4th International Conference on New Horizons in Education

Exploring the impact of diversity-infused content and structural diversity on students' attitudes towards marginalized groups

Marni Westerman[a*], Kristin Wagner[b]

[a]*Douglas College, Sociology, Faculty of Humanities and Social Sciences, New Westminster, BC, CANADA, V3L 5B2*
[b]*Douglas College, Psychology, Faculty of Humanities and Social Sciences, New Westminster, BC, CANADA, V3L 5B2*

Abstract

This paper contemplates the outcomes of exploratory research on the impact of diversity-infused content on students' attitudes towards marginalized groups. The research revealed low levels of intolerance among students in both structurally diverse and structurally non-diverse groups. The results suggest that transformative change among students is likely to occur over the longer term. Future research with the same cohort will explore the longer term aspects of transformative learning.

Keywords: sociology, structural diversity; diversity-infused content, attitude change

1. Introduction

Research indicates that educators, especially those concerned with issues related to diversity, human rights, and social justice, often have faith in the transformative nature of their educational efforts (Stamp, 2001; Westerman & Huey, 2012). Educators across discipline areas often assume that including diversity-infused content in courses will lead to a reduction in measured prejudice among participants in such courses. Some studies have indicated that classroom education about minority groups can reduce prejudicial attitudes in students (Harris, 2003; Kernahan & Davis, 2007). In order to test this assertion, Hussey, Fleck, and Warner (2010) undertook a quasi-experimental study at the University of New Hampshire to measure changes in

* Corresponding author. Tel 00-1-604-376-4156
E-mail address: westermanm@douglascollege.ca

students' attitudes toward a number of different minority groups. In their study the authors compared, via pre and post-test data, changes in attitudes in two different first year Psychology courses over one term: one that included diversity content and one that did not. Their research revealed a reduction in levels of prejudice among the students exposed to diversity-infused course materials and methods.

Hussey et al.'s study was conceptually replicated in the current study to test attitude change among first year Sociology students in two different institutions: one that is structurally diverse and one that is not. Educators often also assume that students in more structurally diverse classrooms and institutions will be more open to challenging prejudices and confronting stereotypes because they are exposed to members of social groups that are dissimilar from their own. Studies have demonstrated that structural diversity has positive effects on student attitudes (Kowalski, 2000). However, other research indicates that contact with minority groups is not enough (Gurin, Dey, Gurin, & Hurtado , 2003). Therefore, structural diversity in combination with diversity infused course content may have a great impact on student attitudes toward minority groups.

For the purposes of the research, *diversity* is defined as variance and a range in characteristics including race, social class, ethnicity, sexual orientation, ability, religion, etc. within a particular group, population, or setting (Banks, 2002, as cited in Hussey et al., 2010). A *structurally diverse* institution is deemed to represent such variety. *Diversity-infused* modules or courses involve course content and pedagogy that are more inclusive of traditionally marginalized groups. The level of inclusion of diversity issues used by the instructor on the project is referred to by Hussey et al. (2010) as the transformation approach, in which the instructor "offer[s] each course topic through multiple, non-dominant perspectives. Teaching methods and materials foster understanding and tolerance of other cultures as well as critical evaluation of monocultural perspectives" (p. 86). For example, students in the current study explored topics such as racism, sexism, and classism by analysing statistics and research studies that challenge prejudices and encourage students to view the world from the perspective of members of marginalized groups. Video excerpts were also used to introduce narratives from members of marginalized groups.

It was expected that students in the diversity-infused learning condition would see a greater reduction in intolerance compared to those in the non-diversity infused learning condition. It was also expected that participants from a structurally diverse institution would experience less of an impact from diversity-infused teachings compared to an institution that is less diverse.

2. Procedures

The current study was a quasi-experimental design that tested the impact of diversity-infused course content on student attitudes by systematically measuring and comparing attitude changes toward minority groups in post-secondary students. Participants were either exposed to diversity-infused modules in a first year Sociology course, or not exposed to diversity-infused modules in a non-Sociology course. Participants from two different institutions were used, allowing the comparison of two student populations: one that is structurally diverse (a college in a major metropolitan area in Canada) and one that is not structurally diverse (a university in small city in the United Kingdom). The dominant culture in both societies is white British.

