Abstract: A program improvement cycle for increasing the quality of postsecondary programs for students with disabilities is described. Nine promising practices were selected from a review of promising practices submitted by 21 model demonstration projects that have been charged with improving the quality of postsecondary education for students with disabilities. These nine practices were divided into three phases of the program improvement cycle: (1) assessing the climate of the institution; (2) delivering professional development activities to administrators, faculty and students; and (3) building capacity for institutional change. Focus group comments from faculty and students are infused throughout the article to illustrate the beliefs and recommendations of these two primary stakeholders.

Thousands of recent high school graduates are heading for college with high hopes for eventually graduating. However, more than 26 percent of freshmen at four-year colleges do not return for their sophomore year (www.osu.edu/osu/newsrel/Current/00-09-18). Minority students and students with disabilities, in particular, make up a large number of those dropping out. Although the number of students with disabilities seeking access to postsecondary programs increased dramatically over the past decade (Blackorby & Wagner, 1996; Stodden & Dowrick, 2000), many in the higher education community are still struggling with how to support students with disabilities effectively, so that these students can enter and complete their postsecondary programs.

Stodden (1998) concluded that even when people with disabilities overcome barriers to enrollment in postsecondary education, disturbing evidence suggests that many of these students experience difficulties completing their programs of study. Failure for students with disabilities to obtain appropriate academic services, supports and programs may cause them to achieve grade-point averages well below those of their non-disabled peers. Lower academic standing may, in turn, hasten their withdrawal from postsecondary settings (Gajar, 1998). Numerous researchers have challenged institutions of higher education to improve the quality of postsecondary services and supports provided to students with disabilities (Gajar, 1998; Stodden, Dowrick, Stodden & Gilmore, 2000; Stodden & Dorwick, 2000). In order for such improvement to take place, both quantitative and qualitative research techniques need to be applied to examine the characteristics and needs of the students, the faculty, and the postsecondary setting itself. In
order for college students with disabilities to be successful, they are likely to need more and better services, supports and programs.

Providing supports and services to postsecondary students with disabilities is a relatively new concept. Many faculty members outside the fields related to disabilities, education, and rehabilitation may not be aware of the many services available to assist college faculty (Mellard, 1994; Minskoff, 1994). As one faculty member reported in a focus group, "This topic of disability has never been discussed... I feel as faculty we are left in the dark." (Faculty member, personal communication, 2/29/2000).

The need to improve the climate of higher education programs for students with disabilities has been the focus of a $5,000,000 demonstration grant program funded by the Office of Postsecondary Education, U.S. Department of Education. The purpose of this grant program is to provide technical assistance and professional development activities for faculty and administrators so that faculty and administrators will take a proactive role in providing quality postsecondary educational opportunities for students with disabilities. In order to document the activities of this grant program, the staff of these 21 grants shared "promising practices" that they are implementing to improve the quality of education across a minimum of 30 campuses nationwide. A matrix of these promising practices was developed that describes the characteristics and intended outcomes of the 63 different strategies shared.

**Selection Criteria and Description of Promising Practices Categories**

Several strategies were implemented to select the "promising practices" featured in this article. Peters and Heron (1993) in defining "best practices" suggested that criteria from the literature be established and applied to all potential best practices under consideration to ensure that these practices represent a reliable, valid and essential aspect of a program. These five criteria include: (a) the practice is well grounded in theory; (b) the practice is supported empirically through studies that are internally and externally valid; (c) the practice has some underpinnings in existing literature; (d) the practice is associated with meaningful outcomes; and (e) the practice is socially valid. The authors applied these criteria to the practices highlighted in this article.

A focus group with postsecondary students with disabilities was conducted to validate the practices from the perspective of these key stakeholders. During the focus group, ten students with disabilities responded to questions such as "From your experiences, were faculty knowledgeable and understanding about common accommodations related to your disability?" and "What should the university administration, as a whole, do to better support students with disabilities?" The focus group responses guided the selection of promising practices to ensure that the featured practices are socially valid. Finally, this article is being co-authored by persons with and without disabilities and disability service providers. Through the writing and review process, each practice is continually validated from the perspective of the end user.

