

**MINNESOTA STATE UNIVERSITY, MANKATO**

**REQUIRED COVER PAGE**

**APPLICATION FOR FACULTY RESEARCH GRANT**

\*\*All sections/questions must be completed to be considered for grant award.

<b>Choose one:</b> <input type="checkbox"/> Creative Project <input checked="" type="checkbox"/> Research Project	Date of Minnesota State Mankato Faculty Appointment (Semester and Year): <u> Fall 2005</u> Date of Last FRG Award (Semester and Year awarded) (if applicable): <u> Spring 2011</u> Final FRG report submitted to RASP (if applicable): <u> X</u> Yes <u> </u> No
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**1. Project Title:**  The Relationship between Temperament and Cultural Competency

**2. Name of Principal Investigator/Project Director:**  Elizabeth J. Sandell

**3. College (abbrev):**  COE **4. Department:**  EEC

**5. Campus Mail Address:**  328AH **6. PI/PD Campus Phone:**  389-5713

**7. Amount Requested: \$**  5,000.00 **8. Total Cost of Project: \$**  7,200.00

**9. Does this project involve:**

**Yes No**

- human subjects? IRB log #  530533-1
- animals/animal care facility?
- radioactive materials?
- hazardous materials?
- biological agents or toxins restricted by the USA Patriot Act?
- copyright or patent potential?
- utilization of space not currently available to the PI/PD?
- the purchase of equipment/instrumentation/software currently available to the PI/PD?

*NOTE: If the answer is "yes" to any of the above questions, the investigator must attach appropriate documentation of approval or justification for use/purchases, including housing of animals.*

**10. Are you a new faculty member (6 or fewer academic semesters)?**   Yes  X No

Checklist for Faculty:

- |   |  |
|---|--|
| <u> </u> Cover Page (A)                                 | <u> </u> Dissemination of results (F)                    |
| <u> </u> Abstract (B)                                   | <u> </u> Timeline and percent of time devoted to project |
| <u> </u> Purpose/objectives (C)                         | <u> </u> Repeated request (G)                            |
| <u> </u> Significance/need (D)                          | <u> </u> Budget has only allowable expenses(H)           |
| <u> </u> Process for attainment of objectives/goals (E) | <u> </u> Bibliography (if applicable) (I)                |
| <u> </u> Vita (3 pages maximum) (J)                     |  |
- Proposal follows format requirements: double-spaced (except sections H-J), 12-point font, one-inch margins, 15 pages with up to 5 pages of attachments to a maximum total of 20 pages (excluding the cover page) for the complete application, and all pages numbered.

*Proposals that do not follow format requirements will be eliminated without review.*

**SIGNATURES**

**Eligibility:**   **Returning fixed term**   **Tenure-track**  X **Tenured**

**Department Contribution** (if applicable): \$

If CASH, Account Number:

**Equipment:** The department acknowledges responsibility for the maintenance and upkeep of any equipment purchased with grant funds.

Chairperson   Date

**College Contribution** (if applicable): \$

If CASH, Account Number:

Dean   Date

**Date Stamp & Initial Receipt in the Office of Research and Sponsored Programs (WA 325)**

## **B. ABSTRACT**

This project will examine the relationship between changes in Cultural Competency (in undergraduate students) and instructional strategies that involve intercultural community service learning, such as the Mahkato Wacipi PowWow. The study will respond to this research question: To what extent do intercultural service learning experiences affect changes in the Cultural Competency of undergraduate pre-service teachers? Cultural Competency, according to Hammer and Bennett (2010), may be defined as “the capability to accurately understand and adapt one’s behavior to cultural difference and commonality.” Data will be collected using the Intercultural Development Inventory (IDI), developed by Hammer and Bennett (2010.) The IDI is based on Bennett’s Developmental Model of Intercultural Sensitivity (1986), which identifies five orientations toward cultural differences: denial, polarization, minimization, acceptance, and adaptation. Undergraduate students in the course Human Relations in a Multicultural Society (part of MSU’s teacher preparation program) will complete the IDI at the beginning and at the conclusion of each semester, in order to measure changes in Cultural Competency that might be attributed to the intercultural service learning experiences (such as the Mahkato Wacipi PowWow) that are included in the course. The results of this study will help determine the efficacy of including intercultural service learning as one of the teaching methods used by the instructors to develop Cultural Competency.