Data collection occurred in the first and last weeks of classes at both institutions. Both institutions' semesters lasted 15 weeks. Courses were chosen on the basis of the first year status of the course. Therefore, the most important issue with regard to the

sample is that the students had little to no experience in Sociology prior to taking the courses under study, which can be assumed, although not guaranteed, by the choice of an introductory course. While factors such as age may have an impact on student attitudes, these factors cannot easily be controlled for under the circumstances (i.e. instructors do not normally have control over who enrols in a first year course based on demographic factors).

The *Intolerant Schema Measure* (*ISM*) (Aosved, Long, & Voller, 2009) was used to collect data on student attitudes towards minority groups in all four conditions. The 54-item ISM is a measure of intolerance toward six constructs, and is a reliable scale (Cronbach's alpha = .96). Demographic data were collected in order to analyse whether differences in age, gender, etc. have an impact on attitude change in either or both institutions.

3. Results

3.1 Participants

A total of 58 participants from the structurally diverse institution and 81 participants from the non-diverse institution took part in this study. As seen in Table 1, participants in both samples were relatively the same age, and had roughly the same breakdown of gender (there were more females in both samples). The structurally diverse sample had a wider variety of self-identified ethnicities. Note that the table below only displays 65% of that diverse sample; the other participants' ethnicities were quite varied. In both samples, participants were primarily single or not in a relationship. In both groups, over 90% of the participants had no children.

In the diverse group, most participants identified as not being a member of a religious group (34.5%), while 22.4% identified as Christian, 13.8% identified as Catholic, and 10.3% identified as Sikh. About 40% noted rarely attending any religious services, but over half of the participants occasionally or often attended religious services. In the non-diverse group, most (37%) identified themselves as Christian, 14.8% noted no religious affiliation, 9.9% identified as Catholic, and 7.4% identified with the Church of England. However, over half noted rarely attending any religious services.

There was a significant difference in occupation categories between the two institutions, χ^2 (6, n = 116) = 36.88, p = .000, Cramér's V = .56. The diverse group had more participants in higher ranked positions. Most of the participants in the non-diverse group were not employed outside the home (25.9%), followed by a skilled manual worker (14.8%) and causal or lowest grade worker (12.3%). In the diverse group, the most frequently identified occupations were both intermediate managerial, administrative or professional work (22.4%) and skilled manual worker (22.4%), followed by higher managerial, administrative or professional work (19%). None of the participants in the diverse group reported themselves as unemployed.

Table 1. Demographic Information

Diverse Group (n =58)			Non-Diverse Group (n = 81)		
Age	M = 22.2	SD = 8.1	Age	M = 23.4	SD = 8.5
	n	%		n	%
Gender			Gender		
Male	17	29.3%	Male	17	21.0%
Female	40	69.0%	Female	64	79.0%
Ethnicity			Ethnicity		
Caucasian-Canadian	15	25.9%	White	35	43.2%
Chinese	7	12.1%	White British	19	23.5%
Indo-Canadian	4	6.9%	British	10	12.3%
Asian	3	5.2%			
Canadian	3	5.2%			
Filipino	3	5.2%			
Indian	3	5.2%			

3.2 Overall ISM Scores

The overall ISM scores for all participants show relatively low levels of intolerance, with average scores around 2 out of a scale of 5 (with 5 being the highest level of intolerance). For all participants, a paired samples t-test showed no significant changes were detected in the overall ISM scores, although the averages did actually increase somewhat in both conditions from the start to the end of the term. Furthermore, there was no significant difference in the pre-semester ISM scores between the diverse group (M = 1. 89) and the non-diverse group (M = 1.84). This was also true for the post-semester ISM scores; there was no significant difference in the post-semester ISM scores between the diverse group (M = 1. 91) and the non-diverse group (M = 1.90) (See Table 2).

Table 2. ISM Means and Standard Deviations for all participants (n = 139)

	Structurally Diverse		Non-Diverse		
	Mean	SD	Mean	SD	p-value
Pre-ISM	1.89	0.48	1.84	0.49	ns
Post-ISM	1.91	0.57	1.90	0.55	ns

ns= not significant

Again, for both institutions, the experimental condition received diversity infused content, and the control condition did not. Within the structurally diverse institution, there was no significant difference between in the ISM means between the control group and the experimental group at the start of the semester, or at the end of the semester. No significant changes were identified in either condition from the start to the end of the semester, although the diversity infused content course did see a decrease in ISM scores (See Figure 1).

