medians (Judd, 1972). Thus, a study using this method would have participants write their opinions on a specific topic, then they would evaluate all of the opinions according to a given criterion (i.e., a rating scale). Each member would receive the list of responses, and if their view differs from most they are asked to revise their opinion or explain why. The members then receive a summary of responses with a statistical report such as the mean or median for each item (Barnette, Danielson, Algozzine, 1978; Judd, 1972).

The Delphi has been found as most useful when the problem under consideration does not lend itself to precise analytical techniques but would benefit from the subjective judgments of a collective approach. Consequently, the Delphi is useful to identify goals and objectives, array possible alternatives, make future projections, establish priorities, reveal group values, gather information and educate a respondent group (Moore & Coke, 1977). Strauss & Zeigler (1975) grouped these different uses into three categories of Delphis which they label numeric, policy, and historic.

History. In the early 1950's the Air Force sponsored a study carried out by the Rand Corporation. The goal of the study was to obtain consensus of opinion of a group of experts concerning the number of A-bombs required to reduce munitions output. The series of intensive questionnaires interspersed with controlled feedback used in the study was named "project Delphi" for the ancient Greek Oracle of Delphi. (Linstone & Turoff, 1975; Moore & Coke, 1977)

Olaf Helmer developed the Delphi technique with his associates at Rand for defense research. It was kept classified and used only by the military. Later, the method was revealed and became useful as a forecasting tool by industry. Since the late 1960's the Delphi has proven to be a popular technique for studies ranging from gathering historical data to urban planning (Seevers, 1993).

Application. In the social sciences the Delphi has been used in a variety of ways and has been found as very beneficial to higher education planning (Judd, 1972; Strauss & Zeigler, 1975). Miller (1988) found higher education studies had implemented the Delphi to solve problem of curriculum, conduct campus planning, establish goals and objectives, analyze cost effectiveness and cost benefit, study elements of evaluation, establish standards for teacher examinations, and to evaluate priorities and resource allocation. Additional applications of the Delphi include gathering current and historical data not accurately known/available, examining significance of historical events, exploring urban and regional planning options, designing the structure of a model, and deciding pros and

cons associated with policy options (Moore & Coke, 1977). This diversity of applications has made the Delphi a useful tool in higher education.

Strengths and limitations. Certainly, one of the strengths of the Delphi is its simplicity. No advanced mathematical skills are necessary for the design, implementation, or analysis of this technique. Several authors have extolled the advantages of achieving consensus without the disadvantages inherent in group contact (Gow, 1979; Jaeger & Bush, 1984; Linstone & Turoff, 1975). Thus, the Delphi avoids the drawbacks of group pressure or the influence of a dominant individual. At the same time, it allows a large group to participate without constraints of geography and expense (Barnette, et al., 1978). Moreover, the Delphi is useful when the contributors have little history of communication with one another and represent diverse backgrounds and experience (Moore & Coke, 1977). Flexible but limited time parameters for individuals to respond to each round are another advantage.

However, the time required between each round to analyze the questionnaires and prepare the next round becomes a disadvantage. This time lag, which can amount to several months, may result in decline of panel interest and respondent attrition (Barnes, 1987; Gow, 1979). One of the more scathing statements about the Delphi approach was put forth by Sackman as reported by Strauss and Zeigler (1975):

1. The claim to represent valid expert opinion is scientifically untenable and overstated.

2. The claim of remote and private opinion over face-to-face encounter, is an unproven generalization.
3. The Delphi consensus is specious consensus.
4. Delphi questions are likely to be vague.
5. Delphi responses are likely to be ambiguous.
6. Delphi results probably represent compounded ambiguity.
7. Delphi is primarily concerned with transient collections of snap judgment.
8. Delphi anonymity reinforces unaccountability in method and findings.
9. Delphi systematically discourages adversary process.
10. Delphi has been characterized by isolation from the mainstream of scientific questionnaire development.

Besides these disadvantages, some common reasons for Delphi failure have been identified. Moore and Coke (1977) cautioned against the monitor imposing views upon respondents by overspecifying the structure or not allowing contributions of unique perspectives. Additional causes of failure include the Delphi used as a surrogate for all other human communications, poor techniques of summarizing and presenting group response and ignoring or not exploring areas of disagreement so artificial consensus is reported to the panel.

Process. Distinct types of Delphi involve some different steps. The reverse Delphi procedure starts with a large amount of information and is reduced to key issues.

The modified Delphi reduces the number of steps by starting with a list of items identified in a literature search (Miller, 1988). Regardless of the type of Delphi being conducted, they all have certain characteristics in common:

1. A panel of experts used to gain information.
2. A set of carefully designed, sequential questionnaires conducted in writing.
3. An attempt to produce a consensus of opinion, and identification of opinion divergence.
4. A guarantee of anonymity of the experts during the study.
5. A method of iteration and feedback that allows participants to review and revise their statements after reading those of their peers.
6. A series of rounds that communicates a summary of previous rounds.
7. A method for processing judgmental data by individuals in remote locations with a framework that maintains focus on one issue (Strauss & Zeigler, 1977).

Delphi Panel. Certainly, the selection of the Delphi panel is critical to the success of any study using this technique. Brooks (1979) cautioned that an “inadequate panel can produce no more than pooled and manipulated ignorance” (p.379). The people selected must be aware of the problem being considered and the implications of their recommendations (Brooks, 1979; Jaeger & Busch, 1984). At the same time, the panel should represent a diverse background to avoid a skewed data set (Strauss & Zeigler, 1975).

The importance of making the respondents stakeholders in the process cannot be ignored (Moore & Coke, 1977; Seevers, 1993). This can be accomplished by making them aware of how they were chosen and the importance of the findings of the study based on their input. Some Delphis have included a final round of face-to-face meetings of the panel to build more in-depth understanding or to find why the respondents believe what they listed in the study (Think Tank Uses Reverse Delphi, 1996).

The Focus Group

Brandau (1993) cautioned that stakeholders must be involved in the process of setting standards. Focus groups provide the ideal setting for this to occur. Since the interpretation of focus groups involves a considerable amount of subjective judgment, the analysis is facilitated if compared to sources using different methodologies (Knodel, 1988). Thus, the union of the focus group and Delphi panel information provides triangulation of information and empowerment of the users.

Definition and Background. Focus group interviews are a qualitative research technique consisting of a structured, extractive process used to gather information from specific interest groups. This organized discussion that includes 8-10 people is guided by a few specific questions that focus on different aspects of a certain topic. The purpose of the interview is to gain a deeper understanding of the participants' views, experiences, feelings, perceptions, beliefs, knowledge, and attitudes about the topic under investigation. Thus, a focus group can be a useful technique when the researcher needs

creative group thinking, complex problems solved, a new perspective or clarification on a problem, or when it is difficult to obtain needed information in writing (Butler, Dephels, Howell, 1995; Morgan, 1993).

The technique of focus group interviews has been used in market research, human services, community problem solving, and program evaluation. The field of marketing has long used focus groups to explore attitudes, behaviors, and perceptions of customers. Focus group interviews were adopted as a major data-gathering technique by market researchers, but they also proved useful to social scientist in questionnaire development and program evaluation (Morgan, 1993). In the college setting this group interview process has been used to improve program quality by assessing such areas as attitudes toward programs, curricula, and instruction (Rahilly, 1992).

Strengths and Limitations. Cost and efficiency are often cited as advantages of the focus group over individual interviews (Frey & Fontana, 1988; Butler et al., 1995). More importantly, focus groups are valued as a research method that is respectful of the target audience. This method allows expression of views when there is a power differential between participants and decision makers, thus bridging the gap between professionals and their group participants.

This advantage allows a clear view of how others think and talk, providing a powerful means of exposing professionals to the reality of the customer, student, or client. Since participants are likely to share personal experiences, this information can be

useful in serving as a referent for the researcher looking for what is common or typical (Morgan, 1993; Knodel, 1988). Consequently, researches can examine motivation with a degree of complexity not typically available with other methods. Additionally, focus groups allow researchers to learn more about the degree of consensus on a topic.

The relationships that evolve during the group meeting often stimulate members to elaborate and express new or additional data for the researcher. This avoids the pitfalls of the recalcitrant respondent who is reluctant to share information. Additionally, the group interview can serve as a source of validation for observed or individual interview data. The flexibility of this method provides considerable probing resulting in more depth and variation of responses.

However, the ability to be flexible and to probe participants' remarks appropriately requires different skills than individual interviews (Frey & Fontana, 1988). Group interviews require the researcher be sensitive to group dynamics to avoid the bandwagon effect or the possibility of one group member controlling the group. Consideration must be given to location conducive to group interviews, group size and different backgrounds of the members. In addition, responses can be affected by the members' view of the purpose of the interview, or the outcomes can be biased by the interviewer's role in the group .

Albrecht & Adelman (1987) describe three types of communication patterns that may be threats to the internal validity of focus group data. *Compliance* is a pattern of

responding in a way the member believes is expected by the questioner in anticipation of an immediate reward. For example, a conforming or flattering response that is not probed may result in the session ending early. The pattern of *identification* occurs when respondents wish to please or avoid offending the facilitator, or if a group member is attracted to another person in the group. Identification may lead to “group think” resulting in premature consensus.

The third pattern, *internalization*, is related to the report of opinions that are deeply ingrained and personal. Such responses are often the most valuable information for the researcher. However, when respondents are asked one at a time for their opinions, those responding last will most often echo the sentiments of the first responders. Research on group discussion has found the technique of beginning with participants writing, rather than saying their ideas will produce a greater number of unique responses and may avoid these limitations (Albrecht et al., 1987; Brassard, 1989).

Process. Several factors have been found essential to the quality of information wrought from a focus group experience. To be successful in producing useable data it is important for the researcher to start with a committed team leader who understands the process and is skilled in probing for information. The leader should be assisted by a co-facilitator who can serve as a recorder. The leaders must supply an accessible and neutral location, sufficient resources, careful selection of participants, clarity of purpose to the interviewees, personal attentions to the group, well-planned and effective questions, and

an accurate method of documenting the discussion that is not distracting (Butler, et al., 1995; Krueger, 1988; Knodel, 1988).

Leaders can also provide light refreshments, and some form of compensation to encourage attendance (Butler et al., 1995). The interview session should last no longer than two hours to avoid fatigue. Additionally, the researcher should plan to provide participants a statement of purpose, a prepared agenda, discussion of ground rules, and assurance that their remarks are confidential.

Focus Group Participants. Selection of the participants and attention to their needs is critical in conducting a successful group experience. The group of participants should consist of about 8-10 members who represent the population relevant to the problem. Morgan (1993) found, “Focus group interviews, when conducted in a nonthreatening and permissive environment, are especially useful when working with categories of people who have historically had limited power and influence.” (p. 15). This seems especially relevant for people who have disabilities; the students in my focus group unanimously stated they had experienced very few opportunities to take a leadership position or to speak about their disability.

Analysis. Krueger (1988) emphasized the need for careful data handling throughout the group interview and afterwards. However, interpretation of focus group information involves a considerable amount of subjective judgment. This interpretation is facilitated if compared to sources using different methodologies such as surveys, case

studies, or in-depth interviews. A thorough analysis is usually based on repeated examination of the full transcript with the goal being to explicate and understand the issue under investigation. This is accomplished by organizing the information into meaningful segments or categories, coding the data and searching for patterns that lead to meaningful conclusions (Brassard, 1989; Glesne & Peshkin, 1992; Knodel, 1988; Ritchie & Spencer, 1994).

After this “code mapping” is completed, an overview grid can be constructed that places the topic headings on one axis and the session identifiers (if several groups were held) on the other. Each cell would contain short summaries of the discussion from each group on each topic. The grid allows the researcher to see relationships and patterns in the information. Knodel (1988) suggests that several people read all of the transcript and collaborate on the analysis to lessen subjectivity and invalid conclusions.

Summary

The literature reveals a change from paternalistic services to education and independence for people with disabilities. The ADA has provided a catalyst in this trend. In postsecondary education the ADA has assured students of physical and program access. To evaluate the implementation of the ADA, standards must be developed to measure the essential elements of the mandate. This chapter has examined how standards are set and the use of a Delphi panel and focus group as stakeholders in the standard setting process.

Chapter 3

Methodology

The purpose of this study was to identify standards for postsecondary institutions conducting a self-evaluation of implementation of the ADA. The review of the literature supports the importance of standards to the profession. However, much of the literature revealed the lack of standard services from campus to campus. As students have become more aware of their rights, they have experienced a lack of consistency in services. College administrators experiencing an increase in the litigation of disability are anxious for clarification of the ambiguous areas of the ADA.

The best method of investigating this topic was use of a Delphi method with triangulation provided by a focus group of students. The importance of multiple measures has been stressed by several authors (Denzin, 1978; Patton, as cited in Worthen & Sanders, 1987; Pedhazur, 1991). The comparison of the multiple qualitative data sources from the Delphi panel and student group allowed multiple perspectives from multiple observers.

Methodology for the Delphi Technique

A Delphi technique was used to determine standards and reach agreement among a panel of professionals. The panelists consisted of three areas of expertise: (a) college service providers, (b) representatives from agencies responsible for enforcing the ADA, and (c) legal experts. The experts were identified by a literature search and by a selection

committee representing the same three areas of college, agency and legal expertise (Appendix A). This selection committee consisted of three members chosen from the leadership in AHEAD and the National Association of ADA Coordinators (NAADAC). The committee was asked to use panel selection criteria identified by Anderson (1996). Those selected would have experience as an ADA Coordinator, college service provider, or legal consultant within the past five years, and one or more of the following: (a) a national reputation established through publications, research or presentations; (b) a current consultant or trainer in the disability field, or (c) a recommendation by at least two or more selection committee members. Additionally, members were identified by the selected Delphi panelists. As the researcher contacted prospective Delphi panelists, some of them recommended additional names. Those recommendations meeting the selection criteria listed above were invited to participate. The final Delphi panel determined criteria to evaluate implementation of the ADA during a self-evaluation or accreditation process.

The expert panel generated standards from an open-ended question in the first round of the Delphi. The open question format was used to avoid the bias of the researcher and the limitations imposed on panelists by a modified Delphi technique (J. Fortune, personal communication, April, 1995). The first round asked the experts to supply standards they saw as desirable for four-year institutions conducting a self-study regarding their ADA implementation. The returns were arranged in categories that are

logical and intrinsic to the organization of colleges and universities. Collected standards were compiled under these categories and organized into questionnaire form for Phase II.

To ensure content validity, the items and categories were reviewed by a content analysis sub-committee consisting of the disability services coordinator at Virginia Tech with 20 years experience in disabilities, a Department of Rehabilitation counselor with over ten years of experience, and a faculty member with expertise in higher education and student affairs (Appendix B). The make-up of this committee provided representation of professionals mirroring a portion of the Delphi panel (college disability services, and agency). The faculty member's expertise was helpful since many postsecondary disability services offices are in the division of student affairs. The content analysis utilized criteria reported by Spector (1992) to ensure each item was: (a) clear, (b) concise, (c) unambiguous, (d) concrete, (e) expressed one idea, (f) avoided colloquialisms or jargon, and (g) avoided use of negatives. This review also attempted to reduce redundancy of items.

After review by the content analysis sub-committee, the questionnaire was structured with a four point Likert-type scale allowing the panel to react positively or negatively to each standard in the self-evaluation criteria. The scale consisted of the choices (a) critical, (b) valuable, (c) minimal, and (d) unnecessary. This scale allowed assessment of panelists' strength of feeling about each standard and avoided the

imprecision of yes/no choices (Spector, 1992). The panel was instructed they could add or change standards in Delphi II.

Results of the Delphi II were entered and analyzed using a macro created in Microsoft Excel for Windows 95 (Version 7.0a) using Visual Basic programming language. The program automatically exported results to Microsoft Word for Windows 95 (Version 7.0a) (Kelley, 1997).

The returned round two items were then reviewed by the content analysis sub-committee. They focused again on redundancy, clarity and ambiguity of items. Additionally, the comments of the Delphi panel were studied for their suggestions regarding overlap, repetitive times or missing items.

A small group at the Virginia Council of Learning Disabilities Conference was asked to examine the round two and focus group comments for further content validity for the round three instrument. In addition, the participants in the Southeast Regional Consortium of EOAA/ADA Coordinators Pisgah XIX Conference were asked to review the categories and standards from round two for their suggestions for the round three instrument.

Input from these groups produced only minor changes to the original categories. The admissions category was broadened to include admissions and recruitment. The term disabled student services was changed throughout the instrument to read, services for students with disabilities (SSD) to be in congruence with the person first language of the

ADA. The content analysis sub-committee suggested additional deletions of items that were repetitive.

Through this examination of the round two questionnaire, the items for round three were reduced by 62 questions. Only 19 of those were done by the two-thirds acceptance criteria (two-thirds of the panel rating the item as a 3 or 4). The additional 43 items were eliminated by the comments from the panelists and by the content-analysis sub-committee using the same criteria they used in Delphi I.

In Delphi III, each panel member received an individualized instrument listing the mean rating from the group plus the individual's Delphi II rating. The goal of the Delphi III was to reach consensus on rating each item. The panelists could change their ratings or provide their argument for keeping their original ranking if it did not match the group mean. Panel members were asked to rate any new or substantially modified items. All standards receiving a total of two-thirds of the responding panel members' votes in the critical (4) and valuable (3) categories were included in the proposed self-evaluation model.

Methodology for the Focus Group

In addition, data was gathered from a focus group of students with disabilities to consider the voice of the stakeholders. The focus group method was used for several reasons: (a) to avoid the intimidation of a personal interview (b) to avoid asking students with learning disabilities or low vision to complete a survey instrument (c) to facilitate in

depth responses, and (d) to learn the degree of consensus among students. The session inquired about what standards they deemed necessary for colleges to accommodate their access needs. The student group consisted of a selective sample chosen from recommendations by the Dean of Students Office, Services for Students with Disabilities at Virginia Tech. Each student was mailed a letter of invitation which explained the study and they received follow-up phone calls and reminders. The final group represented all levels of student status, freshman to graduate and different types of disabilities.

The student group for this study met in the campus student center to avoid office or classroom settings and to create a relaxed environment. Each group member had been offered a choice between a five-dollar bill or five lottery tickets in their invitation to attend the session. A lively discussion about the lottery tickets added to the informal atmosphere and put the students at ease. Each student was provided a written list of the questions (in large print for the student with low vision), a written agenda and a verbal explanation of the process that we would use (Appendix C). All students knew the facilitator, and two students were acquainted with the co-facilitator. The group was given a brief explanation of this study that included the goal to establish standards using a Delphi technique with a panel of experts.

Working with a co-facilitator allowed this researcher to tape the interview, take notes, listen carefully, and probe when needed, while she conducted the discussion and served as moderator. Also, the two of us could carefully control for a dominant figure

stifling others, and we could watch for any pressure for conformity.

Following the methods described by Albrecht, et al. (1987) and Brassard (1989), the questions for discussion were provided in writing. The questions were: (a) What do you think should be done to help people with disabilities gain better access to higher education?, (b) How should the ADA be promoted? and, (c) How well is the ADA working; is it meeting your needs? Each student was asked to list their responses to the question on note cards. After allowing adequate time for a thoughtful response, the participants were asked to discuss their replies within the group and to cluster their cards according to common themes or categories. The students then reported the clusters and responses to the co-facilitator who recorded them on a wall chart. Further discussion was recorded on the chart; probing questions were recorded in the facilitator's notes and on tape. After all questions, categories and replies had been recorded on the wall chart, students were asked to come to consensus on a title for each category or theme.

From this process, five major themes emerged. The students then ranked the five areas in order of importance for them as a group. Again, this involved coming to consensus on the order of importance, but they were quick to agree on the ranking. Their responses were analyzed using a method that provides a systematic charting and sorting for qualitative material according to key issues and themes (Knodel, 1988; Ritchie & Spencer, 1994). Recurrent themes that emerged from the focus group information were compared to the responses of the expert panel.

The procedure of using index cards and clustering reduced interviewer bias and assisted data analysis. The process also ensured that each students' opinion could be heard, discussed and probed if needed. Since students first wrote responses silently, the bandwagon effect and dominance by one individual was avoided.