These promising practices were categorized into three broad areas: (1) assessing the climate of the department, college or entire institution, (2) professional development of administrators, faculty and students, and (3) building capacity for institutional change. Table I describes a
program improvement cycle that consists of these three areas outlined above and provides examples of the most frequently reported practices in each of these three areas.

The first area, assessing the climate, consists of a variety of strategies that are being implemented to conduct a baseline assessment of current knowledge, attitudes and skills of administrators, faculty and students. Focus groups, surveys and structured interviews are examples of practices used to gather baseline information about a department, college, or institution. The second area, professional development, is divided into four broad sections: on-site training that is delivered face-to-face, self-advocacy training that is provided to students, technology-based training, and web accessibility/distance education. The third area focuses on building capacity for institutional change so that a program improvement cycle is established that continually monitors the climate and delivers a wide variety of professional development activities. Through this cycle, the institution continually assesses the climate, plans professional development activities, and issues administrative directives so that faculty and administrators have the knowledge, skills and attitudes to deliver the highest quality education for all students, including students with disabilities.

Assessing the Climate

Before planning professional development activities, it is important to assess the climate of a department, college or entire campus community. By gaining an understanding of the prior experiences, needs, and preferred training formats of administrators, faculty and students, disability service providers can plan appropriate topics and training opportunities. Also, service providers can find out when to plan face-to-face training opportunities so they are conveniently scheduled for faculty. Various formats should also be provided. For example, some faculty members may prefer to have access to critical information through web sites enabling them to access information when they need it.

The strategies that were most often reported by the 21 institutions involved in the postsecondary grant program to assess the climate were focus groups, surveys and advisory committees. Several institutions also reported using informal strategies such as interviews and faculty meetings.

Focus Groups

Approximately 50% of the universities and colleges involved in the postsecondary grant program used focus groups to assess the climate of a department. A focus group is a form of qualitative research that uses a group interview in which 8-10 participants are asked a series of structured questions. The questions are developed in advance and all address a pre-determined topic (Morgan, 1998).

Some postsecondary institutions conducted focus groups which included only faculty members, while others conducted separate focus groups with faculty, students with disabilities and students without disabilities. Table 2 provides a sample of the focus group questions asked at one institution. The advantage of doing three focus groups with faculty, students with disabilities and students without disabilities was that the climate was assessed from three perspectives. If only students with disabilities reported that too much content was covered in class, the stakeholders
were not sure if the students had poor note taking skills or if too much content was covered in class. However, when students without disabilities validated the concerns raised by students with disabilities, faculty were more likely to address the concern.

Within faculty focus groups, faculty reported that they often do not know if their students have disabilities. Other faculty members reported that they do not have an understanding of how the need for accommodations should be disclosed and negotiated, as evidenced by this statement: "I do not want to give accommodations without the proper identification because it is not fair to the other students. It seems that the lines of communication are broken.... How do I get the information to make an informed decision?" (Faculty member, personal communication, 5/24/2000).

Other faculty members were not aware of needed accommodations, or felt that these accommodations were giving an unfair advantage to the students with disabilities. For example, one student said: "I do not look disabled. Teachers think there is nothing wrong with me. They think that I'm getting an unfair advantage" (Student, personal communication, 2/28/2000). Some students reported that some faculty members resist providing needed accommodations that may enhance the education for students with disabilities: "People respond to disability in different ways. That is why some students try to get through classes without saying anything to you. All they need is one bad experience and they are going to try to avoid saying anything to you." (Faculty member, personal communication, 2/29/2000).

A number of faculty members appeared to be frustrated by the inconsistent practices of students with disabilities enrolled in their classes. Service providers can suggest some strategies that may improve communication between faculty members and students. For example, faculty could add a disability statement to the syllabus that invites students to discuss their need for accommodations with faculty. Service providers can also assist students in learning how to explain their need for accommodations in an honest and confidential manner so faculty members gain an increased understanding of the particular learning needs of their current students, and eventually gain a more comprehensive appreciation for the complexities of disabilities.

One of the most common outcomes of the focus group process is the development of a systematic action plan that capitalizes on the strength of faculty while addressing the concerns of all stakeholders. Other outcomes may include the identification of training needs and preferred training formats. Once the training needs and formats are identified a customized training program can be planned and delivered.

