Changing the Culture (CTC): A Collaborative Training Model to Create Systemic Change

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Abstract

The goal of the Changing the Culture project at the University of Rhode Island is to develop a multi-institutional, statewide network of disability resource mentors, whereby faculty and administrators encourage their department colleagues to develop policies and teaching practices that are inclusive of students with disabilities. The CTC program is systematically increasing the number of disability resource mentors in private and public postsecondary institutions in Rhode Island. One of several outcomes of the project’s seminar, and the resulting day-to-day presence of disability resource mentors, has been increased system-wide inclusiveness for students with disabilities.

Changing the Culture (CTC) project’s primary goal is to work with faculty and administrators at Rhode Island’s postsecondary institutions to develop more inclusive and supportive learning environments for students with disabilities. More specifically, the project seeks to prepare at least one faculty member in each academic department (or one administrator in each administrative unit) to serve as a disability resource mentor to colleagues and as a liaison to offices of disability services.

To prepare for their roles, disability resource mentors participate in a four-day workshop in which they acquire information about various disabilities, examine assumptions and attitudes about students with disabilities, and consider accommodations that enable students with disabilities to participate fully in postsecondary programs. Following the workshops, disability resource mentors talk with colleagues in their departments to raise consciousness about the challenges students with disabilities face, increase knowledge about disabilities, consider what various accommodations make possible, and occasionally help resolve conflicts if someone is unwilling or hesitant to provide the requested accommodations.

Underlying this approach to faculty development are three core observations and assumptions. First, the CTC project team recognizes that several people play roles in how welcoming and inclusive a college or university is for students with disabilities. That is, while faculty play a prominent role, students also interact with administrators and staff in admissions offices, financial aid offices, libraries, housing offices, deans’ offices, career services and myriad other offices. It seems important, therefore, to have disability resource mentors in these offices as well as among faculty.
Second, CTC’s approach acknowledges that departments constitute important decision-making entities for faculty and administrators. That is, faculty set programmatic goals, curricular requirements, and many of the academic and administrative policies that affect students within departmental units. Administrators, too, initiate and often determine policies within their departments. Having a person knowledgeable about disabilities present when department members discuss such matters increases the likelihood that goals, requirements, and policies will include rather than exclude students with disabilities.

Finally, CTC’s approach recognizes the power of colleague relationships. While the importance of these relationships is documented in research on peer mentoring (Kerka, 1998), the emphasis in this project derives primarily from the observations of CTC team members who have worked with faculty for more than 30 years. Colleagues within a department may disagree, argue, and debate, but for the most part, they listen to and respect one another. Therefore, if minds need to be changed, departmental colleagues seem good candidates for changing them.

### Table 1

**Outline of Four-Day Seminar to Train Disability Resource Mentors**

<table>
<thead>
<tr>
<th></th>
<th>Morning</th>
<th>Afternoon</th>
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</thead>
<tbody>
<tr>
<td><strong>Day One</strong></td>
<td>• Introductions</td>
<td>• Introductions</td>
</tr>
<tr>
<td></td>
<td>• Attitudes &amp; Stigma</td>
<td>• Short Film: “Big Man/Big Voice” (Langley, 1997)</td>
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<td></td>
<td>• Student Panel</td>
<td>• Legal Considerations: Rights &amp; Responsibilities, Civil Rights, What Is Reasonable?</td>
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<tr>
<td></td>
<td>• Excerpts: “When Billy Broke His Head” (Golfus &amp; Simpson, 1994)</td>
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</tr>
<tr>
<td><strong>Day Two</strong></td>
<td>• Vision Disability, Simulation &amp; Scenario Discussion</td>
<td>• Film: “Voices in a Deaf Theatre” (Meisel, 1996)</td>
</tr>
<tr>
<td></td>
<td>• Hearing Disability, Simulation &amp; Scenario Discussion</td>
<td>• Physical Disability</td>
</tr>
<tr>
<td></td>
<td>• Out &amp; About Campus Simulation Activity</td>
<td>• Out &amp; About Campus Simulation Activity</td>
</tr>
<tr>
<td></td>
<td>• Follow-Up &amp; Scenario Discussions</td>
<td>• Follow-Up &amp; Scenario Discussions</td>
</tr>
<tr>
<td><strong>Day Three</strong></td>
<td>• How Students Process Information</td>
<td>• Film: “Misunderstood Minds” (Kirk, 2002)</td>
</tr>
<tr>
<td></td>
<td>• Learning Disabilities &amp; ADHD</td>
<td>• LD&amp;ADHD Documentation</td>
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<tr>
<td></td>
<td></td>
<td>Scenario Discussions</td>
</tr>
<tr>
<td><strong>Day Four</strong></td>
<td>• Film: “Depression &amp; Manic Depression” (Guth, 1996)</td>
<td>• DSS Data and University Policies</td>
</tr>
<tr>
<td></td>
<td>• Mental Health Disability, Simulation &amp; Scenario Discussion</td>
<td>• Bringing the Information Home, What Will You Do?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Summary Discussion or Alumni Mentor Panel</td>
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</table>
Training for Disability Resource Mentors