Research Steps

In sum, the methodology of the study was a three-round Delphi to establish standards with results compared to information collected from a student focus group.

The collective research steps consisted of the following:

1. Identify panel members and focus group.
2. Secure commitments from panel and students to serve in the study.
3. Mail, Fax or E-mail Delphi I to each panel member with an instruction sheet.
4. Hold focus group discussion.
5. Send follow-up E-mail or Fax reminders after one week.
6. Phone and E-mail nonresponders two days after Delphi I return-date.
7. Compile Delphi I responses into logical categories. Edit for duplication, compose into standard language and create Delphi II instrument.
8. Mail Delphi II with instruction sheet. Add members indicating desire to participate who were unable to respond to Delphi I.
9. Send follow-up E-mail or Fax reminders after one week.

10. Phone or E-mail nonresponders two days after Delphi II return-date
deadline
11. Analyze responses to Delphi II and create Delphi III instrument.
12. Mail Delphi III with instruction sheet.
13. Send follow-up E-mail or Fax reminders after one week.
14. Phone or E-mail nonresponders two days after Delphi III return-date
deadline
15. Analyze responses to Delphi III.
16. Analyze focus group information.
17. Compose the results of the study.
18. Provide all panel members and focus group members with a follow-up
report of the findings.

Due to the problem of non-response in survey research, several steps were taken to ensure an acceptable response rate in each of the three rounds of the Delphi. For the first round open question, respondents were encouraged to use e-mail for ease of transmittal. Panelists who did not have this capability could send replies by facsimile or hard copies. In round 2, the panelists could use e-mail, but it was found to be difficult because of the formatting of the document and the myriad of computers of the panelists. The round 2 and 3 surveys were sent in hard copy with self-addressed, stamped return envelopes with a follow-up mailing to non-respondents. Reminders were also sent by e-

mail. Several panelists mailed their surveys by facsimile. The final response rate of 100% from round 2 to round 3 indicates that these steps were effective.

Data Analysis

Data analysis procedures for some Delphis concentrate on item variances around measures of central tendency such as means (Barnette et al., 1978). Often the median and frequencies comprise the statistical analysis (Seevers, 1993). Some researchers have reported results using the mode (Miller, 1988) or percentage of consensus (Anderson, 1996).

This study used the means for feedback to panelists and to report results of the study. Since standards for ADA implementation have not previously been established, a two-thirds vote for each standard was used for retention of criteria from round two to round three and for the establishment of final standards from round three. The final criteria were compared to recurring themes gleaned from the student focus group.

Further exploratory analysis was conducted using correlations and simple factorial ANOVAs (not presented in this study) to determine which factors had the most influence on the importance ratings of the categories and subcategories of standards. A final analysis using one-way ANOVAs is presented showing only the significant differences found between panelist's importance ratings of the categories and sub-categories of standards.

Chapter 4

Analysis

Standards to be used as a basis for evaluating implementation of the ADA in postsecondary institutions were identified by using three rounds of a Delphi technique and a student focus group. A summary of the participation of the panelists and focus group and the results of the Delphi rounds is included in this chapter.

Delphi Panel Selection and Characteristics

The expert panel was chosen based on the criteria established by Anderson (1996). A selection committee consisting of one representative from each of the three panel groupings of agency, university and legal experts recommended and reviewed an initial list of panelists. Each final participant demonstrated one or more of the following: (a) experience providing college, agency or legal services within the past 5 years; (b) a national reputation established through publication, research or presentations; (c) currently consulting or providing training in disability or ADA issues; or (d) recommended by at least two or more Selection Committee/ Delphi panel members or citations in the literature search. Over 79 possible panel members were identified.

Research involving the Delphi technique or survey participants is always affected by non-responders and attrition. In this case, the characteristics of the Delphi panel reflect lower response rates from agency and legal professionals. Also, the selection committee identified only five legal experts to invite for participation in the Delphi. As

prospective Delphi panelists were contacted, they often recommended additional experts, none of these were legal experts. This may be indicative of the small number of lawyers working with the ADA and postsecondary issues.

Absent from the Delphi panel are representative from the Department of Education Office of Civil Rights (OCR) and the Department of Justice (DOJ); contacts with these offices sighted case loads and training commitments as their reason for not participating. Although the agencies represented by the Delphi panel work closely with OCR and DOJ, the results of the study lack their particular enforcement perspective. The two experts identified due to their affiliation with the Postsecondary Education Consortium on Deaf Education were also unable to participate.

Examination of the attrition during the study shows four agency experts, one legal expert and two university experts were unable to participate after round one of the Delphi. However, one agency, one legal and six university experts joined the panel during Delphi II. There was 100% retention from Delphi II to Delphi III.

Due to attrition/lack of representation among OCR, DOJ, legal experts and experts in deaf culture, review of the final standards by these groups is included in the final recommendations. Because the final list of standards is to guide ADA Coordinators and disability administrators in a self-evaluation of their colleges' program access, a review of the standards by individual campus legal counsels is also recommended.

The final panel completing the last two Delphi rounds consisted of 30 members with 21 members representing higher education institutions, 7 representing agencies, and 2 representing legal professionals. The demographic characteristics of the 30 final Delphi panelists revealed they are predominately female (63%) and 33% of the participants have a disability (Table 1). A majority (60%) had more than 16 years of experience in the field of disability. However, the panelists had been in their current positions only an average of 9.42 years, which may indicate that many institutions created positions with the advent of the ADA in 1990. Approximately 54% of the participants possess at least a masters degree. This is not surprising, since a majority of the panel is affiliated with university or college offices for students with disabilities (70%).

Other demographic descriptors of the sample include the respondents' institution size. The size of institution considered total students enrolled in universities or colleges and the total constituency served by agencies. The majority of participants (40%) were employed by large institutions enrolling more than 20,000 students. In contrast, 37% of the experts were in institutions serving less than 10,000 people. The panel represented a wide geographic area covering 15 states and the District of Columbia.

The Delphi panels represent highly qualified professional well known for their leadership in the field of the ADA, higher education and disabilities. The group includes former presidents of AHEAD, the former executive director of AHEAD, the current director of NAADAC, and several authors of well known texts on the ADA and

Table 1**Personal Attributes of the Final Expert Panel**

	Variables	n = 30	Percent
Gender:	Female	19	63
	Male	11	37
Disability Status:			
	Disability	10	33
	No disability	19	63
	Missing data	01	03
Affiliation:	University Service Provider	21	70
	Agency	07	23
	Legal Advisor	02	07
Years Experience:			
	0 - 4	02	07
	5 - 10	05	17
	11 - 15	05	17
	16 - 20	09	30
	20+	09	30
Years in Current Position:			
	0 - 4	09	30
	5 - 10	09	30
	11 - 15	05	17
	16 - 20	04	13
	20 +	03	10
Highest Degree Earned:			
	Bachelor's	03	10
	Master's (except thesis)	01	01
	Master's	10	33
	ABD	05	17
	Doctoral	09	30
	J.D.	02	07
Institution Size:			
	1,000 - 4,999	08	27
	5,000 - 9,999	03	10
	10,000 - 14,999	02	07
	15,000 - 19,999	03	10
	20,000 +	12	40
	Missing Data	02 (2 Agencies = NA)	

disabilities and higher education. Also on the Delphi panel is the AHEAD representative to CAS, the director of the federally funded Job Accommodations Network (JAN), and several of the professions best known consultants. A full listing of the 29 Delphi I panelists is in Appendix D; the 30 Delphi II and Delphi III panelists are listed in Appendix F.

Delphi I

Seventy-nine experts were invited to participate in the Delphi portion of the study. Sixty professionals (76 %) returned the information form; of this number, forty-four (73 %) signified agreement to participate in the study. Sixteen individuals (27%) stated they could not participate but would like to receive a summary of the findings.

The forty-four panelists who agreed to participate in the study were asked to identify the essential standards for institutional self-evaluation of the ADA.

Twenty-nine members (66 %) completed the first round open questionnaire generating 790 standards (Appendix D).

Delphi II

These responses from Delphi I were edited for clarity and duplicate opinions were merged. This process was accomplished with assistance from the content analysis sub-committee. The sub-committee represented expertise similar to the Delphi panel. One member had 20 years of experience in working with students with disabilities, another member had 10 years of experience in counseling that included five years with the

Department of Rehabilitative services. The third member was chosen for his experience teaching graduate studies in higher education and student affairs. The following list from Spector (1992) was utilized in editing the items to formulate the standards for the Delphi II instrument:

1. Items should be clear, concise, unambiguous, and concrete.
2. Items should express only one idea when possible.
3. Items should not contain colloquialisms and jargon.
4. Items should not be structured with negatives.

This researcher had coded the 790 Delphi I items and deleted obvious redundancies before submitting items to the content analysis sub-committee. The coding process consisted of reviewing each item and attaching a term for the place in a postsecondary setting that standard would fit. These terms became the categories and subcategories and were organized in chronological order for the process a student might follow from first applying to a university to later accessing services at the university. Thus, Admissions became the first category, followed later by Services for Students with Disabilities (SSD), and Assistive Technology became the last category as students normally would be referred to an assistive technology lab by the SSD office. This information was forwarded to the content analysis sub-committee. The chronological order was reviewed by the content analysis experts as were the items. The content sub-committee was able to further reduce redundancy of items based on an attempt to place a

standard at the first place the student would encounter the service. For example, items that discussed publicity of SSD services were placed under Administration, publications, category II appearing before SSD, category III. Originally, several similar items appeared under more than one category adding to the length of the instrument.

The edited responses produced a list of standards that became the second-round questionnaire with 374 items. These items were clustered into seven judgmental categories: (a) admissions, (b) administration, (c) disabled student services, (d) access, (e) academic accommodations, (f) ADA/504 coordinator, and (g) assistive technology. The categories that received a large number of items were subdivided to provide greater ease in responding to a lengthy instrument. Table 2 illustrates the number of items that were generated in each category.

The standards generated in round one were sent to all forty-four members who had originally indicated interest in participating in the study. Of that number, 30 (68%) of the 44, completed through round two and were included in round three of the study.

Some panel members declined to rate individual standards in round two and round three. Their reasons for not rating an item included lack of time or the item was confusing. The analysis of round two and three was based on the percentage of those responding to the question. A sample page of Delphi II is contained in Appendix E.

Table 2**Number of Standards Per Category in Rounds Two and Three**

<u>Category</u>	<u>Delphi II</u>	<u>Delphi III</u>
I. ADMISSIONS/RECRUITMENT (Total)	21	19
II. ADMINISTRATION (Total)	80	59
A. General	23	14
B. Fiscal Planning	3	2
C. Procedures		
1. Confidentiality	3	2
2. Publications	7	5
3. Complaint Procedures	12	8
D. Committees	10	7
E. Evacuation and Safety	13	13
F. Training	9	8
III. SERVICES FOR STUDENTS WITH DISABILITIES (Total)	82	69
A. General	48	42
B. Professional Expertise	8	8
C. Part Time/Graduate Students	4	4
D. Data Collection/Self Monitoring	15	10
E. Documentation	7	5
IV. ACCESS (Total)	138	120
A. General	18	17
B. Physical/Structural/Transportation	38	29
C. Program	13	8
1. Support Services		
a. Financial Aid	7	7
b. Health and Counseling	3	3
c. Residential and Dining	13	12
d. Career Services/ Field Placement	4	4
2. Telecommunications	17	17
3. Student Employment	6	6
4. Student Organizations	5	4
5. Library	5	5
6. Graduation Ceremonies	9	8
V. ACADEMIC ACCOMMODATIONS (Total)	34	35
VI. ADA/504 COORDINATOR (Total)	7	6
VII. ASSISTIVE TECHNOLOGY (Total)	12	10
	TOTAL = 374	318

*Delphi II added 7 items in Academic Accommodations; 1 new item was dropped in Delphi III 19 items dropped by 2/3's criteria; 43 items eliminated for clarity.

Delphi III

Only 19 items were eliminated by the Delphi experts based on the criteria of two-thirds acceptance at the valuable or above level (Appendix E, Toss Items). The number of items was further decreased by the content analysis sub-committee. Using comments from the Delphi panel and the Spector (1992) criteria, they eliminated 43 additional items to reduce redundancy and to add clarity. The content analysis sub-committee again employed the chronological approach to reduce items that were similar and appearing in more than one category. Additionally, person first language was added throughout the round 3 instrument. Panel comments were also used to reword the accepted items for the round three instrument. The items were then clustered under the same categories with the “admissions” category expanded to “admissions and recruitment”. The expert panel had produced seven additional items for Delphi III that were rated with the same scale as Delphi II (1=unnecessary; 2=minimal; 3=valuable; 4=critical). The Delphi III was then mailed to the same thirty people who completed Delphi II (Appendix F). The final standards are listed in Chapter 6.

The Delphi panel adopted 318 items as final standards based on the criteria of two-thirds consensus at the 3 (valuable) or 4 (critical) level of ratings on a four point Likert scale (Table 3). The entire panel of 30 participants had only 2 items on which they reached a 100% consensus at the 4 (critical) level. The panel reached 100% consensus on 149 standards at the 3.0 - 3.99 (valuable) level.

When the panel responses are examined by groups reaching 100 % consensus, the agency mean resulted in only two items ranked as critical and 255 items rated at the valuable level. The university personnel had the same two items reaching the critical level and 173 items achieving 100% consensus at the valuable level. The two items chosen as critical with 100% consensus by the agency, university, and entire panel were:

II.A.6. Written policies establish the intent of the institution not to discriminate on the basis of disability and to provide reasonable accommodations in accordance with state and federal laws.

IV.A.7. If the campus operates any special programs (such as adaptive recreation, special tutorial programs, special courses) primarily or exclusively for students with disabilities, these students are not excluded from any other regular campus programs for which they are eligible.

The legal category of the Delphi panel reached 100% consensus on 100 items at the critical level, and on 292 items at the valuable level. The high number of standards achieving the critical level among the legal professionals must take into consideration that only 2 panelists fit this category, while there were 21 university professionals and 7 agency professionals. It is interesting to find the legal professionals, who must litigate ADA complaints, and agency personnel, who enforce the mandate, were more generous in their views than the service providers who work directly with the students.

It is important to notice that the 100% consensus items from the two legal professionals match the returns from the panelists with disabilities. This is explained by the fact that one legal professional did not respond to the voluntary demographic question about disability status. Therefore, the remaining legal participant who does have a disability is also counted in the group of experts with disabilities.

On further examination of the university professionals, some interesting differences in item ranking are noticed based on the size of institutions. Again, small sample size must be considered when examining these data. The medium sized institutions (10,000 - 14,999 students) reached 100% consensus on 24 items as critical. The 20,000 plus and the small institutions of less than 5,000 students reached full consensus on only two to four items in the critical range. Table 3 illustrates the number of items rated as critical (4) relative to affiliation and disability status of the panelists.

The panelists with disabilities rated items higher than their counterparts. The panelist with disabilities comprised one-third of the entire group. They came to 100% consensus on 100 of the items at the critical level and 292 items at the valuable level compared to 2 critical and 168 valuable consensus items by panelists with no disability. These findings are similar to those of Blosser (1984) comparing disabled and non-disabled SSD directors on their perception of work role categories and are further corroborated in the analysis using an ANOVA discussed below.

Table 3

**Number of Items Achieving 100% Consensus at Critical (4) Level
Relative to Panelists' Affiliation and Disability Status**

<u>Affiliation</u>	<u>Number of Items Ranked as Critical with 100% Consensus</u>
<u>Universities, by size</u>	
More than 20,000 Students	3
15,000 - 19,999	2
10,000 - 14,999	24
5,000 - 9,999	4
1,000 - 4,999	2
<u>Total University Panelists</u>	2
<u>Agencies</u>	2
<u>Legal Panelists</u>	100
<u>Panelists with Disabilities</u>	100
<u>Total Delphi Panel</u>	2

Exploratory Analysis of Delphi III Ratings. As the raw data was entered, patterns began to emerge that indicated variances between the panelists' responses based on their demographic differences. Further exploratory analysis was conducted using correlations and simple factorial ANOVAs (not presented in this study) to determine which factors had the most influence on the importance ratings of the categories and subcategories of standards. Only one factor, disability status, appeared to have a significant relationship with importance ratings of standards. However, a final analysis using one-way ANOVAs (Appendix G) revealed differences in 16 category and sub-category ratings related to disability status, gender, affiliation, years of experience or years in current position. Information is presented showing only the significant differences.

The .10 level of significance was used for the analysis since this was an exploration. The researcher was interested in "teasing out" information about the standards that may be relevant to the professionals using the standards and important for further research.

One-way ANOVAs enabled the testing of importance ratings by panelists' demographic attributes. The importance score for a category or sub-category was calculated by summing each panelist's ratings for each category/sub-category. Sums were used because they provided a simple to understand measure reflecting the variance of responses, proved more sensitive to the data, and allowed less loss of data. A Levene test

for homogeneity of variance accompanied all one-way ANOVAs. This statistic was examined to verify that differences in group sizes were not violating the assumptions of an ANOVA model. All one-way ANOVAs presented met the homogeneity of variance test.

Of the 18 categories and subcategories, 12 (67%) indicate some possible relation to the disability status of the panelists. The remaining 6 (33%) were independent of the respondents' attribute of disability status. This would indicate that these categories are equally important to all participants. However, four subcategories indicated possible difference based on the panels': (a) gender, (b) affiliation, (c) experience, and (d) years in current position. These are explained in the following analysis and Appendix G.

Three (43%) of the main categories ranked differently based on disability:

(a) Administration, (b) Services for Students with Disabilities, and (c) Access. Within these overall categories, there are nine sub-categories which indicate difference in importance rating between persons having a disability and those reporting no disability. In the area of Administration, the sub-categories of general, procedures, evacuation and safety, and training differed on disability status. Similarly, in the category of Services for Students with Disabilities, the sub-categories of general, professional expertise, data collection/self monitoring, and documentation were rated higher by panelists with a disability. In the category of Access, the sub-category of physical/structural/transportation was more important to the participants with a disability. Thus, we can

conclude that disability status may affect the importance given to these areas of standards.

Gender, affiliation and experience also surfaced as areas of differentiation for panel ratings. Regarding the sub-category of II.C. Procedures (confidentiality, publications, complaint procedures), there is an indication of difference in importance rating between the panelists' gender status. The female participants rated this category higher than their male counterparts. The sub-category of III.C. Part Time/Graduate Students was rated as more important by panelists having more years of experience. It may be that those who have more experience have dealt with more non-traditional students, and they may be more familiar with legal requirements to serve this population.

However, on the sub-category of III.D Data Collection/Self Monitoring, the panelists with more years in their current position rated the category lower. Examination of the individual standards in this item offer some explanation. Several items dealt with measuring student satisfaction; this is not a legal requirement and these standards received lower ratings. Other items in this category deal with requiring an ADA transition plan and keeping the plan updated; this is required by law and received higher ratings. Therefore, the panelists who were in their current position for a longer period are familiar with requirements, and although they value data collection on student satisfaction, they may not make this a top priority.

This sub-category also differed based on affiliation, with agencies rating data collection higher than university personnel. Again, the ADA legal requirements may have been recognized as vital by the agencies that enforce the law. On the other hand, the agency personnel have fewer years in their current position (3.9) compared to the university panelists (11.4). It may be the less experienced group is more idealistic in expectations of gathering student satisfaction data.

To look at the importance all panelists gave to all categories, the mean of the category means was examined. Means provide a measure better suited for comparisons between categories and sub-categories of standards than sums. By computing the mean of each panelist's mean importance score for each category and sub-category, we can determine the rankings of the categories. Table 4 illustrates the ranking with the means. It should be noted that the means for all the categories are very close, so the priorities must be viewed judiciously.

The category with the highest overall mean was the area of Assistive Technology (mean = 3.71). Although this category received only 10 final standards, the high rating may indicate the importance to the profession of vanguard developments in adaptive devices. The items in this category reveal the importance of providing the technology, but also the importance of providing training, equal access, and ongoing research. As one panelist stated, "Computer assisted technology is critical for many students; it may be the only way they can get through school, especially if the disability is severe."