**Surveys**

Of the 21 institutions involved in the postsecondary grant program, 43% used survey research techniques to obtain input from faculty members and administrators regarding faculty needs and preferred training formats. Sample questions follow:

1. Do you include a statement on your syllabi about accommodating students with disabilities? a-Yes b-No
Please rate the following questions using the scale below:

1-Strongly agree 2-Agree 3-Neutral 4-Disagree 5-Strongly Disagree

2. When I have a student with a disability in my class, I:
   a. Know my responsibilities as an instructor in making accommodations.
   b. Know the student's rights and responsibilities.
   c. Know the role of the Office for Disability Services in coordinating accommodations.
   d. Am willing to adapt my instructional strategies and course materials to meet students' needs.

At one institution the survey results indicated that approximately 80% of the faculty members reported that they do not include any statements related to accommodating students with disabilities on their syllabi. (A typical syllabi statement indicates a faculty member's willingness to provide reasonable accommodations to a student with a disability.) These statements serve several functions. First, they can be considered a way of opening the door to communicating with students, thereby decreasing the likelihood of inappropriate or inefficient accommodations being made while increasing the chance of meeting the student's needs. Second, syllabi statements are a requirement of the American with Disabilities Act. It is apparent that faculty at the above institution are not aware of one of the most basic steps needed to accommodate students with disabilities in postsecondary settings.

**Advisory Committee**

Of the 21 institutions involved in the postsecondary grant program, 15% reported using advisory committees and forums to discuss issues regarding the quality of education for students with disabilities. For example, some institutions have used their advisory boards to determine the types of web-based materials needed to be developed by the institution. By collaborating with potential users and supporters, project staff and faculty members have developed increased awareness of issues related to accommodating students with disabilities.

**Professional Development for Administrators, Faculty and Students On-Site Training**

"An individual without information can not take responsibility; an individual who is given information can not help but take responsibility" (Brownell, 2000). One method of providing information to administrators, faculty members and students is through on-site training. On-site training of faculty and teaching assistants is emerging among our nation's universities and colleges as a promising practice for improving the quality of higher education for students with disabilities. The literature is replete with studies and analyses which examine the effectiveness of employee training programs for skilled and unskilled labor. Organizations utilize on-site training programs to enhance professional development, improve accountability, and increase productivity. A variety of effective training methods, both informal and formal, are described in the literature.
The necessity for on-site training in postsecondary education is evidenced by the following statements: "I think it should be made clear what is optional and what is required. How much choice do you want to leave the faculty? I do not think the faculty know their rights." Still another professor commented, "I think that one of the problems is that we do not know why students are learning disabled." (Faculty member, personal communication, 05/24/00).

Students with disabilities have also shared many anecdotes that underscore the potential value such training could provide. As one student confirmed "Someone in the field of disabilities should come over and lecture. Most people do not have the knowledge they need on the subject. I mean, I do not use Braille, but faculty always assume I do because I am visually impaired. I think that people need to think on their feet. Their stereotypic views need to be expanded" (Student, personal communication, 08/28/00).

In order to bring faculty members in contact with the topic of disabilities, and also give them the skills they need, the techniques of workshops, summer institutes, and new faculty orientations were used by eleven of the twenty-one (52%) projects. The components of the training include (a) building knowledge, (b) encouraging communication, (c) increasing experience, and (d) evaluating performance outcomes. The overall goal of this training is to raise awareness among faculty with regards to the needs of students with disabilities, to demonstrate or discuss appropriate teaching strategies for use with students with disabilities, and provide an overview of existing campus resources. It may be important for on-site training programs to assist faculty in developing their syllabi disability statements.

Finally, when done effectively, on-site training can reduce/eliminate a faculty member's concerns about teaching students with disabilities. As one faculty member put it, "When you are teaching, you are in a different mind set. You are thinking about teaching and the materials. You are not ready to deal with accommodations" (Faculty member, personal communication, 5/24/00). Assuming the faculty member has attended training, s/he will have considered guidelines on accessibility, course design, and procedures for student performance evaluation prior to having students with disabilities in class. Effective training can enable a faculty member to achieve his/her primary goal in a way that enables all students (those with and without disabilities) in the class to benefit.