The goals for CTC’s four-day training seminar are to enable disability resource mentors to initiate and facilitate the following activities with their colleagues:

- To discuss multicultural aspects of disability and address negative stereotypes that are barriers to people with disabilities;
- To explain disability laws as related to higher education and interpret the concept of “reasonable accommodations” for a range of disabilities;
- To summarize research on learning and the implications for teaching generally and for teaching students with disabilities specifically;
- To convey basic information about various disabilities (visual, hearing, physical, learning, attention, and mental health) and about accommodations that help students with these disabilities succeed;
- To engage colleagues in thinking creatively about ways to enable students with disabilities to meet department and program requirements.

Table 1 outlines the topics and schedule for the CTC disability resource mentor training.

The CTC training methods used are built upon constructivist and social constructivist views of learning, which posit that people are not simply passive recipients of new information, but rather actively engaged in constructing their understanding of new knowledge (Bruning, 1994; Donovan, Bransford, & Pellegrino, 1999; Fosnot, 1996; Svinicki, 1999). Prior learning and experience play major roles in the construction process because people interpret new information in light of what they already know. Interactions with others are also key because they enable learners to gain additional perspectives and interpretations. Therefore, the CTC training seminar emphasizes active involvement, experiential activities, reflection on experience, and interaction with peers.

Each of the sessions outlined in Table 1 begins with a short presentation of basic information about the topic under focus. The opening session on attitudes, for example, identifies and shows examples of stereotypical representations of persons with disabilities in children’s literature, advertising, television, and film. The session on legal issues outlines key provisions of laws affecting persons with disabilities. Sessions on the various categories of disability begin with an overview of the characteristics, challenges, and accommodations pertinent to each. While these opening presentations involve considerable interaction in the form of questions and answers, the CTC team has worked to keep them as brief as possible (under 30 minutes) in an effort to quickly move on to activities that invite more active involvement and interaction among participants.

Since, simulation experiences are among those highly involving activities, most of the sessions include a simulation. For example, specially prepared “blocker glasses” simulate vision disabilities; an audiotape simulates degrees of hearing loss. A reading exercise simulates the difficulties persons with dyslexia have decoding reading assignments and written exams. A more substantial simulation occurs the afternoon of the second day. Here the CTC team distributes wheelchairs or crutches to some participants to simulate mobility disabilities, “blocker” glasses to simulate vision loss to others, and tinnitus maskers or ear protectors to simulate hearing loss to the remaining participants. In teams of two, participants try to make their way around campus to two or three places – the library, a faculty office, a classroom, for example. In follow-up discussions and in their evaluations, participants note that this is one of the most powerful parts of the seminar. Many express surprise at how difficult it is to navigate campus. Some report interactions in which they felt they were treated differently because of their “disability.” Most agree that they understand the challenges faced by students with disabilities much more fully as a result of the simulation.

Scenario discussions, another key element in the training seminar, provide opportunities for disability resource mentors to prepare for the kinds of interactions they might have with colleagues. The CTC training team has created about 30 different scenarios based on interactions and incidents that have actually occurred. The following is a sample scenario discussed in the session on physical and mobility impairments:
Gail is completing her sophomore year at a large research university. She is applying for admittance to the natural resources program. She has a 3.4 GPA and has previous experience that makes her a strong candidate. She uses a wheelchair, however, and a faculty member on the admissions committee has questioned the appropriateness of admitting her because of her disability. The faculty member reminds everyone of the extensive field work that is required in the program’s curriculum. She questions how a student in a wheelchair will be able to participate in the many required field trips in which students gather specimens that are then analyzed in lab settings.

As a disability resource mentor, what suggestions or recommendations might you make to the admissions committee?

Every seminar session includes discussion of two to four scenarios. Participants discuss first in small groups and then share their ideas in the larger group. Because the scenarios rarely have obviously correct answers, they invite participants to consider a variety of issues such as student rights, institutional standards, and legal issues.