Table 4

Categories Ranked In Priority By Mean Of Means*

<u>Category</u>	<u>Mean of the Panelists' Means</u>
VII. ASSISTIVE TECHNOLOGY	3.71
IV. ACCESS	3.63
I. ADMISSIONS/RECRUITMENT	3.59
VI. ADA/504 COORDINATOR	3.59
III. SERVICES FOR STUDENTS WITH DISABILITIES	3.57
II. ADMINISTRATION	3.48
V. ACADEMIC ACCOMMODATIONS	3.45

* It must be noted that all the category ratings are very close. This must be considered when differentiating one from another in importance.

The category of Access obtained the second highest mean and the highest number of standards (120). This is a logical outcome since the main purpose of the ADA is physical and program access. This category would impact the duties of every member of the panel, so this area contains issues that may be the most familiar to all panelists.

Two categories achieved the same mean of means ranking both as the third highest priority. The category of I. Admissions/Recruitment and the category VI. ADA/504 Coordinator received a mean rating of 3.59. The Admissions/Recruitment category received only 19 standards in Delphi III. Several panelists commented that the admissions criteria are stated clearly in the ADA, and this is reflected in the high ratings that many of these standards received. For example, item I.1 (c) states, “Recruitment materials include general information about the campus, such as: phone numbers for further information about disability resources and services.” This one item received a mean from the panel of 3.98, and as one panelist wrote, “The ADA has a notification requirement to ensure that participants in a program are aware of Title II’s applicability to the public entity’s programs and services.”

The ADA Coordinator category received only six final standards; nevertheless, panelists rated this area high due to language in the ADA requiring institutions to appoint an ADA Coordinator. “This is a legal requirement and should be a critical element in an evaluation,” was an added comment of one participant regarding item VI.2. (see Appendix F). The importance attached to this category may have an impact for smaller institutions

that have either not met this standard or have designated a person as ADA Coordinator who has a myriad of other duties. Several standards in this category emphasized the importance of the coordinator's training and ability to understand documentation of disability in addition to being well versed in the law of disability.

The fourth priority category was III. Services for Students with Disabilities (SSD) with a mean of 3.57. This category had 69 standards in Delphi III, the second largest grouping. The services category dealt with a broad array of topics including the resources of the SSD office, communication with students, qualifications and training of professionals, and evaluation of the services to students. Written policies and guidelines were especially important in this category. Several items dealing with evaluation of services brought comments from panelists and their reasons for not coming to consensus on several items. One panelist's comments about collecting student feedback to measure satisfaction (III.D.1) was informative, "This is a good management practice and desirable but not necessary. Doing the legal and even the right thing may result in dissatisfied students."

Category II. Administration, earned the fifth highest mean (3.57). The standards in this area dealt with the fiscal planning for disability services, campus publications, procedures for confidentiality and complaints, campus committees, evacuation, and training of the campus community. Therefore, this category was comprised of 59 standards with very diverse topics. The comments about this category received from

panelists were also diverse. Referring to campus publications portraying individuals with disabilities, one panelist remarked, “While clearly a plus, not necessarily a legal context. Additionally, if such pictures are staged, they may misrepresent access realities.”

Another participant’s comment was particularly poignant when she addressed the standard II.A.3, “Institutional efforts with regard to diversity include disability.” She wrote, “Policies which include one but not the other are inherently weak and don’t work. There is a disparate number of people with disabilities among people of color. Separate policies, or existence of one policy but not the other will not serve the whole person. Issues of color and culture must be dealt with by the SSD staff when working with students of color/ethnicity who have disabilities. The institution will not be effective in dealing with either students of color/ethnicity, or with disability, unless they look at it as a cohesive whole.” This is a very powerful comment about the responsibility of the SSD office and the complex responsibilities of the college in dealing with students with disabilities. It is interesting that this panelist has a disability and that this category was one on which experts differed based on disability.

The final category ranking based on the mean of means, was the V. Academic Accommodations area. The lower ranking was surprising to this researcher, since the majority of the panelists were university service providers who arrange the academic accommodations for students. However, this mean is still very high (3.45). Several items that were either unenforceable or were not directly related to the ADA caused concern for

the panelists. For example, one item (V.4) required that faculty would use both auditory and visual means of communicating information to the students. One panelist's response to this item was, "Highly desirable and good teaching, but instructional style and training for general teaching is not the responsibility of SSD offices."

This category also included several lists of academic accommodations (V.11. a-l), instructional options (V.12. a-d), and exam accommodations (V.13.a-g). The item concerning instructional options drew many comments from the panel. The changing of the wording from the Delphi II version, ("Faculty members are *instructed* to provide") to the Delphi III version of, "Faculty members are *encouraged* to provide," made the item more palatable. Concerning items 11-13, one panelist stated, "The items listed here are those which can be critical to providing an equal opportunity to students with medical disabilities and some physical disabilities. Too tightly set course load requirements and schedules can be those policies that do not intend to discriminate, but when applied can and do discriminate."

Focus Group Selection and Characteristics

Along with the information from the expert panel, data was gathered from a focus group of students with disabilities to find the standards they deemed necessary for colleges to accommodate their access needs. The students were chosen from recommendations by the Dean of Students Office, Services for Students with Disabilities at Virginia Tech. Ten students were mailed a letter of invitation to participate in the

study. Seven students expressed interest in participating. They were sent reminders and given a reminder phone call. At the session, only five students attended; this may have been due to summer session having started and fewer students being available. The group represented all levels of student status, freshman to graduate and one student representing international status. Five types of disabilities were represented: vision, hard of hearing, mobility, learning disability and attention deficit/hyperactivity disorder (Table 5).

Virginia Tech had only one student who is deaf at the time the focus group was conducted. This student was not on campus for the summer session and was unable to attend the meeting. Thus the focus group information lacks the perspective of the Deaf culture.

The students represented diverse majors and QCA levels. The QCA was not considered in choosing participants; although, they could not be on academic probation at the time of the study. The group had varied academic experience. The two students with physical disabilities (muscular dystrophy and cerebral palsy) had no history of academic difficulty. The student with a visual impairment was an international student who had to drop classes before she found assistive technology resources to aid in her reading. The students with learning disabilities and attention deficit had been in academic jeopardy until they began working with the Services for Students with Disabilities Office. Table 5 describes the attributes of participants in the focus group.

Table 5

Personal Attributes of the Student Focus Group

Gender	Race	Disability	Ac. Level	Major
Male	Caucasian	Muscular Dystrophy	Sophomore	Marketing
Male	Caucasian	Attention Deficit/ Hyperactivity Disorder	Senior	Management
Female	Caucasian	Cerebral Palsy and Hearing	Graduate	Counseling
Female	International Student	Legally Blind	Graduate	Environmental Science
Female	African American	Learning Disability	Junior	Education

Focus Group Findings

Students were comfortable with the Affinity Diagram process used to discuss the questions presented in writing. The note card exercise kept the discussion focused and each student was responsive. Each focus group member was given a stack of index cards and was asked to write one response per card to the question, “What do you think should be done to help people with disabilities gain better access to higher education?” After a reasonable response time, students were asked to cluster their cards into related groupings. This process was repeated with the remaining questions, “How should the ADA be promoted?” and, “How well is the ADA working? Is it meeting your needs?” Information from the card clusters was recorded on a wall chart, a header or theme was given to the groupings and these categories were ranked in order of priority by the participants.

Observation of this process did not reveal any one person dominating the activity. Each student contributed to the clustering process and very little conversation took place. All students, however, became very verbal in the discussion of the clusters and responses during the recording of these items on the wall chart. Nonverbal communication and body language indicated involvement and at times an intensity as participants leaned forward, became very animated and their voices became louder. Several topics, such as faculty expectations and paternalistic attitudes brought out strong reactions.

Analysis of the Focus Group transcript revealed 13 recurring factors. These were collapsed into the five themes set by the participants. The recurring factors and themes are explained in Table 6. The themes are listed in order of the priority decided by the students. Each theme is discussed below with student comments that illustrate the theme or recurring factors.

Financial support was the top priority when the students ranked their five categories. The researcher defined the theme as the knowledge of students, parents and institutions regarding issues of financial aid that are particular to students with disabilities. Financial aid was reported as too restrictive and not meeting the needs of students with disabilities. The students had not anticipated their medical or equipment needs nor the extra time needed to complete their education. These factors make it more expensive for students with disabilities, but these students had not received assistance in claiming these costs when applying for financial aid packages.

Although not directly related to college financial aid, the benefits of the ADA were translated to financial support in some areas. The international student expressed, “I am very grateful this law pertains to me.” She spoke of her appreciation that the ADA applied to non-citizens and supplied assistive technology for her low vision. However, it took a year of research for her to find someone who was aware of the services she would receive as a student studying in the United States.

Table 6

Themes and Recurring Factors of the Focus Group Listed in Order of Priority

Financial Support - The knowledge of students, parents, and institutions regarding issues of financial aid that are particular to students with disabilities.

- Transition Services
- Financial Aid
- Legal Rights for Financial Assistance
- Resources and Responsibilities of Higher Education

Legal Rights - The effect the legal mandate has on college campuses, and the importance the ADA has for students with disabilities.

- ADA Awareness
- IDEA (Individuals with Disabilities Education Act)
- Transition Services

Personal Support Structure - The experiences with family, public school, and college faculty and the effect of stereotypes about disabilities.

- Emotional Support and Encouragement
- Early Support and Intervention
- Hidden Disabilities

Awareness of Accommodations - The importance of secondary schools and colleges having information about college services and providing early planning for college attendance.

- Family, Teacher, Counselor Awareness
- Special Education Issues
- Resources and Responsibility of Higher Education
- Accommodations
- Collaboration
- Transition Services

Outreach and Networking - The importance of early intervention and commitment students have to sharing information with middle and high school students.

- Outreach by College Students
- Collaboration
- Resources & Responsibility of Higher Education
- Transition Services

The theme of *ADA awareness* was examined as the effect the legal mandate has had on college campuses and the importance of the ADA for students with disabilities. Student reaction was mixed on the effect the ADA has for the faculty in the classroom. On one hand, a student felt the ADA led to success when saying, “It has helped me feel more secure. I found other students made it and knew I could also.” Students still felt their faculty often had little knowledge of the ADA or disability issues, “We may be biased because we have a disability, but how many professors know enough about it to know how to handle the student in their class?” In defense of faculty and administrative awareness of the ADA, one participant replied, “It would be hard to measure attitude, but we could measure effort, and I think I see more people on campus making an effort. This is not a static thing.” Overall the group was very positive and felt that awareness of the ADA had spread beyond the classroom, as one student pointed out, “I think the ADA has encouraged development of more technology,” and another replied, “Awareness at every level is the key.”

This idea of awareness at all levels was emphasized in the theme of *personal support structure* which encompassed the experiences with family, public school, and college faculty and the effect of stereotypes about disabilities. Early intervention and support arose as a factor important in building self-esteem for these students. Their stories revealed that their ability to communicate with faculty and to be a strong self-advocate was closely related to early experiences.

Their early experiences involved a mix of family knowledge of services and interactions at school. The students with mobility difficulty had strong parent advocacy. The mother of the student with attention deficit was a teacher and successful in getting support for her son, but often this came from outside the system such as tutors and after school specialist.

One student had recently spoken at a high school gathering of parents, teachers and students with disabilities, “When I was speaking to two high school groups, and started telling the parents and students about all the services and technology, the first thing the parents asked was, ‘How much is this going to cost me?’ They did not know about help from the Department of Rehabilitative Services. They weren’t hooked up.” The college students were adamant about the need for more information to the families, counselors and teachers. It is noteworthy that high school is a time when students typically do not want much parent involvement, and they do not want to be identified as different from their peers. However, these college students are just a few years beyond this stage but feel very strongly about this support and information effort.

High school counselors, special education teachers and transition specialist were another target of the students’ concern. They felt strongly that these professionals should be aware of the ADA and services available at the college level. Several students told of experiences where teacher expectations were very low for students with disabilities, “In my high school if you were in special education classes, you really

weren't talked to about going to college." Knowledge of different disabilities and a range of accommodations is important. These students felt high school special education departments were unable to deal with all their special needs. In this aspect, they found even a large university to be more accommodating, "I feel like I have more people at the college level who are very knowledgeable; there seems to be more information for them."

However, this knowledge of disability did not always exist in the faculty-student interactions. The area that drew the most discomfort concerning the college experience came from the students with invisible disabilities. They felt faculty members do not understand learning disabilities or attention deficit and have a hard time discussing these disabilities. They also reported many faculty members are not aware of the technology or support services that exist. Their frustrations surface in their comments, "I need my faculty to believe in me," and, "Don't look through a lens of disability, look at my capability."

The unique stress of having a disability increased for these students when faculty members said they could not or should not take a class or pursue an area of study. "I had a professor who would not let me take a class because she said I could not keep up with the reading due to my attention deficit. But she didn't know I was already doing the reading by using the assistive technology in the library." It should be noted that the Delphi Panel had a specific standard stating, "Students are not arbitrarily denied admission to particular academic programs."

This *awareness of accommodations* became the third theme for the students. This theme is defined as the importance of secondary schools and colleges having information about college services and providing early planning for college attendance. The students felt there were more resources at the colleges, thus a responsibility of higher education was to provide knowledge of disabilities and accessibility to the secondary school level. One of the most helpful resources to these students was the assistive technology they had not been aware of until attending college. Many of them were using scanning devices that would “read” print to them.

Another factor that emerged under this theme was the area of collaboration. These students had been involved in activities with the Services for Students with Disabilities. Accordingly, they are aware of the collaboration between faculty, advisors, Dean of Students Office, EOAA Office, ADA Coordinator and other support services on campus such as Career Services and Student Health and Counseling. They had not seen this happening in high school between counselors, teachers and special education staff. However, it could be at that age they were not aware of such collaborative efforts. They did feel strongly that experts on disability and the ADA should take information to high schools and build collaborative relationships that may result in more students with disabilities attending college. They also voiced the importance these collaborations on campus had on their college experience. The work of service providers with faculty had resulted in more flexibility in their plan of studies and in provision of vital

accommodations such as course substitutions. They were concerned that this kind of accommodation was not provided in high schools, and rigid course requirements made it very difficult for students with learning disabilities to be successful.

These concerns about their high school experiences led to the theme that received the most comment, *outreach and networking*. This theme dealt with the importance of early intervention and the commitment these students have to sharing information with middle and high school students. The focus group participants felt it was vital for college student with disabilities to visit younger students with disabilities. As one student stated, “Too often we rely on students to come to college and tell us (the services office) they want accommodations, but we should be going to the schools.” The participants believed these visits should begin with the middle school; moreover, they believed this was critical to the encouragement factor for younger students. One student commented, “It is an incentive to see someone else completed college with a disability,” and another added, “We should conduct regular visits; make this the norm to keep schools current with new programs and technology.”

The students again expressed the responsibility of the university to serve the community in the aspect of ADA and disability issues. Their perception was that the university could teach public school teachers and counselors more about disabilities, and that there should be required courses that cover ADA, disabilities and accommodations for adults. The idea of preparation of counselors and teachers brought many comments

about the lack of information on disability and the need for more in-depth training regarding the ADA. One student noted, “A lot of people, including teachers, are scared of people with disabilities; they don’t know how to deal with them.” This factor of responsibility for training brought the students back to the factor of collaboration.

The students believed that the Department of Rehabilitative Services should share in the responsibility of outreach and training with both public schools and postsecondary institutions. The group wanted to see more collaboration between secondary schools and colleges. They also wanted collaboration between the schools and agencies, collaboration within schools (faculty, service providers, and support services), and better collaboration between the college and surrounding community. One student who uses a scooter stated, “I leave the campus, and I can’t go anywhere.” Two members also expressed a desire to see collaborative efforts in research such as projects involving engineering and education departments.

The theme of *outreach and networking* emphasized the need for training not only of secondary school staff, but a need for ongoing training in the college. Students commented that regular workshops are important for faculty as facilities and technologies change. They also felt outreach and education should address career training for students not only in high school transition, but the college student transitioning to work or graduate school. Thus, college career placement offices may need training on the special issues of disability and the ADA. The students in this group were very eager to be a part

of this collaborative training and outreach effort. They said many times that they would like to be a part of a speaker's bureau that would visit high schools, or they would serve as a panel for faculty and staff inservice sessions. Each of them stressed the importance of involving people with disabilities in training about disability and the ADA.

Summary of Focus Group Findings

It is beyond the scope of this study to explore the extent to which these students sought help during high school and college. We do not know how much responsibility they took for facilitating their own services such as financial aid, tutoring and appropriate accommodations. These findings suggest that school and college communities may not have coordinated services to provide "one stop shopping" for students and their families. A decentralized network of services exists, but it is difficult for students with disabilities to connect with the myriad of agencies and offices.

The focus group method of collecting data was successful in gaining insights into the perspectives of students with disabilities. However, at the end of the focus group interview, the researcher was concerned the group did not meet the intent of the study to establish ADA standards because the concerns of the students were related to outreach and high school experiences rather than the college or university program accessibility. After considering the studies by Scott (1995) and by VCU, (1991), reporting services and accommodations most needed by Virginia students, the researcher decided to report the focus group information for the benefit of future studies. The responses of the focus

group were found to be similar to the factors found in these studies which added to the trustworthiness of the emerging themes. So, although the data from the students was different from what this research expected, the students' stories provided a rich source of information for colleges' recruitment and service efforts.

The student focus group appeared most concerned with the transition process and outreach efforts although they rated financial aid as a first priority. An overall theme that emerged from the focus group indicated the need for transition efforts to be strengthened for high school students entering college. The points which surfaced were the following:

- (a) the independent student with strong parental support did not receive transition assistance required under the Individuals with Disabilities Education Act (IDEA);
- (b) while in high school, students did not realize that assistance was available from the Department of Rehabilitative Services;
- (c) this resulted in coming to college not being aware of accommodations or financial aid they could have requested;
- (d) because of the level of technology available on many campuses, colleges are able to provide accommodations as needed; however, high school students are uninformed;
- (e) successful college students with disabilities liked the idea of providing a transitional information session to high school students prior to their entering college.

Comparison of Delphi Panel and Focus Group

A matrix was constructed to compare the categories and sub-categories of standards of the panel to the themes and recurrent factors of the student focus group. Large sheets of paper were used to align the focus group themes and recurring factors on one axis of the paper with the Delphi categories and sub-categories across other axis. Several overlapping areas were discovered between the two groups using these broad themes and categories. The cells formed by the categories and themes were then filled with quotes from the focus group transcript and the Delphi final standards which fit in the intersections of the broad areas. This process allowed the exploration of the ideas generated by both groups. The matrix construction does not give any gradation to areas of overlap, i.e. there is no one area with greater overlap. The matrix further revealed that the panelists generated operational *standards* for an accessible campus, and the students expressed their *wishes* for an accommodating environment.

The student's first area of concern was Financial Support. They felt there are areas of financial aid particular to students with disabilities that are not always considered by the college financial aid process. Nor did they feel high school counselors are aware of the legal rights students have in declaring disability expenses on financial aid applications. The panelists also were aware of this need as evidenced by 10 standards generated about financial aid. An entire sub-category addressing financial aid (IV.C.1.a) contains standards which stress coverage of medical/disability expenses and aid for students who attend part-

time due to disability. In item II.F.2 panelists stated, “In-service training regarding disability services is available (or required) for various student support programs on campus, such as...financial aid... .” Thus, the panelists were very cognizant of the wishes and needs of students they serve.

Legal Rights was the second area of concern for students. The panelists recognized the ADA awareness factor in this theme through the items addressing training for faculty and other college personnel. As category II.F covering training indicates, it is important to provide awareness training to new faculty and graduate teaching assistants, university counsel, and the entire campus community.

