

Promoting Multicultural Competence: Diversity Training for Transition Professionals

by David Lichtenstein, Brown University, Lauren Lindstrom, and Tiana Povenmire-Kirk, University of Oregon

Abstract

As post-school outcomes for diverse students with disabilities continue to fall short of those of their majority-culture peers, there is an increasingly urgent need to increase multicultural competence among transition professionals. This study used a pre-/post-test measure to assess changes in multicultural competence for a statewide group of education and rehabilitation staff following a one-time-only training. Findings produced mixed but limited results as to the efficacy of such training in multicultural competence. This suggests that short-term training may not produce powerful enough effects to impart long term changes; however, the results also imply that merely surveying staff about attitudes and practices may act to raise awareness and increase competence. Implications for future research and practice are discussed.

American public schools are serving an increasingly diverse student population. Growing ethnic and linguistic diversity in the United States has resulted in corresponding changes in the public schools (Luft, 2001; Sue, Bingham, Porche-Burke, & Vasquez, 1999). Some have estimated that by the year 2040, culturally and linguistically diverse (CLD) students will represent more than one-half of the general school population (Leake & Black, 2005).

Many of these CLD students and families will receive special education services. However, special education professionals may not be adequately prepared to provide effective career and transition services to meet the unique needs of these diverse students and their families. A number of recent studies have found that CLD families report a lack of participation in, and significant dissatisfaction with, special education and transition services (Defur, Todd-Allen, & Getzel, 2001; Geenen, Powers, Lopez-Vasquez, & Bersani, 2003; Kim & Morningstar, 2005). Greene and Nefsky (1999) summarized some of the major barriers that may deter active participation and equal ownership in transition planning for CLD families, including: (a) family knowledge of and comfort with school systems and procedures, (b) differences in interpersonal communication styles or language barriers, (c) differing cultural attitudes towards disability, and (d) lack of sensitivity of special education staff to cultural diversity. In a recent literature review focused on CLD family involvement in transition

planning, Kim and Morningstar (2005) found that professional attitudes, contextual barriers (such as poverty, time conflicts, and single parenthood), and bureaucratic barriers within the school and community all created significant obstacles to participation for diverse families. Given the importance of family participation in educational development (Newman, 2004), it is not surprising that outcomes for CLD students in special education lag significantly behind their majority-culture peers (National Center on Secondary Education and Transition, 2003; Trainor, Lindstrom, Simon-Burroughs, Sorrells, & Martin, in press; Wagner, Newman, Cameto, Garza & Levine, 2005).

The need to address family participation and consistently poorer outcomes for CLD students has led to a call for greater multicultural competence among special education and transition personnel (Greene 1996; Harry, 2002; Kim & Morningstar, 2005; Trainor, 2005; Trainor et al., in press). Commonly, multicultural competence has been assumed to encompass three major categories: awareness of diversity and of one's own attitudes toward diversity; knowledge of minority populations and specific behavioral patterns/trends; and skills in communicating and working with a diverse range of people (Constantine, 2001; D'Andrea, Daniels, & Heck, 1991; Kerka, 1992). Cultural competence includes the ability to consider one's own assumptions and beliefs; evaluate the influence of culture on others; and respect differences that may be a result

of variations in family and cultural values (Greene, 1996; Harry, 2002; Luft, 2001). In part, cultural competence involves understanding how a youth's challenging behavior may not necessarily represent "bad choices" or "faulty values", but reasonable adaptations to cultural and contextual circumstances (Geenen et. al, 2003; Hawks & Muha, 1991; Kalyanpur & Harry, 1997).

Although the field of special education has only recently begun to recognize the importance of multicultural competence, other disciplines such as school counseling and health care education have highlighted the need for training in multicultural competence (e.g., Kai, Spencer, & Woodward, 2001; Carey, Reinat, & Fontes, 1990). In a large survey of school counselors, Carey, Reinat and Fontes (1990) reported that counselors believed that training was needed in the areas of improving academic achievement of ethnic minority students, cross-cultural communication, and racism awareness. Researchers have also noted the benefits that increasing staff competence could have in offering culturally appropriate services for specific ethnic minority groups. In a study of career outcomes for Mexican-American high school girls, McWhirter, Hackett, and Bandalos (1998) found that teacher support acted to moderate the effect of perceived barriers, suggesting that educators well-versed in multicultural competence could make a significant impact on outcomes for students.

The field of counseling psychology has been a primary leader in tackling the question of how multicultural competence might be improved in personnel. A recent meta-analysis reported positive associations between multicultural education and multicultural competence, par-

ticularly in the areas of practitioners' knowledge, awareness, and skills (Smith, Constantine, Dunn, Dinehart, & Montoya, 2006). This study also found that interventions based on extant theory have higher effect sizes than those not based on best practices literature (Smith et al., 2006). Similarly, experiential activities have shown an especially large benefit in skill development (Heppner & O'Brien, 1994). Conversely, didactic or theory-oriented trainings have been reported to be less helpful or even detrimental to participants (Kai, Spencer, & Woodward, 2001). These studies have largely been conducted with graduate students in counseling or other fields, and therefore the knowledge base on the effectiveness of diversity training for school based personnel, including special education and transition professionals, remains limited at best.