Two additional training strategies/methodologies merit mention. First, the seminar includes a panel of students with different disabilities. Panel members respond to questions about the saliency of their disability in their lives, how they wish others would interact with them, and what they say when others suggest that accommodations create unfair advantages to them. Students speaking in their own words are especially effective in conveying emotional content as well as information. Films also bring to life information about disabilities and, as Table 1 indicates, the seminar includes one film followed by discussion each day.

In the closing session, participants work in small groups to brainstorm ways in which they might “bring the information home to colleagues.” Some opt to conduct discussion groups in which they will invite colleagues to share their experiences in working with students with disabilities. Others decide they will request time during department meetings to talk briefly about the training program, to explain what they are prepared to do as disability resource mentors, and perhaps to discuss one or two scenarios from the seminar. Some prefer a more low-key approach in which they will look for opportunities to talk with colleagues individually.

In addition to the seminar, participants receive a resource manual made up of a collection of distributed materials from HEATH Resource Center, the NETAC Consortium, and similar agencies, as well as handouts and information developed by the CTC staff. The manual is intended to serve as a resource to the mentors as they bring aspects of the seminar back to their departments. A website (www.uri.edu/ctc) also serves as a link to other demonstration projects and to websites that have information about the various disabilities described during the seminar. Two of the six seminars apprenticed a training team from each of the cooperating institutions, Community College of Rhode Island and Rhode Island College. Those teams have begun to function independently, conducting seminars at their respective institutions.

Method of Evaluation

The overall goal of the Change the Culture project was to facilitate the development of an inclusive and supportive learning environment for students with disabilities. Professional development training was the primary strategy utilized to reach this goal. Faculty and administrators participated in a comprehensive training seminar and ongoing supportive activities as described. The outcome of the training was evaluated in two different ways: (a) immediate effectiveness of the training seminar for the participants, and (b) long-term impact of the training on the postsecondary learning environment. Data related to the immediate effectiveness of the training were easily obtained through multiple seminar feedback instruments, which informed ongoing revision and modification to the curriculum. Data on the long-term impact were inherently more difficult to obtain due to the lack of a “gold standard” outcome measure. The global nature of the variable of interest and the multi-faceted causality in an environment as complex as postsecondary education also contribute to this difficulty. Given this complex outcome environment and the limited duration of the project (three years), pre-
liminary qualitative data support the impact of the training on the postsecondary learning environment.

**Results**

A total of 103 faculty and administrators from 45 departments at 7 Rhode Island higher education institutions have been trained as disability resource mentors. Six seminars were conducted during the three-year project period. Participants, from both public and private institutions, represented numerous disciplines, including engineering, business, arts and sciences, pharmacy, allied health, environment and life sciences, affirmative action and university libraries.

**Effectiveness of the Training Seminar**

Three instruments were used to collect data on the effectiveness of the training seminar: (a) a scale measuring participants’ confidence in meeting the train-

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Mean</th>
<th>Standard Deviation</th>
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<tbody>
<tr>
<td>Confidence Scale Item</td>
<td>Pre-</td>
<td>Post-</td>
</tr>
<tr>
<td>1. Describe common stereotypes of persons with disabilities and the associated limitations these stereotypes foster.</td>
<td>2.82</td>
<td>3.63</td>
</tr>
<tr>
<td>2. Identify and implement strategies to combat the negative stigma of disability.</td>
<td>2.47</td>
<td>3.50</td>
</tr>
<tr>
<td>3. Summarize the basic principles of the IDEA and the ADA.</td>
<td>2.21</td>
<td>3.38</td>
</tr>
<tr>
<td>4. Explain the concept of “reasonable accommodations” and give examples for a range of disabilities.</td>
<td>2.54</td>
<td>3.79</td>
</tr>
<tr>
<td>5. Summarize the latest research on learning disabilities, including types, causes, and accommodation strategies.</td>
<td>1.97</td>
<td>3.05</td>
</tr>
<tr>
<td>6. Describe common mental illnesses, including their symptoms, treatments and unique associated stigma.</td>
<td>2.32</td>
<td>3.33</td>
</tr>
<tr>
<td>7. Demonstrate mentoring skills, including active listening, problem solving, and consideration of multiple points of view.</td>
<td>2.80</td>
<td>3.58</td>
</tr>
<tr>
<td>8. Describe affective and psychomotor consequences of selected (simulated) disabilities.</td>
<td>1.98</td>
<td>3.17</td>
</tr>
<tr>
<td>9. Describe/discuss first-person accounts of life with a disability.</td>
<td>2.31</td>
<td>3.47</td>
</tr>
<tr>
<td>10. Disseminate seminar content to departmental/administrative unit colleagues.</td>
<td>2.78</td>
<td>3.68</td>
</tr>
</tbody>
</table>

*Note.* Data based on a 4-point Likert scale with greater numbers associated with greater confidence.
ing objectives, (b) a satisfaction survey, and (c) a nar-
rive feedback form. The first two tools were Likert
struments that asked participants to rate their agree-
ment/disagreement with statements about the training
on a 4-point scale; the feedback form collected narr-
ative data. Data from all three tools were used to
modify and revise the curriculum and presentations to
maximize the effectiveness of the training.