## **C. PURPOSE / OBJECTIVES**

This project will examine the relationship between changes in Cultural Competency (in undergraduate students) and instructional strategies that involve community services learning, such as the Mahkato Wacipi PowWow. The study will respond to this research question: To what extent do intercultural service learning experiences affect changes in the Cultural Competency of undergraduate pre-service teachers?

## **D. SIGNIFICANCE / NEED**

Teacher preparation programs continue to recognize the need to incorporate cultural competence as a critical component (May, Collins-Chobanian, & Wong, 1994; Ladson-Billings, 1995; Villegas &

Lucas, 2002). Cultural competency, according to Hammer & Bennett, may be defined as “the capability to accurately understand and adapt behavior to cultural difference and commonality” (2010). In 2007, 4 out of 10 American students in public schools were from ethnic minority families (National Center for Education Statistics, 2007a). Furthermore, 90% teachers who work with these students were white (National Center for Education Statistics, 2007b). During the next 15 years, according to school analysts, there will be an even more diverse student population (Hernandez, Denton, & Macartney, 2008). There is a need for school professionals who can adequately recognize and meet the needs of this increasingly diverse student population (Sleeter, 2001).

This study relates to the COE mission statement: “Prepare professionals who embrace big ideas and real-world thinking to ensure student success” (College of Education, retrieved March 16, 2014 from <http://ed.mnsu.edu/about/framework.html>). The research will provide students and faculty members at MSU with collaborative, critical reflection about culture and education in diverse environments.

Furthermore, one of the requirements for teacher licensure in Minnesota is completion of a course such as Human Relations in a Multicultural Society. Historically, this course has included student learning of knowledge about various cultures in Minnesota. In a series of other research projects at MSU, Mankato, this principal investigator has explored various influences of elements in the Human Relations course on undergraduate students’ cultural competency. These elements (e.g., team-based research, cultural partnership, and instructor) were less related to learning knowledge ABOUT other cultures and more related to reflections on actual experiences WITH other cultures.

The principal investigator has conducted several studies in cooperation with members of an undergraduate research team. In Fall, 2010, McNabb and Tupy (2011) used the IDI to measure baseline and changes in cultural competence for 49 undergraduate students who

completed a multicultural relations course. The course instructional strategies included self-assigned service learning and team-based library research projects. The study found no statistically significant differences between IDI scores at the beginning of the semester when compared to the end of the semester.

In Fall, 2011, Sandell and Tupy (2012) examined changes in cultural competency among 100 undergraduate students during a semester-long multicultural relations course. The course instructional strategies included a cultural partnership assignment with nine hours of interaction and an interview with a person from a culture other than the undergraduate student's own culture. And, rather than students assigning themselves for service learning, the course instructors assigned students directly to a community agency specifically with adults from other cultures. Results showed statistically significant differences between pre-instruction scores and post-instruction scores on the IDI.

Later, the principal investigator examined the variations in course instructor influence on changes in cultural competency among 87 undergraduate students who completed a multicultural relations course (Sandell, 2014). Overall results did show statistically significant differences between pre-instruction scores and post-instruction scores on the IDI. However, data analysis found no statistically significant differences between scores received by students among five different instructors.

#### **E. PROCESS FOR ATTAINMENT OF OBJECTIVES / GOALS**

The process for obtaining the objectives of this grant is delineated in the following paragraphs. An associated timeline is included below, in table format which highlights when specific tasks will be completed.

For 2014 – 2015, subjects will include 200 persons (100 each semester), who are between 18 and 30 years old, who enroll in EEC 222w (Human Relations in a Multicultural Society) during the

academic year. The study involves an assessment that will be used as part of the instructional strategy of the course. During class, the subjects will complete the assessment on-line at the beginning and conclusion of each semester. The results of the assessment are used to give feedback to students during the course. The data becomes archival data after the end of the semester. Minnesota State University, Mankato IRB published the Board Approval Letter Document related to this Project [530533-1] on IRBNet on October 23, 2013 (see attachment). Because this project and related projects are analyzing data that is collected as part of the course instruction, the IRB approved the project as exempt.

Students will complete the Intercultural Development Inventory (IDI) (Hammer & Bennett, 1998, 2001). The IDI consists of fifty, Likert-type items that can be answered in 20 to 30 minutes. The scale measures group intercultural sensitivity and is based on Bennett's Developmental Model of Intercultural Sensitivity (Bennett, 1986). The psychometric properties associated with the IDI have shown that it is useful for assessing training needs and identifying impact of interventions aimed at increasing intercultural competence.