Purpose and Objectives

The purpose of our study was to evaluate the need for, and efficacy of, a one-time-only diversity training for a group of education and rehabilitation professionals who provide transition services for youth with disabilities. We were interested in collecting information on the issues and challenges transition staff may face in serving a more diverse student population, and determining the value and impact of our training in multicultural competence. Such a short training may not be the "gold standard" for multicultural education; however, given the limited resources and time available for training practicing professionals, this study addresses the question of whether such short and presumably common trainings provide any lasting benefit. In order to study these issues, we developed an instrument (the Diversity Self-Assess-

ment) to measure self-reported multicultural competence, employed a quasi-experimental control group, and followed up with participants two months after the initial intervention. We expected that our training would produce a small but measurable effect in the self-reported multicultural competence of those who attended.

Method

Context for the Training

The diversity training evaluated in this study was one component of ongoing professional development activities provided to education and rehabilitation personnel affiliated with the Youth Transition Program (YTP). The YTP is a partnership among the Oregon Office of Vocational Rehabilitation Services (OVRs), the Oregon Department of Education and local schools statewide in Oregon. The purpose of the program is to prepare high school youth with disabilities for employment- or career-related post-secondary education or training. YTP services include: transition planning and career exploration, school and community-based instruction, paid job training, and follow-up support services. Services are provided by transition specialists, who are primarily paraprofessionals employed by the high schools in collaboration with counselors from OVRs. Currently, the YTP is being implemented in over 120 high schools serving approximately 1460 youth with disabilities. YTP is an evidence-based program which has been shown to significantly improve post-school outcomes for youth with disabilities (Benz, Lindstrom, & Latta, 1999; Benz, Lindstrom, & Yovanoff, 2000). Over the last five years, the program has served an increasing number of culturally and linguistically diverse youth; in addition, more

than 50% of participants are from low income families (Lindstrom, Lichtenstein, & McGrath-Kato, 2006).

Sample

As our target population was personnel who could impact a Special Education student’s transition services, we collected data for this study from 63 education and rehabilitation professionals who attended a full day statewide YTP training event (53 staff members completed both pre- and post-test, and form the actual sample analyzed). The event served staff from across the state of Oregon and drew a wide variety of school and Vocational Rehabilitation staff. The training included sessions covering a variety of topics related to improving transition services and outcomes for high school youth with disabilities. Of the 53 staff who completed both pre- and post-tests, 15 attended a one hour diversity session; 38 people did not attend and therefore formed our quasi-experimental control group. Study participants included school transition specialists (n=47), counselors from the Office of Vocational Rehabilitation Services (OVRs) (n=8), and eight people representing other school staff, including special education directors or other administrators. The sample included individuals from both rural and non-rural communities, and from a wide range of school sizes. The participants had spent an average of five years working in their particular roles, although experience ranged widely from 1 to 35 years. Of note, 84% of the sample identified themselves as Caucasian/European-American. While such limited diversity within the staff is undoubtedly an important challenge to address in our efforts to better serve diverse students, our sample appears to be relatively representative of the

broader teaching force, which is largely female and European-American (National Center for Education Statistics, 2005; National Collaborative on Diversity in the Teaching Force, 2004). No significant demographic differences (e.g., gender, ethnicity, or years in role) were present between the “trained” and “untrained” groups. (See complete participant demographics in Table 1.)

Description of the Diversity Training

Our diversity training was offered as an optional breakout session during an annual statewide YTP conference. Training content was based on the experience of the authors in special education and counseling, formal education in multicultural competence, and a thorough review of the literature in the area of diversity and transition. Therefore, the training was considered to represent “best practices” in multicultural competence and transition (Kai, Spencer & Woodward, 2001; Leake & Cholmay, 2004; Smith et al. 2006). The training was comprised of several components, including: information on post-school outcomes for ethnic mi-

nority and low-income youth, interactive discussions of case studies, review of strategies and resources for improving service to diverse students, and encouragement to set “action plans” to determine how the information could be translated into practice. Where possible, the evidence base was incorporated into both content (e.g., critical principles to stress in working with diverse families) and methodology (e.g., interactive, experiential activities) of the training. For more information on the content and format of the training please contact the first author. The diversity training was repeated at two sessions during the conference in order to maximize attendance.

Data Collection and Measurement

DATA COLLECTION PROCEDURES

We collected data for this study in two waves. First, we distributed the Diversity Self-Assessment instrument (described in detail below) to all participants attending the statewide YTP conference. The instrument was administered during a large group session prior to the diversity training to maximize participation. In total, 63 YTP staff

Table 1
Participant Demographic Data (N = 63)

Variable		N	%
Gender	Female	56	90
	Male	6	10
	Missing Data	1	
Ethnicity	Caucasian	53	84
	Ethnic Minority	5	8
	Missing data	5	8
Role	Transition Specialist	46	74
	VR Counselor	8	13
	Other School Staff	8	13
Years in Position	1 -3 years	33	53
	4 - 7 years	14	23
	8 - 10 years	8	13
	11 - 35	7	11
School Location	Nonrural	34	55
	Rural	28	45
Attended Diversity Training	Did not attend	45	71
	Attended	18	29

members completed the pre-test self-assessment. Approximately two months later, we contacted all participants who completed the pre-test to inform them of the need for follow-up. Then, over the course of two weeks, we completed post-test telephone interviews using the same instrument (with slight modifications to the open-ended questions) with 53 of the original survey respondents. We made multiple efforts to retain participants, ultimately achieving an 84% retention rate.

