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# Change in Cultural Competency among Students during an Intentional Human Relations

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**Change in Cultural Competency among Students during an Intentional Human Relations**

**Experience**

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## Abstract

This study measured changes in the intercultural competency of undergraduate students in a course, Human Relations in a Multicultural Society. The hypothesis for this study was that the intentional, cross-cultural experiences in the course will have an impact on the cultural competency of each student. This course is taught each semester at a Midwestern public university. The study included 70 undergraduate students between 18 and 35 years old who voluntarily enrolled in the course and represented students in academic majors such elementary education, sports management, social work, mass communications, journalism, and pre-professional studies (e.g., mortuary science, veterinary medicine, therapy). The theoretical basis of the study was the Developmental Model of Intercultural Sensitivity (DMIS). For this study, the Intercultural Development Inventory (IDI) was used as a measure of cultural competency. The IDI was completed by subjects at the beginning of the semester and at the conclusion of the semester. This provided a process to compare pre-instruction and post-instruction scores. Data was analyzed to compare scores and to identify the cultural orientation of each student among five stages of the DMIS: Denial, Defense, Minimization, Acceptance, and Adaptation. Researchers expect that subjects will show positive gains in overall intercultural sensitivity. Results will be used by the local university to facilitate strategic initiative to educate undergraduate students in multicultural diversity.

***Keywords:* Cultural Competency, Multicultural, Diversity**

## Change in Cultural Competency among Students during an Intentional Human Relations Experience

The purpose of this study was to assess changes in undergraduate students' cultural competency after participating in an intentional, multicultural relations experience (EEC 222w). The hypothesis for this study was that the intentional, cross-cultural experiences will have an impact on the cultural competency of each student. This course is taught each semester at a Midwestern public university. The study included 70 undergraduate students between 18 and 35 years old who voluntarily enrolled in the course and represented students in academic majors such elementary education, sports management, social work, mass communications, journalism, and pre-professional studies (e.g., mortuary science, veterinary medicine, therapy).

Experiences in this course were developed in response to a series of priorities by accreditation and sponsoring organizations for teacher preparation programs. The National Council for Accreditation of Teacher Education (NCATE) is encouraging teacher preparation programs to foster and measure culturally responsive teaching.<sup>1</sup> Minnesota State University, Mankato (MSU, Mankato) is implementing experiential requirements with Diverse Cultures “To give students learning opportunities to experience diversity with reflection supervised by a faculty member to assist them in recognizing them in recognizing and responding to conditions of marginalized populations referring to specific groups of peoples of individuals that are relegated to the outer edges of society or social standing, both in this country and abroad.”<sup>2</sup>

The College of Education (COE) at MSU, Mankato is committed to prepare its teacher candidates to be highly effective in an increasingly culturally diverse Minnesota K-12 classroom. One of the goals of the COE is “To prepare principled professional practitioners who thrive and succeed in diverse environments, promote collaborative and generative communities, and engage

in life-long learning.”<sup>3</sup> The teacher preparation programs at MSU, Mankato seek to provide teacher candidates with field “experiences among students with exceptionalities and students from diverse ethnic, racial, gender, and socioeconomic groups in their field experiences and student teaching.”<sup>4</sup>

To that end, placements in diverse field experiences are required for all students. For example, beginning in the Spring 2009 semester, COE students had the opportunity to spend 6 weeks in a cross-cultural emersion field experience in Queensland, Australia. Other students have been encouraged to participate in intensive and intentional cross-cultural experiences in southern Minnesota (e.g., service learning experiences, field experience placements, etc.).

The United States’ population is increasingly diverse racially, ethnically and culturally. By 2020, one out of every three Americans will be a person of color.<sup>5</sup> Diversity also means diversity in behaviors, gender identity, and sexual orientation. “To promote multicultural competence, experts have suggested using a multifaceted training approach that includes cognitive, affective, and consciousness-raising activities.”<sup>6</sup>

Brown<sup>7</sup> suggested four steps to becoming culturally competent: (1) knowledge of other cultures, (2) understanding different components of a culture and how others may view a situation differently, (3) acceptance, respect and tolerance for all cultures, and (4) appropriate behavior with people of a variety of cultures and traditions. The course intervention for this project addressed all four steps. Use of an intercultural inventory assessed cultural competency changes as a result of the interventions related to all four steps.

