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Impact of Service Learning on the Inter-Cultural Competency of Pre-Service Teachers

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2017-2018 Student Research Team

College of Education, Minnesota State University, Mankato

@ 2018 National Conference on Undergraduate Research

Edmond, Oklahoma

Big ideas. Real-world thinking.



2017 - 2018

Student Research Team



- Mariah Adams
- Alyssa Harter (TA)
- Andrea Faye
Gangoso-Aguila
- Sean O'Rourke
- Jonathon Arndt
- Amanda Rousemiller
- Yuseina Brito-Lino
- David Edwards
- Chandler Gooding
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Research Questions

- **What is the beginning level of inter-cultural competency of undergraduate students?**
- **The effect of living abroad on the beginning of inter-cultural competency of pre-service teachers?**
- **Can one course make a difference in the inter-cultural competency of pre-service teachers?**
- **Is there any difference in cultural competence based on the type of service learning experience?**
- **How do changes in inter-cultural competency (ICC) compare among pre-service teachers at three data collection points?**

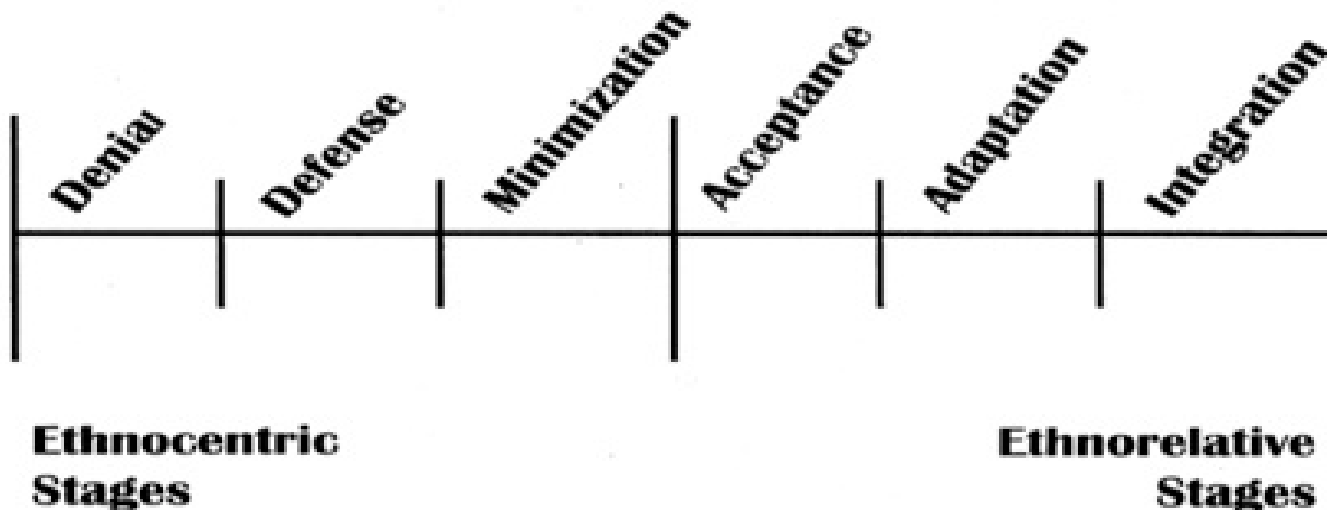
Definitions of Key Terms

- **Culture** is “the pattern of beliefs, behaviors, and values maintained by groups of interacting people, and passed to future generations” (Hammer & Bennett, 2010).
- **Inter-Cultural Competency** is "the capability to accurately understand and adapt behavior to cultural differences and commonality" (Hammer & Bennett, 2010).

Theoretical basis: Developmental Model of Inter-cultural Sensitivity (DMIS)

Development of Intercultural Sensitivity

Experience of difference →



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Data Collection

- demographics (e.g, gender, age, citizenship, childhood region, education level, minority status).
- academic major, academic classification, instructor.
- experience with people of cultures different than those of the students (e.g., time living abroad).
- measure of inter-cultural sensitivity with the *Inter-cultural Development Inventory* (Hammer & Bennett, 1998, 2001)
- collected at the beginning and end of the first semester and (for elementary education majors) just before the final semester of the program (student teaching in elementary school classrooms).

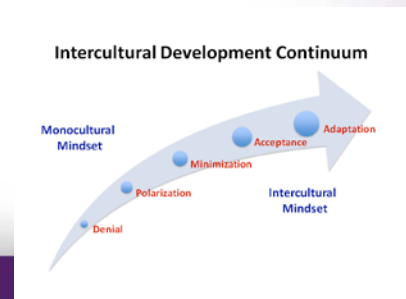
Demographic Characteristics

N	%	Demographic Information
604	73.5%	Female
769	93.4%	18 – 30 years old
755	91.8%	US citizens
63	7.7%	Ethnic minority in home country
742	90.3%	Childhood in North America
671	81.6%	Never lived out of US
295	35.9%	Second year (33 – 64 credits)
467	56.8%	College of Education