INSTRUMENT DEVELOPMENT

The Diversity Self-Assessment is a 22-item instrument that asks participants to rate themselves on a range of questions related to awareness, knowledge, and skills for serving diverse populations of students with disabilities. Participants rated themselves on a four-point Likert-type scale that ranged from 1 (*rarely/strongly disagree*) to 4 (*always/strongly agree*). In addition, the pre-test assessment asked two open-ended questions about challenges and needs identified by staff in working with diverse populations. We included three additional open-ended questions about changes in service delivery in the post-test assessment. Six items questioning participants about the population they serve and the technical assistance they receive, were created for internal purposes and were not included in these analyses.

The Diversity Self-Assessment was created following an extensive review of the literature on diversity in special education and transition. Items were created that reflected important concepts from the literature (e.g., flexibility to family needs) or significant barriers identified (e.g., language barriers). The original version of the instrument was pilot-tested at an earlier training session and ex-

panded based on feedback from that session. Our instrument was developed to assess three major concepts: (a) awareness of the influence of culture; (b) knowledge of specific cultural practices and values of diverse families; and (c) skills in working with a diverse range of students and families. This emphasis on awareness, knowledge, and skills is supported by existing literature on assessing multicultural competence (D'Andrea, Daniels, & Heck, 1991). Given the well-documented importance of working with families (Geenen, Powers, & Lopez-Vasquez, 2001; Kalyanpur & Harry, 1997; Kim & Morningstar, 2005) and developing self-awareness (Harry, 2002; Kerka, 1992; Stuart, 2004), many of our questions highlighted these areas within the three essential qualities of awareness, knowledge, or skills. Others have followed a similar process of instrument development (e.g., Carey, Reinat, & Fontes, 1990) to measure this construct. Although it carries significant limitations, self-report measurement is the most common approach to assessing multicultural competence (Smith et al., 2006).

We designed the Diversity Self-Assessment instrument to target three broad subcategories of multicultural competence (e.g., awareness, knowledge, and skills); however, we also sought an empirical approach to creating subscales to validate our initial hypotheses. Therefore, we employed Principal Components Analysis (PCA) with Varimax rotation to determine empirical scales based on inter-item correlation and underlying factor analysis. PCA has been reported to be an appropriate means of initial data-reduction to produce components useful for future analyses (Tabachnick & Fidell, 2001). As a further check on the

methodology, exploratory factor analysis was also performed on the same variables and achieved essentially the same results as reported below.

The Principal Components Analysis revealed that a four-factor solution best fit the data, explaining 61% of the variance in items while retaining adequate numbers of items for each factor. Solutions with more than four factors did not significantly improve the amount of variance explained. Although the four-factor solution did not exactly mirror our expectations, it did produce scales consistent with our understanding of the literature and important principles relevant to multicultural competence. The four factors included: (a) "Valuing Culture" (adequate reliability, $\alpha=.78$), (b) "Cultural Awareness" (adequate reliability, $\alpha=.79$); (c) "Family Involvement" (fair reliability, $\alpha=.58$); and (d) "Self-awareness" (fair reliability, $\alpha=.58$). See Table 2 for a list of individual items that comprise each factor. This PCA covered all of the targeted items save two, which were not adequately differentiated between the four factors and were accordingly excluded from further analysis.

Data Analysis

Data analysis proceeded in two major modes. First, we used ANCOVA to test for group differences using scales derived from the Principle Components Analysis. Second, we used qualitative methods such as thematic analysis to understand overall changes and group differences in the open-ended questions (Patton, 2002).

QUANTITATIVE ANALYSIS

First, we were interested in whether or not there were significant differences between the pre- and post-test scores for each scale across the whole sample. To address this question

Table 2
Principal Components Analysis Four-Factor
Solutions with Items

Factor	Items	Item Factor Loading
“Valuing Culture”	13. I encourage students to explore and discuss their heritage, cultural background, and/or family values, and to set goals that are consistent with this background.	.782
	15. In meetings with families and/or youth I discuss the young person’s strengths and abilities.	.623
	16. I seek information about people of diverse backgrounds, cultures and experiences.	.641
	18. I search for strengths related to the youth’s family and culture.	.757
	19. When faced with a challenging or difficult case, I consider the influence of family or cultural values.	.697
“Cultural Awareness”	2. I acknowledge many different kinds of families and feel comfortable working with them in the transition process.	.749
	4. I am familiar with local or state trends regarding changes in population and outcomes for diverse groups.	.817
	6. I am aware of services, organizations, or locations that are frequently accessed or visited by members of ethnic/racial minority, low income, or other groups.	.738
	7. I am familiar with cultural practices, norms, or values of a variety of ethnic, religious, or other groups.	.748
“Family Involvement”	8. I explain to the youth/families that I work with the transition process, options for services, and ways in which they can actively participate in the process.	.738
	10. I actively encourage and seek participation from families.	.648
	12. I am flexible with meeting times and locations in order to fully include youth <u>and</u> their families.	.764
“Self-Awareness”	3. I am aware of how my own cultural background/values may influence the goals I encourage youth to set or my expectations for post school outcomes.	.783
	21. When faced with a challenging or difficult case, I consider the influence of <u>my own</u> family or cultural values.	.846

we performed paired-samples t-tests for overall differences between pre- and post-test scores on each scale. We expected that, in the absence of training, we would not observe overall differences for the whole sample between pre- and post-test. Next, we tested the effect of the diversity training on the Diversity Self-Assessment scores. To do this, we ran between-groups analysis of covariance (ANCOVA), searching for differences between the trained and untrained groups in the post-test score, holding the pre-test score as a covariate. We expected to see small but significant increases on the post-test for the trained group, relative to the untrained group. Finally, to examine the influence of demographic factors on our measure, we searched for significant correlations between both pre- and post-test scores and gender, ethnicity, years in role, and rural/non-rural status.