Other areas of overlap were found in the third priority of the students, Personal Support Services. The panelists addressed this area somewhat differently than the students, but they still saw the need of services and training that would deal with attitude/stereotype issues. The Delphi category of Administration had several items that dealt with campus efforts to provide support. For example, item II.A.1 begins, “Compliance with the ADA and 504 is a campus-wide endeavor... ,” and item II.A.17 states, “Effective collaboration exists between university units involved in serving students with disabilities (e.g., center for academic computing, office of physical plant, faculty senate, student government association, admissions, affirmative action/ADA, educational equity, instructional development program). This item also mentions the collaboration factor so important to the students. Also, important to the factor of self-

esteem might be the involvement of students in their own accommodations. Under the category of Services for Students with Disabilities, one item (III.A.2) provides for the involvement of students with disabilities in discussions and decisions about campus access. The committee sub-category also encourages involvement of students with disabilities in decision making groups.

Awareness of Accommodations was the fourth area of priority for the students. The panelists' standards on Admissions and Recruitment address this area somewhat, but it must be kept in mind that colleges cannot inquire about disability of applicants (items I.3, I.11). However, other standards address the applicant's need to know about disability services (I.1.(a),(b), (c)). The importance of this awareness of campus accommodations is also seen in standard II.A.5, "Guidelines and policies for nondiscrimination and accommodations not only exist but are "visible" to the average member of the campus community." The significance of this theme is also addressed in category V. Academic Accommodations.

The student's final theme was the Outreach and Networking section. Although the panelists were not dealing with this aspect in their goal to establish standards for access, there are some items that relate to the recurring factor of collaboration under this theme. Standard III.A.7 speaks to shared responsibility for service provision, and III.A.9 deals with relationships with outside agencies. The importance of networking with the Department of Rehabilitative Services as early as possible is stated in standard III.A.37.

Although the two groups had a very different perspective, the students' wishes and the panelists' standards had many areas of overlap. The panelists' top priority of Assistive Technology, although not a theme for the students, is often mentioned by the students and is certainly a factor in their success. Additional focus groups with students may provide a rich source of validation of these standards.

Summary

The standards promulgated in the study were relevant to community colleges and public and private four-year institutions. The panelists exhibited a wide range of interest by addressing such varied areas as standards of practice, graduate programs, the disabled student services office, policy development, reasonable accommodations, evacuation and safety, and technology as an accommodation. By contrast with the findings of the expert panel, the student focus group appeared more concerned with the transition process, campus climate issues and outreach efforts.

The results of both the student focus group and the Delphi technique indicated a difference in perspectives of the stakeholders and experts. The research study revealed that the students were more outreach oriented towards high-schoolers prior to entering college. In contrast, the experts focused more on policy and administrative responsibilities.

Chapter 5

Summary, Conclusions, and Discussion

Summary

With the advent of the Americans with Disabilities Act (ADA), colleges and universities have faced new challenges in serving adult students with disabilities. This mandate has opened the door to higher education for students with disabilities and has given them access to every aspect of college life including academics, internships, graduate studies, residence halls, and instructional technology. Improved access has resulted in higher numbers of students with disabilities on campus and the need to serve students with more severe disabilities. The number of students with invisible disabilities such as learning disabilities, attention deficit, and psychiatric disabilities has soared in recent years.

During this trend, colleges have had to increase their staff who administer services for students with disabilities, and each campus was required to appoint an ADA Coordinator. These personnel have little guidance, beyond the actual mandate and decisions from court cases, about best practices for students they serve. Additionally, these service providers and coordinators come from a myriad of backgrounds including counseling, special education, rehabilitation, and student affairs. Although standards are available for physical access from the Americans with Disabilities Act Accessibility Guidelines, these guidelines give no direction for accommodating the larger population of

students with invisible disabilities. This situation has led to little consistency between institutional services.

The Association on Higher Education and Disabilities has begun to address these issues through their research efforts on professional standards and a code of ethics. Nevertheless, a set of criteria to assist in evaluating the entire college or university program access has not been developed. The purpose of this study was to identify the essential standards that colleges and universities could use in evaluating their implementation of the ADA.

The methodology adopted for this research were the multiple measures of a three round Delphi technique and a student focus group. Thirty professionals representing university service providers, legal professionals and agencies enforcing the ADA completed the final rounds of the Delphi study. Five students with various disabilities participated in the student focus group.

Twenty-nine expert panelists promulgated 790 standards in response to an open question in the first round of the Delphi. Electronic mail expedited the return of these responses and assisted in entering and editing the large amount of data. The returns were edited for clarity using criteria from Spector (1992) and arranged under seven broad categories that were suggested by panelists' remarks and by a content analysis sub-committee. The editing process resulted in 374 items.

The Delphi II instrument consisted of the 374 standards with a four point Likert scale attached for rating each item as: (4) critical, (3) valuable, (2) minimal, or (1) unnecessary. The survey was mailed to the forty-four panelists who had expressed an interest in participating in the study. Thirty (68%) of the panelists completed the second-round instrument. Items were retained which were rated at the critical or valuable level by two-thirds of the panelists. Round-two returns resulted in 19 items being dropped due to the two-thirds criteria. Forty-three additional items were eliminated with further editing by the content analysis sub-committee using remarks from the panelists about repetitive items. The expert panel generated seven additional items for the Delphi III phase.

The third-round Delphi was composed of the 312 items retained from Delphi II plus the seven additions. The same thirty panelists completed the final round resulting in a 100% retention of experts in the final phase of the study. In the final round, the panelists were given the choice of keeping the rating of their round two response or of agreeing with the mean of the entire group for each item. One of the added items from round two was eliminated using the two-thirds criteria resulting in 318 final standards.

The Delphi panel reached 100% consensus on two items at the critical level and 149 standards at the valuable level. The different affiliations of the panelists reached differing consensus levels. The agency group also reached 100% consensus on only two items at the critical level, but they had 100% consensus on 255 items rated at the valuable

level. University professionals rated the same items as critical but reached 100% consensus on only 173 items at the valuable level. University size affected how professionals rated the items. Medium sized institution affiliation resulted in higher consensus on items in the critical range. The legal professionals had a more generous rating with 100% consensus on 100 items at the critical levels, and 292 items at the valuable level. However, this group had only two members, so little generalizability can be gained from their response.

Several indicators were found between the panelists' ratings and their disability status. Importance ratings on some items were also affected by gender, affiliation, years of experience and years in current position. These findings were based on one way ANOVAs measuring the sums of the panelists' ratings in the 18 categories and subcategories.

The participants with disabilities rated 12 of the 18 categories as more important than their peers without disabilities. Panelists who are female rated the items in the administrative procedures area as more important. Data collection and self monitoring were more important to the experts in agencies and to those with fewer years in their current position. Providing services to part-time and graduate students was more important to the panelists with more years of experience.

The seven broad categories were ranked by importance using the panelists' mean scores. This ranking gives an indication of the priority panelists give to areas of the

standards. However, it must be noted that the means of the broad categories are within less than three tenths of a point of one another, so it is difficult to consider the priority of categories as extremely relevant. Comparison of the categories of the Delphi instrument and the themes of the student focus group revealed several areas of overlapping concern for the two groups.

The highest priority for the expert panel was the category for *Assistive Technology*. This was also an important factor for the student focus group. *Access* was the second priority; this category covered a broad range of program access issues such as: (a) financial aid, (b) health and counseling, (c) residential and dining, (e) career services, (f) student employment, and (g) student organizations. This closely ties to the areas of concern for the students whose top priority was financial support.

The third priority was tied between *Admissions/Recruitment* and *ADA/504 Coordinator*. Both of these areas dealt with knowledge of disabilities. It was important to the panelists that admissions offices be knowledgeable about how to handle applicants with disabilities and to be knowledgeable about how to deal with the confidentiality of disability documentation. The panelists were also concerned about campus ADA coordinators having knowledge about disabilities, documentation, and the legal mandates dealing with disabilities.

Services for Students with Disabilities (SSD) was the fourth priority in ranking the categories. The visibility of the services was very important to the expert panel and to

the students. Several standards dealt with the importance of publicizing accommodation information in many arenas for the students and faculty. During the focus group, one student commented on the importance of better advertisement of services, “I feel everybody knows about Virginia Tech’s football team and our engineering program, but I don’t feel that disabled students in Virginia, West Virginia, or North Carolina know all the accommodations that are available to them here.” Students suggested more information be placed in college catalogs, campus newspapers, on posters and on videos.

Written mission statements and procedures were emphasized in this category. The panel also suggested: (a) written qualifications for the SSD staff, (b) training in working with adults with disabilities, and (c) expertise in disability services and disability laws. These standards coincide with the students’ recurring factor of resources and responsibility in higher education. The students perceived the college service provider having more training and legal expertise than their secondary counterparts. The students felt this expertise should be shared. However, the expert panel did not adopt standards dealing with collaboration with external units (II. A. 22, Appendix F).

The *SSD* category revealed the importance of regular data collection, review of the ADA transition plan, and periodic review of current practices and policies which may deny equal opportunities for students with disabilities. The proposed standards can be beneficial in these reviews.

Administration was the fifth priority category and consisted of 59 standards.

Important areas for the panelists included: (a) shared responsibility in dealing with disability issues, (b) confidentiality of disability documentation, (c) publications advertise availability of services and are available in alternate formats, (d) complaint procedures are available in writing, (e) people with disabilities are involved on committees, (f) evacuation and safety are well planned, and (g) all facets of the university are trained on disability and students' rights. Students also stressed the need for faculty training on disability. However, the panel did not accept the standard on sensitivity training (Appendix E, Toss Items).

Academic Accommodations was the last priority for the panelists, which was surprising since the majority of the Delphi panel are university service providers. The ratings of individual items reveal the importance of certain accommodations for the panel. One item (V.11. a-1) listed specific academic accommodations that should be included for students. From this list, the two highest rated items were exam accommodations (3.83) and reduced course load (3.72). Specific exam accommodations receiving the highest ratings were, extended time (3.79) and an isolated, quiet area (3.78). The tossed items (Appendix E) show the panelists are unwilling to provide course waivers, repeated coursework, or electives in study skills as academic accommodations. Nor is the panel interested in providing temporary accommodations while students obtain needed documentation of disability. The standards with lower ratings reveal the reluctance of the

panel to dictate teaching styles, or faculty communication styles (V.4, 11 (c), and 12 (b), Appendix F).

Conducting the three rounds of the Delphi study took much more time than originally anticipated. Although electronic mail facilitated the return of panelists' responses in the first round, this medium was not helpful to the final two rounds. The panelists were prolific in the number of standards generated in the first round. Editing of the 790 items was extremely time consuming. A content analysis sub-committee was consulted to verify the inclusion of standards and to decide the logical categories for organization of the large number of items. Return rates for the Delphi II were extremely slow due to the length of the instrument. It was very helpful to meet the majority of the panelists at the national meetings of the Association on Higher Education and Disability (AHEAD) and the National Association of ADA Coordinators (NAADAC). After these face-to-face meetings, more of the panelists knew the researcher and this facilitated faster returns of the Delphi III instrument.

In addition to the Delphi technique, the voice of the stakeholders was sought through use of a student focus group. The interview was conducted in May of 1996 with five students representing different disabilities. The data was collected using the Affinity Diagram method that involved: (a) students recording responses on note cards, (b) clustering note cards in categories or factors, (c) a co-facilitator recording categories on wall charts, (d) discussion of factors with further recording on the wall chart, and (e)

ranking final categories in priority order. At the end of the interview the researcher examined a typed transcript and reviewed the audio tape of the interview. This review led to a definition of the five themes of the students with recurring factors organized under the themes. This process allowed construction of a matrix for examination of the overlap of student themes and the Delphi panel categories and standards.

Conclusions

The findings of the study justify several broad conclusions:

1. Standards for a campus wide self-evaluation of implementation of the ADA is very important to professionals offering disability services in universities, agencies enforcing the ADA and legal professionals interpreting the mandate. Professionals with disabilities rate some of these standards as more important than their peers without a disability.
2. The new field of assistive technology is viewed as a high priority in accommodating students' needs for accommodation. Providing high visibility of this benefit and all services of the SSD office in writing, in many mediums, and in alternative formats is critical.
3. Students with disabilities agree that assistive technology is a key to success, but they are concerned about financial assistance for obtaining the technology and for other medical and disability related costs.

4. As a whole, the expert panel rejected standards for an ADA evaluation that call for collaboration with units outside the university. The students perceive the university as responsible for sharing ADA and disability information with secondary school professionals, students and parents. The focus group felt strongly that early exposure to successful college students with disabilities would help middle school students and the professionals in the school system.

5. Training for faculty about disability, legal rights, and the ADA are important issues for students and professionals. The students favor sensitivity training for better understanding of the disability experience; whereas the Delphi panel sought standards for training faculty and staff about legal responsibilities due to the ADA and about availability of disability services. Both groups emphasized the importance of people with disabilities serving on committees responsible for training, providing ADA information, and enforcement on college campuses.

Discussion

Prior to this study, evaluation of campus accessibility was based solely on physical access guidelines or judgments of students and service providers. The results of the Delphi study have resulted in a product that can be used by any college campus, or can be adopted by AHEAD for application to an accreditation process.

Analysis of the completed study reveals several points of interest. These include: (a) the agreement between student and expert opinion; (b) the differences between experts

based on disability status, gender, affiliation, years of experience, and years in current position, and (c) the priority experts give the categories of standards.

Agreement of students and experts. The student focus group and Delphi panelists stressed the importance of one office to provide a “one-stop-shopping” service whenever possible. The panelists emphasized this point through standards about the need for adequate facilities for counseling, test administration, notetaking and tutoring. The students expressed frustration with connecting with the myriad of services on campus and external agencies. Lack of a strong advocate or transition services results in students arriving at college without knowledge about available services and accommodations. Early contact with knowledgeable professionals assists in attainment of financial aid information and assures students and families know about outside agency resources. This early contact with the SSD office or ADA Coordinator helps establish the support structure important to the students.

The knowledgeable professional is the key ingredient in this experience. Training of the SSD professionals and ADA Coordinator is critical if students and families are to be given the correct information and provided appropriate accommodations. The wide range of duties for the professionals mentioned in the list of standards can help guide professional development opportunities through AHEAD and NAADAC.

The students perceived better services and a wider range of services were available at the college level. This finding might encourage collaboration and outreach to provide

training for secondary schools that could be integrated with the training of campus disability administrators. Both groups need a foundation of information in IDEA, ADA, documentation, confidentiality and disability issues. Both the students and Delphi panelists stressed training opportunities need to be available for faculty for better understanding of their responsibility under the ADA. However, outreach efforts, such as training secondary teachers, should not be a part of an ADA evaluation.

Differences based on panel attributes. Although the panelists agreed on retaining the majority of the standards, they differed in the importance given the standards based on their attributes and affiliation. The disability status of the expert panel was not known to the researcher when they were invited to participate in the study. It was surprising to find that one third of the panel has a disability; this may be a tribute to the success of the ADA in employment. The higher consensus on the critical level of the standards by this group may have implications for future training of professionals. There may also be implications for future research comparing delivery of services on campuses with SSD administrators or ADA coordinators with a disability. The differences between panelists based on gender and years of experience may also be addressed through training by AHEAD.

The differences in importance rating by agencies may call for more opportunities to involve agency personnel in AHEAD, and local ADA Consortia for increased dialogue on appropriate accommodations, program access and service delivery. Improved

communication and collaboration between agencies and colleges may address the students' recurrent factors of need for strengthened transition services, early intervention, and information for families.

Priority of categories. It was interesting to find the Delphi panel and student group overlapped on their interest in assistive technology. However, it is surprising that more assistive technology standards were not generated. So much attention in higher education has been given to the areas of distance learning, world wide web pages for faculty, and multimedia as a teaching tool. Each of these brings issues for anyone with a disability using assistive technology. As colleges begin to require each student have a personal computer, the student relying on assistive technology is faced with issues of compatibility, costs, availability, and training. It may be that this is still a new area for service providers and agencies charged with providing services to postsecondary students. Future research will be needed to address standards for assistive technology provisions in college environments.

The panelists with disabilities came to 100% consensus on 4 of the 10 standards in the category of assistive technology (40%). The students also mentioned the importance of assistive technology under the recurring theme of Resources of Higher Education. The concern for students, as well as a practical concern for colleges, will be paying for the adaptive devices, specialized software, and site licenses to make them readily available. The problem of funding may be addressed by agencies such as the

Department of Rehabilitative Services (DRS), Department for the Deaf and Hard of Hearing (DDHH), and the Department for the Visually Impaired (DVI) working collaboratively with colleges to purchase devices for a central lab rather than trying the impossible task of funding computer equipment for individual students.

The priority of Access may have been influenced by the number of panelists with disabilities and the added understanding they brought to this category of standards. The emphasis on program access was very important to all panelists. The many standards in this category (120) also stressed the need to evaluate policies, procedures and services on a regular basis and to involve people with disabilities in this process. This overlaps with the students' desire to be involved in ADA issues on campus.

Having a designated ADA Coordinator was equally important with the Admissions/Recruitment efforts. Both of these categories also emphasized the need for training. The implication for college campuses to examine the job descriptions and procedures for both of these offices is critically important. The ADA coordinator must be familiar with disability documentation, legal issues, and disability rights and issues. The admissions office must be familiar with applicants who may present a different set of strengths based on their experience of learning with a disability. The admissions office must also have a well controlled procedure for handling confidential information that may be sent to them by students unfamiliar with the SSD office.

The Services for Students with Disabilities area of standards revealed the importance of providing a wide range of services, not only for the students, but for the entire campus. The standards set an expectation that SSD staff will train campus personnel in disability issues, legal rights and responsibilities, and appropriate accommodations. The range of responsibilities of the SSD office reiterates the importance of the recent efforts by AHEAD to develop professional standards. That effort, along with this study, can provide college administrators guidance in hiring, training and support needed for the SSD and ADA coordinator positions.

The final two categories for the panel, Administration and Academic Accommodations, again reveal the importance for faculty training about disability. The lists of accommodations for students often become good teaching habits for all students. Some of the “toss” items were not adopted because they were seen as “good teaching”, not as standards for an accessible campus. This common theme for training through all of these categories may become part of an accreditation instrument. This might lead to renewed efforts in providing information to all faculty members about working with diverse populations and result in their improved comfort level in teaching students with all types of disabilities.

Chapter 6

Recommendations

This study involved representatives from the constituencies affected by the implementation of the ADA on a college campus. Their interest in the development of standards was demonstrated in the number of items generated, the breadth of the areas covered by the standards, and the desire of the student focus group for continued involvement. The recommendations in this chapter are made as a result of the information gleaned from the Delphi panel and focus group with students.

The chapter ends with the final standards adopted by the expert panel. The list of standards will impact the effectiveness and accountability of ADA coordinators at four year colleges. The final recommendation involves organizing the standards into a handbook for use by ADA coordinators.

Recommendations

1. Opportunities should be available for various audiences to review the standards and findings and to make recommendations. Presentations at AHEAD, NAADAC, National Association Student Personnel Administrators (NASPA) and other professional conferences may be helpful in this effort. Student groups with disabilities and secondary school personnel need to be involved in this review.

2. The following seven areas should be used in evaluations of the implementation of the ADA on college campuses: admissions/recruitment, administration, services for

students with disabilities, access, academic accommodations, ADA/504 coordinator, and assistive technology.

3. The standards identified by the Delphi panel should be incorporated in these categories to be used in evaluations of campus program accessibility.

4. The intensity rating of the standards should be used as a basis for prioritizing the items on an evaluation instrument.

5. The standards should be made available to AHEAD and NAADAC as guidelines for self-evaluation and as a training tool.

6. The findings and standards should be published by AHEAD through the *Journal of Postsecondary Education and Disability* to be available to all SSD administrators and ADA Coordinators.

7. The standards should be available to college administrators for guidance in hiring, providing training, and support to their SSD and ADA personnel.

8. The standards should be available to accreditation organizations to be incorporated into the full campus accreditation process.

9. Assistive Technology should become a focus for research and training for AHEAD. Collaborations with DRS, DDHH, and DVI should be explored to accomplish improved training and transition services for students with disabilities.

10. The study should be expanded to private schools and community colleges. Although the standards seem appropriate for both of these groups, the panelists were instructed to limit their comments to the public four year institutions.

11. Further research is needed to explore how services for students are affected by the disability status of the professionals serving as SSD administrators or ADA coordinators. Is there a difference in when the professional became disabled? Is there a difference depending on what the disability is?

