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# Validation of the Culturally Responsive Teaching Survey

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**Abstract**: This investigation examined the psychometric properties of the Culturally Responsive Teaching Survey (CRTS), a newly-developed assessment that measures the cultural responsiveness of adult English language educators' teaching practices. Findings from two studies revealed a uni-dimensional scale of appropriate internal consistency which yielded positive correlations with multi-cultural knowledge and teaching skills.

## Introduction

This investigation examined the psychometric properties of the newly-developed Culturally Responsive Teaching Survey (CRTS), an instrument designed to assess the teaching practices of English language teachers in adult learning environments. Using two studies conducted with adult ESOL and EAP teachers, the researcher examined the dimensionality of the construct of culturally responsive teaching and the convergent validity of the two sub-scales of the CRTS. These findings should lead to expanded use of this instrument by researchers and practitioners.

## Theoretical Framework

Culturally responsive teaching places students' cultures at the core of the learning process and utilizes the "cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students" (Gay, 2000, p. 29). By creating classroom norms reflective of the students' identities, and not of mainstream culture, the culturally responsive educator mitigates the challenges of overcoming "cultural mismatches" between the home and school cultures (Collard & Stalker, 1991; Ladson-Billings, 1995). Culturally responsive teaching is distinguished by its emphasis on validating, facilitating, liberating, and empowering minority students by "cultivating their cultural integrity, individual abilities, and academic success" (Gay, 2000, p. 44) and is based on the four pillars of "teacher attitude and expectations, cultural communication in the classroom, culturally diverse context in the curriculum, and culturally congruent instructional strategies" (Gay, 2000, p. 44).

Ginsberg and Wlodkowski developed the Motivational Framework for Culturally Responsive Teaching (2009) to describe culturally responsive teaching in adult learning environments. They posited that culturally responsive teaching increases the intrinsic motivation of students of non-dominant cultural groups. The Motivational Framework for Culturally Responsive Teaching is designed to create an environment in which "inquiry, respect, and the opportunity for full participation by diverse adults is the norm" (Wlodkowski, 2004, p. 161) and is based on the integrated use of four elements: *establishing inclusion, developing attitude, enhancing meaning,* and *engendering competence* (Ginsberg & Wlodkowski, 2009; Wlodkowski, 2004). Each element, or criteria, has corresponding norms and practices that adult educators can use in creating or evaluating their praxis. This four-element model served as the theoretical foundation for the CRTS.

## Methods

This study was guided by the following research questions:
1. What is the factor structure of the CRTS?
2. Are there correlations between the CRTS and the Multicultural Teaching
   Competencies Scale?

## Data Collection

The CRTS includes 17 teaching practices about which participants report two scores: *frequency of use* and *desired frequency of use* (formerly *perceived importance*) on 5-point frequency scales with levels of: *never, rarely, sometimes, usually,* and *always*. Participants respond to items such as, *"I ask students to compare their culture with American culture"* and *"I include lessons about the acculturation process"*. See Appendix A for the complete item pool. The survey also includes demographic questions about the respondent's native language, years of teaching experience, and cultural and linguistic profile of the teaching environment.

## Data Analysis

### Factorial Structure

The CRTS was first used in a study of adult education ESOL and EAP teachers in Florida in late 2012 (Rhodes, 2013a; 2013b). The target population consisted of teachers in non-credit, adult education ESOL and EAP programs in Florida. From the 430 person sampling frame, there were 134 completed surveys resulting in a 31.2% response rate. The majority of respondents were females (78.38%) from community or state colleges (92%).

An exploratory factor analysis (EFA) was used to examine the structure of the CRTS. The EFA produced a five-factor solution using a varimax rotation and was used for the final solution. The factor pattern coefficients revealed a majority of the 17 items with factor loadings of .55 or greater and thus, deemed significant indicators of their respective factors (Comrey & Lee, 1992; Hair, 2010). Using this cutoff point to compare the factor structure of the items in this study to the four-element theoretical framework provided by the Motivational Framework of Culturally Responsive Teaching (Ginsberg & Wlodkowski, 2009), limited similarities were found. The factors on the CRTS accounted for 56% of the total variance with eigenvalues higher than 1.0 for each of the factors. Therefore, the eigenvalues met the criteria for Kaiser's rule (Mertler & Vannatta, 2005), but did not meet the criteria for the total variance (greater than 60%) that is considered acceptable for research in the social sciences (Hair, 2010; Henson & Roberts, 2006; Mvududu & Sink, 2013). The findings of this survey administration demonstrated a limited relationship to its theoretical framework. Therefore, while additional studies with expanded sampling frames may yield a different internal structure, these findings suggest a singular uni-dimensional structure. A complete list of the factor pattern coefficients is presented in Table 1.