The same comparisons were made within the non-diverse institution. Similar to the structurally diverse institution, there were no significant changes found from the start of the semester to the end of the semester for either type of learning environment (diversity infused vs. not) for overall ISM score (See Figure 2.).

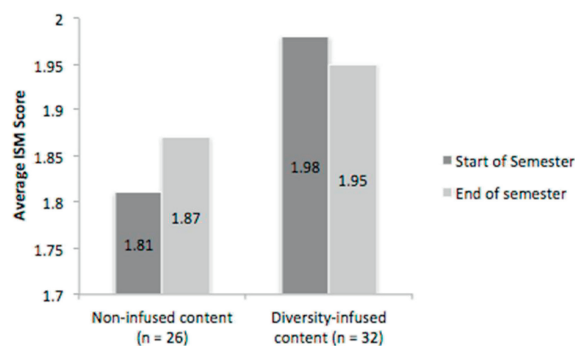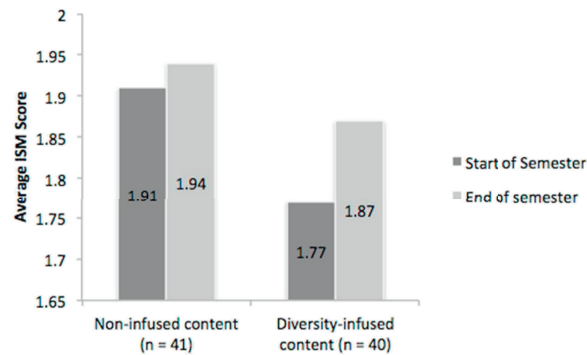Figure 1. Overall ISM Means for Structurally Diverse Group (n = 58)

Figure 2. Overall ISM Means for Non-Diverse Group (n = 81)

3.3 ISM Subscale Findings

The ISM is composed of six subscales, of nine items each, covering the following issues: sexism, racism, sexual prejudice, ageism, classism, and religious intolerance. Again, scores range from 1 to 5, with 5 being the most intolerant. There were no significant differences found between the two institutions in their subscale scores, either at the start of the semester or at the end of semester.

In the structurally diverse institution, there were no significant changes from the start of the semester to the end of the semester in any of the subscales for all 58 participants. (See Table 3.) Within this group, the two conditions (i.e. experimental, receiving diversity infused content, and control, not receiving diversity infused treatment) were compared. A chi-square test revealed significantly more females in the control condition. χ^2 (1, n = 57) = 4.763, p = .029. At the start of the semester, the 32 participants in the experimental condition were significantly more sexist (M = 1.71) than the 26 participants in the control condition (M = 1.43), $t(56)$ = -2.11, p = .039. This significant difference did not appear at the post-test, suggesting the groups had more similarity in responses by the end of the semester. The only significant difference between males and females was found in the control condition: males were significantly more sexist at the start of the semester (M =1.78) compared to females at the start of the semester (M = 1.36), $t(24)$ = 2.14, p = .043. Interestingly, this significant difference did not exist at the end of semester, and this was due to increased variability in responses to items measuring sexism by both males and females at the end of the semester.

Table 3. Subscale ISM Means and Standard Deviations for Structurally Diverse Group (n = 58)

	Pre-scores		Post-scores		
	Mean	SD	Mean	SD	p-value
Sexism	1.58	0.53	1.62	0.65	*ns*
Racism	1.92	0.64	1.89	0.62	*ns*
Sexual Prejudice	1.84	0.80	1.85	0.87	*ns*
Ageism	1.68	0.49	1.65	0.58	*ns*
Classism	2.37	0.69	2.37	0.80	*ns*
Religious Intolerance	2.00	0.59	2.09	0.69	*ns*

ns = not significant

In the non-diverse group, there were significant changes for all 81 participants in three of the subscales from the start of the semester to the end of the semester. Measures of sexism, racism, and religious intolerance all significantly increased by the end of the semester, but with small effect sizes (see Table 4). Within this institution, the experimental condition participants were significantly older (M = 26.31) than the control condition participants (M = 20.68), $t(78) = -3.103$, $p = .003$. At the start of the semester, the control participants were significantly more intolerant of lower class (M = 2.72) compared to those who were exposed to diversity content (M = 2.36), $t(79) = 2.517$, $p = .014$. This difference was not significant at the end of semester, suggesting greater similarity in classist beliefs between the two learning conditions. Additionally, within the control condition, the subscale of racism was found to increase significantly from the start of the semester (M = 1.78) to the end of the semester (M = 1.98), $t(40) = 2.309$, $p = .026$. There were no other significant differences or changes between the two conditions.