Most large universities utilize teaching assistants (TA's) to instruct students in undergraduate coursework. Thus, approximately 50% of the projects have TA's participating in the same on-site training programs as faculty. Faculty members should account for how their TA's plan courses, present material, and evaluate student performance. In such top-down systems as institutions of higher learning, we should expect faculty members to insure guidelines and procedures are being followed and implemented by TAs appropriately.

**Student Orientation and Self-Advocacy Training**

The major responsibility for a student's academic success lies with the student. If s/he has a disability, in order to be successful academically, s/he must learn to advocate for his or her needs. Approximately 19% of the projects focus on providing orientation classes for freshmen that include information about places where students can get assistance, tips on communicating
with faculty members, and study skill techniques. More specifically, these training opportunities teach students with disabilities to recognize their individual needs, utilize alternative learning strategies, and appropriately advocate for their needs.

Faculty members reported that they want training when they need it and that is when they are face-to-face with a student who needs accommodations. Some students reported that they feel students can be the best training resource for faculty. Providing self-advocacy instruction and support has been one promising practice that has been implemented at a number of institutions of higher education. Students with disabilities have said "Students with disabilities need to get advice on how to deal with their disability, like a mini-lecture on how to talk to teachers" (Student, personal communication, 2/9/00). Barriers such as lack of time to meet, and pressure to meet class requirements, often interfere with effective self-advocacy support groups. By offering these self-advocacy skills as part of a credit-bearing course, it is possible to deliver and enhance students' self-advocacy skills needed to navigate the university while assisting them in gaining their elective course requirements.

Once students have the skills to explain their disabilities, negotiate their accommodations assertively, and assist in the coordination of those accommodations, they can become change agents. They can participate in the quality of the education they receive. Students can meet with faculty members, explain their disabilities and accommodations, and negotiate how to best coordinate delivery of those accommodations. When students take active roles in coordinating their accommodations, not only are they assisting faculty members (in gaining the skills to deliver a high quality education to a more diverse group of students), but, students are getting the skills they will need in future employment settings. One effective guidebook for assisting students to understand their disabilities and to explain their needs for accommodations is "Self-advocacy and conflict resolution training: Strategies for the classroom accommodation request" (Rumrill, Palmer, Roessler & Brown, 1998).

**Technology-Based Training**

Technology-based training uses computer hardware and software, as well as related technologies, to transfer information. Over the last few decades the use of technology has soared. Over recent years, technology has been increasingly used for educational training purposes.

Several factors have been attributed to the expansion of technology-based training. Perhaps the most convincing factor is that technology reduces or eliminates barriers for people with disabilities. Typewriters have been traded for word processors; e-mail has, to a great extent, supplemented or replaced hand-written letters, and the Internet has enhanced research capabilities, all of which enable people with disabilities to handle a larger variety of tasks more independently.

Further, technology creates a bigger classroom. Technology increases access for students and faculty in rural areas, students and faculty with disabilities, and nontraditional students (i.e., students with family, time, and travel limitations) to educational opportunities. Finally, many students and faculty believe in the benefits of technology-based training, and are eager for more information to be delivered in this fashion. As one student put it, "the notes for my classes were
not posted on the Internet - that would have been helpful" (Student, personal communication, 04/13/00).

When faculty members at one institution were asked "What suggestions do you have for improving the teaching-learning climate for students with disabilities?" the responses favored web resources because faculty members use the web to clearly post information, notes, and due dates for projects and tests. When students were asked what suggestions they had for improving learning experiences, most responded with a request for more information being available on the Internet (Student focus groups, personal communication, 02/09/00 to 05/10/00).

When students were asked what services help them learn the content, one student replied, "I used the Internet. They posted homework and practice exams. My lecturer has his web page linked to many other pages" (Student, personal communication, 04/13/00). Another student stated, "A lot of my classes are using the Internet. I have had notes and sample quizzes on the web. When I already have the notes printed out [in advance of the class session], I can write and listen to what the teacher is saying" (Student, personal communication, 04/13/00). Yet another student focused less on the "advance organizer" functions of technology, and more on the delivery and presentation style: "Using technology keeps students awake during class" (Student, personal communication, 04/13/00).