QUALITATIVE ANALYSIS

We analyzed the responses to the open-ended questions using standard techniques for qualitative analysis (Miles & Huberman, 1994; Patton, 2002). First, participant responses were typed (or transcribed in the case of the phone interviews) into a single document. Two of the co-authors reviewed all of the open-ended responses and developed a set of codes based on common responses. Next all of the open-ended responses were coded and summarized in tables, placing responses in rank order using the codes as an organizing structure.

Results

Quantitative Analyses

PRE-TEST

We examined the pre-test scores for each scale to understand how staff perceived their multicultural competence in the absence of any formal training. At pre-test, the mean overall re-

sponse was 3.1 out of a possible 4.0, indicating that staff, on average, felt very positively about their frequency of use of the strategies measured in the instrument. (See Table 3.) For instance, participants felt that they commonly acknowledged various family structures, flexed their style to meet the varying needs of families, and/or focused on a youth's strengths and abilities. For each of the four scales derived, staff rated themselves on average at a three or

above, suggesting positive estimates of their skills and awareness of diverse populations (and perhaps making it more difficult for significant intervention effects to emerge.) Interestingly, those who attended the diversity training rated themselves lower on all but one of the pre-test scales (and all but two of the post-test scales).

POST-TEST

To assess whether there was a change in multicultural competence as a result of the diversity

trainings, we first analyzed whether, for the whole group, there was a net increase in scores from pre- to post-test. Contrary to our expectations, paired samples t-tests indicated that for most scales, including the total score, there were small but significant gains in mean scores from pre to post-test for the whole sample (combining trained and untrained groups). (See Table 3.) The only scale that did not show significant change was the Cultural Awareness scale.

Table 3
Overall Differences for Each Scale (Pre and Post-test)

Scale	Pre-test Mean (item)*	Post-test Mean (item)*	Mean difference (scale)**	t	df	Significance
Total score	3.14	3.33	3.15	2.62	52	.01
Valuing Culture	3.13	3.34	1.24	3.78	51	<.001
Family Involvement	3.42	3.69	.83	4.30	51	<.001
Self Awareness	3.03	3.24	.58	2.73	52	<.01
Cultural Awareness	3.02	3.11	.26	1.02	52	.31

Note: This table reflects the sample for whom both pre- and post-test data were available.

*Item means reflect the mean score for items within a given scale

**Scale mean differences reflect the mean differences for the summed items in a scale between pre and post-test

Table 4
Group Comparisons (Trained versus Untrained) for Post-test Scores

Scale	Pretest Mean (Standard Deviation)	Post-test Mean (Standard Deviation)
Valuing Culture		
Untrained	15.5 (2.9)	16.4 (2.4)*
Trained	16.0 (2.9)	17.3 (1.5)
Cultural Awareness		
Untrained	12.1 (2.3)	12.6 (1.9)
Trained	11.7 (2.0)	11.5 (1.4)
Family Involvement		
Untrained	10.5 (1.2)	11.2 (1.0)
Trained	9.7 (2.2)	10.8 (1.0)
Self-Awareness		
Untrained	5.9 (1.8)	6.4 (1.2)
Trained	5.8 (1.3)	6.6 (1.2)
Overall Score		
Untrained	51.0 (9.8)	53.1 (5.8)
Trained	45.9 (11.5)	52.6 (4.0)

* Significant ANCOVA ($p < .05$) (significant increase for untrained group relative to trained)

Next, we compared the relative change in pre- to post-test scores for each scale by group (trained versus untrained). Results of this analysis appear in Table 4. The data suggest that, overall, there was no apparent improvement in self-reported multicultural competence attributable to the diversity training. In fact, of the five ANCOVA analyses conducted (one for each scale and the total score), only one was significant, and that was for the “Valuing Culture” scale, in which the untrained group’s scores increased while the trained group’s scores decreased. Otherwise, there were no significant ANCOVA scores, suggesting that when controlling for pre-test scores,

there were no differences between trained and untrained groups on post-test competence scores. Furthermore, staff demographic variables were not related to their levels of multicultural competence. We examined correlations between role, years in role, gender, and ethnicity and all of the pre-/post-test scores; there were no significant correlations beyond what would be expected from random error.