Confidence scale. The confidence scale was
administered before the training started on Day 1 and
again at the end of the final day of training. Table 2
presents pre- and post- means and standard devia-
tions for each item, or training objective. Higher scores
indicate greater confidence. A summative score for
each individual was also calculated. Considering this
summative data, the pre-test mean ($M = 24.12$, $SD
= 5.8$) was significantly lower than the post-test mean
($M = 35.6$, $SD = 3.5$), $t (86) = 15.4$, $p < .001$.

Satisfaction survey. The satisfaction survey was
administered at the end of the final day of training. In
addition to assessing the logistics of seminar delivery
(e.g., parking, environmental comfort, etc.) and in-
structor skills (e.g., encouraged participation, skilled
in listening and responding, etc.), this instrument sought
information on overall participant satisfaction and par-
ticipants’ plans for using the presented information.
Means and standard deviations for these data are given
in Table 3; again, higher numbers indicate a more
positive response.

Table 3

Satisfaction Scale Means and Standard Deviations

<table>
<thead>
<tr>
<th>Satisfaction Scale Items</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How satisfied are you with the class?</td>
<td>3.80</td>
<td>0.40</td>
</tr>
<tr>
<td>2. How satisfied are you with the instructor(s) of this class?</td>
<td>3.83</td>
<td>0.38</td>
</tr>
<tr>
<td>3. How satisfied are you that this class is time well spent?</td>
<td>3.77</td>
<td>0.42</td>
</tr>
<tr>
<td>4. What is the likelihood that you will apply the skills taught in the class?</td>
<td>3.78</td>
<td>0.42</td>
</tr>
<tr>
<td>5. What is the likelihood that you will use the class materials in your job?</td>
<td>3.71</td>
<td>0.46</td>
</tr>
<tr>
<td>6. What is the likelihood that you will recommend this class to others?</td>
<td>3.81</td>
<td>0.39</td>
</tr>
<tr>
<td>7. What is the likelihood that you will take another class?</td>
<td>3.60</td>
<td>0.59</td>
</tr>
</tbody>
</table>

Note. Data based on a 4-point Likert scale with higher numbers associated with greater satisfaction/likelihood.
Narrative feedback. Finally, formative (daily) and summative narrative feedback on each seminar was gathered. Questions addressed three topics: (a) what about the training was effective/helpful, (b) what was still unclear, and (c) what could be done to improve the experience. These responses informed subsequent sessions. Typical summative data follow:

The CTC Training Initiative has developed excellent materials and an engaging delivery approach [that] work together to create an environment where faculty, staff, and students can explore their current beliefs regarding disability. It is [a] combination that builds both knowledge and skill in its participants. E. Dalton, Associate Professor, Rhode Island College. (personal communication, July 16 2002)

[After participating in the training] I feel confident that I will be able to be a true resource to my colleagues in terms of educating them about the needs of students with disabilities and also in terms of assisting them in providing reasonable accommodations to these students. Thank you for a wonderful learning experience. (L. Bowleg, Assistant Professor, URI, personal communication, July 13, 2002).

I experienced one of the most successful professional development opportunities of my career. (L. Peebles, Director-Student Services, New England Institute of Technology. personal communication, July 10, 2002).

Because of the training, I was able not only to understand the importance of thinking of cultural diversity as including disabilities, but I knew the arguments to make. Thus, … my work is more informed. (W.L. McKinney, Dean, College of Human Science and Services, URI, personal communication, July 11, 2002).

Long-Term Impact of the Training on the Postsecondary Environment

Changing the learning environment of postsecondary institutions to better meet the needs of students with disabilities is a long-term goal. Measuring such change is challenging, given the complex, long-term, multifaceted nature of this learning environment. Changing the Culture took a qualitative approach to collect preliminary data from the disability resource mentors to support the long-term impact of the training on the postsecondary learning environment. Focus groups, listserv discussions, and one-on-one conversations were the sources for these data.