The experts who were invited to represent the deaf community in this study were unable to participate due to other commitments. None of the students in the focus group are deaf. Therefore, this population was underrepresented. A review of the standards by the Postsecondary Consortium (PEC) representing the deaf culture is recommended.

12. Future studies should include more focus groups of students to see if additional themes emerge and to compare their results. A comparison is needed between students with apparent disabilities and those with invisible disabilities.

13. Collaborative efforts between service providers, coordinators and the education/special education/counselor education departments must be explored to address the research needs mentioned in this study. Students in teacher and counselor preparation programs could benefit from involvement in focus group research efforts similar to the one in this study. These collaborations could result in better research being performed in the field of postsecondary education and disability.

14. College faculty in the education/special education/counselor education departments should build experiences with assistive technology into their curriculum. Future teachers should be aware of the adaptive devices that are available to their students with disabilities.

15. Due to the low number of legal experts on the Delphi panel, the standards should be reviewed by more legal professionals. It is recommended each institution have their university counsel review the standards for omissions.

Handbook

College ADA coordinators have the responsibility of ensuring program access and physical accessibility to their campus. The standards adopted in this study were developed to provide guidelines for the ADA coordinators evaluating the implementation of the ADA. These standards provide the measure of effectiveness and accountability that are critical for an ADA evaluation. The final standards listed in Table 10 serve as the foundation for the work of the ADA coordinators.

The final standards are shown with editorial changes by the panelists; additions are in **bold** and deletions are in *italics*. These editing comments should be considered by AHEAD in their review of the standards before final adoption.

It is recommended the standards be organized in a handbook for ease of use. The handbook should be organized in the outline of categories, shown in Table 9, that were generated by the expert panel. Standards could be reorganized under the categories

prioritized by importance ratings. AHEAD should provide a review of the handbook by the Standards Committee and by all members.

Table 7

Handbook Organization.

- I. ADMISSIONS/RECRUITMENT
- II. ADMINISTRATION
 - A. General
 - B. Fiscal Planning
 - C. Procedures
 - 1. Confidentiality
 - 2. Publications
 - 3. Complaint Procedures
 - D. Committees
 - E. Evacuation and Safety
 - F. Training
- III. SERVICES FOR STUDENTS WITH DISABILITIES
 - A. General
 - B. Professional Expertise
 - C. Part Time/Graduate Students
 - D. Data Collection/Self Monitoring
 - E. Documentation
- IV. ACCESS
 - A. General
 - B. Physical/Structural/Transportation
 - C. Program
 - 1. Support Services
 - a. Financial Aid
 - b. Health and Counseling
 - c. Residential and Dining
 - d. Career Services/ Field Placement
 - 2. Telecommunications
 - 3. Student Employment
 - 4. Student Organizations
 - 5. Library
 - 6. Graduation Ceremonies
- V. ACADEMIC ACCOMMODATIONS
- VI. ADA/504 COORDINATOR
- VII. ASSISTIVE TECHNOLOGY

Table 8

Final Standards with Group Ratings

The final standards are reported with the final mean importance rating of the expert panel. Panel editing changes are indicated with additions in bold, deletions in italics.

- I. ADMISSIONS/RECRUITMENT
 1. Recruitment materials include general information about the campus, such as:
 - 3.57 (a) programmatic access
 - 3.06 (b) photographs positively promoting students with disabilities and their involvement on campus
 - 3.98 (c) phone numbers for further information about disability resources and services
 - 3.33 (d) a (*statement*) **process** through which students may voluntarily self-identify
 2. The admissions process materials include the following:
 - 3.87 (a) contact information for requesting accommodations during admissions interviews/campus tours
 - 3.68 (b) applications **and catalogs** in alternate formats
 - 3.85 3. Preadmission inquiries about disability are not made.
 - 3.85 4. The application process is accessible to people with all disabilities (e.g., interpreters for interviews, accessible locations). (*early registration or assistance with registration*)).
 - 3.78 5. Written guidelines exist which ensure that there are no discriminatory requirements in admissions policies and procedures.
 - 3.82 6. Each academic area that has selective enrollment policies in place has gone through a review of their admissions policies and eligibility criteria to assure that these policies are not discriminatory on the basis of a disability, **or tend to screen out people with disabilities through secondary criteria.**
 - 3.03 7. Admissions policies are flexible enough to give equal or equivalent consideration to a student who has recently been diagnosed with a disability.
 - 3.20 8. **The admissions process considers alternate admission criteria for students with impaired sensory ability.** (*Written policies and procedures exist which ensure alternate admission criteria, or test administration procedures are available to individuals with disabilities upon request (e.g., admissions tests reflect aptitude rather than impaired sensory, manual or speaking skills except where sensory, manual or speaking skills are integral to what the test is designed to measure)*)).
 - 3.08 10. (*A cooperative admissions procedure exists between admissions staff and*) **The admissions process includes consultation with** the professional(s) knowledgeable about college students with disabilities.

- 3.83 11. Any information (*collected*) **received** on disability in the admissions process is kept separately from other admissions records and is held/stored as confidential **by the services for students with disabilities**.
- 3.70 12. Students are not arbitrarily **denied admission to particular academic programs**. (*kept from majoring in a subject because that subject normally leads to licensing or certification that a student with certain disabilities would not be able to attain*).
- 3.47 13. Students with disabilities are encouraged to participate in regular classes, courses and programs.
- 3.76 14. Application forms for housing, dining, health services, transportation services, etc., include a section for students with disabilities and their requested accommodations.
- 3.94 16. Information sent to accepted students includes instructions regarding contacting Services for Students with Disabilities (SSD) and/or documentation required for being eligible for services.
- 3.37 17. As necessary, students with disabilities are assisted with registration through such means as priority scheduling, registration off-site, or advising students on the selection of courses or professors. (*and facilitating registration for them*).

II. ADMINISTRATION

A. General

- 3.93 1. Compliance with the ADA and 504 is a campus-wide endeavor (i.e., faculty and staff know their responsibilities and when and where to refer students for assistance).
- 3.52 3. Institutional efforts with regard to diversity include disability.
- 3.58 5. Guidelines and policies for nondiscrimination and accommodations not only exist but are “visible” to the average member of the campus community.
- 4.00 6. Written policies establish the intent of the institution not to discriminate on the basis of disability and to provide reasonable accommodations in accordance with state and federal laws.
- 3.84 7. All university policies, **practices, and procedures** have been reviewed (*in response to*) **for** implementation (*of the*) **with ADA/504**.
- 3.74 8. All leasing agreements and contractual agreements of any type, **including off campus groups renting facilities**, have been reviewed for nondiscriminatory policies, impacts for campus programs operated in those facilities, and for physical access. The agreement includes language about which entity is responsible for any physical modifications, alterations to improve physical access, **and procedures for participants to request and receive accommodations**.

- 3.23 11. Decisions for claiming undue burden or fundamental alteration are made by the head of the college or their designee, who is no lower than a department head with budgetary authority.
- 3.26 13. Policies and procedures exist in dealing with service/companion animals.
- 3.46 15. Policies and procedures exist for responding to crisis situations which may include individuals with disabilities (e.g., disruptive behavior, suicide attempts, violent behavior acts).
- 3.90 16. Written policies establish both student and institutional rights and responsibilities when students request academic modifications.
- 3.40 17. Effective collaboration exists between university units involved in serving students with disabilities (e.g., center for academic computing, office of physical plant, faculty senate, student government associations, admissions, affirmative action/ADA, educational equity, instructional development program).
- 3.32 18. The institution is able to show that it does not provide funding or other assistance to organizations or programs that discriminate on the basis of disability.
- 3.84 20. Libraries, campus stores and other support facilities have developed plans for providing services whether or not a facility is accessible (help in accessing material in library stacks, book delivery by bookstore, computer access to library catalog, etc.).
- 3.89 21. The institution has made it generally known, via media, documents, letters, etc., the names of contact persons, with addresses, phone numbers (voice, TTY and fax) and e-mail addresses for any part of the implementation of the ADA (e.g., with whom to file a grievance, from whom to request auxiliary aids and services, where to go for academic accommodation).

II. ADMINISTRATION

B. Fiscal Planning

- 3.62 2. Campus financial resources are identified and made available to meet the appropriate requirements/priorities contained in the self-evaluation and transition plans.
- 3.57 3. Adequate funding sources are available to resolve identified physical access barriers which preclude or severely limit physical access. Also, funding exists when other program access options are not feasible, such as relocation of activities.

II. ADMINISTRATION

C. Procedures

1. Confidentiality

- 3.79 a. A policy/procedure has been established to determine (*who*) **which office** will hold all disability-related information and documentation supplied by students as well as how the issue of confidentiality of these records will be handled throughout the student's career at the institution. This policy is disseminated in written and alternate media to ensure the campus community is cognizant of it.
- 3.75 b. Any documentation a department may have on a student related to that student's disability is held in a confidential manner apart from academic records; the institution can show where these confidential records are maintained.

II. ADMINISTRATION

C. Procedures

2. Publications

- 3.65 a. Nondiscrimination policies are available in writing and alternate media and are adequately disseminated.
- 3.70 c. Publications (**documents, notices, flyers, brochures and press releases**) include a nondiscrimination statement that includes individuals with disabilities.
- 3.66 d. Publications include information for requesting accommodations and/or inquiries concerning accessibility.
- 3.68 f. Procedures exist to ensure that notices, forms, announcements and other university communications can be made readily available in different formats when requested.
- 3.23 g. Individuals with disabilities are positively portrayed in university publications and audio-visual materials.

II. ADMINISTRATION

C. Procedures

3. Complaint Procedure

- 3.91 a. **Written guidelines have been developed for alleged discrimination and to resolve disputes about accommodations or unusual requests. These procedures are available in alternate formats, are communicated to the campus community, and cover students as well as those providing services (SSD staff, interpreters, notetakers, attendants).** (*Grievance procedures for internal disability discrimination complaints has been developed, is available in print and alternate format, and has been communicated to the campus community in appropriate publications*).
- 3.51 b. The institution can show that the grievance procedure is workable and offers protections for the person who filed it (i.e., is not biased towards the institution).
- 3.47 d. (*The campus has a clearly defined grievance process with at least one level of complaint above the decision maker (in other words, t)* **The ADA coordinator should not be the director of services for students with disabilities office; however, if this occurs, s/he should not be the grievance officer for disability complaints.**
- 3.45 g. Grievance committees are trained and updated regarding (*the state of the law and the state of the art of*) **504/ADA and** service provision, to adequately hear a matter being grieved.
- 3.19 h. Students with disabilities sit on grievance committees, where student members are permitted.
- 3.12 i. Disability related behaviors/issues are taken into consideration by the grievance committee (*when hearing matters being grieved*) **as** (*may be mitigating circumstances*).
- 3.28 j. Committee members' consultation with experts in the area is encouraged.
- 3.39 l. A 504/ADA grievance policy (*has been established and widely circulated that offers legitimate redress of grievances without asking*) **does not require** the individual (*initiating the complaint to go through*) **to meet with** "the offending party" (*along the way*) **as the initial step in the complaint.**

II. ADMINISTRATION

D. Committees

- 3.54 1. SSD personnel or students with disabilities sit on committees concerned with new buildings and renovations to assure they are usable by students with disabilities.

- 3.21 2. SSD personnel or students with disabilities regularly advise committees and student organizations regarding nexus with disability issues.
- 3.45 3. The institution is able to show that individuals with disabilities have the opportunity to serve on advisory boards and committees.
- 4. A university-wide disability quality assurance committee exists that:
 - 3.22 (a) is comprised of students and faculty with and without disabilities
 - 3.27 (b) has representatives from Services for Students with Disabilities, Physical Plant, Provost, etc.
- 3.75 5. There is/are appropriately represented campus committees for the self-evaluation and transition plan.
- 3.86 6. Individuals with disabilities are appropriately represented on the self-evaluation and /or transition plan committees.

II. ADMINISTRATION

E. Evacuation and Safety

- 3.98 1. All public use areas have accessible alarms (visual and audible) that comply with or exceed applicable regulations.
- 3.92 2. The institution has a viable emergency response plan that has been coordinated with the local fire department, fire marshal and other emergency response teams.
- 2.93 3. The emergency response plan does not assume the person with a disability is always the victim (person with disability may be only uninjured person or only one who knows how to use a spill kit).
- 3.77 4. The campus has the necessary technology, procedures and training in place for dealing with emergency phone access by deaf, hard of hearing, visually impaired, speech impaired students in residence halls for access to the police, health center, 911, etc.
- 3.57 5. The campus police and security personnel have had training on disability issues including deaf issues (person is trying to sign, not break away), basic signs (choking, help, telephone, hurt, etc.), pain control (legitimate use of controlled substances), fragility of some conditions (e.g., osteogenesis imperfecta).
- 3.00 6. Institution has protocols for dealing with Volatile Organic Compound (VOC) Free Areas.
- 2.80 7. Cleaning materials, adhesives/mastics, pest control and other compounds/chemicals used are the least toxic with the lowest possible amount of VOCs.
- 2.56 8. Protocols are in place for using products with VOC contents, and air exchange is used rather than VOC-laden air fresheners.

- 3.68 9. Written procedures are available and disseminated concerning building evacuation procedures for students with disabilities, and training is provided to appropriate campus personnel about such procedures.
- 3.48 10. Health and safety procedures and training are in place regarding access to and use of such facilities as science labs, super-clean labs, etc.
- 3.42 11. Individuals with disabilities are not limited to reside, visit, or use only the ground floor, of certain buildings.
- 3.69 12. A system exists for individuals with disabilities to notify authorities at the time of an emergency. The system includes emergency preparedness training of persons with disabilities as well as others on campus and it takes place regularly.
- 3.52 13. Portable lab stations and wheelchair accessible eyewash stations are available. Lab assistants are available if these are unavailable.

II. ADMINISTRATION

F. Training

- 3.28 2. In-service training regarding disability services is available (or required) for the various student support programs on campus, such as counseling services, residence hall staff, career planning services, campus employment, financial aid, admissions, academic advising, learning skills centers, etc.
- 3.58 3. New faculty, staff and TAs are given training regarding their responsibilities as a matter of law and contract, student's rights and responsibilities, where to refer students for assistance, and how to consult with SSD personnel when they have questions/concerns.
- 3.64 4. University counsel is well versed in ADA matters and has participated in adequate training in this area of the law.
- 3.22 5. Training and technical assistance regarding ADA/504 is *(provided)* **offered** to the entire campus community. *(including visitors at appropriate intervals).*
- 3.38 6. In-service training and updated information about changing physical access requirements/standards is routinely provided to campus architects, facilities managers, housing facility personnel, physical plant personnel, etc.
- 3.22 7. Permanent funding is available in the budgets for architects/facilities managers for relevant publications, off-campus workshops, and conferences regarding ADA issues.
- 3.75 8. Faculty are trained or provided information (such as a faculty guide to services) regarding **ADA/504** requirements, reasonable accommodations, and classroom modifications. *(such as: (a) visual or audio description of material shown on overheads or written on chalkboards, (b) captioned videos or films are ordered or borrowed whenever available, (c) clearly written directions for assignments and a syllabus which outlines expectations in the class.)*

- 3.06 9. The institution provides advisors who are knowledgeable about specific learning disabilities and attention disorders as well as the institution's resources and programs.

III. SERVICES FOR STUDENTS WITH DISABILITIES (SSD)

A. General

- 2.95 1. Effective (*communication*) **accommodation** is determined by student's **communication** preference and history of what has worked for each individual student.
- 3.50 2. (*Processes exist to involve*) Students with disabilities **are involved** in discussions and decisions about campus access.
- 3.23 3. Disability services are involved in long-range planning (career services, health services, academic advising, and self-advocacy counseling).
- 3.27 4. SSD provides referral information to students regarding resources for diagnostic evaluations for which the students may pay the cost (if any).
- 3.64 5. The institution provides a continuum of accommodations to support students with (*attention disorders and/or learning*) disabilities including, but not limited to: access to complete class notes, notetakers, ability to tape classes, access to recorded textbooks, extended time limits, access to reliable office hours of instructors, and alternative test-taking formats.
- 3.62 6. The institution provides an (*full-time*) **identifiable** professional/office who makes policy on provision of services, determines eligibility for services, provides/coordinates direct services and responds to inquiries from prospective students and/or parents regarding the accessibility of the institution and its programming.
- 3.59 7. The SSD professional consults regularly with appropriate personnel where the responsibility for service provision is shared (tutorial services provided by the learning center, testing accommodations by the writing center, **consultation with university counseling**, etc.).
- 2.89 9. SSD maintains active relationships with local Independent Living Centers, **or local resources** who assist those students with disabilities requiring personal attendant services.
- 3.71 10. The SSD office space is sufficient in size to afford personnel **and student** privacy and is adequate in terms of student traffic, **and is accessible**.
- 3.17 11. The SSD office has adequate and appropriate private counseling and test administration space.
- 3.81 12. The SSD office has professional personnel in numbers sufficient for the numbers of students served.

- 3.67 13. The SSD office has adequate support staff, clerical staff and student workers.
- 3.87 15. The existence of disability services and procedures students need to follow to request accommodations are clearly described and are easily accessed, including alternate formats, by all students, parents, faculty and staff.
- 3.49 16. The campus disability services office has a mission statement that is compatible with and connected to the institutional mission and the ADA.
- 3.45 17. The campus disability services has a statement of operating philosophy which guides the decisions of the office.
- 3.75 18. The campus disability services office has clearly defined services and programs.
- 3.59 19. The disability services office has clearly defined and well-implemented strategies for service delivery.
- 3.15 20. Institutions having a specialized program to meet the needs of a particular disability group make delineation from the delivery of general accommodations and access.
- 3.79 21. Students who may need disability-related accommodations are informed at various times and in various places (pre-admissions, orientation, in student handbooks, course selection catalogue, student newspaper, bulletin boards, campus radio or TV broadcasts, etc.) about how to declare disability, to whom to provide documentation of disability and need for accommodation, and how to obtain necessary accommodations.
- 3.88 22. Academic services such as tutoring, study skills instruction, editorial advice, and computer services available at no cost to students in general, are similarly available to students with disabilities. Services which are available for a fee are available for the same fee to students with disabilities.
- 3.35 23. The SSD office is positioned administratively to provide (*a hearing with*) **access to** those in power.
- 3.42 24. The SSD assists students with disabilities to assume the role of self-advocate while serving as a support/resource if necessary.
- 2.79 25. Students without disabilities who serve as a notetaker or provide other assistance to students with disabilities, receive some benefit from the university (e.g., a certificate of appreciation or a discount on the price of books).
- 3.17 26. Students are provided with information regarding the hiring of readers, notetakers, office or lab assistants. Written procedures exist for eligibility for notetaking services.
- 3.25 27. Students are not required to find or compensate their own notetakers.

- 3.71 29. All faculty and administrators know where to refer students for services and understand the rationale and necessity for following the established procedures in this regard.
- 3.33 30. Offices, other than the SSD office, responsible for any direct service provision, publicize their existence and function.
32. The institution provides instruction in strategies that enable students with disabilities to meet the challenges and requirements of the curriculum in addition to accommodations. Instruction includes, but is not limited to:
- 2.93 (a) accommodated/abbreviated notetaking,
 2.74 (b) advance organizers to guide textbook reading, literature reading and nonfiction reading
 2.76 (c) advance organizers for writing
 2.85 (d) time management strategies
 3.34 (e) use of computer-assisted technology
- 3.08 33. ADA materials and resource numbers for Department of Justice, Department for the Rights of People with Disabilities, HEATH, **OCR, and local resources** are available for students to clarify specific questions.
34. The office responsible for accommodations/aids (e.g., reading services, document conversion, interpreting services, notetaking, testing, accommodations, adaptive technology/equipment, etc.) has detailed, written procedure for each of the following:
- 3.85 (a) student requests for accommodations/aids
 3.17 (b) application forms for *(each)* accommodation/aid
 3.72 (c) student responsibilities for implementing accommodations
 3.79 (d) implementation of accommodation in timely fashion
 3.63 (e) notification of faculty
 3.51 (g) recordkeeping with detailed information for each student receiving accommodation, **including notes about discussions with students**
 3.81 (h) confidential student file/documentation
- 3.87 35. Students are informed (*of the principle*) that a disability must be revealed **to the SSD Office** in order to receive accommodations.
- 2.89 37. The college makes an effort to determine as soon as practical whether a student with a disability is a client of the Department of Rehabilitative Services (DRS), and ascertains DRS' commitment to the students regarding the furnishing and funding of the requested accommodation or service; **however, accommodation remains the institutions responsibility.**

III. SERVICES FOR STUDENTS WITH DISABILITIES (SSD)

B. Professional Expertise

- 3.59 1. Written qualifications exist for Services for Students with Disabilities staff.
- 3.35 2. Services for Students with Disabilities determine when it is necessary to consult with faculty and other campus providers and have procedures for doing so.