All data collection will be complete in May, 2015. Data input into SPSS will take place in June and July, with further quantitative and qualitative data analyses commencing throughout the Summer semester. The investigator will use the group mean scores on five developmental scales to evaluate whether any significant indicators of change were observed in these areas of intercultural development. Data will be analyzed to determine the relationships between the changes in student cultural competency and the type of service learning in which the student participated. The quantitative data collected with the IDI will be analyzed by the investigator using the established IDI protocols and IBM® SPSS® Statistics Version 12.0 statistical analysis software (IBM Corp., 2012). This study will examine the IDI individual and group profiles to determine whether group characteristics were statistically significant. The alpha level for the analysis is set at  $\alpha = .05$ . Differences will be determined to be significant if they were at the  $p < 0.05$  level.

### Timeline

	08/14	09/14 – 12/14	12/14	01/15	01/15 – 05/15	05/15	06/15 – 08/15
	Start of Fall 2014	Fall 2014	End of Fall 2014	Start of Spring 2014	Spring 2015	End of Spring 2014	Summer 2015
Data Collection	X		X	X		X	
Course Instruction		X			X		
Data Input		X			X		X
Data Analysis	X			X			X
Conference Presentations		X			X		
Manuscript Preparation							Begins

#### **F. DISSEMINATION OF RESULTS**

Project results will be used by MSU, Mankato faculty members in designing and re-designing instructional strategies that impact students’ cultural competency. The results will also be used by Project GEM and the Mahkato Wacipi PowWow in designing its intercultural community service learning programs.

Project results will be presented at local, state and national conferences, including the American Evaluation Association conference and the MSU Undergraduate Research Symposium. Submission in written form of project results will be submitted to teacher education journals, e.g., Journal of Teacher Education, Journal of College Teaching and Learning, American Journal of Education.

Results will also be presented at college-wide faculty information and training sessions for on-going communication of program/strategy progress. Project results will be shared with the

College of Education Bush Educational Initiative Director and Bush Foundation as part of program evaluation procedures.

Outcomes of the study will be used for program assessment by the College of Education and its Department of Elementary and Early Childhood. MSU will use this information in considering the effectiveness of its cultural diversity goal: experience diversity with supervised reflection and recognize and respond to conditions of marginalized populations.

#### **G. REPEATED REQUESTS**

In a series of research projects at MSU, Mankato, this investigator has explored various influences on undergraduate students' cultural competency. Some of these activities were supported by Faculty Research Grant #211729 between 07/01/11 and 4/30/13. FRG#211729 used the IDI to measure changes in cultural competence for 49 undergraduate students who completed a multicultural relations course in Fall 2010. The course instructional strategies included team-based library research projects. That study found no statistically significant differences between IDI scores at the beginning of the semester when compared to the end of the semester. FRG #211729 also supported a project that examined changes in cultural competency among 100 undergraduate students the multicultural relations course in Fall 2011. Those course instructional strategies included a cultural partnership assignment with nine hours of interaction and an interview with a person from a culture other than the undergraduate student's own culture. Results showed statistically significant differences between pre-instruction scores and post-instruction scores on the IDI after a course that involved a cultural partnership assignment.

In contrast to earlier FRG-supported activities, this project will examine the relationship between changes in Cultural Competency (in undergraduate students) and instructional strategies that involve intercultural community service learning, such as the Mahkato Wacipi PowWow. The study will respond

to this research question: To what extent do intercultural service learning experiences affect changes in the Cultural Competency of undergraduate pre-service teachers?



**H. BUDGET FOR FACULTY RESEARCH GRANT**

PI/PD Associate Professor 5 hrs/wk x 30 wks (in-load)  
 Student Para Professional 1(P1) (researchers) 2 persons x \$8.70/hr x 10 hrs/wk x 30 wks  
 Purchase of IDI for data collection: 100 students each semester x 2 semesters x \$11/IDI x 2 (pre/post) = \$4400. The cost of the IDI for pre-instruction assessment will be contributed by the Department of Elementary and Early Childhood, College of Education. The cost of the IDI for post-instruction assessment will be paid by the FRG.