Consistent with the aforementioned comments from focus groups, all twenty-one projects (100%) have been using some form of technology to provide faculty training on a variety of topics. These topics include, but are not limited to: Universal Instructional Design, accommodations, adaptive equipment, campus resources, and teaching strategies for instructing students with disabilities.

**Distance Education**

One such form of technology-based training is distance education. Distance education can be either synchronous or asynchronous instruction. It is defined as learning situations wherein the students and the teacher are separated by physical distance. Technology can be used to either complement or as a substitute for face-to-face contact (Engineering Outreach, 1995).

According to Wheaton, Chovan, O'Braint, & Howell (2000), over half of all universities and colleges in the United States are or will be offering distance education courses. Given the relatively high percentage of people with disabilities reporting "being on-line" (43%), the proportion of those individuals that report the Internet has significantly improved the quality of their lives (48%), and the proportion of those individuals who feel connected to the world (44%), it is safe to assume that the use of distance education will continue to grow among individuals with disabilities (Taylor, 2000).

Several research studies have been conducted on the effectiveness of distance education in relation to traditional classrooms (Engineering Outreach, 1995; Knobloch, 2000). All of the studies reviewed revealed no significant differences between the educational outcomes of learners in distance education courses and learners in traditional classrooms. And learners in
distance education courses experienced high student satisfaction and positive attitudes (Engineering Outreach, 1995; Knobloch, 2000).

It is important to note that the methods and technologies used in distance education must meet the same pedagogical standards as would be expected in typical courses. For example, methods appropriately matched to the instructional goals are expected, whether the course is delivered through distance education or face-to-face contact. In both formats, there should be student-to-student contact, and timely response from teachers. Learning issues, rather than the presence or absence of technology need to drive the standards and activities within learning situations (Engineering Outreach, 1995; Knobloch, 2000). Further, additional educational outcomes research needs to be done for students with disabilities who participate in distance education courses (Stodden, 2000).

In keeping with the research described above, nine of the projects (42.9%) are infusing distance education into the scope of their activities. The goals of distance education as implemented by these projects are (a) to educate faculty about the value of effectively accommodating students with disabilities, (b) to supply faculty with the skills needed to adapt all of their available resources to accommodate students with disabilities, and (c) to make faculty aware of a wide range of other resources (e.g., teaching strategies for diverse learners, assistive technology, legal issues, campus policy, and procedures regarding accommodating students with disabilities).

**Web Accessibility**

Another aspect of technology-based training is web accessibility. Web accessibility is the practice of making web pages usable by all people regardless of disability. "The power of the Web is in its universality. Access by everyone regardless of disability is an essential aspect" (The Ohio State University Accessible Web Design).

Over 54 million people living in the United States have a disability (http://www.halftheplanet.com/department/news/2000). That number is likely to rise given our increased life expectancy. At the same time, an increasing number of people, institutions and companies rely on the web to conduct personal affairs, class, and business. Yet, the proportion of web sites that are fully accessible to people with disabilities is relatively small. In fact, given the propensity for web designers to use flashy graphics, the proportion of accessible sites is decreasing (Gates, 1997).

A recent study conducted at the Ohio State University revealed that only one-third (36.3%) of the web pages registered with the university are accessible. The authors of the study further noted that most of the accessible web pages "lacked many of the design elements commonly associated with quality web design" (Wheaton, Chovan, O'Briant & Howell, in press).

Linda Hazzan, vice president of marketing for SoftQuad, underscores the necessity of creating accessible web pages by stating, "Inaccessibility goes beyond just not being able to surf the Web for fun, it jeopardizes people's jobs when they are not able to operate on the internet on an equal basis as their colleagues." Jim Miller, The World Wide Web Consortium's technology and society domain leader added, "...it is very depressing to think that advances in technology are
Not surprisingly, approximately 50% of the projects are including accessible web design activities into their work. Furthermore, five (23.8%) of the projects have created centers whose primary purposes are to train and educate people in development of accessible web pages, distance education courses, and on-line course segments. These projects ensure that accessibility information and technical assistance are widely available and usable.