- 3.79 3. Coordination of services for students with disabilities is provided by a professional with training and experience working with college students/adults with disabilities.
- 3.86 4. The director/coordinator and a staff of SSD possesses a high level of expertise in disability services and the law.
- 3.56 5. The Disability Support Services director or coordinator is designated as the authority to determine students' disability status and necessary accommodation.
- 3.84 6. Interpreters are qualified for their assignments.
- 3.61 7. Readers, notetakers, attendants are qualified and given training where appropriate regarding the performance of their functions and how to facilitate the students with disabilities usage of these auxiliary aids and services.
- 3.59 8. Central administration provides SSD personnel with access to appropriate training and consultation with experts in the area.

III. SERVICES FOR STUDENTS WITH DISABILITIES

C. Part-time/ Graduate Students

- 3.90 1. Services are provided for part-time, nontraditional and graduate students as well as traditional, undergraduate, full-time students.
- 3.67 2. Students who attend part-time due to their disability have equal access to financial aid (**within federal guidelines**), academic programs, university services, tuition changes, academic honors, athletic eligibility, and events that are otherwise restricted to full-time students.
- 3.60 3. Established procedures exist for students on part-time status due to disability in areas of housing, single rooms or other exceptional housing arrangements.
- 3.80 4. Financial aid for students who cannot attend full time is addressed to the extent possible within federal financial aid guidelines.

III. SERVICES FOR STUDENTS WITH DISABILITIES

D. Data Collection/Self-Monitoring

- 3.44 1. Student feedback is collected to measure satisfaction with disability services.
- 3.31 2. Data regarding the use, effectiveness and satisfaction of students with SSD is reported on a regular basis to administration, funding sources, etc.
- 3.87 3. An ADA **and 504** transition plan has been developed and is consulted periodically to determine if campus renovations, etc. are on schedule and is used as guidance.

- 3.85 4. The transition plan is complete and is utilized in compliance efforts.
- 3.93 5. The institution has an ADA self-evaluation and work plan on file **that included examination of policies to ensure compliance with related, applicable requirements (e.g. 504).**
- 3.62 7. All campus programs, activities and services are reviewed for nondiscriminatory practices and policies **through an on-going process of self-evaluation, corrective actions and training.**
- 3.71 9. The ADA self-evaluation indicates how people with disabilities had an opportunity for input/involvement.
- 3.31 11. The college (*annually*) **periodically** reviews current protocols and or practices regarding admission, academic requirements, athletics, housing, student affairs, student discipline, testing and grade appeals, extra-curricular activities, and student internships to determine whether there are any policies, issues or institutional obstacles which may deny equal educational opportunities for students with disabilities.
- 3.11 12. The institution's quality assurance regarding 504/ADA policies and procedures is accomplished through external reviews, advisory groups which include students with disabilities and critical university/college information.
- 3.06 15. Quantity/quality of SSD services are carefully monitored if the coordinator/director has additional college responsibilities.

III. SERVICES FOR STUDENTS WITH DISABILITIES

E. Documentation

- 3.28 1. Appropriate professionals provide diagnostic testing of students who may have a disability.
- 2.93 2. Professionals **who provide diagnostic testing** are available for discussion of **the diagnosis** (*as well as diagnosis*) and counseling.
- 3.82 3. The institution has a process by which the rationale for a student's selected accommodations and the plan for their provision is adequately documented and communicated to all parties involved.
- 3.83 4. Written guidelines exist for determining appropriate documentation that will determine eligibility for services for qualified students with disabilities.
- 3.88 5. Procedures and guidelines exist for defining "disability" and who is qualified/eligible for services under ADA and Section 504 of the Rehabilitation Act of 1973.

IV. ACCESS

A. General

- 3.89 1. Provisions are made to ensure that communications with individuals who have hearing, vision, or speech impairments are as effective as communications with others (accomplished through the provision of auxiliary aids such as qualified sign language interpreters, amplification systems, television and video captioning, telecommunication devices for the deaf [TTY], readers, taped texts, brailled materials or large print materials).
- 3.75 2. TTYs exist at major offices and services that have extensive telephone contact with the public, especially at emergency services (police, fire, doctor).
- 3.60 3. **Accurate and current** access guides and maps are developed and distributed across campus **and are available in alternate formats.**
- 3.70 4. Disability and access concerns are part of the planning process for commencement, convocations, conferences and other special events with a person designated to review plans for events or to serve as a resource.
- 3.91 6. The campus does not apply surcharges to students with disabilities for any disability accommodations or auxiliary aids required by ADA or 504.
- 4.00 7. If the campus operates any special programs (such as adaptive recreation, special tutorial programs, special courses) primarily or exclusively for students with disabilities, these students are not excluded from any other regular campus programs for which they are eligible.
8. Detailed written procedures exist with systems in place whereby deaf students may:
 - 3.82 (a) request interpreting services **and real time captioning (CART)**
 - 3.78 (b) specify their preferences for the type of interpreting
 - 3.72 (c) primary consideration is given to these requests given sufficient advance lead time
- 3.72 9. Written procedures and policies exist for provision of disability accommodations and auxiliary aids for continued education, extension programs, and non-credit offerings.
- 3.68 10. Orientation is fully accessible including: facilities (including housing if it is an overnight event); transportation (for students with limited stamina or mobility when tours of the campus are given); presentations (materials in alternate formats, interpreters provided). Likewise, students with disabilities are not required to attend a separate orientation session.
- 3.66 11. Academic buildings, dormitories and recreational/social facilities and events are accessible to everyone (including guide dogs) **to the extent possible.**

- 3.89 12. Non-academic campus programs such as athletics, sports, arts, drama, entertainment events, and other activities are available and accessible to students with disabilities.
- 3.96 13. The institution meets telecommunication, communication, safety and access needs of people who are deaf, hard of hearing, or who have speech impediments.
- 3.59 14. There is an identified process and mechanism for establishing the priorities for improving program accessibility. (*and providing the necessary accommodations*).
- 3.84 15. Procedures for requesting accommodations at events or activities (e.g., interpreter, captioning, handouts in alternative formats, etc.) exist and are publicized and are described in publications and contact information appears within materials publicizing the events.
- 3.72 16. Campus operated preschool or daycare centers are accessible and do not deny access to a child with a disability or to a child because the parent has a disability.

IV. ACCESS

B. Physical/Structural/Transportation

- 3.24 4. Written policy and procedures exist regarding the interfacing of programmatic and facility issues.
- 2.90 5. Wheelchair access is ensured to all public locations of the institution, including not needing to rely on relocation of classes, programs, services and activities.
- 3.15 6. Program access exists in buildings focused on integration and student choice, using ADAAG for physical alterations when necessary.
- 3.13 7. A physical access specialist **is available** (*exists*) to review renovation/new construction projects and to consult with architects/institution regarding the planning of new projects.
- 3.98 9. When facilities are not fully accessible, procedures exists for requesting modifications for access or the rescheduling of events/activities and class reassignment or relocation.
- 3.96 10. An adequate number of accessible parking spaces as required by ADAAG and campus requests is available and enforced (cars without handicap permits are towed).
- 3.72 11. A fixed bus route service purchases or leases only vehicles which are accessible to people with disabilities. If not, the bus schedule clearly lists the time schedule for accessible buses.
- 3.65 12. Paratransit vans exist to supplement the bus system if all areas of campus cannot be readily accessed by bus.

- 3.63 13. Information exists via maps, brochures or web pages regarding individual building access, access to classes and to campus-wide events.
- 3.83 16. Special programs, entertainment events, social events, **club activities** lectures and similar events offered by the university are held in architecturally accessible locations, including those held off-campus.
- 3.98 17. Established mechanisms and procedures exist for review of campus building construction, renovation, and maintenance projects to ensure compliance with ADAAG or UFAS as appropriate.
- 3.26 18. The campus has reviewed and has procedures in place to address and communicate with other Title II entities (e.g. city or county government) or Title III entities (e.g. private property or commercial businesses, unincorporated areas adjacent to campus) to ensure physical access in facilities, access routes, paths of travel, etc. that have connection to the campus (e.g. walkways, ramps, curbcuts, bus stops, parking lots, etc.).
- 3.44 19. A protocol exists to ensure classroom accessibility, which includes a floating inventory of ergonomic chairs, adjustable height tables or other items that can be placed in a classroom on an as-needed basis each semester or quarter to serve students with disabilities.
- 3.28 20. Review of transportation policies and procedures exists for students/ staff with disabilities.
- 3.00 21. Paratransit is available at all times **that other transit exists**, so students can call on an as-needed basis.
- 3.12 22. On new campuses, consideration is given to planning the location and construction of buildings so natural topography is taken into consideration for new building accessibility.
- 3.37 23. Special seating arrangements for different disabilities are available and include reserve space in front of rooms and spaces for wheelchairs throughout lecture halls.
- 3.62 24. Lecture halls are equipped with sound systems which can be accessed by students with hearing impairments.
- 3.78 26. Appropriate signs (*announce*) **indicate** the location of accessible entrances, availability of assistive listening devices, location of accessible restrooms, water fountains, etc.
- 3.78 27. Signage is compliant with (*relevant codes*) **ADAAG/UFAS** in terms of color, size, contrast, location, frequency of placement, ease of usage. (*in other words, it should be clear, not cryptic and politically correct without being absurd*).
- 3.84 28. Ramps (*are to code and*) have railings **and are built to ADAAG, UFAS, state or local code, whichever provides better access.**

- 3.34 29. Where possible, entrances have both ramps and stairs with handrails.
- 3.60 30. Doors are operable by persons with physical disabilities (automatic or power assisted) wherever possible; hardware (*is to code*) **meets ADAAG or UFAS**.
- 3.80 31. Mechanical means of access (elevators, automatic doors, multi-model alarms/signals) are kept in good working order.
- 3.82 33. Restrooms (*are to code*) **meet ADAAG/UFAS** and are usable by persons with disabilities.
- 3.51 34. Any renovations, openings or closing of entrances or parking lots, installation of security systems, erection of fences, etc., are communicated beforehand to the SSD office so students with disabilities can be informed of the physical changes to the campus.
- 3.91 35. Campus parking policies clearly address how disabled-designated parking is handled.
- 3.94 36. Transportation provided to others on campus (bus, fleet vehicles, field trips and transportation to the surrounding community) is equally available via paratransit/accessible vehicles.
- 3.71 37. The institutions has policy/procedures in place to mitigate weather issues, including but not limited to snow/ice removal from parking stalls/access aisles and accessible routes.

IV. ACCESS

C. Program

- 3.75 1. The institution has equivalent access to recreational activities and opportunities.
- 3.35 2. Policies regarding use of recreational facilities are flexible to accommodate varying needs.
- 3.91 3. All benefits, services, programs and activities provided to the public, employees and students are available to persons with disabilities and are (*equal*) **equivalent** to those offered to people without disabilities.
- 3.82 7. Interpreters/**captioning** are available **upon request** (*for people who use ASL*) for classes and campus-wide events.
- 3.58 8. Accommodation and access policies **and procedures** are in place throughout the campus in all places such as student council activities, parent's day, alumni association meetings, etc.
- 3.95 10. Course registration procedures exist to ensure that modifications are available to individuals with disabilities as needed (e.g., accessible registration sites, alternatives to phone-based registrations, e-mail, fax, and priority registration).

- 3.77 11. Where parallel services exist (e.g., LD tutoring program), they are physically accessible (as students with learning disabilities may also have physical disabilities).
- 3.15 12. The college provides accommodations/services at no additional charge to the student with the exception of tutors.
- IV. ACCESS
- C. Program
1. Support Services
- a. Financial Aid
- 3.85 1. Financial aid is offered in a nondiscriminatory fashion.
- 3.54 2. Federal policies allowing financial aid officers to incorporate medical/disability related expenses associated with being in college into a student's financial need are publicized.
- 3.75 3. The financial aid office is informed and educated about disability related issues relative to financial assistance: e.g., part-time enrollment issues, special equipment needs, (*and*) needs for extended time for completion of degree requirements, **and additional costs incurred due to disability**.
- 3.66 4. Policies for distribution of financial aid are regularly examined to determine that they are nondiscriminatory,(e.g., full time status, disability related expenses, composition of financial aid package, length of time to complete degree, and coordination with Vocational Rehabilitation Services).
- 3.68 5. The institution does not require a student with a disability to apply for Vocational Rehabilitation Services and does not withhold financial aid if the student does not pursue that suggestion.
- 3.45 6. Provisions are made to allow students to participate in work study programs or receive financial aid for longer than four years if required **within Federal constraints**.
- 3.48 7. Students with disabilities can request modifications in work study requirements.
- IV. ACCESS
- C. Program
1. Support Services
- b. Health and Counseling
- 3.93 1. Health facilities, career services and counseling services are accessible and nondiscriminatory in their availability to students with disabilities.

- 3.31 2. Policies and procedures for student participation in health, career and counseling services are reviewed regularly to be sure that they permit participation by students with disabilities.
- 3.32 3. Comprehensive health services exist that are capable of addressing needs of students with disabilities **to the same extent that they address the needs of students without disabilities.**
- IV. ACCESS
- C. Program
- 1. Support Services
- c. Residential and Dining
- 3.76 1. Written procedures exist and are publicized on requesting housing accommodations.
- 3.77 2. Institutions with residential quarters have some that are accessible (according to ADAAG standards).
- 3.74 3. Accessible housing is scattered throughout the residence system and not concentrated in one dorm or on one floor, **so students with disabilities have comparable ranges of choice in housing.**
- 3.37 4. A publicized process exists to meet the needs of persons with specific dietary needs.
- 3.50 5. Assistance is available for students who need help in carrying trays, identifying foods, etc.
- 3.73 6. Dining halls **and lounges** are wheelchair accessible.
- 3.46 7. Menus, if used, are available in Braille or tactile format, or someone is available to read this information to persons who cannot access the print medium.
- 3.28 8. Access to dorm rooms and use of attendants allows an equal experience and cost.
- 3.34 9. Written procedures exist and are publicized regarding how to request housing accommodations when an attendant is needed.
- 3.34 10. Flexibility in policies exist which allow variances when the need is adequately documented.
- 3.28 11. Laundry areas include accessible machines which are available in both dorms and family housing.

- 3.74 13. Campus housing has an appropriate range of housing options and choices available to students with disabilities, including proper physical facilities, modifications in facilities, and highly individualized accommodation needs such as grab bars, etc.

IV. ACCESS

C. Program

1. Support Services

d. Career Services/ Field Placement

- 3.37 1. The career services office coordinates activities with the Office of Disability Services and incorporates disabilities into regular services (such as resume writing workshops, interview workshops, job seeking strategies, etc.).
- 3.62 2. Internships, cooperative education programs and summer or semester employment opportunities are developed with community business organizations which are accessible and nondiscriminatory for students with disabilities and which provide disability related accommodations as needed.
- 3.37 3. Study abroad and exchange programs are accessible and have a formal mechanism for requesting and determining (*reasonable*) accommodations.
- 3.75 4. The institution has a policy in place that addresses field/clinical placements (practicums, internships, etc.) with outside agencies to ensure nondiscrimination on the basis of disability. The policy provides for input from students with disabilities in determining if the site is physically accessible to them.

IV. ACCESS

C. Program

2. Telecommunications

- 3.76 a. The institution has at least one TTY which is placed in an office that is open and staffed during regular business hours (preferably an office with extended hours).
- 3.62 b. Staff know how to use the TTY and will return any TTY calls that are left on the answering machine or come in via relay service.
- 3.14 c. Any office with a TTY has the TTY on direct connect when the auto-attendant (automated answering system) is in use on the voice phone.
- 3.64 d. All offices with frequent student/visitor/guest phone contact have a TTY or a protocol for responding to incoming TTY or relay calls.
- 3.32 e. All academic departments have basic knowledge on relay service and where to go on campus to use a TTY.

- 3.66 f. All campus TTY numbers, including voice/TTY numbers, are listed in or on: staff directories, student directories, local phone books, letterheads, business cards, brochures, and every other place voice numbers and/or fax numbers are listed.
- 3.12 g. At least one, if not all, campus TTY numbers are listed in the state TTY directory and at least one campus TTY number is listed in the “National Directory of TTY Numbers”.
- 3.21 h. The state’s relay service access numbers, TTY and voice, are listed in the staff and student directories.
- 3.64 i. The campus has at least one pay phone TTY or at least one TTY available for public use at the same times and with the same amount of ease of access as voice phone users have available.
- 3.68 j. The campus follows the Hearing Aid Compatibility Act of 1988 and the Telecommunications Act of 1996 in providing hearing aid compatible phones for public use (pay phones, local access or house phones, and for phones provided in teleconferencing and videoconferencing).
- 3.28 k. All public use phones have volume control, and at a minimum, 25% of each type of phone will have volume control.
- 3.71 l. An institution that has automatic voice access to admissions status, financial aid status, grades, changing of personal records (address or phone number change), voting in student elections, registration for classes and/or any similar automatic voice access system, has a companion system accessible to TTY users and students who cannot use voice systems.
- 3.51 m. The campus has in place methods to provide appropriate communication devices including TTYs, assistive listening devices, etc., to students, guests and visitors.
- 3.61 n. Televisions and monitors have decoders.
- 3.44 o. The institution has a policy that all new videos purchased will be captioned and existing videos used regularly will be replaced with captioned versions.
- 3.71 p. Information regarding TTY locations is well publicized.
- 3.53 q. At least one telephone in each bank of pay phone is equipped with amplification equipment.

IV. ACCESS

C. Program

3. Student Employment

- 3.56 a. Inclusion of essential functions exist on all job descriptions.
- 3.41 b. **Announcements regarding position vacancies are in accessible formats.**
- 3.81 c. Selection criteria for jobs are consistent with the essential functions of the job.
- 3.78 d. The institution has materials, resources and guides readily available to employees to help ensure nondiscrimination in its programs.
- 3.42 e. The institution clearly explains to employees the employees' responsibilities in ensuring equal opportunity for people with disabilities to participate in the programs, activities and services of and to receive benefits from the institution.
- 3.47 f. Financial and related employment assistance exists for students with disabilities **when necessary to achieve equal access to employment opportunities.**

IV. ACCESS

C. Program

4. Student Organizations

- 3.80 a. Policies exist in writing that student organizations will operate in a nondiscriminatory fashion.
- 3.83 b. The number of individuals with disabilities who may participate in a program or activity is not limited.
- 3.59 c. Student organizations have protocols to follow in providing auxiliary aid and services e.g., a campus office with oversight of registered student organizations assists the groups in getting materials in large print, Braille, etc.
- 3.44 e. All student and social organizations are accessible, nondiscriminatory, and seek participation by students with disabilities.

IV. ACCESS

C. Program

5. Library

- 3.92 a. All library facilities (main and departmental) ensure both physical and programmatic accessibility, including: special reading collections, reserve materials, computer resources, data bases, portions of the library which are not accessible provide through services such as research assistants, book pullers, runners, etc.
- 3.74 b. The campus has mechanisms to ensure access to print (including library holdings) and audio and video material.
- 3.56 c. The library actively seeks materials in alternate formats when requested by clients.
- 3.80 d. There is access to: card catalog (both electronic and hard copy), CD-ROM materials, and options to standard book return bins.
- 3.65 e. Library personnel are trained in disability accommodation procedures and strategies and printed information on library disability access is available to library patrons.