Qualitative Analyses

PRE-TEST FINDINGS

The open-ended questions in our Diversity Self-Assessment instrument allowed us to conduct a more in-depth examination of the perceptions of transition

staff during the pre- and post-test administration. We examined the pre-test data to gain an initial understanding of the types of information transition staff needed to be able to better serve diverse students. Table 5 provides a summary of the most common responses to our open-ended question regarding information needs. Responses are summarized by themes and listed in rank order. The highest priority need identified by education and rehabilitation professionals was for basic information regarding diverse families, including a more comprehensive framework for understanding cultural norms, values, and expectations. One aspect of this theme was a request

Table 5
Information Needs Identified by Participants at Pre-test

Rank Order	Key Theme	Issues/Topics Identified by Participants
1	General Cultural Information	<ul style="list-style-type: none"> •Understanding cultural norms and values •Awareness of family expectations and attitudes toward education, employment, and post school services •Information about population changes; demographic trends
2	Strategies for High Risk Youth	Providing services for diverse youth who may face additional barriers including: <ul style="list-style-type: none"> •Homelessness •Poverty •Drug involvement •Mental health concerns •Adjudicated youth
3	Language Information	<ul style="list-style-type: none"> •Classes to improve language skills (primarily Spanish) •Translation services for program materials •Job placement strategies for bilingual students
4	Working with Immigrant Populations	<ul style="list-style-type: none"> •Process for working with youth & families who are not US citizens •College options and planning •Obtaining green cards or work permits
5	Community Supports	<ul style="list-style-type: none"> •Information on community programs and services for diverse youth •Access to community mentors and advocates
6	Policy/System Level Support	<ul style="list-style-type: none"> •Encouragement at the state level to serve diverse youth in transition programs

for additional information on demographic trends and the increasingly diverse student population served within their programs. The second most common need identified was in the area of strategies and resources for diverse youth facing barriers such as homelessness, poverty, or drug involvement. Participants were also interested in having access to language services and specific information to work with youth from immigrant families. Finally, participants identified a need for information about local community support systems and a desire for state level support to improve transition services and outcomes for diverse youth.

POST-TEST FINDINGS

During the post-test interviews, we asked participants if they had made any changes in the way they provide career or transition services as a result of attending the training or completing the Diversity Self-Assessment. (See Table 6.) Consistent with our quantitative analyses, we found that some of the transition personnel in both the trained and untrained groups reported changing their prac-

tices or expanding their awareness. However, individuals in the trained group were more likely to indicate specific changes in planning, referral, or other service delivery strategies (60% versus 26%). Consistent with this finding, those participants who completed the initial Diversity Self-Assessment, but did not attend the diversity training, more often indicated no changes in service delivery (48% versus 20%). Conversely, they were somewhat more likely to indicate an increase in overall diversity awareness (26% vs. 20%).

Participants who described making changes in their multicultural awareness or practice were asked to provide specific examples of the changes they had made. A summary of these responses (listed in rank order) is included in Table 7. The most common change described was for staff to actively seek information about families' cultural context, and to incorporate these cultural values and expectations into the transition process. Many participants also described an increase in their own awareness of diversity issues and a broader understanding of the importance of cultural

context. In addition, staff noted that they were more likely to refer students to community resources and services and to have program information or forms translated into a variety of languages.

Discussion

This study provides several contributions to the existing transition and multicultural training literature. Overall, we found fairly high initial levels of self-reported multicultural competence among the education and rehabilitation professionals participating in the study. During the pre-test, staff also identified a number of specific training needs to increase their knowledge and skills in working with diverse populations. Analysis of post-test scores resulted in small but significant gains for all staff, regardless of participation in the diversity training session. Although we found only one significant difference between the trained and untrained groups, responses to the open-ended post-test questions indicated a number of changes in service delivery based on participation in the assessment or diversity training session. Finally, there appeared to be no significant

Table 6

Post-test Findings: Participant Changes across Trained and Untrained Groups (N = 53)

	T r a i n e d (N = 15)		U n t r a i n e d (N = 38)		Sample Participant Responses
	N	%	N	%	
Yes: Made Changes in Services	9	60	10	26	I now consciously consider family background, heritage, and what the student brings to the table. I have a greater understanding of the many diversity issues at play.
No Changes	3	20	18	48	No. currently there is not much cultural or ethnic diversity in our district, but I see this changing in the next few years.
Increased Awareness	3	20	10	26	Not really, but I have increased my awareness and continue to grow in this area.

relationship between demographic characteristics of the staff and multicultural competence outcomes. Below we consider these findings in depth.

The Diversity Self-Assessment

Based on our Principal Components Analysis, the Diversity Self-Assessment was able to generate four empirically derived scales of fair to adequate reliability. Given the small number of items, this appears to be a successful initial effort to reliably measure multicultural competence for transition staff. The question of validity, limited by the self-report nature of the instrument and the lack of other instruments to use as comparison, is more difficult to answer. In the absence of more formal proof, we can offer circumstantial evidence of the validity of this instrument. First, it is firmly based in the empirical literature of both multiculturalism and transition, thus making it more likely to accurately represent the overlapping demands of those content areas. Second, the instrument was pilot-tested with an earlier group of transition staff and revised based on those pilot tests. Third, feedback from

the staff in open-ended questions allowed us an alternative way of examining the evidence for any finding. Therefore, we believe that this instrument is, overall, a reasonably valid tool in measuring multicultural competence for transition staff. The Diversity Self-Assessment may serve as a critical first step for program developers and evaluators to understand the need for and efficacy of training in diversity. Interestingly, although the scales did not conform to our original expectations of awareness, knowledge, and skills, they cohere around factors that resonate with scholarly estimates of what composes multicultural competence (Harry, 2002; Kerka, 1992; Stuart, 2004). That is, qualities such as valuing cultural diversity, seeking to include families, and developing self-awareness seem well-suited to an assessment of a transition staff member’s multicultural competence.