### Convergent Validity

The CRTS was also used in a nationwide study of adult education ESOL and EAP teachers in 2015. There were 218 responses, representing an overall response rate of 6%. In addition to the CRTS, participants in this study were asked to complete the Multicultural Teaching Competencies Scale (MTCS), (Spanierman et al., 2011). The MTCS is a 16-item self-report questionnaire that assesses skills, behaviors, and knowledge of culturally responsive teaching practices and theory and is divided into two sub-scales: Multicultural Teaching Skills

and Multicultural Knowledge.

Convergent validity describes the relationship between assessments (Crocker and Algina, 1986). If there is a positive correlation, the instruments can be seen to measure related constructs. Scores from the CRTS and the MCTS sub-scales were analyzed for correlations through Pearson-product moment correlations. There were positive correlations between the *frequency of use* scores of the CRTS and both the Teaching Skills ($r = .587$; $p < .01$) and Knowledge sub-scales ($r = .506$; $p < .01$) of the MCTS. These significant correlations in the expected positive direction provide support for the convergent validity of the CRTS, by indicating that those who use or desire to use more culturally responsive teaching practices are also more skillful at and knowledgeable about teaching students of diverse backgrounds.

Table 1. *Factor Pattern Coefficients Based on a Principle Components Analysis for Items Related to Frequency of Use Sub-Scale in Study 1*

**Rotated Component Matrix[a]**

| | Component | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| Item 1 – Domain A - *Establishing Inclusion* | **.675** | -.149 | .253 | -.165 | .005 |
| Item 2 – Domain B - *Developing Attitude* | .168 | .234 | **.691** | -.214 | .043 |
| Item 3 – Domain C - *Enhancing Meaning* | **.711** | .260 | -.049 | .070 | -.328 |
| Item 4 – Domain A - *Establishing Inclusion* | .435 | .332 | .065 | .236 | .090 |
| Item 5 – Domain A - *Establishing Inclusion* | -.026 | **.681** | .112 | -.053 | .201 |
| Item 6 – Domain A - *Establishing Inclusion* | .206 | **.690** | -.063 | .044 | -.309 |
| Item 7 – Domain D - *Engendering Competence* | .387 | .185 | .434 | .361 | -.152 |
| Item 8 – Domain B - *Developing Attitude* | .021 | -.025 | **.740** | .338 | .087 |
| Item 9 – Domain B - *Developing Attitude* | **.544** | .118 | -.219 | .346 | .178 |
| Item 10 – Domain A - *Establishing Inclusion* | .096 | .103 | .025 | -.009 | **.762** |
| Item 11 – Domain D - *Engendering Competence* | .142 | .139 | -.051 | **.641** | .239 |
| Item 12 – Domain A - *Establishing Inclusion* | .135 | **.585** | .289 | .188 | .364 |
| Item 13 – Domain A - *Establishing Inclusion* | **.559** | -.045 | .269 | .162 | .261 |
| Item 14 – Domain C - *Enhancing Meaning* | **.608** | .002 | .123 | .150 | .332 |
| Item 15 – Domain D - *Engendering Competence* | .349 | .337 | .305 | .355 | .301 |
| Item 16 – Domain C - *Enhancing Meaning* | **.652** | .259 | .046 | -.089 | .009 |
| Item 17 – Domain D - *Engendering Competence* | -.075 | -.106 | .204 | **.689** | -.238 |

**Implications**

English language teachers of adults face many obstacles in the creation of a learning environment that addresses the needs and learning styles of these diverse learners (Villegas & Lucas, 2002). Prior to the development of the CRTS, there was little to guide those educators in the creation of a culturally responsive environment when ethnic and linguistic heterogeneity is the norm. This investigation examined the psychometric properties of the newly-developed CRTS. Using two studies conducted with adult ESOL and EAP teachers, the researcher examined the dimensionality of the construct of culturally responsive teaching and the internal consistency and construct validity of the two sub-scales of the CRTS.