CATEGORY	AMOUNT
<b>Personnel</b> (include graduate assistants and other student labor) <u>Justification:</u> Student Para Professional 1(P1) (researchers) 2 persons x \$8.70/hr x 5 hrs/wk x 30 wks	<b>\$2800.00</b>
<b>Supplies, materials, and equipment</b> <u>Justification:</u> Purchase of IDI for data collection: 100 students each semester x 2 semesters x \$11/IDI x 2 (pre/post) = \$4400.	<b>\$4400.00</b>
<b>Copying/printing</b> <u>Justification:</u>	
<b>Communication</b> <u>Justification:</u>	
<b>Travel</b> <u>Justification:</u>	
<b>Other services</b> <u>Justification:</u>	
<b>Total Required</b>	<b>\$7200.00</b>
<b>Less Additional Contributed Funds</b>	<b>\$2200.00</b>
<b>TOTAL REQUESTED</b>	<b>\$5000.00</b>

## I. BIBLIOGRAPHY

- Bennett, M. (1986). A developmental approach to training for intercultural sensitivity. *International Journal of Intercultural Relations*, 10, 179 – 195.
- College of Education, Mission Statement, retrieved March 16, 2014 from <http://ed.mnsu.edu/about/framework.html>
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- May, L., Collins-Chobanian, S. & Wong, K. (1994) *Applied ethics: a multicultural approach* Englewood Cliffs, NJ: Prentice Hall.
- McNabb, C. & Tupy, S. (2011). Difference in Students' Cultural Competency Before and After an Intentional Human Relations Experience. *Journal of Undergraduate Research*, 11. Minnesota State University, Mankato, MN.
- National Center for Education Statistics (2007a) *Racial/ethnic distribution of public school students*. Available online at: <http://nces.ed.gov/programs/coe/2007/section1/indicator05.asp> (accessed 11 November 2008).
- National Center for Education Statistics (2007b) *Characteristics of full-time school teachers*. Washington, DC, National Center for Education Statistics.
- Sandell, E. (2014). Impact of Instructor Influence on Changes in Cultural Competency among Undergraduate Students during an Intentional Human Relations Experience. Unpublished monograph.
- Sandell, E., & Tupy, S. (2014). Where Cultural Competency Begins: Changes in Undergraduate Students' Intercultural Competency. (Manuscript submitted to the *Journal of Teaching and Teacher Education (JTTE)*).
- Sleeter, C. E. (2001) Preparing teachers for culturally diverse schools: research and the overwhelming presence of whiteness, *Journal of Teacher Education*, 52(2), 94–106.
- Villegas, A. J. & Lucas, T. (2002) Preparing culturally responsive teachers: rethinking the curriculum, *Journal of Teacher Education*, 53(1), 20–32.

## J. APPLICATION VITA

**Elizabeth J. Sandell**  
**Associate Professor**

Department of Educational Studies: Elementary and Early Childhood  
328 Armstrong Hall, Mankato, Minnesota 56001

Minnesota State University, Mankato

Date of Hire: 2005; Date of Promotion: 2011

Office: (507) 389-1516

[elizabeth.sandell@mnsu.edu](mailto:elizabeth.sandell@mnsu.edu)

web: <http://mavdisk.mnsu.edu/sandee1/>

March 9, 2014

### **Mission Statement**

To teach and organize people in transition, so they grow in faith and hope, control their own decisions and resources, and use their gifts and talents.

### **Academic Background**

University of Minnesota, Minneapolis, MN 1987-1991 Ph. D.

Major: Education/Early Childhood Minor: Psychological Foundations

University of Minnesota, Minneapolis, MN 1976-1980 M. A.

Major: Educational Administration Supporting field: Child Development

University of Minnesota, Minneapolis, MN 1971-1974 B. A.

Major: Social Welfare Supporting field: Child Development

### **Academic Experience**

Interim Director, Undergraduate Research Center, Minnesota State University, Mankato, MN. 2014.

Associate Professor, Department of Educational Studies: Elementary and Early Childhood, College of Education, Minnesota State University, Mankato, MN. 2011 – present.

Assistant Professor, Department of Educational Studies: Elementary and Early Childhood, College of Education, Minnesota State University, Mankato, MN. 2005 – 2011.

Acting Director, Center for Excellence in Teaching and Learning, Minnesota State University, Mankato, MN. 2009.

Chairperson, Department of Educational Studies: Elementary and Early Childhood, College of Education, Minnesota State University, Mankato, MN. 2006 – 2008.

### **Academic and Creative Contributions**

Blackhurst, A. E., Wenger, G. L., and Sandell, E. J. (2009). *The Value of Undergraduate Research and Creative Activity in the Tenure and Promotion Process at Minnesota State University, Mankato*. Monograph. Mankato, MN: Minnesota State University, Mankato.

McNabb, C., Tupy, S. J., and Sandell, E. J. (2011). *Change in Cultural Competency among Students during an Intentional Human Relations Experience* presented April 1, 2011, at the 2011 National Conference on Undergraduate Research. Ithaca, NY.