Initial Levels of Multicultural Competence

By and large, staff initially rated themselves as having fairly high degrees of multicultural competence. During the pre-test as-

essment, the mean value for most scales was at or above a three out of four on a Likert-type scale. Staff felt that they commonly considered cultural variables, were flexible with their meeting styles and their approaches to families, and focused on strengths. Conversely, on the open-ended qualitative questions, participants suggested a number of areas in which they would like more information or training related to working with diverse populations. Taken together, these results present a mixed picture of the participants’ initial level of multicultural competence. On the one hand, they suggest that staff surveyed may not need training in multicultural competence – after all, based on their quantitative data they seemed to feel quite comfortable thinking about and embodying conscientious attitudes about culturally diverse students. On the other hand, the open-ended responses suggested numerous areas in which staff reported that they would benefit from training. Given this, and given a literature that suggests that diverse families are frequently underserved or inadequately

Table 7
Changes Identified in Transition Service Delivery

Rank Order	Key Theme	Changes Identified by Participants
1	Seek More Information from/about Families	<ul style="list-style-type: none"> •Actively seek input from families in career and transition planning process •Consider family background/culture in decision making
2	Connect Students to Specific Resources	<ul style="list-style-type: none"> •Accessing specific programs to meet needs of diverse students (e.g. multicultural center at local college) •Building connections with local employers and trade organizations
3	Increased Awareness of Diversity Issues	<ul style="list-style-type: none"> •Broader view of cultural and family values •Understanding of “my own assumptions”
4	Sought Information in Other Formats	<ul style="list-style-type: none"> •Requested translation of forms and materials

served by transition staff (Defur, Todd-Allen, & Getzel, 2001; Greene & Nefsky, 1999; Trainor, et al., in press), it is possible that the participants' self-ratings were artificially inflated. That is, transition staff may have overestimated the frequency and consistency with which they embody the skills and values assessed in the survey, and thus underestimated their need for further training.

Possible Survey Effects

We had not intended the Diversity Self-Assessment to promote any changes in attitudes or practice. However, the data from both quantitative and qualitative measures suggest that there was a small but significant increase from pre- to post-test for the group as a whole. In studies over longer spans of time, such an increase might suggest a developmental change in which, over time, an entire group of people improves in their abilities in a given area. However, given the limited time difference (two months) between pre- and post-testing and the fact that this survey was conducted with mature, experienced staff in the field, this seems unlikely. What seems more likely is that there was a small intervention effect of surveying staff about their multicultural competence. In other words, by asking questions of everyone about their interactions with diverse students and families, we may have encouraged further thought and growth around these issues. Thus, our Diversity Self-Assessment may have served to not only gather information about staff multicultural competence, but to actually improve that competence by raising dialogue and awareness.

Effects of Diversity Training

As mentioned above, effects of diversity training may be particularly difficult to assess in

this study. The self-report measure necessarily relies on a staff person's own views of their abilities and may not reflect subtle changes inculcated by a consciousness-raising effort. And given our emphasis on awareness, staff may have come to realize how much more there is to learn about working with diverse populations, and thus rated themselves lower on the self-report instrument following training. In fact, the staff who attended the diversity training did indeed rate themselves lower on one scale following the diversity training than the untrained group. Finally, most staff had already rated themselves fairly highly on the pre-test measure and therefore a "ceiling effect" may have made differences even more difficult to detect.

Given all this, our best estimate is that, although there was not a detectable impact of our training on the attendees' quantitative ratings, there may yet have been a small beneficial effect of the training. The rating scales are fairly clear - in no case was there a significant improvement, relative to the untrained group, for the trained group. However, the open-ended questions tell a different story. Whereas more than three-quarters of the staff who participated in the training could identify specific changes in their service provision or conceptualization, only one-third of those who did not participate in the training identified specific changes or improvements in service. Many more trained staff indicated that they used a multicultural framework to provide transition planning and other services. This, then, suggests that, although there may have been changes in the practice of trained transition staff, they may not have been broad or powerful enough to be captured by the self-report rating scales.

Limitations of the Study

One important point to note in considering the implications of these findings is that our study assumes that multicultural competence is a quality that can be measured in a written instrument, and discretely altered by brief training. In reality, multicultural competence is a complex construct, encompassing a range of attitudes, knowledge, and interpersonal qualities (Stuart, 2004; Smith et al., 2006). Assessing multicultural competence may not easily lend itself to the kinds of methodologies that have been used in studies of other interventions. Nonetheless, we hope that studies such as ours will continue to encourage the discipline to develop both theoretically and practically in order to meet the important needs identified for CLD students and families in transition.

Several of the limitations of this study stem from its methodology, which appears appropriate given that this is an early examination in an emerging discipline. To begin with, our small sample size limited our power to detect distinctions between groups. Our conclusions are also limited by the nature of our sample, in that the two groups were not randomly assigned, but rather self-selected whether or not they would attend the training session. Although quite common for this purpose, the self-report nature of our instrument may also be a limitation. Despite some correlational and anecdotal findings, the literature reports little match between self- and other-reported multicultural competence (Constantine, 2001). Thus, self-report measures such as ours may instead assess "multicultural counseling self-efficacy," which might further explain our contradictory findings from the ratings and open-ended questions. Despite these

limitations, we believe our study has value for its attempt to address a critical need with direct service transition staff, and for its pre-/post-test measurement of both quantitative and qualitative ratings of multicultural competence.