IV. ACCESS

C. Program

6. Graduation Ceremonies

- 3.77 a. Graduation ceremonies are wheelchair accessible with at least one route from parking to seating navigable by wheelchair.
- 3.70 b. ADAAG regulation ramps to the graduation stage are installed by prior request or the entire degree issuing ceremony takes place at ground level so that students unable to walk up the steps are part of the regular ceremony.
- 3.77 c. Sign language interpretation of ceremonial events is available by prior request.
- 3.68 d. Persons whose disabilities require them to sit up front near the speakers will have an area so designated for that use, by prior request.
- 3.67 e. Programs and other graduation-related materials are available in Braille, large-print or audiocassette by prior request.
- 3.72 f. Guide dogs and service animals are permitted to accompany their masters.
- 3.34 g. Written guidelines exist for requesting modifications for graduation requirements (major, degree, general education, etc.).

- 3.44 i. Written procedures exist for distance learning participants to request accommodations.
- V. ACADEMIC ACCOMMODATIONS
- 3.84 1. Policies exist in the institution that freely allow the following in the classroom **upon request**: notetakers, tape recorders, interpreters, attendants, computers, captioners, and service animals.
- 3.81 2. Licensing requirements (*for any campus*) **related to any degree** programs do not discriminate on the basis of disability in their licensing, certification or regulatory activities or in cooperative agreements with external agencies (e.g., teacher certification, medical school and health professions).
- 3.75 3. Academic policies are in place that will accommodate the needs of students with disabilities (repeat rules, incomplete policies, “reasonable accommodation”).
- 2.89 4. Faculty use both auditory and visual means of communicating information to the students in classes.
- 3.56 5. Students can make audio and/or video recordings of lectures, provided that recording is not disruptive, **when it is an appropriate accommodation and does not infringe on copyright**.
- 3.87 6. A process exists through the Office of Students with Disabilities that assists students in determining appropriate academic adjustments and auxiliary aids based upon documentation.
- 3.75 7. Accommodations are modified (*which appear not to be working whether they are over- accommodating or because they are not sufficiently accommodating the student*) **when no longer needed or ineffective**.
- 3.71 9. Campus tutoring services, **when provided for all students**, are accessible to students with disabilities.
- 3.13 10. Tutors are trained in using adaptive equipment, alternate media and/or differences in learning styles.
11. Academic accommodations include:
- 3.72 (a) reduced course load
- 3.64 (b) course substitutions
- 2.90 (c) alternate assignments
- 3.51 (d) flexible scheduling
- 2.51 (h) pass-fail options versus letter grade
- 3.01 (i) determination of dean’s list status (e.g., during reduced course load)
- 3.71 (k) extended time to complete degree
- 3.83 (l) exam accommodations

- 12. Faculty members are (*instructed*) **encouraged** to provide:
 - 3.01 (a) options to reduce distractions during in-class writing
 - 3.01 (b) simplified or repeated instructions, orally and in writing
 - 3.12 (c) clarification of all projects/assignments
 - 3.05 (d) feedback regarding performance
- 13. Exam accommodations include:
 - 3.46 (a) standardized test available in non-standardized form (**alternate formats or essay/oral for multiple-choice**)
 - 3.78 (b) isolated, quiet areas
 - 3.79 (c) extended time
 - 3.64 (d) individual administration
 - 3.70 (e) alternative format
 - 3.75 (f) use of computer
 - 3.62 (g) use of calculator
- 3.57 14. There is a policy for refusal of waivers or accommodations which would fundamentally alter the educational program or which would pose unreasonable risk to the student or others.

VI. ADA/504 COORDINATOR

- 3.94 1. The office/individual that has the responsibility and authority for enforcing legal mandates (e.g., Section 504, the ADA) is clearly identified on campus.
- 3.74 2. The institution has a designated coordinator for ADA issues and an ADA compliance/grievance officer to mediate disputes.
- 3.60 3. The ADA coordinator has sufficient expertise to evaluate the appropriateness of requests for accommodations in light of students' documentation of the disability.
- 3.78 4. A definition and job description exists for an ADA coordinator and/or 504 compliance officer.
- 3.85 5. The ADA/504 Coordinator is well-versed in the law of disability, applicable regulations, relevant institutional policies, and basic mediation techniques in order to facilitate a clear dialogue between the university and student for prompt resolution of all disability-related disputes.
- 2.79 6. The campus has an ADA Coordinating group.

VII. ASSISTIVE TECHNOLOGY

- 3.83 1. All computer facilities ensure both physical and programmatic accessibility (e.g., adjustable tables, keyguards, documentation in alternate formats, software, adaptive technology, input/output devices, internet access), **or there is the capability to immediately equip the lab to meet individual student needs.**
- 3.86 2. Adaptive technology is utilized and updated to ensure that students with disabilities have **equivalent** access to technology (*is as equal to that of students without disabilities. as is reasonably possible*)
- 3.64 3. Procedures exist for distributing, maintaining, and supporting adaptive computer technology training for users.
- 3.70 4. Gopher and World Wide Web “publications” are compatible with standard screen reading software **and meet criteria for accessible websites..**
- 3.91 5. Effective access to computers for students with disabilities is provided during the same hours available to all students.
- 3.61 6. Computing access for students with disabilities is regularly reviewed due to the changing nature of adaptive technology. The review includes all computer lab facilities, services to students with various types of disabilities, and provisions to fund the necessary technology.
- 3.88 8. Computer labs and informational technology (such as library catalogues or information kiosks) are accessible to students with a variety of disabilities.
- 3.35 9. Computer labs are staffed by technicians who can instruct persons with disabilities on how to use them.
- 3.55 10. The college provides access to a wide variety of technology (real time captioning, brailers, magnifiers). (*and services providers (interpreters, readers, transcribers)*).
- 3.80 12. Provision of materials in alternative formats (*is a requirement*) **is available upon request and in a timely manner.**

Added Item:

2. Exam accommodations include:
- 3.52 (a) rest periods
- 3.54 (b) spell checkers
- 3.81 (c) scribes
- 3.81 (d) readers
- 3.70 (e) tape recorder (to record answers orally)
- 3.81 (f) CCTV (to magnify material)

Summary

Universities and colleges that are serious about accommodating students should be willing to conduct regular, lengthy, and detailed evaluations of the accessibility of their campus. This instrument is a first step in providing guidelines for such an evaluation. The list of standards provides much greater detail and supplements the list of questions given in the Title II Technical Assistance Manual (U.S. EEOC & DOJ, 1992). The standards developed in this study can result in a checklist for colleges to evaluate their policies, procedures for accommodation and accessibility. Further lists can be used that are specific to other elements of the college. The checklists and guidelines developed by specific professional organizations may be useful, for example, the restaurant association has guidelines for food service, and the hotel/motel association or HUD materials serve as an additional guide for residence halls.

In conclusion, there is no one list of standards that can address all areas of the complexity of college campuses. However, we must set the parameters of just what constitutes program access and provide guidelines for meeting those parameters of the accessible campus. Colleges and universities that conduct such a detailed analysis of accessibility can be proud and willing to emphasize access in their promotional literature. Such efforts can only result in opening the doors a little wider for students with disabilities.

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Appendix A

Panel Selection Committee

Selection Committee

UNIVERSITY SERVICE PROVIDERS

President, Virginia Association on Higher Education and Disability
(VA AHEAD)
New River Community College
PO Box 1127
Dublin, VA 24084

AHEAD is an international organization that offers training, professional publications, and technical assistance to colleges and university service providers. Annual conferences address concerns of professional standards, diagnostic evaluations, services in all areas of disability and legal decisions in 504 and ADA cases.

AGENCIES

Executive Director
National Association of ADA Coordinators
(NAADAC)
PO Box 4079
Palm Springs, CA 92263

NAADAC provides professional training and networking for ADA Coordinators in university, college, business and government positions. The organization sponsors regional workshops and disseminates ADA information through a regular newsletter. NAADAC conferences bring together the experts who interpret and enforce the ADA and 504 mandates for public, state and local government institutions.

LEGAL

National Rehabilitation Information Center
(NARIC)
8455 Colesville Road
Suite 935
Silver Spring, MD 20910

NARIC is a library and information center on disability and rehabilitation. The agency collects and disseminates results of federally funded research projects. Information specialists perform searches and assist with disability questions.

Criteria for Selecting Delphi Panel

Experience as an ADA Coordinator, college service provider, or legal consultant within the past five years, and one or more of the following:

1. A national reputation established through publications, research or presentations
2. A current consultant or trainer in the disability field or
3. A recommendation by at least two or more selection committee members
4. Identified by the selected Delphi panelists. As the researcher contacted prospective Delphi panelists, some of them recommended additional names. Those recommendations meeting the selection criteria listed above were invited to participate.

Appendix B

Content Analysis Sub-committee

Content Analysis Sub-Committee

Professor of Student Affairs
Educational Leadership and Policy Studies
Virginia Polytechnic Institute and State University
Blacksburg, Virginia

Rehabilitation Counselor
Student Affairs Doctoral Candidate
Virginia Polytechnic Institute and State University
Blacksburg, Virginia

Coordinator
Services for Students with Disabilities
Virginia Polytechnic Institute and State University
Blacksburg, Virginia

Content Analysis Sub-Committee Criteria

Criteria for survey items by Paul E. Spector in Summated Rating Scale Construction: An Introduction (1992).

1. Items should be clear, concise, unambiguous, and concrete.
2. Items should express only one idea when possible.
3. Items should not contain colloquialisms and jargon.
4. Items should not be structured with negatives.

Additional criteria included:

5. Reduce redundancy through chronological placement of items under categories.
6. Place items in only one category when possible.
7. Use Delphi panel comments to aid in editing for redundancy and clarity.

Appendix C

Focus Group

May 15, 1996

Dear (first name):

Thank you for agreeing to attend a focus group interview regarding university self-evaluation of implementing the ADA. As we discussed on the phone, the focus group will meet at 2:00 PM on May 21, in the Black Cultural Center.

All information discussed will remain confidential. In compensation for your time, you will be paid \$5.00 or \$5.00 worth of lottery tickets (the preference you indicated in our phone conversation). Also, plenty of refreshments will be provided.

Do not hesitate to contact me at 231-7500 should you have any questions. Thank you again for your time and I look forward to our interview session.

Sincerely,

Virginia J. Reilly
ADA Coordinator
336 Burruss Hall
Blacksburg, VA 24061-0255
(540) 231-7500 V; (540) 231-9460 TTY

**AGENDA
FOCUS GROUP ON ADA STANDARDS
BLACK CULTURAL CENTER
MAY 21, 1996**

- I. GREETINGS**
- II. INTRODUCTIONS**
- III. BACKGROUND OF THE STUDY**
 - A. The accreditation process**
 - B. Areas from the literature review**
 - C. How these findings will be used**
- IV. PURPOSE OF TODAY'S FOCUS GROUP**
- V. GROUND RULES**
- VI. DESCRIPTION OF THE METHOD WE WILL USE TODAY**
- VII. THE QUESTIONS**
 - A. What do you think should be done to help people with disabilities gain better access to higher education?**
 - B. How should the ADA be promoted?**
 - C. How well is the ADA working? Is it meeting your needs?**
- VIII. SUMMARY**

GUIDELINES

Student Focus Group

The following guidelines were reviewed prior to the focus group session

- Ask permission of the group to tape record the session.
- Remind the group that all comments will be confidential. No names will be used in the written report.
- Describe the purpose of the study: Establish standards that colleges can use to evaluate their implementation of the ADA.
- Review the ground rules

Only one person at a time should speak so everyone is able to hear the comment.

All opinions will be respected; all remarks are valid.

Discussion should be confined to the context of the present question until the group indicates they are finished with that topic.

Participants are free to comment regarding the question under discussion or pose additional questions that are relevant to the present question being discussed.

Participants can request to return to any question.

Clarification of any question can be requested to ensure each participant understands the items under discussion.

Appendix D

Delphi I



VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Office of Equal Opportunity/Affirmative Action

336 Burruss Hall, Blacksburg, Virginia 24061-0216 (540) 231-7500 Fax: (540) 231-8510 TDD: (540) 231-9460

June 25, 1996

FIELD{name}
FIELD{street}
FIELD{city, state, zip}

Dear FIELD{salutation}:

We have just celebrated the fifth anniversary of the signing of the Americans with Disabilities Act (ADA). While ADA compliance is having an increasing effect on the resources of American universities, no set of clear criteria has been agreed upon for assessing the effective implementation of this mandate on college campuses. As we have witnessed the dramatic increase in the number of students with disabilities attending four-year colleges, it becomes essential to establish standards for effective services and accommodations.

Criteria for program access beyond physical accessibility are not readily available. In light of this, we are conducting a study to identify standards for self-evaluation of ADA implementation in four-year public colleges. Because you are recognized as an expert in the field of the ADA and/or disabilities, we are seeking your participation in this study. Your willingness to serve on a Delphi panel will be beneficial to this study and to the field of disabilities services.

A modified Delphi technique consisting of three rounds will be used to identify and reach consensus on ADA self-study standards. The first round will ask you to supply standards you see as desirable for four-year institutions conducting a self-study regarding their ADA implementation. In succeeding rounds you will be asked to rank the desirability of including each standard in the self-study process. If you use e-mail, we would like to conduct the rounds via that medium.

In this study you will be a part of a thirty-member Delphi panel of experts. Anonymity is a characteristic of the Delphi technique; therefore, your name will not be associated with responses during the study, but will appear in a list of contributors at the end of the study. When making your decision to participate, please remember that the success of the Delphi technique and this study depend on the completion of all the rounds by all of the panel members. This study will require approximately thirty minutes of your time for three times during the next two months at approximate two-week intervals. There will be some flextime between rounds. The target date for completion of the first round is July 29, 1996.

Please let us know your decision by returning the enclosed response form. The results of this research will be available to you at the end of the study. Thank you for your consideration and participation. If you have any questions about the study, please call Virginia Reilly at (540) 231-7500 or (540) 231-0645, or send e-mail to jenmik@vt.edu.

Sincerely,

Virginia J. Reilly
ADA Coordinator

Marilyn Lichtman
Associate Professor

A Land-Grant University - The Commonwealth Is Our Campus
An Equal Opportunity/Affirmative Action Institution



VIRGINIA POLYTECHNIC INSTITUTE
AND STATE UNIVERSITY

Office of Equal Opportunity/Affirmative Action

336 Burruss Hall, Blacksburg, Virginia 24061-0216
(540) 231-7500 Fax: (540) 231-8510 TDD: (540) 231-9460

ADA Implementation Study - Response Form

_____ I will be able to participate in all three rounds of this study

_____ I will not be able to participate in this study

Name: _____

Position: _____

E-mail: _____

Address: _____

Phone: _____

*A Land-Grant University—The Commonwealth Is Our Campus
An Equal Opportunity / Affirmative Action Institution*

Delphi I Letter Sent by Electronic Mail or Fax:

Dear ADA Panel Member,

Thank you for agreeing to serve on the panel of experts to design standards for colleges involved in self-evaluation of their ADA implementation. We have been pleased with the very positive response from the panel members.

Enclosed are the instructions for the first round of the Delphi process. Because the information from this round must be composed into a questionnaire format, your prompt response would facilitate completion of this portion of the study.

The next round of the Delphi will contain the items the panel has identified as possible standards by which colleges can measure their effectiveness in implementing the ADA. Each item will have a scale so you can rate the importance of the proposed standards. The anticipated mailing date for the second round is August 19, 1996. The third and final round will include the results of the second round and a final rating scale for each proposed standard. After our analysis of those results, you will receive a summary of the findings. All responses will remain confidential, but your name will appear on a list of contributors at the end of the study.

INSTRUCTIONS: ROUND 1

1. Please compose a list of proposed standards for four year colleges to use in a self-study of their implementation of the Americans with Disabilities Act (ADA). These will be criteria you think are important for any public four year college. It may be helpful to envision the ideal accessible campus remembering that accessibility refers to much more than physical access (we don't want to repeat the ADAAG Standards here).
2. When composing your list, please use the following parameters:
 - a. The study is limited to public, four year colleges subject to Title II of the ADA
 - b. The standards generated from this study should be useful to the college accrediting agencies.
 - c. The study is limited to Title II issues for students; employment is not addressed in this study.
 - d. There is no limit on the number of standards you submit; likewise, there is no minimum number.
3. Please complete your list of standards and return them by August 12 via electronic mail, fax or regular mail. Please address returns and any questions to:

Virginia J. Reilly
336 Burruss Hall
Blacksburg, VA 24061-0216
E-mail: jenmik@vt.edu
Fax: (540) 231-8510
Phone: (540) 231-7500

Delphi I E-Mail Acknowledgment

Dear Delphi Panel Member:

I received your round one response. Thanks so much! It is exciting to see these lists that confirm many of the efforts we are all working toward. You will receive a compilation of everyone's response in a few weeks which will have a rating scale for each item. Thanks again for your quick response.

Sincerely,

**Virginia J. Reilly
ADA Coordinator
336 Burruss Hall
Virginia Tech
(540) 231-7500 (V)
(540) 231-9460 (TTY)
jenmik@vt.edu**

Delphi I Panelists

AGENCIES

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Appendix E

Delphi II

November 11, 1996

FIELD(name)
FIELD(street)
FIELD(city, state, zip)

Dear FIELD(salutation):

Thank-you for participating in the first round of the study to identify standards for self-evaluation of ADA implementation in four-year public colleges. As you can tell from this packet, the response has been enormous, so this round was delayed in order to edit the many items and eliminate duplicates. I hope the enclosed packet of tea helps you get through the sizable task.

Enclosed are the instructions and the response form for the second round of the study. The categories were chosen as a logical means of organizing the responses; feel free to comment on, add, or suggest changes for the categories. You will see that the instruction page has room for your name and general information. Your response will remain confidential; this form is to confirm our expert panel information and for data processing purposes only. Please complete the form and attach it to your round two response.

If possible, we would like to complete the Delphi portion of the study by the end of December. To do so, it would help if we could receive your completed questionnaire by November 18. You may return the questionnaire by mail, fax, or e-mail; an e-mail version is being sent to you as an attachment. Fax and e-mail, if available, would be helpful in reducing response time. The fax number for returning the response form is (540) 231-8510. The e-mail address is *jennmik@vt.edu*. If you have any questions, please contact Virginia Reilly at (540) 231-7500 or via fax or e-mail. Thank-you for your continued participation.

Sincerely,

Sincerely,

Virginia Reilly
ADA Coordinator
attachments

Marilyn Lichtman
Associate Professor

INSTRUCTIONS

Round #2 of:

The Development of Standards for Self-Study in Four-year Colleges Evaluating Implementation of The Americans with Disabilities Act (ADA)

1. Attached is the response form with the items generated as standards for four-year colleges conducting a self-evaluation of implementation of the ADA.
2. In front of each statement is a four-point importance scale. Please indicate how important you feel that statement is for colleges evaluating their implementation of the ADA by circling the appropriate number. The range of choices is:
1 = unnecessary 2 = minimal 3 = valuable 4 = critical
3. If you feel there are statements that have been omitted, please add the statements at the end of the form.
4. Please complete the form and return it in the enclosed addressed envelope. A prompt response will be of great benefit to the study. Should the envelope become separated from the response form, please send the form to:

Virginia Reilly
ADA Coordinator
336 Burruss Hall
EOAA Office
Virginia Tech
Blacksburg, VA 24061-0216

Thank you for the dedication you have given to this study!

Please complete this form and attach it to the Round #2 responses.