**Building Capacity for Institutional Change**

The major focus of many of the projects funded by the Office of Postsecondary Education is building capacity for institutional change that will be sustained beyond the grant cycle. Many of the projects embark on endeavors that have the potential to improve the university teaching and learning climate in relation to students with disabilities. Administrative and faculty directives, leveraging resources, and retention studies seem to hold the most promise for advancing institutional change.

**Administrative and Faculty Directives**

Administrative and faculty directives, informing faculty of policies and institutional practices, is being used by seven (33%) of the projects. Activities encompassed in administrative and faculty directives include (a) written notices sent from the Provost's office describing the university's procedures and guidelines for serving students with disabilities, (b) faculty training sponsored by the Provost's office, and (c) distribution of an informational package to all faculty. Through these activities, targets for improvements are identified and faculty will have a clearer understanding of their roles. In the long run, polices and practices will be established which clearly support students with disabilities.

**Leveraging Resources**

Leveraging resources is the practice of negotiating resources and cooperation between and among offices. For example, the Partnership Grant at the Ohio State University provides free technical assistance for designing accessible web sites. This technical assistance is available to all staff and faculty who have received funds from Technology Enhanced Learning and Research (TELR) grant program. In exchange for this technical assistance, TELR required that all their grant recipients assure that all of their web sites have accessible web pages, including those available as part of their distance education courses.

**Student Retention Studies**

Finally, student disability retention studies (studies that determine attendance and drop out patterns of students with disabilities), were initiated at three (15%) of the project universities. The studies all investigate differences in retention and program completion between students with and without disabilities, as well as examine the factors that contribute to student attrition. As one student aptly stated, "I think it [study of retention patterns] is necessary to see where we
are failing" (Student, personal communication, 08/28/00). Once retention rates are established, data needs to be collected on other key aspects of retention - identification and use of effective strategies and supports used in continued postsecondary education and employment for students with disabilities (Stodden, 2000).

**Conclusion**

Clearly, a variety of strategies are being implemented across the country to improve the quality of postsecondary education for students with disabilities. The strategies described within this article provide a starting point for administrators, faculty, students and disability service providers, to begin a program improvement cycle. Through this cycle faculty, students and staff can work together to create positive outcomes for students with disabilities.

Many students with disabilities do receive quality postsecondary educations. These students successfully negotiate their accommodations, as evidenced by the following student focus group comments: "Once they understand you have a problem, they [faculty] usually work with you. It means a lot to sit down and try to come up with accommodations" (Student, personal communication, 2/28/2000). "If you show that you are willing to work hard, they [faculty] are willing to help you, and go beyond the call of duty" (Student, personal communication, 2/28/2000).

Many faculty members and students work together to achieve quality postsecondary educations for students with disabilities. Institutions of higher education need to implement a quality improvement cycle that continually (1) assesses the climate, (2) delivers professional development opportunities for administrators, faculty and students, and (3) builds capacity for ongoing institutional change. Through this program improvement cycle, institutions can continually monitor and evaluate the quality of their programs, services and supports for students with disabilities.

**References**


Taylor, H., *The Harris Poll #30, How The Internet is Improving the Lives of Americans with Disabilities*.

Table 1: Sample Promising Practices

Promising Practice: Assessing the Climate

**Characteristics:** Focus Groups, Surveys, Structured Interviews

Collect information from faculty and/or students to gain an understanding of their needs, frustrations, and recommendations for improving the teaching-learning climate for students with disabilities.

**Potential Outcomes:**

1. Perception and critical training needs of faculty and students identified
2. Preferred training formats identified
3. Baseline data collected

Promising Practice: Professional Development for Administrators, Faculty and Students

**Characteristics:** On-Site Training such as Workshops for Faculty, Administrators and Teaching Assistants (TA)

Conduct interactive workshops on topics identified as high interest and needed by faculty and administrators.

Faculty and Administrators are provided with in-depth information on instructional strategies, accommodations, resources, and supports to better teach students with disabilities.