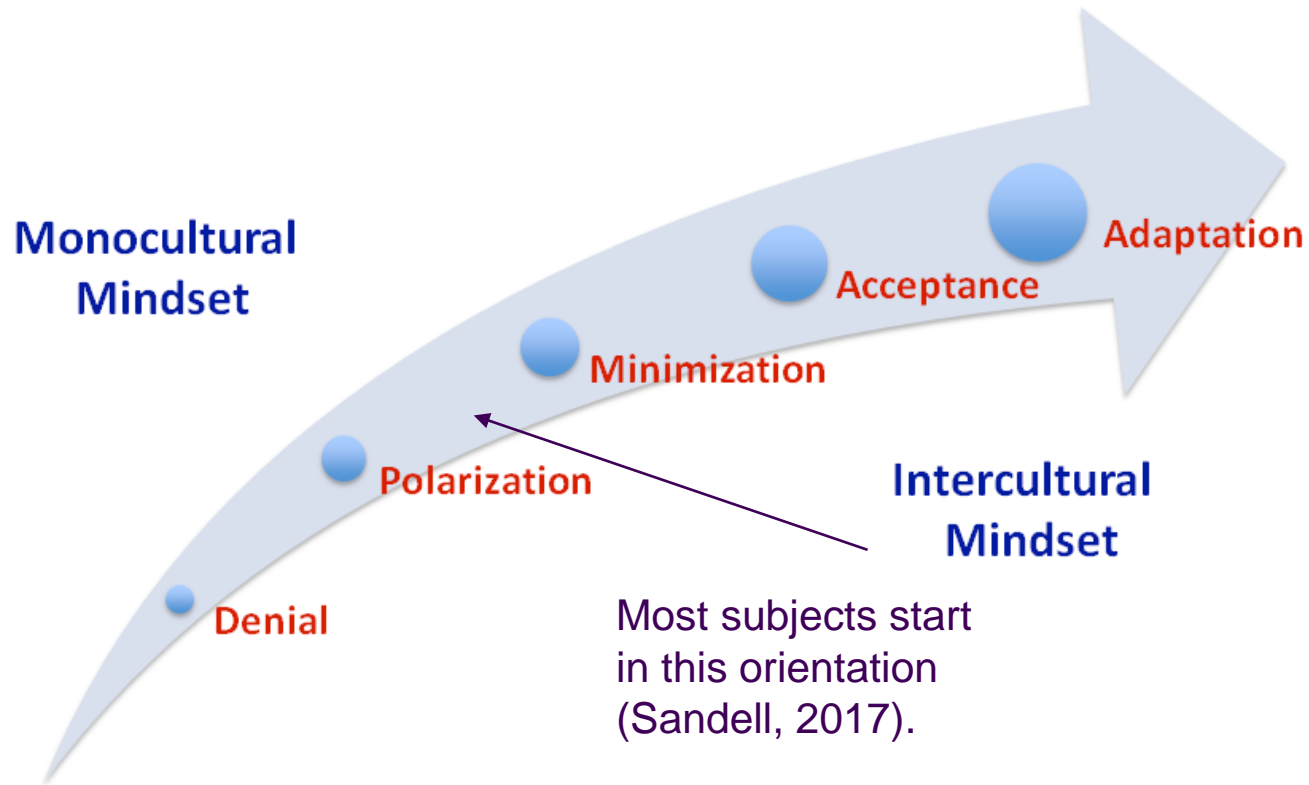
Beginning Stages of Inter-cultural Competency among Undergraduates at MSU, Mankato

	N	Minimum	Maximum	Mean	Std. Dev.
Developmental Orientation	779	49.570	128.980	88.863	14.667

Analysis showed no significant differences in beginning stages of ICC among undergraduate students $p < .05$.



Intercultural Development Continuum





Intervention:

Human Relations Course

- 3-credit undergraduate writing-intensive course, “Human Relations in a Multicultural Society”
- Students self-select this course from among general education courses
- Course is required for elementary education majors
- 18 hours at service learning site
- 9 hours with a cultural partner small group OR a small-group team research project
- 1:1 coaching conference with PI/Instructor (2 semesters)

Overall Change in Inter-Cultural Competency due to Human Relations Course

Paired Samples t-tests	Mean	N	95% Confidence Interval		t	df	Sig.
			Lower	Upper			
Pre-instruction	88.863	779	87.831	89.894			
Post-instruction	95.101	779	93.941	96.268			
Paired differences	6.238	779	5.213	7.263	11.944	778	.000



Comparison of Changes in Inter-Cultural Competency after Service Learning Experiences

Type of Service Learning	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower	Upper		
Disabled	102	96.67588	16.340301	1.617931	93.46634	99.88542	56.550	129.560
Schools	8	81.56375	9.554315	3.377961	73.57614	89.55136	69.640	100.170
Newcomers	86	97.82598	16.410665	1.769607	94.30752	101.34443	60.810	137.690
Low-income	19	98.00000	13.473806	3.091103	91.50583	104.49417	75.720	120.480
PowWow	93	94.53634	16.007935	1.659946	91.23955	97.83314	54.710	128.610
Ethnic RSO	48	93.63917	18.583827	2.682344	88.24299	99.03535	58.290	124.250
Dementia	61	97.73210	14.508580	1.857633	94.01628	101.44792	65.210	127.040
Other	149	94.50597	16.710798	1.369002	91.80066	97.21129	57.290	131.670
Total	566	95.61500	16.321276	.686034	94.26751	96.96249	54.710	137.690

Comparison of Changes in ICC for Pre-service Teachers by Type of Service Learning

	Sum of squares	Df	Mean Square	F	Sig.
Between Groups	2975.042	7	425.006	1.607	.131
Within Groups	147531.939	558	264.394		
Total	150506.981	565			

Overall Change in ICC from Beginning to Conclusion of Teacher Prep Program

Paired Samples t-tests	Mean	N	95% Confidence Interval		t	df	Sig.
			Lower	Upper			
post-222 v pre-222	5.874	48	2.973	8.774	4.074	47	.000
post-422 v post-222	15.805	48	10.157	21.452	5.630	47	.000
post 422 v pre-222	21.679	48	16.373	26.984	8.220	47	.000

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- **Undergraduate Research Symposium, Mankato, Minnesota**
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Questions?



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