Implications for Practice

Although it has become clear that there is a need to improve transition-related service delivery for diverse students and families, special educators have only recently begun to examine how to actually address such issues in practice. Our study suggests that short, one-time-only training may not be enough to induce consistent, wholesale changes in the way transition staff conceptualize and serve diverse populations. Training such as ours may increase staff awareness of diversity issues, or, as we discovered, spark some discreet changes in staff's pattern of service delivery. Therefore we believe that a one-time training may have some beneficial impact. However, our data suggest that in order to truly transform the beliefs and practices of staff providing transition services, longer training with more in-depth interactions and experiences may be required. Furthermore, follow-up sessions to extend impact and to reinforce the value of these strategies over the long term might prove useful.

It may also be fruitful to find other ways to increase professionals' awareness of the limits of existing transition services for diverse families. This increased awareness may encourage staff to consider changes in their own practice by attending voluntary trainings and seeking additional information (only about one-third of our sample elected to attend our training). This could be accomplished by documenting poor post school outcomes for diverse students, highlighting how many staff find gaps in their knowledge regarding di-

verse students and families, or other means. The implication here is that it may be useful to find ways to encourage staff to seek training – to create a sort of “readiness for change” intervention – prior to offering training sessions in multicultural practice.

Implications for Research

While providing hints at promising directions for future training and practice, this study raises more questions than it answers. One critical question raised is about the validity of measurements of multicultural competence. The literature notes, not surprisingly, that self-report measures are quite commonly used in this arena, but have proven limited in illuminating covert, subtle, or more global changes in multicultural competence (Smith et al., 2006). Nor is there a well-established correlation between self- and other-reported multicultural competence (Constantine, 2001). But the value of self-report measures, both in terms of expediency and in terms of the possible intervention effect they might produce, suggest a great need for more research on the validity of self-report measures. Could such a measure adequately capture people's actual practice? We suggest that open-ended or qualitative items provide a valuable addition by generating triangulating evidence as a validity check. In addition, given that the ultimate goal of this training was not to improve staff practice, but to create better outcomes for students, more information is needed on how well self-report measures for transition professionals might predict outcomes for diverse students. To date, there has been almost no investigation of how multicultural training impacts outcomes for clients (Smith et al., 2006). We believe that the Diversity Self-Assessment could serve as an important first step

in the effort to quickly measure and impact multicultural competence for professionals in the field.

The fields of transition and multicultural education also need an increased emphasis on developing and evaluating multicultural training practices. Much of the literature in multicultural education comes in studying graduate students; further investigation is needed on multicultural competence for practicing professionals. As practitioners and educators, we need to understand whether certain training strategies and techniques might be more effective, leading to improved multicultural competence in staff working on the front lines of education and mental health.

Conclusion

Post-school outcomes for diverse students with disabilities have continued to lag behind those of their majority-culture peers (Wagner et al., 2005). Increasing the numbers of well-trained, culturally competent service providers would make a significant impact on this imbalance. Although our study suggests that one-time-only training is probably insufficient to create sustained changes, we have discovered important implications for future work in this arena. Our experience with our own training efforts implies that periodic assessment of staff members' awareness and practices regarding diversity, coupled with in-depth, experiential, ongoing training, may very well improve the multicultural competence of transition staff. Broadly speaking, we believe our study supports the notion that continuously examining the influence of culture and context will improve transition service delivery, and ultimately, begin to better address the multiple barriers that diverse youth with disabilities experience.