**Potential Outcomes:**

1. Increased faculty awareness of instructional strategies, accommodations, resources & supports to educate students with disabilities
2. Instructional practices of workshop participants change as a result of participation
3. Students increase their rate of learning

Promising Practice: Self-advocacy Training for Students

**Characteristics:** Teach self-advocacy skills to students with disabilities to empower them to disclose/negotiate accommodations appropriately, thereby building a positive working relationship with faculty and improving the quality of education.
**Potential Outcomes:**

1. Students develop relationships with faculty based on honest understanding of needs
2. Students complete course requirements
3. Students learn course content
4. Faculty gain awareness, skills and attitudes needed to teach students with disabilities

**Promising Practice: Technology-based Training**

**Characteristics:** Provide information delivered via the on-site training to faculty using an on-line format.

**Potential Outcomes:**

1. Increased faculty awareness of instructional strategies, accommodations, resources & supports to educate students with disabilities
2. Instructional practices of workshop participants change as a result of participation
3. Students increase their rate of learning

**Promising Practice: Web Accessibility and Distance Education**

**Characteristics:** Deliver training to faculty for making web-enhanced courses accessible to students with disabilities

**Potential Outcomes:**

1. Faculty web pages and distance education courses will be accessible to students with disabilities
2. Students can access web to gain quality postsecondary education

**Promising Practice: Building Capacity for Institutional Change**

**Characteristics:** Administrative Directives

Written notices are distributed across campus that describe the policies, guidelines, and practices that enhance the education of students with disabilities

**Potential Outcomes:**

1. Faculty/staff informed of university policy
2. Faculty/staff have clear guidelines of their responsibilities in making the campus accessible

**Promising Practice: Student Attrition/Retention Studies**
Characteristics: Create database pertaining to student retention/attrition and compare/contrast retention figures among students in diverse groups and different programs.

Potential Outcomes:

Program improvement efforts are data-based and result in systematic action plan that improves the quality of higher education for students with disabilities

**Table 2**: Sample Focus Group Questions

**Question 1**

Faculty: What accommodations and learning needs have you been asked to make for students with disabilities in your classes? (How did that work out?)

Students with Disabilities: How do you explain your accommodations and learning needs to your professors?

Students without Disabilities: How do you explain your learning needs to your professors?

**Question 2**

Faculty: What would you tell students is the best way to explain their learning needs or to request needed accommodations from faculty?

Students with Disabilities: Under what teaching situations do you learn best? How have your instructors attempted to respond to your individual learning needs?

Students without Disabilities: Under what teaching situations do you learn best? How have your instructors attempted to respond to your individual learning needs?

**Question 3**

Faculty: What information do faculty need about disability and accommodation?

Students with Disabilities: What type of teaching methods (lecture, small group discussions, large group discussions, etc.) enhances your understanding of the course content?

Students without Disabilities: What type of teaching methods (lecture, small group discussions, large group discussions, etc.) enhances your understanding of the course content?

**Question 4**
Faculty: What is the best way to provide faculty with the information or assistance that they need?

Students with Disabilities: What types of specific supports and services do you anticipate needing throughout your higher education experience? What types do you anticipate needing as you enter the job market, in order to reach your short-and long-term employment/career goals?

Students without Disabilities: What types of specific supports and services do you anticipate needing throughout your higher education experience? What types do you anticipate needing as you enter the job market, in order to reach your short-and long-term employment/career goals?

Question 5

Faculty: What can faculty do to improve the educational experience of students with disabilities in your college (department)?

Students with Disabilities: What suggestions do you have for improving the teaching methods for students?

Students without Disabilities: What suggestions do you have for improving the teaching methods for students?

> Commentary : Mike Hoenig
> University Hospital School; Iowa City, Iowa

"Promising Practices - Improving the Quality of Higher Education for Students with Disabilities" thoroughly discusses the importance of faculty awareness of the needs of students with disabilities. The involvement of persons with disabilities as co-authors and validators of practices studied is impressive. The authors gathered data by holding focus groups of students with and without disabilities, a good idea that yielded an excellent basis for comparison. The Professional Development Activities discussion was very interesting as it revealed that teachers tend to focus on teaching and that other means, such as summer institutions, were needed to help them focus on accommodation. Self-advocacy training for students with disabilities being offered for credit was also a good idea. The discussion on technology-based training, distance education, and web accessibility is very good. It points out the benefits of technology while acknowledging access barriers. Promising Practices acknowledges that many students with disabilities gave good experiences and that faculty often goes beyond the call of duty when they see a student with a disability working hard.