Table 4. Subscale ISM Means and Standard Deviations for Non-Diverse Group (n = 81)

	Pre-scores		Post-scores			
	Mean	SD	Mean	SD	p-value	d
Sexism	1.43	0.53	1.62	0.69	$p = .001$	0.40
Racism	1.73	0.62	1.88	0.69	$p = .013$	0.28
Sexual Prejudice	1.73	0.84	1.71	0.75	*ns*	
Ageism	1.52	0.55	1.50	0.50	*ns*	
Classism	2.54	0.68	2.47	0.81	*ns*	
Religious Intolerance	2.08	0.67	2.22	0.71	$p = .030$	0.25

ns = not significant

d = effect size: |0.2| = small, |0.5| =medium, |0.8| = large

In both institutions, classism had the highest scores of all subscales. These values did not significantly change from the start to the end of the semester for either type of institution.

At the non-diverse institution, participants in the experimental condition were involved in a focus group after the semester was over. Discussion with the course instructor revealed information that was helpful to interpreting results (see Section 4.2 below).

4. Discussion

4.1 Current Study

The results of this study suggest that diversity infused content, whether delivered in a structurally diverse setting or not, had little effect over changing levels of tolerance toward minority groups over the period of one semester. Overall, levels of intolerance, as measured by the Intolerant Schema Measure, did not significantly decrease at either institution. The overall ISM values for both groups were fairly low, indicating low levels of intolerance in both groups. This may be a factor in the results that suggest little change. Participants were arguably not intolerant to begin with, so it is possible that their opinions of minority groups overall were unlikely to experience significant change toward more acceptance. There was a slight and non-significant drop in the overall ISM scores in the structurally diverse experimental group; however, this change is too small to support the notion that the content of the Sociology course had a direct impact on the ISM score.

However, the expectation that the structurally diverse student population would not be impacted as much by diversity-infused content compared the non-diverse institution was supported. The changes in this non-diverse institution were greater, although not in the anticipated direction.

The subscale information is potentially more interesting. Both groups were least tolerant of lower classes, suggesting that classism is a particular area of interest when building diversity-infused course materials. This is especially true given the significant differences in occupation of the participants between institutions. While there were no significant changes in the ISM subscale scores in the diverse group from the beginning to the end of the term, the scores on three of the subscales increased in the non-diverse group over the course of the term, indicating a rise in intolerance. This may represent some resistance to the information on the part of the students of the non-diverse group, although only the experimental group was exposed to explicitly diversity-infused material.   The work of authors such as Lake and Rittschof (2010) demonstrates that some students exhibit resistance and show signs of becoming more deeply entrenched in their intolerant attitudes when exposed to diversity-infused content.   The ISM scale used for this study tested students' attitudes to marginalized groups only, and not their reflections on the learning experience in the course, so we cannot say with certainty that the increased intolerance scores are related to course content.

Further, there appears to be a gendered dimension to this resistance, with males being less open to diversity than females (see Pascarella et al., 1996). Both Hussey et al.'s (2010) research and the current study showed higher levels of sexism in males in some groups. Whitt et al.'s (2001) longitudinal study of undergraduates through 3 years of college also noted that

male students tended to be less open to diversity and challenge than female students, suggesting that "a higher average level of openness to diversity among peers [may have] created a threatening climate for men who, in response, clung to behaviours and ideas that felt comfortable" (p. 196). Directly challenging student's beliefs under the wrong circumstances may cause students to disengage from the course; Bowman and Brandenberger (2012) noted that the level and form of the challenges presented to the student should be appropriate to the student's level of experience with diversity. Lake and Rittschof (2012) suggest that the reasons for students' resistance should be explored in order to improve diversity education. They also suggest that consistent attitude change and increased empathy for others among students result from a) direct challenges to misinformation about groups through b) the use of personal narratives in a c) non-threatening classroom environment. These suggestions will inform the pedagogical choices made in the future. While providing a safe space of discussion and challenging misinformation about marginalized groups is central to the content of the Sociology course, further efforts to engage students with personal narratives could enhance the structure of the course in the future.