References

- Benz, M., Lindstrom, L. & Latta, T. (1999). Improving collaboration between schools and vocational rehabilitation: The Youth Transition Program model. *Journal of Vocational Rehabilitation*, 13, 55-63
- Benz, M., Lindstrom, L. & Yovanoff, P. (2000). Improving graduation and employment outcomes of students with disabilities: Predictive factors and student perspectives. *Exceptional Children*, 66 509-529.
- Carey, J.C., Reinat, M. & Fontes (1990). School counselors' perceptions of training needs in multicultural counseling. *Counselor Education and Supervision*, 29(3), 155-169.
- Constantine, M. G. (2001). Predictors of observer ratings of multicultural counseling competence in Black, Latino, and White American trainees. *Journal of Counseling Psychology*, 48, 456-462.
- D'Andrea, M., Daniels, J., & Heck, R. (1991). Evaluating the impact of multicultural counseling training. *Journal of Counseling and Development*, 70, 143-150.
- Defur, S., Todd-Allen, M. & Getzel, E. (2001). Cultural considerations in the transition process and standards based education. In C.A. Kochar-Byrant & D. Bassett (Eds) *Aligning transition and standards based education: Issues and strategies* (pp. 105-123). Arlington, VA: Council for Exceptional Children.
- Geenen, S., Powers, L., & Lopez-Vasquez, A. (2001). Multicultural aspects of parent involvement in transition planning. *Exceptional Children*, 67, 265-282.
- Geenen, S., Powers, L., Lopez-Vasquez, A., & Bersani, H. (2003). Understanding and promoting the transition of minority adolescents. *Career Development for Exceptional Individuals*. 26, 27-46.
- Greene, G. (1996). Empowering culturally and linguistically diverse families in the transition planning process. *The Journal for Vocational Special Needs Education*, 19(1), 26-30.
- Greene, G., & Nefsky P. (1999). Transition for culturally and linguistically diverse youth with disabilities: Closing the gaps. *Multiple Voices for Ethnically Diverse Exceptional Learners*. 3(1) 15 - 24.
- Harry, B. (1992). Developing cultural self-awareness: The first step in values clarification for early interventionists. *Topics in Early Childhood Special Education*, 12(3), 333-350.
- Harry, B. (2002). Trends and issues in serving culturally diverse families of children with disabilities. *The Journal of Special Education*, 36(3), 131-138.
- Hawks, B. K., & Muha, D. G. (1991). Facilitating the career development of minorities: Doing it differently this time. *Career Development Quarterly*, 39(3), 251-260.
- Heppner, M. J., & O'Brien, K. M. (1994). Multicultural counselor training: Students' perceptions of helpful and hindering events. *Counselor Education and Supervision*, 34, 4-18.
- Kai, J., Spencer, J., & Woodward, N. (2001). Wrestling with ethnic diversity: Toward empowering health educators. *Medical Education*, 35, 262-271.
- Kalyanpur, M., & Harry, B. (1997). A posture of reciprocity: A practical approach to collaboration between professionals and parents of culturally diverse backgrounds. *Journal of Child and Family Studies*, 6(4), 487-509.
- Kerka, S. (1992). *Multicultural Career Education and Development*. ERIC Digest No 123. ERIC Clearinghouse on Adult Career and Vocational Education, Columbus, OH.
- Kim, K.H., & Morningstar, M.E. (2005). Transition planning involving culturally and linguistically diverse families. *Career Development for Exceptional Individuals*, 28(2), 92-103.
- Leake, D. & Black, R. (2005). *Cultural and linguistic diversity: Implications for transition personnel*. National Center on Secondary Education and Transition.
- Leake, D., & Cholymay, M. (2004). Addressing the needs of culturally and linguistically diverse students with disabilities in postsecondary education. Information Brief published by National Center on Secondary Education and Transition. Downloaded October 10, 2005, from www.ncset.org.
- Lindstrom, L., Lichtenstein, D., & McGrath-Kato M. (2006). *Oregon Youth Transition Program: 1989 - 2006 Fact Sheet*. Prepared for: U.S. Department of Education, Office of Special Education and Rehabilitation Services & Oregon Vocational Rehabilitation Services
- Luft, P. (2001). Multicultural competence in the transition planning process. In R. Flexer, T. Simmons, P. Luft & R. Baer, (Eds.) *Transition Planning for Secondary Students with Disabilities* (pp 120 - 160). Upper Saddle River, NJ: Merrill Prentice Hall.
- McWhirter, E.H., Hackett, G., & Bandalos, D.L. (1998). A causal model of the educational plans and career expectations of Mexican American high school girls. *Journal of Counseling Psychology*, 45(2), 166-181.
- Miles, M., & Huberman, M. (1994). *Qualitative data analysis*. (2nd ed.). Thousand Oaks, CA: Sage Publications.
- National Center on Secondary Education and Transition (2003). *Youth Employment, NCSET NLTS2 Data Brief 2 (2)* Retrieved November 17, 2006 from www.ncset.org/publications
- National Center for Education Statistics. (2005). Special analysis: Mobility in the teacher workforce. In *The Condition of Education 2005* (pp.3). Washington, D.C.: U.S. Department of Education.
- National Collaborative on Diversity in the Teaching Force. (2004). *Assessment of diversity of America's teaching force*. Washington, D.C.: Author.
- Newman, J. (2004). *Family involvement in the educational development of youth with disabilities: A report from the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International.
- Patton, M. (2002). *Qualitative evaluation and research methods (3rd ed.)*. Newbury Park, CA: Sage Publications, Inc.
- Smith, T., Constantine, M., Dunn, T., Dinehart, J. & Montoya, J. (2006). Multicultural education in the mental health professions: A meta-analytic review. *Journal of Counseling Psychology*. 53(1) 132-145.
- Stuart, R. (2004). Twelve practical suggestions for achieving multicultural competence. *Professional Psychology: Research and Practice*. 35(1) 3 - 9.

- Sue, D.W., Bingham, R.P., Porche-Burke, L., & Vasquez, M. (1999) The diversification of psychology: A multicultural revolution. *American Psychologist*, 54, 1061-1069.
- Tabachnick, B.G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th Ed.). Boston: Allyn and Bacon.
- Trainor, A. (2005). Self-determination perceptions and behaviors of diverse students with LD during the transition planning process. *Journal of Learning Disabilities*, 38(3), 233-249.
- Trainor, A., Lindstrom, L., Simon-Burroughs, M., Sorrells, A & Martin, J. (in press). From marginalized to maximized opportunities for diverse youth with disabilities: Position paper of the Division on Career Development and Transition. *Career Development for Exceptional Individuals*.
- Wagner, M., Newman, L., Cameto, R., Garza, N., & Levine, P. (2005) *After high school: A first look at the post school experiences of youth with disabilities. A report from the National Longitudinal Transition Study - 2. (NLTS2)*. Menlo Park, CA: SRI International.

Correspondence about this manuscript may be sent to Dr. David Lichtenstein, Brown University, Alpert School of Medicine, Bradley School, Portsmouth, 2820 East Main Road, Portsmouth, RI 02871. Electronic mail may be sent to dlichtenstein@lifespan.org.