McNabb, C., Tupy, S. J., and Sandell, E. J. (2011). *Change in Cultural Competency among Students during an Intentional Human Relations Experience* in Proceedings of the 2011 National Conference on Undergraduate Research. Ithaca, NY.

- McNabb, C., Tupy, S. J., and Sandell, E. J. (2011). *Change in Cultural Competency among Students during an Intentional Human Relations Experience* presented at the 2011 Undergraduate Research Conference. Mankato, MN.
- McNabb, C., Tupy, S. J., and Sandell, E. J. (2011). *Change in Cultural Competency among Students during an Intentional Human Relations Experience*. Journal of Undergraduate Research, Vol. 11. Mankato, MN: Minnesota State University, Mankato. Available from: <http://www.mnsu.edu/urc/journal/2011/>
- Sandell, E. J. (2007). Impact of international education experiences on undergraduate students. *The Delta Kappa Gamma Bulletin*, 73(4), 12 – 18. Available from: <http://www.deltakappagamma.net/associations/6498/files/BU-SUMMER%2007-TEXT.pdf>
- Sandell, E. J. (2011). *Assessing intercultural competence among undergraduate students: baseline data and analysis*. Monograph. Mankato, MN: Minnesota State University, Mankato.
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- Zahn, G. D., Sandell, E. J., and Lindsay, C. E. (2008). Fostering global-mindedness in teacher preparation. *International Journal of Teaching and Learning in Higher Education*, 19(3), 331 – 335. Available from: <http://www.isetl.org/ijtlhe/pdf/IJTLHE291.pdf>

ATTACHMENT- letter of approval from the IRB



October 23, 2013

Dear Elizabeth Sandell, PhD:

Re: IRB Proposal entitled "[530533-1] The Relationship Between Temperament and Cultural Competence"

Review Level: Level [I]

Your IRB Proposal has been approved as of October 23, 2013. On behalf of the Minnesota State University, Mankato IRB, I wish you success with your study. Remember that you must seek approval for any changes in your study, its design, funding source, consent process, or any part of the study that may affect participants in the study. Should any of the participants in your study suffer a research-related injury or other harmful outcome, you are required to report them to the IRB as soon as possible.

When you complete your data collection or should you discontinue your study, you must notify the IRB. Please include your log number with any correspondence with the IRB.

This approval is considered final when the full IRB approves the monthly decisions and active log. The IRB reserves the right to review each study as part of its continuing review process. Continuing reviews are usually scheduled. However, under some conditions the IRB may choose not to announce a continuing review. If you have any questions, feel free to contact me at [irb@mnsu.edu](mailto:irb@mnsu.edu) or 507-389-5102.

Cordially,

A handwritten signature in black ink that reads "Mary Hadley".

Mary Hadley, Ph.D.  
IRB Coordinator

A handwritten signature in black ink that reads "Sarah Sifers".

Sarah Sifers, Ph.D.  
IRB Co-Chair

ATTACHMENT agreement with collaborator

Project GEM  
631 – 320th Avenue  
Pemberton, MN 56078  
March 17, 2014

Elizabeth J. Sandell, Ph.D.  
Associate Professor  
Department of Elementary Education  
Minnesota State University, Mankato

Dear Dr. Sandell,

This letter is to document our willingness for Project GEM to involve students from MSU, Mankato in the intercultural service learning experience at the Mahkato Wacipi PowWow in 2014 at the Land of Memories Park.

As Volunteer Coordinator for the Mahkato Wacipi PowWow, I am committed to service in the community and organizing applied learning experiences for students. This will be accomplished both through field education and service learning requirements before, during, and after the PowWow.

We appreciate that field education and service learning involve the completion of assignments in the local community that tie meaningful learning experiences directly to course content. Through reflective activities, service, and field seminars, we will support students' enhancement of their understanding of course content, sense of civic responsibility, self-awareness, professional development and commitment to the community.

We agree to model professional, ethical, and appropriate behavior when interacting with persons at the event. We will provide students with a complete tour of the site, in order to ensure that students are aware of all safety policies and emergency procedures and are able to act responsibly in case of an emergency.

Furthermore, we agree to participate in evaluation of the event, including analysis of content of students' (anonymous) reflection papers and analysis of (anonymous) data about the students' cultural orientations.

We look forward to working with you!

Sincerely,

[X electronic signature]

Alice DeYonge  
Executive Director  
gem7773@mchsi.com