This study was based on the Developmental Model of Intercultural Sensitivity (DMIS).<sup>8</sup> This theory suggests that individuals progress through predictable stages as their cultural competency increases. There are six stages of the DMIS; the first three stages fall into the



**Figure 1: Developmental Model of Intercultural Sensitivity (Hammer et. al, 2003)**

**Methods**

In the Fall semester of 2010 at Minnesota State University, Mankato, a study was conducted using two sections of a 3-credit undergraduate course, “Human Relations in a Multicultural Society.” The course was considered as the independent variable in this study. The research was used to determine what kind of impact the course had on a student’s cultural competency. The COE created this course as an intervention to improve students’ knowledge and understanding of diverse populations. Such an impact would prepare the students for diversity in the workplace and in their future. The course includes intentional and intensive cross-cultural experiences in order to meet several university-wide objectives:<sup>9</sup>

1. Interact with individuals from diverse populations outside the classroom and have the opportunity to reflect on such interactions.
2. Demonstrate an acquisition of the basic knowledge and understanding of diversity related concepts so that the student’s experience will have meaning and context.
3. Integrate classroom knowledge with experiential learning in analyzing and responding to conditions of marginalized populations.

Students self-selected the course from among general education courses as requirements for their bachelor’s of science degrees; however, this course was required for elementary education majors. During Fall 2010, there was a population of 250 undergraduate students enrolled in five sections of the course. This study used a convenience sample of 70 students from

among the students that were enrolled in two sections of this course at MNSU, Mankato. All participants were between 18 and 34 years old.

The course met on campus for 2.5 hours per week for 15 weeks. There was an off-campus field experience with service learning component. This was a writing-intensive course, with feedback and opportunity for revision. The course included these assignments and learning experiences, following the cycle: learning, description, experience, reflection:

1. Attendance and readings
2. Peer review and use of writing assessment website for feedback on writing products
3. Video/DVD programs (e.g., *Shadows of Hate*)
4. Guest speakers (e.g., LGBT ally orientation panel)
5. Cultural Self-analysis
6. Communication Skills Self-analysis
7. Temperament Self-analysis and Reflection Paper
8. Professional Dispositions Self-analysis and Reflection Paper
9. Service Learning Field Experience and Reflection Paper
10. Group Teaching Experience and Reflection Paper
11. Cultural Diversity Reflection Paper
12. Participation in Cultural Event

The study was approved by the Institutional Review Board at Minnesota State University, Mankato before the study began. Prior to the pre-test and the post-test, the instructions and information on each test were explained by two undergraduate assistants and the class instructor. All participation in this study was voluntary, and the students could choose to end their participation at any point. Forty-nine participants completed both the pre-test and the post-test

assessments. Students who chose to participate used time in class to complete the research instrument online in a computer lab on campus. The study participants read and signed a consent form. The students completed the research instrument in private; their scores remained anonymous to ensure confidentiality.

The study collected data using the Intercultural Development Inventory (IDI).<sup>10</sup> The IDI is a theory-based test while most tests that measure intercultural competence are criterion-based. The questions are asked in the form of a response scale of five options; 5 = agree, 4=agree somewhat more than disagree, 3=disagree some and agree some, 2 = disagree somewhat more than agree, 1=disagree. The questions asked on the IDI were statements taken from interviews of 40 people explaining situational and cross-cultural diversity. A factor analysis was then used to determine the six measurements used to score participants.