Two broad categories of impact were identified in the data through content analysis: policy changes and improved communication. Policy changes included the elimination of time limits for all exams in several academic departments and the addition of standard accommodation statements in course syllabi and departmental handbooks. Perhaps the most significant policy change occurred at Rhode Island College where disability resource mentors, as a group, successfully advocated for a full-time disability services coordinator. The coordinator, the first full-time staff for disability services in that institution’s history, is now a member of the CTC satellite training team at that institution. The second identified theme was improved communication among colleagues concerning accommodations. Disability resource mentors reported making themselves available to mediate between their faculty colleagues and students with disabilities. Consider the following, for example:

One disability resource mentor (DRM) in the physics department told about his colleague, who was rudely confronted by two students demanding accommodations. The colleague refused to provide extended time on the final exam. That colleague then went to the DRM and said, “You’re the one I’m supposed to talk to…” The DRM, investigating, learned that it was the rude behavior, not the accommodation, creating the problem. He told the faculty colleague, “You really can’t refuse the extended time, but let’s talk to the students about appropriate behavior toward faculty.” (L. Kahn, Professor, Physics, URI, personal communication, May 6, 2001).
Disability resource mentors also reported that myths about persons with disabilities are being dispelled and greater comfort has been demonstrated in dealing with students with disabilities, as described in the following quotes:

I have noticed a much better understanding and concern for students with disabilities. The message seems to be getting through to my colleagues and the Dean who has spoken positively about the program and the efforts of those who have participated. (J. Matoney, Professor, College of Business, URI, personal communication, May 26, 2003)

I can attest to the value of the [CTC] program for faculty and students. Its success can be measured more in the informal, day-to-day shifts in student/professor interactions and pedagogical practices than in any grand policy change. Through informal memos and conversations, my colleagues and I have shared information about URI policies and government rules regarding the accommodation of students with disabilities, as well as information about the needs of individual learners. (M. Schwartz, Professor, History, URI, personal communication, July 10, 2002)

The efforts [of CTC] are making a significant difference in the level of awareness, knowledge and, therefore, advancement of issues related to college students with disabilities. (L. Peebles, Director-Student Services, New England Institute of Technology, personal communication, July 10, 2002)

Discussion

The goal of the CTC project is to create systemic change in institutions of higher education that combats the threat to the intellectual, academic and personal achievement of students with disabilities. To create such systemic change, the project has successfully trained a network of disability resource mentors, who serve as information resources to their colleagues and liaisons to the disability services units of their institutions. In addition, independent trainer teams have been established to present a training seminar at their institutions and to expand the networks of mentors at those cooperating institutions.

There is strong evidence supporting the effectiveness of the training seminar. There is preliminary evidence of the systemic impact of the disability resource mentor network, in department policy changes, funding of new positions, and reduction of attitudinal barriers. This formative period for a grass-roots movement of systemic change has begun to foster a more inclusive environment for college students with disabilities. The increased awareness and improved strategies to include students with disabilities will benefit ALL students in higher education institutions.

The CTC project will continue its work by professionally packaging the tested curriculum for use by other institutions, upgrading the CTC web site so that it becomes a national interactive resource, and creating professionally prepared documents that will complement the library of materials from NETAC and the other Demonstration Program projects. Further, the CTC project will continue efforts to train new disability resource mentors, support the efforts of established training teams at other institutions, and adapt the curriculum to meet the needs of future faculty, adjunct faculty, and secondary school educators who assist student transition to the postsecondary environment.

Three objectives will provide the framework for accomplishing CTC’s future work to promote systemic change:

- Refine, for use by institutions of higher education, the tested teaching methods and strategies of the mentor training. Adapt the curriculum for future faculty, adjunct faculty, and secondary-level transition educators. Universal design and multicultural issues will also be important.
- Expand the network of disability resource mentors through professional development and training sessions at postsecondary institutions in Rhode Island, New England, and beyond the local region.
- Professionally package program materials for effective dissemination on a national basis (i.e., package curricula in CD-ROM, create an interactive CTC web site, etc.) to support systemic change.
In evaluating the progress of CTC, we will examine the impact of disability resource mentors on department attitudes and student experience. The effectiveness of each seminar will continue to be evaluated, as will retention and graduation statistics for students with disabilities. True systemic change, the most significant feature of the CTC program, lies in the hard work of intensive training and personal day-to-day encounters of mentor to colleague and trainer to mentor; documenting this systemic change is a long-term process. This project is a product of U.S. Department of Education Grant Award #P333A990064: Changing the Culture: The University of Rhode Island’s Demonstration to Ensure that Students with Disabilities Receive a Quality Higher Education.

References


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