Name _____

Address _____

Phone _____ E-mail _____

Job Title _____

Years of experience in disability/ADA work _____ Gender _____

Years in current position _____ Highest earned degree _____

Have you conducted research, published, or made presentation in the field of disability or ADA? _____ Yes _____ No

Sample Page of Delphi II

Please circle the rating indicating the importance of each standard to serve as guidelines for self-evaluation of the ADA. 1=unnecessary 2=minimal 3=valuable 4=critical

I. ADMISSIONS

1. Recruitment materials include general information about the campus, such as:
 - 1 2 3 4 (a) programmatic access
 - 1 2 3 4 (b) photographs positively promoting students with disabilities and their involvement on campus
 - 1 2 3 4 (c) phone numbers for further information about disability resources and services
 - 1 2 3 4 (d) a statement through which students may voluntarily self-identify
2. The admissions process materials include the following:
 - 1 2 3 4 (a) contact information for requesting accommodations during admissions interviews/campus tours
 - 1 2 3 4 (b) applications in alternate formats
- 1 2 3 4 3. Preadmission inquiries about disability are not made.
- 1 2 3 4 4. The application process is accessible to people with all disabilities (e.g., interpreters for interviews, accessible locations, early registration or assistance with registration).
- 1 2 3 4 5. Written guidelines exist which ensure that there are no discriminatory requirements in admissions policies and procedures.
- 1 2 3 4 6. Each academic area that has selective enrollment policies in place has gone through a review of their admissions policies and eligibility criteria to assure that these policies are not discriminatory on the basis of a disability.
- 1 2 3 4 7. Admissions policies are flexible enough to give equal or equivalent consideration to a student who has recently been diagnosed with a disability.
- 1 2 3 4 8. Written policies and procedures exist which ensure alternate admission criteria, or test administration procedures are available to individuals with disabilities upon request (e.g., admissions tests reflect aptitude rather than impaired sensory, manual or speaking skills except where sensory, manual or speaking skills are integral to what the test is designed to measure).
- 1 2 3 4 9. Admissions criteria for non-selective institutions are clearly stated, with a range of acceptable scores.
- 1 2 3 4 10. A cooperative admissions procedure exists between admissions staff and the professional(s) knowledgeable about college students with disabilities.

Toss Items

Collection of items that were NOT rated 3 or higher by 2/3 of the Panelists. Panel mean is shown on the left.

I. ADMISSIONS

- 2.57 9. Admissions criteria for non-selective institutions are clearly stated, with a range of acceptable scores.
- 3.50 15. There are written guidelines for handling application information that identifies an applicant as having a disability (nonstandard admission tests, "resource room" listed on high school transcripts, comments in letters of recommendation, IEPs, psychoeducational testing, etc.) if it is submitted in admissions applications.

II. ADMINISTRATION

A. General

- 2.77 2. The institutional mission and goals address the disabled population needs.
- 3.70 4. There is definitive and strong administrative support addressing the needs of persons with disabilities.
- 3.57 9. Contracts/agreements for off campus groups renting facilities for events and conferences outlines responsibilities and procedures for participants to request and receive accommodations.
- 3.53 10. The EEOC nondiscrimination statement is consistently applied/made available in publications, documents, notices, flyers and brochures, and other appropriate places (e.g., press release for some issues).
- 2.93 12. Alcohol and drug use policies are well-publicized and consistently followed.
- 3.43 14. The institution's leaders, vocally and in written material, have declared support of the ADA and 504; the institution can show commitment on the part of its leaders toward ADA and its implementation.
- 3.70 19. A clear statement of inclusion of the disabled population is in all nondiscrimination policies of the institution.
- 2.63 22. There is collaboration with external university units, (e.g., government, funding sources, national and regional organizations and peer universities).
- 1.60 23. University officials should begin dialogue with the court system to establish a new program, with young adults sentenced to community service by the court, which would meet their community service requirements by providing no-cost assistance to students with disabilities who need it. These young adults would have to be appropriately screened (e.g., nonviolent offenders).

- II. ADMINISTRATION
 - B. Fiscal Planning
 - 2.40 1. The budget is administered based on the types of disabilities being served and the data which supports this.
- II. ADMINISTRATION
 - C. Procedures
 - 1. Confidentiality
 - 3.60 c. Disability documentation on students is retained in files separate from general student files such as those that may be maintained by academic departments or schools.
- II. ADMINISTRATION
 - C. Procedures
 - 2. Publications
 - 3.43 b. Required notice on rights and protections afforded by Title II and its application to programs, services and activities is clearly stated in publications, documents, notices, flyers and brochures, and other appropriate places (e.g., press release).
- 2.73 e. *(Each college catalog publishes a statement that most academic classes (excluding science or art lab, physical education, etc.)),***Publications contain a statement that classes/campus activities will be relocated to an accessible site upon timely request and on a case-by-case basis.** *(may be moved to a different location if necessary to accommodate an individual with a disability, with the name and phone number of the ADA Coordinator and a statement reaffirming the school's commitment to equal educational opportunity for individuals with disabilities.)*
- II. ADMINISTRATION
 - C. Procedures
 - 3. Complaint Procedure
 - 3.73 c. There are appropriate due process procedures that provide prompt and equitable resolution of complaints alleging discrimination on the basis of disability, including academic issues and other grievances that arise under Title IX.
- 3.50 e. Written guidelines exist and are publicized regarding the procedure to resolve disputes about appropriate accommodations or unusual requests from students with disabilities.
- 3.33 f. Grievance policies and procedures exist for challenging alleged discriminatory practices for students and those providing the services (interpreters, readers, attendants).
- 3.73 k. Grievance procedures are available in writing and alternate media, comport with due process and are equitably administered.

II. ADMINISTRATION

D. Committees

- 4. A university-wide disability quality assurance committee exists that:
 - 2.63 (c) has community representatives
 - 2.53 (d) has developed a bill of rights for students with disabilities
 - 2.63 (e) continuously provides current disability information

II. ADMINISTRATION

F. Training

- 2.63 1. All members of the university have taken an attitude-awareness sensitivity training workshop about disabilities (*such as the Windmills Training offered by Milt Wright and Associates*).

III. SERVICES FOR STUDENTS WITH DISABILITIES (SSD)

A. General

- 3.53 8. The SSD office has adequate avenues for consultation with university counseling and other relevant administrators.
- 3.87 14. The director/coordinator and other SSD staff possesses expertise in disability law, services, etc.
- 2.63 28. Volunteer upper classpersons with disabilities serve as ombudsman/advisors to incoming students with disabilities on both program and physical accessibility issues.
- 2.90 31. The activities of the SSD office and the accomplishments of students with disabilities are communicated to the campus community via “mainstream” channels.
- 34. The office responsible for accommodations/aids (e.g., reading services, document conversion, interpreting services, notetaking, testing, accommodations, adaptive technology/equipment, etc.) has detailed, written procedure for each of the following:
 - 3.20 (f) alternative provision of accommodation
- 3.20 36. The college does not act as a student’s ADA diagnostician or medical advisor.

III. SERVICES FOR STUDENTS WITH DISABILITIES

D. Data Collection/Self-Monitoring

- 2.63 6. The institution disseminates summary data regarding disability.
- 3.87 8. The institution has conducted a self-evaluation that included examination of policies to ensure compliance with related, applicable requirements (e.g. 504).
- 3.63 10. The institution can show an on-going process of self-evaluation, corrective actions and training.
- 3.27 13. The institution has a strategic plan that includes the ADA transition plan and on-going education for faculty, staff and students regarding ADA/disability issues.

- 2.53 14. A database exists that is accessible to all university personnel that contains information on specific reasonable accommodation strategies for various functional limitations experienced by students with disabilities.

III. SERVICES FOR STUDENTS WITH DISABILITIES

E. Documentation

- 2.63 6. Students first document their disability through the use of standardized tests or assessments before becoming eligible for services.
- 2.57 7. The college has an educational psychologist or other qualified medical professional available for technical consultation regarding disability documentation and requests for accommodation.

IV. ACCESS

A. General

- 3.83 5. The campus has a system/procedures to ensure provision of effective accommodations, particularly academic accommodations and auxiliary aids, including reading services, notetaking, interpreting, testing accommodations, library assistance, special equipment such as tape recorders and adaptive computing technology.

IV. ACCESS

B. Physical/Structural/Transportation

- 3.30 1. Physical access for students on campus has been evaluated from the perspective of function as well as form.
- 2.70 2. Accessible transportation is available to and from campus.
- 3.63 3. Written policies and procedures exist for facility access, new construction and renovations.
- 2.80 8. All facilities are accessible.
- 3.57 14. A systematic plan exists for readily achievable barrier removal (e.g., transition plans, institution master plan, strategic plan, maintenance and renovation schedule).
- 3.57 15. An effort is made to hold club meetings and other activities in rooms which are accessible to students with disabilities.
- 3.40 25. All buildings on campus which are wheelchair accessible are clearly designated as such on a campus map which details relevant access related information, and this is available in alternate formats.
- 1.27 32. There are steps up to the curb next to the accessible parking space.
- 3.53 38. A system is in place for determining the priorities for improving physical access given the campus resources and greatest demands for improved facilities.

IV. ACCESS

C. Program

- 3.80 4. Program access is provided and mechanisms for insuring such access are in place.
- 3.67 5. Benefits, activities and services are offered in the least restrictive environment possible with participants' peers.
- 2.73 6. Adequate notification exists for reporting program accessibility requirements.
- 3.33 9. Central administration is aware of and provides support services in the form of reduced course loads without adversely effecting financial aid availability for students with disabilities or resulting in surcharges in the form of increased tuition costs.
- 3.80 13. Policies for a reduced course load for students with disabilities address issues such as access to campus services, financial aid, tuition charges, academic honors, and athletic eligibility.

IV. ACCESS

C. Program

1. Support Services

c. Residential and Dining

- 2.90 12. The institution can provide (*bed shakers*), visual **smoke/ fire** alarms, TTYs (when telephones are provided) and similar items to students with hearing loss.

IV. ACCESS

C. Program

4. Student Organizations

- 3.37 d. A grievance procedure exists that covers the activities of student organizations.

IV. ACCESS

C. Program

6. Graduation Ceremonies

- 3.30 h. Written guidelines exist for determining if requests for modifications of graduation requirements are reasonable.

V. ACADEMIC ACCOMMODATIONS

- 2.13 8. Academic program review exists for degrees for students with disabilities.
- 11. Academic accommodations include:
 - 2.77 (e) electives include learning styles, study skills, or similar study improvement courses
 - 2.37 (f) course waivers
 - 2.97 (g) late drop/withdrawal options
 - 2.70 (j) repeat a course for credit option

VI. ADA/504 COORDINATOR

- 3.57 7. There is a dedicated university administrative unit/office/person monitoring compliance with the Rehabilitation Act and the ADA.

VII. ASSISTIVE TECHNOLOGY

- 3.67 7. Tape recorders, computers, and other adaptive technology is permitted in academic classes.
- 3.23 11. State-of-the-art accessible computer technology is available to assist students in their learning and to provide them equal opportunities with all students.

The following question was an added item that was not accepted.

- 2.53 1. Institutions may choose to offer some accommodations to students for a defined period of time, i.e. one semester or one quarter, to allow the student adequate time to supply documentation.

An explanation about high averages on some tossed items:

If more than 1/3 of the people rated the item less than a 3 then the item was dropped even though the remainder of the of the people may have rated the item high. The criteria for acceptance was two-thirds of the experts rating at 3 or above.

Appendix F

Delphi III

DATE

FIELD(name)
FIELD(street)
FIELD(city, state, zip)

Dear FIELD(salutation):

Dear :

First, I want to thank all of you for the time and effort you have given this study. The many comments that were sent with the Delphi II document demonstrated your thoughtfulness in establishing essential standards for institutional self-evaluation of the Americans with Disabilities Act (ADA).

Enclosed are the instructions and response form for the third and final round of the study. Each standard now has your rating from Delphi II followed by the average rating of the entire panel. Items rated less than 3 by two-thirds of the panel have been eliminated. Additionally, items were eliminated if a majority commented that they were unclear or redundant with previous items. You will notice some items indicate changes to the original standard, with deletions shown in *italics*, and additions shown in **bold**. These changes were generated from your comments and suggestions.

You will see that the instruction page has room for your name and general information. Your name and address only will appear in the final document. The remaining information will remain confidential, but it is very important for the data analysis.

If possible, we would like to complete this portion of the study by the end of August. To do so, it would help if we could receive your completed questionnaire by July 18. You may return the form by mail or fax. If you can respond by fax, it will be greatly appreciated for reducing response time. You have also received this survey by electronic mail. If you returned your results electronically, please disregard this mailing.

Send responses and information sheet to Virginia Reilly.
Please call or e-mail if you have any questions:

FAX: (540) 231-8510.
Phone: (540) 231-7500
(540) 382-0645
E-mail: jenmik@vt.edu

We will mail you a summary of the findings at the conclusion of the study in late September or early October. Thank you for your participation.

Sincerely,

Virginia J. Reilly
ADA Coordinator

Marilyn Lichtman
Associate Professor

Jimmie Fortune
Professor

INSTRUCTIONS

Round #3 of:

Essential Standards for Institutional Self-Evaluation of The Americans with Disabilities Act (ADA)

1. Attached is the response form with the items generated as standards for four-year colleges conducting a self-evaluation of implementation of the ADA.
2. In front of each statement are two numbers. The number on the left is Your Response from Delphi II; the number on the right is the Panel Mean (the average of all participants' responses on Delphi II).
3. Please circle the Panel Mean if you agree with the group.
4. If you do not agree with the Panel Mean, circle Your Response and write a short statement explaining your decision.
5. Please complete the form and return it in the enclosed addressed envelope by August 1997. A prompt response will be of great benefit to the study. Should the envelope become separated from the response form, please send the form to:

Virginia Reilly
ADA Coordinator
336 Burruss Hall
Virginia Tech
Blacksburg, VA 24061-0216

Thank you for the dedication you have given to this study!

Please complete this form and attach it to the Round #3 responses.

Name _____

Address _____

Phone _____ E-mail _____

Job Title _____

Years of experience in disability/ADA work _____ Gender _____

Years in current position _____ Highest earned degree _____

Do you have a disability? (Optional) _____ Yes _____ No _____

Size of institution:

_____ less than 1,000 _____ 1,000 to 4,999 _____ 5,000 to 9,999
_____ 10,000 to 14,999 _____ 15,000 to 19,999 _____ more than 20,000

E-Mail and Fax Reminder, Delphi III

Dear ADA Panel Member,

Thank you for agreeing to serve on the panel of experts to design standards for colleges involved in self-evaluation of their ADA implementation. We have been pleased with the very positive response from the panel members.

Two weeks ago you received the 21 page, Round III portion of the study. We have not received your response, and your input is critical to the success of the study. This is the third and final round which includes your results of the second round and a final rating for each proposed standard. After our analysis of these results, you will receive a summary of the findings. All responses will remain confidential, but your name will appear on a list of contributors at the end of the study. Your prompt response will help facilitate completion of the study. If for some reason you did not receive your Round III document, please contact me and I will mail a new packet.

Thank You for Your Participation,

Virginia Reilly
ADA Coordinator

Sample First Page Round III Instrument:

<Panelist's Name>: Please circle Panel Mean if you agree. If you do not agree with the Panel Mean, circle Your Response, and write a short statement explaining your decision. Your Response is on the left. Panel Mean is on the right.

- I. ADMISSIONS/RECRUITMENT
1. Recruitment materials include general information about the campus, such as:
- 3 | 3.50 (a) programmatic access
- 2 | 2.90 (b) photographs positively promoting students with disabilities and their involvement on campus
- 4 | 3.97 (c) phone numbers for further information about disability resources and services
- 3 | 3.23 (d) a (*statement*) **process** through which students may voluntarily self-identify
2. The admissions process materials include the following:
- 4 | 3.83 (a) contact information for requesting accommodations during admissions interviews/campus tours
- 4 | 3.63 (b) applications **and catalogs** in alternate formats
- 4 | 3.70 3. Preadmission inquiries about disability are not made.
- 4 | 3.80 4. The application process is accessible to people with all disabilities (e.g., interpreters for interviews, accessible locations). (*early registration or assistance with registration*)).
- 4 | 3.73 5. Written guidelines exist which ensure that there are no discriminatory requirements in admissions policies and procedures.
- 4 | 3.77 6. Each academic area that has selective enrollment policies in place has gone through a review of their admissions policies and eligibility criteria to assure that these policies are not discriminatory on the basis of a disability, **or tend to screen out people with disabilities through secondary criteria.**
- 4 | 2.87 7. Admissions policies are flexible enough to give equal or equivalent consideration to a student who has recently been diagnosed with a disability.
- 4 | 3.20 8. **The admissions process considers alternate admission criteria for students with impaired sensory ability.** (*Written policies and procedures exist which ensure alternate admission criteria, or test administration procedures are available to individuals with disabilities upon request (e.g., admissions tests reflect aptitude rather than impaired sensory, manual or speaking skills except where sensory, manual or speaking skills are integral to what the test is designed to measure)*).
- 3 | 2.97 10. (*A cooperative admissions procedure exists between admissions staff and*) **The admissions process includes consultation with** the professional(s) knowledgeable about college students with disabilities.
- 4 | 3.80 11. Any information (*collected*) **received** on disability in the admissions process is kept separately from other admissions records and is held/stored as confidential **by the services for students with disabilities.**
- 4 | 3.70 12. Students are not arbitrarily **denied admission to particular academic programs.** (*kept from majoring in a subject because that subject normally leads to licensing or certification that a student with certain disabilities would not be able to attain*).

DELPHI PANEL

UNIVERSITY SERVICE PROVIDERS/UNIVERSITY AFFILIATED

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Storrs, CT 06269-2064

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Virginia Department of Rehabilitative Services

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Berkeley, CA 94710

Jo Anne Simon
Attorney at Law
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Brooklyn, NY 11217

Appendix G

Statistical Analysis

Categories and Subcategories with Significant Difference by Disability

<u>Category</u>	<u>Mean Sum*</u>		<u>F Ratio</u>	<u>Prob.</u>
	<u>No (n=19) Disability</u>	<u>Yes (n=10)** Disability</u>		
<u>II. ADMINISTRATION</u>				
A. General	49.75	51.69	$F_{1,27} = 5.32$	.03
C. Procedures	51.31	54.82	$F_{1,27} = 3.86$	.06
E. Evacuation and Safety	42.03	46.39	$F_{1,26} = 6.11$	.02
F. Training	26.55	28.17	$F_{1,27} = 3.69$	.07
Overall Category	198.05	213.16	$F_{1,27} = 6.08$	.02
<u>III. SERVICES FOR STUDENTS WITH DISABILITIES</u>				
A. General	139.36	146.18	$F_{1,27} = 3.03$	.09
B. Professional Expertise	27.76	29.68	$F_{1,27} = 3.00$	.09
D. Data Collection/Self Monitoring	34.24	36.22	$F_{1,27} = 5.62$	.03
E. Documentation	16.88	18.32	$F_{1,27} = 3.11$	.09
Overall Category	233.15	245.49	$F_{1,27} = 4.29$	.05
<u>IV. ACCESS</u>				
B. Physical/Structural/ Transportation	98.98	106.42	$F_{1,27} = 6.46$	.02
Overall Category	404.80	443.41	$F_{1,27} = 3.10$	.09

*The sum of each panelist's individual scores for each category or subcategory. Categories and subcategories with fewer items have lower sum scores.

**Missing data: One panelist did not reveal disability status.

Categories and Subcategories with Significant Difference by Panel Attributes

Categories and Subcategories with Significant Difference by Gender

<u>Category</u>	<u>Mean Sum</u>		<u>F Ratio</u>	<u>Prob.</u>
	<u>Female(n=19)</u>	<u>Male(n=11)</u>		
II. ADMINISTRATION C. Procedures	<u>53.78</u>	50.57	F _{1,28} = 3.46	.07

Categories and Subcategories with Significant Difference by Affiliation

<u>Category</u>	<u>Mean Sum</u>		<u>F Ratio</u>	<u>Prob.</u>
	<u>Univ.(n=21)</u>	<u>Agency(n=7)</u>		
III. SSD D. Data Collection/ Self Monitoring	34.35	<u>36.45</u>	F _{1,28} = 5.85	.02

Categories and Subcategories Correlated Using Pearson's Product Moment Correlation Coefficient by Years Experience (only significant results presented)

<u>Category</u>	<u>Correlation Coefficient</u>	<u>Prob.</u>
III. SSD C. Part Time/Graduate Students	.3550	.05

Categories and Subcategories Correlated Using Pearson's Product Moment Correlation Coefficient by Years in Current Position (only significant results presented)

<u>Category</u>	<u>Correlation Coefficient</u>	<u>Prob.</u>
III. SSD D. Data Collection/Self Monitoring	.4252	.02