The IDI collects all of the answers into an in-depth profile. It also provides the stage of development of the individual based on the answers provided and feedback on that particular stage. The IDI has five scales: *Denial/Defense (D/D) scale*;, *the Reversal (R) scale*, *Minimization (M) scale*, *Acceptance/Adaption (A/A) scale*, and *the Encapsulated Marginality (E/M) scale*. There are two more scales that give an overall *Developmental Intercultural Profile* and an overall *Perceived Intercultural Profile*. The *Developmental Intercultural Profile* is how the IDI rates intercultural sensitivity, whereas the *Perceived Intercultural Profile* rates intercultural sensitivity. There are four more scales associated with the overall individual profile; *Orientation Gap (OG)*, *Trailing Orientations (TO)*, *Leading Orientations (LO)*, and *Cultural Disengagement (CD)*.

Confirmatory factor analyses conducted by Hammer and others<sup>11</sup> supported five dimensions with reliability coefficients ranging from .80 to .85. Correlations with the

Worldmindedness Scale<sup>12</sup> and Intercultural Anxiety Scale<sup>13</sup> supported the IDI's construct validity. Based on the psychometric properties associated with this instrument, its authors have suggested that it is useful for purposes of assessing training needs, identifying interventions aimed at increasing intercultural competence, assisting with the selection of personnel, and program evaluation. Based on the testing that was performed on the IDI for validity and reliability, it has been confirmed that this test can be used in determining an individual or groups orientations when looking at cultural differences. It can then be used in the future to re-assess the same individual or group to test if progress has been made if there was an intervention after the first assessment.

This study selected the IDI because of its suitability for a classroom-based setting. In the researchers' opinions, the IDI met the requirements to be considered a valid psychometric instrument. This contributes to the IDI being more generalizable and stable than other tests. In addition, it had a high validity rate for this type of study.

The survey was administered at the beginning of the Fall Semester and at the end of Fall Semester. The research instrument was administered by Dr. Elizabeth Sandell, who has been trained as a Qualified IDI Administrator. The investigators used only the group mean scores on five developmental scales to evaluate whether any significant indicators of change were observed in intercultural development. The group mean was used to protect individual privacy and to research the overall success of the class on the students. Participants could contact the investigators to view their individual score and have the results explained to them in private after the results were analyzed.

## Results

There were a total of 49 undergraduate students that took both the pre-test and the post test. The results were separated into three key parts; perceived orientation, developmental orientation, and the orientation gap. The perceived orientation is the level of cultural competence that the student's believe they have; the average for the group's perceived orientation at the pre-test was 119. When the students took the post-test the average perceived orientation was averaged at 118; both of these averages are represented in the acceptance stage. The developmental orientation is the level of cultural competence that the students actually have. The average for the pre-test was 88, while the average for the post-test was 89. Both of the developmental scores for the students are represented by the minimization stage. The orientation gap is the difference between what the students think their cultural competency is and what the IDI records it to actually be; it is also represented by the difference between the scores of the developmental orientation and the perceived orientation of the students. Both orientation gap scores averaged to be around 30 points. This indicates that students in the class as an average overestimated their cultural competence by a stage.

Table 1 shows the results collected

	Pre-instruction		Post-instruction		Orientation
	n	Score	n	Score	
Perceived Orientation	49	119.02	49	118.75	Acceptance
Developmental Orientation	49	88.19	49	87.59	Minimization
Orientation Gap	49	30.83	49	31.16	Overestimated

Table 1

Upon completion of all of the tests the researchers grouped pre and post scores of the participants based on their assigned identification numbers. A repeated measures ANOVA was

used to analyze scores. The scores of the pre and post tests were evaluated based on the five categories analyzed in the IDI. A chi-square was conducted to determine if the participants of EEC222W improved, regressed, or had no change in regards to their cultural competency. It was found that there was no significant difference between the pre- and the post- test scores in any of the categories analyzed.

### **Discussion**

The purpose of this study was to assess the impact of intensive and intentional cross-cultural experiences in southern Minnesota on MSU, Mankato students by collecting data from a pre/post assessment using the Intercultural Development Inventory. Outcomes of the study will be used for program assessment and modification for future courses.