4.2 From Attitude Change to Transformative Learning

The scale of this study was small and its purpose exploratory. Furthermore, the sample sizes for these two groups are not large, and may not be representative of both institutional populations. There are limitations with generalizing beyond these samples. Rather than making generalizations, the authors' thoughts on the study for purposes of moving this research forward are below.

Our study seems to indicate that simple exposure to structural diversity does not guarantee lowered intolerance (see also Gurin et al., 2003), nor does it support the notion that major attitude change is likely to occur over one single course. Learning and change regarding attitudes towards those different from ourselves may not happen as a single "a-ha" moment, nor over the process of a single course. Rather, it is more likely that such changes occur as part of the process of growth, maturity, and knowledge development that evolve over several years of post-secondary education. As a result of our preliminary research, we have chosen to explore this longer-term learning. We are particularly interested in transformative learning, as defined by Mezirow (1997): "the process of effecting change in a frame of reference…when circumstances permit, transformative learners move toward a frame of reference that is more inclusive, discriminating, self-reflective, and integrative of experience" (p. 5). Mezirow argues that transformative learning is central to adult education as it aids the individual in becoming an autonomous thinker. The teacher/facilitator models critical reflection and openness to diversity for the learners, rather than simply focusing on being a content expert or authority figure.

Facilitating openness to diversity and critical reflection can be encouraged through unexpected encounters related to diverse groups of people. Such encounters can challenge the individual's belief system and belief challenge is associated with attitude change (Bowman & Brandenberger, 2012). This type of encounter is referred to in Mezirow's work on transformative learning as a "disorienting dilemma" or an experience that does not fit with an individual's previous belief or value system. According to Brock's (2010) research, the most prevalent precursor step to transformative learning was a disorienting dilemma. The disorienting dilemma can set a student on a path to critical reflection, self-evaluation, and new patterns of thinking and acting. The process of transformative learning is not communicated by the teacher and absorbed by the student: it is an active process in which the student encounters a situation that challenges him/her and causes

him/her to become dissatisfied with his/her value system and then critically reflect upon it. Personal narratives can be used to engender the experience of a disorienting dilemma, as illustrated by Lake and Rittschof (2012).

Brock's (2010) research supports the notion that discussing a disorienting dilemma with peers contributes to the critical reflection that is central to the transformative learning process. The dissatisfaction and will to change resulting from a disorienting dilemma can be reinforced by interactions with peers who also share the dissatisfaction. The importance of peer interaction is reinforced in several studies on the longer-term transformation of students with regard to issues of diversity and social justice. Whitt et al. demonstrate that students who converse with one another about personal and cultural differences and controversial subjects, such as social problems, tend to become more open to diversity over the course of their college experience (2001). Interactions that challenge previously held ideas and beliefs were associated with an increase in openness to diversity and challenge. Pascarella et al.'s study of transformative change over the first year of college also demonstrates that "the more students interact with diverse peers and the greater the extent to which such interactions focus on controversial or value-laden issues that may engender a change in perspective or opinion, the greater one's development of openness to diversity and challenge" (1996, p. 188).

Preliminary interviews with members of the non-diverse experimental group cohort at the end of the second year of their program revealed that discussing controversial issues with their peers, both inside and outside of the classroom, was a key element in their learning. Participants generally agreed that a significant impact of participating in the program was becoming more open minded, as well as considering the opinions of others and why they are held. Considering the opinions of others is part of the maturation process and contributes to transformative learning. The participants noted the importance of interactions with other members of their cohort in their development of self -confidence and critical thinking about social problems, because many different and controversial topics were discussed with peers with various opinions. For example, one student interviewed at the end of the second year her program described the influence of peer-group discussions on her own evolving learning process: "I think that is the biggest thing for me and I think it has come from learning more about the different [marginalized] groups [through lectures] because obviously that then gives me the information to form an opinion but also meeting all these different people who have their own opinions." When asked which aspect of her program thus far had the most influence on her learning process, the same participant replied "Talking to peers, definitely. Because we get the information from the lectures but it's through the discussions that we have, in person, on Facebook, through confrontations with each other, through talking to each other, that has given me more of a sense of understanding".