**Factor Structure.** Using the four elements of Ginsberg and Wlodkowski's model (2009), this researcher hypothesized a multi-dimensional construct of the CRTS. However,

findings from the exploratory factor analysis conducted in Study I support a uni-dimensional structure. An explanation may be found in the interconnected and holistic nature of the model's design. The Motivational Framework of Culturally Responsive Teaching was designed to assist practitioners in instructional planning with self-reflection at its foundation. The four elements are described as interconnected parts of a "holistic and systemic" (Ginsberg and Wlodkowski, 2009, p. 34) model of classroom practice. All elements work in partnership to create an environment conducive to learning for students of diverse backgrounds.

Another explanation may be linked to the survey items' lack of sensitivity to nuances involved in culturally responsive teaching. The survey includes 17 items which were developed and validated through online questionnaires with multiple choice questions. The lack of open-ended questions may have resulted in an overly restrictive validation process and could be improved upon by conducting live focus groups. Using these, and additional qualitative methods, would allow for probing of participants in order to gain a better understanding of this discrepancy between culturally responsive teaching theory and its practice in adult ESOL and EAP classrooms.

**Reliability.** When examining latent traits such as culturally responsive teaching practices, the reporting of the reliability of sample scores establishes a level of consistency of these unobservable characteristics (Meyer, 2010). In both Study 1 and 2, the Cronbach Alpha Coefficient of the scores from the frequency and desired frequency sub-scales demonstrated good levels of internal consistency, ranging from .781 to .880. Thus, there is evidence that the CRTS yields consistent and reliable results.

**Convergent Validity.** Convergent validity describes the relationship between assessments (Crocker and Algina, 1986). If there is a positive correlation, the instruments can be seen to measure related constructs. In Study 2, scores from the CRTS and the MCTS sub-scales were analyzed for correlations through Pearson-product moment correlations. The hypothesis of a positive relationship between the two areas examined by the MCTS, multicultural knowledge and multicultural teaching, and the two sub-scales of the CRTS guided the examination of data. The findings support the hypothesis for this sample.

The MCTS approaches multicultural teaching as a complex and ongoing activity. The theoretical framework of the MCTS is a multi-dimensional construct of: continual critical reflection, motivation to increase awareness of diversity, and the connection between educator beliefs and praxis (Spanierman et al., 2011). It has been used in a variety of educational settings with acceptable levels of internal consistency and validity. Therefore, the positive correlations found in Study 2 demonstrate the usefulness of the CRTS to adult educators interested in exploring the cultural responsiveness of their teaching.

In conclusion, the results of these studies provide initial support for the reliability and validity of the CRTS. Findings suggest that the CRTS is a reliable uni-dimensional measure, whose scores demonstrate convergent validity through positive correlation with multicultural teaching knowledge and skills. The CRTS provides a useful tool for researchers to expand understanding of adult ESOL and EAP teachers' strategies to incorporate students' cultural identities into the classroom in the presence of ethnic, racial, and linguistic diversity. Further research will yield additional information about general patterns of behavior and should include examinations of differences based on teacher demographics.

Furthermore, prior to the development of this survey, adult education ESOL and EAP

teachers could not easily assess the extent to which they used this teaching approach. The CRTS enables these teachers to evaluate specific teaching practices which are relevant to their classroom. It can serve as an important tool to foster and improve culturally responsive teaching practices in low-proficiency level teachers and to expand culturally responsive teaching practices in average to high-proficiency level teachers. Future studies will be conducted to strengthen these preliminary findings and expand the growing knowledge base of culturally responsive teaching practices of adult educators.

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**Appendix A**
Culturally Responsive Teaching Survey

| Item # | Item Prompt |
|--------|-------------|
| 1 | I include lessons about the acculturation process. |
| 2 | Examine class materials for culturally appropriate images and themes |
| 3 | I ask students to compare their culture with American culture. |
| 4 | I make an effort to get to know my students' families and backgrounds. |
| 5 | I learn words in my students' native languages. |
| 6 | I use mixed-language and mixed-cultural pairings in group work. |
| 7 | I use peer tutors or student-led discussions. |
| 8 | I use surveys to find out about my students' classroom preferences. |
| 9 | I elicit students' experiences in pre-reading and pre-listening activities. |
| 10 | I encourage students to speak their native languages with their children. |
| 11 | I have students work independently, selecting their own learning activities. |
| 12 | I spend time outside of class learning about the cultures and languages of my students. |
| 13 | I include lessons about anti-immigrant discrimination or bias. |
| 14 | I supplement the curriculum with lessons about international events. |
| 15 | I ask for student input when planning lessons and activities. |
| 16 | I encourage students to use cross-cultural comparisons when analyzing material. |
| 17 | I provide rubrics and progress reports to students. |