The group mean scores were used to protect the privacy of the participants. If individual scores had been taken into account there may have been a significant difference found between the pre- and the post- scores. Several of the individual post-test scores were significantly different from the pre-test scores; however when compiled together, the significance was lost. 70 participants initially took the pre-test. 49 participants completed the pre- and the post-test necessary to be included in the results. Therefore, the results may have been insignificant due to the small sample size that was available. It was predicted that if all of the students who took the pre-test, actively participated in the class for the Fall 2010 Semester, and took the post-test, the results would show a significant difference between the pre- and the post-test scores. This would indicate that the students improved in cultural competency from the course materials studied and the experiences they were offered.

The average age range of the students that completed the pre- and post-test may have had an effect on the significance levels. A majority of the students were at the Freshman and Sophomore level. The students at the Freshman and Sophomore levels may not have enough experience with diversity before coming into the course. If the student majority was at the Senior level, the results may have been different. The instructor had many observations that she believes contributed to the outcome of the student's cultural competency. Dr. Elizabeth Sandell reported that many students had little life experience with cultural variations, and this likely led to a lack of elaborate understandings of differences. If the students were not able to understand cultural differences it is likely they could not apply the more complex frameworks that were represented in the class. With the students unable to understand the course frameworks and concepts it is likely that this enforced the simpler stereotypes they had before they took the course.

This research resulted in a number of changes in the course EEC222W to try to increase student's cultural competency for the upcoming school year. Changes that were made include changing the textbook to *Understanding Human Differences* by K. L. Koppelman and R. L. Goodhart. Another change that was implemented is requiring students to take more personal self-assessments to try to increase the student's awareness of their own culture. An additional change that was made is that a cultural partnership was added which required the student to spend 9 hours with someone from another culture, have an ethnographic interview and write a reflection paper. This change was implemented in order to make students aware of cultures they have little or no knowledge of.

For future research in this area, it would be beneficial if there were a larger amount of participants available for the pre- and post- tests. A larger sample overall may have produced a noticeable difference between the pre- and post-test scores. This research has generated many

separate research questions. Examples of these include but are not limited to: What changes in curriculum design and content for a *one-semester course* enhance students' cultural competency? What difference does it make that students were freshmen and sophomores? Along with, what difference does it make that the course was one semester not two?

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**Authors:**

Samantha Tupy is a Minnesota State University Mankato Senior. She presented on "change in cultural competency among undergraduate students after an intentional human relations experience" at the Undergraduate Research Conference in Minnesota and at the National Conference of Undergraduate Research in New York. She received a Best Presentation Award at the 2011 Undergraduate Research Conference. She and her colleague, Camille McNabb, received a grant from the MSU Foundation to support this research study. She will be going on to pursue her doctoral degree in Clinical Psychology. Dedicated to her education, she is on the Dean's List, received the Psychology of Women Scholarship, and is in the National Society of Leadership and Success. She plans on graduating with her bachelor degree with honors. She will be on two research teams come Fall 2011.

Camille McNabb, MN, received a Best Presentation Award at the 2011 Undergraduate Research Conference, at Minnesota State University, Mankato. She and her colleague, Samantha Tupy, received a grant from the MSU Foundation to support this research study. Ms. McNabb is a senior majoring in psychology and has been accepted into an accelerated program to earn her master's degree in Industrial and Organizational Psychology.

**Faculty mentor:**

Elizabeth J. Sandell, Ph. D., is an Associate Professor in Education. She has taught at Minnesota State University, Mankato, MN since 2005. She studied Early Childhood Education, Educational Administration, and Social Work at the University of Minnesota. Before coming to Minnesota State Mankato, she taught at Macalester College, Crown College, and the University of Minnesota. She is a former Director of Early Childhood Family Education for the Saint Paul Public Schools. She is very interested in quality rating indicator for early childhood education programs; human relations in a multicultural society; and education in the former Soviet Union (which she has visited 14 times).