Although transformative learning may be a process that takes several years to develop, factors that may contribute to openness to diversity and difference could be introduced in individual classes in order to support the transformative learning process. As Brock notes, "in looking back over a semester, learners can be surprised that life lessons have been learned. Sharing these with classmates can cement this change and stimulate others to see the world in a new way" (2010, p. 137). Providing experiences that may contribute to the development of a disorienting dilemma in the form of personal narratives, films, guest speakers, or other methods of exposing students to belief challenge seems central to the development of transformative learning. Coupling such experiences with exercises in which students interact with one another can also contribute to the process. Encouraging students to share their perspectives on controversial topics in a

safe environment can help them to appreciate different perspectives. Discussing beliefs, disorienting dilemmas, and belief change with peers can encourage critical reflection.

5. Conclusion

The data provided in the first phase of the project do not support the notion that structural diversity contributes significantly to lower levels of intolerance in post-secondary Sociology students. Attitudes towards marginalized groups may be less likely to change significantly over a single term. The findings, however, have alerted the researchers to several areas that might require special attention in future teaching and to developing the conditions necessary to limit resistance to diversity information. This study highlights the advantage of following students through a multi-year program in order to examine transformative learning.

References

Aosved, A., Long, P., & Voller, E. (2009). Measuring sexism, racism, sexual prejudice, ageism, classism and religious intolerance: The intolerant Schema Measure. *Journal of Applied Social Psychology* 39 (10), 2321 – 2354.

Banks, J. (2002). *An introduction to multicultural education (3rd ed.).* Boston: Allyn and Bacon.

Bowman, N. A., & Brandenberger, J.W. (2012). Experiencing the unexpected: Toward a model of college diversity experiences and attitude change. *The Review of Higher Education* 35 (2), 179 – 205.

Brock, S. (2010). Measuring the importance of precursor steps to transformative learning. *Adult Education Quarterly* 60 (2), 122 – 142.

Gurin P. Y., Dey, E.L., Gurin, G., & Hurtado, S. (2003). How does racial/ethnic diversity promote education? *The Western Journal of Black Studies* 27 (1), 20 – 29.

Harris, T. (2003). Impacting student perceptions of and attitudes toward race in the interracial communication course. *Communication Education* 53 (3-4), 311 – 317.

Hussey, H.D, Fleck, B.K.B., & Warner, R. (2010). Reducing student prejudice in diversity-infused core psychology classes. *College Teaching* 58, 85 – 92.

Kernahan, C., & Davis, T. (2007). Changing perspective: How learning about racism influences student awareness and emotion. *Teaching of Psychology* 34 (1), 49 – 52.

Kowalski, R. M. (2000). Including gender, race, and ethnicity in psychology content courses. *Teaching of Psychology* 27 (1): 18 – 24.

Lake, R. & Rittschof, K. (2012) Looking deeper than gradebook: Assessing cultural diversity attitudes among undergraduates. *Journal of the Scholarship of Teaching and Learning* 12 (3), 142 – 164.

Mezirow, J. (1997). Transformative learning: Theory to practice. *New Directions for Adult and Continuing Education* 74, 5 – 12.

Pascarella, E.T., Edison, M., Nora, A., Hagedorn, L. S. & Terenzini, P. (1996). Influences on student's openness to diversity and challenge in the first year of college. *The Journal of Higher Education* 67 (2), 174 -195.

Stamp, P. (2001). *Educational prescriptions.* Toronto: University of Toronto. (Unpublished master's thesis).

Westerman, M., & Huey, L. (2012). Putting on band-aids: The contradictory roles and 'small wins' of tempered campus radicals. *Discourse: Studies in the Cultural Politics of Education* 33 (2), 223 – 234.

Whitt, E. J., Edison, M. I., Pascarella, E. T., Terenzini, P. T. & Nora, A. (2001). Influences on students' openness to diversity and challenge in the second and third years of college. *The Journal of Higher Education* 72 (2), 172 – 204.