

Introduction of the Intercultural Development Inventory to a Long-term Study of Student Journals in an Undergraduate Intercultural Communication Course

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The reflective writing samples of students enrolled in an Intercultural Communication class at a faith-based Midwest U.S. college document the development of intercultural sensitivity during the instructor's first-time use of the Intercultural Development Inventory (IDI). The study compares reflections in IDI-supported classes without exposure to the instrument. Both groups wrote extensively on learning about self, cultural values, nonverbal and verbal communication, personal development, and reaction to learning. Students in the IDI-supported classes also reflected on stages of intercultural sensitivity, developmental nature of intercultural sensitivity, need for intercultural competence, similarities and differences between partners, and personal growth to come. The first-person accounts as students react to IDI placement and conversations with intercultural partners strengthen the paper. Student voices provide insight into intercultural encounters, the impact of the IDI, and information for instructors and international students, or persons who plan to work in the U.S. The study has pedagogical implications as well: (a) ability to see an IDI group measure of intercultural sensitivity, (b) fewer students on fringes academically, (c) need for class time and resources, and (d) greater sense of class as shared learning environment. Limitations of the study and implications for future research are discussed.

Undergraduate courses in Intercultural Communication often include a focus on the development of intercultural sensitivity of students. It is not unusual for the course to include an assignment that requires conversations with a person from a different culture. It is unusual to be able to provide a strong framework that includes appropriate vocabulary, and an objective stance to discuss the development of intercultural sensitivity for this intercultural experience. The use of the Intercultural Development Inventory (IDI) provides a framework, an objective stance, and identifies new outcomes. The purpose of this grounded theory study of two undergraduate Intercultural Communication classes was to answer the question, "How helpful is the use of the IDI with respect to the development of intercultural sensitivity of students enrolled in an undergraduate Intercultural Communication class?"

The current research project grew out of a separate study of the use of reflective journal writing in an Intercultural Communication class (Barnes, 2009). In the literature review of the earlier study, multiple contexts were found to be appropriate for journal writing (Cozolino & Sprokay, 2006; Gharakhanian, 2007-08; Larrotta, 2008; Masse, 1999; Parr, Haberstroh, & Kottler, 2000; Taylor, 2006; Valimaki, Vehvilainen-Julkunen, & Pietila, 2007; Walden, 1995). There are various forms of journal assignments (Fulwiler, 1997; Hughes, Kooy, & Kanevsky, 1997; Meyer & Fisher, 2007; Mills, 2008; O'Connell & Dymont, 2006). Journal writing captures well the complexities of intercultural development and students are encouraged to

see themselves as critical participants in the construction of knowledge (DeRicco & Sciarra, 2005; Hughes, Kooy, & Kanevsky, 1997). This includes the study of race (Simpson & Williams, 2007). Intercultural sensitivity is said to be critical for the pre-service teacher preparing for a diverse classroom (Garmon, 1998; Li & Lal, 2005; Nagata, 2004; Smith & Batiste, 1999; Van Hook, 2000). Shah (2004) points out the importance of careful interviewing practices when interacting with persons from a culture different than the interviewer.

For the current research, the literature review moved to reflective writing and the use of the IDI Version 2. The 50-item questionnaire developed by Hammer (2007) generates a respondent profile based on a continuum of intercultural sensitivity for use in a course such as Intercultural Communication, or a related training program. The IDI is based on Milton Bennett's Developmental Model of Intercultural Sensitivity (DMIS) (Hammer, Bennett, & Wiseman, 2003). IDI Version 3 was released after the current study. The Version 3 developmental model appears in figure 1 (Hammer, 2009a, 2009b).

The DMIS and the IDI are widely accepted and in use in a variety of settings including education (DeJaeghere & Zhang, 2008; Mahon, 2006). The IDI has been recommended specifically for pre-service education majors (Bhawuk & Brislin, 2000; Van Hook, 2000); in addition, it was used to assess changes in the intercultural sensitivity of 24 pediatric resident trainees (Altshuler, Sussman, & Kachur, 2003).

The IDI was used in a study by Klak and Martin (2003). The authors attribute success in promoting diversity on a university campus in part to cultural events and students' written commentaries on these events, and emphasized the developmental nature of intercultural sensitivity when they reported, "Growth in intercultural sensitivity is an incremental, individual, and phenomenological process" (p. 463). Greenholtz (2000) notes the need to reflect and re-reflect on the significance of experiences, and applies this concept to the development of intercultural sensitivity using the IDI in a variety of hiring and training situations. Miller and Fernandez (2007) used reflective writing in a long-term study of students and faculty in the Global Intercultural Experience for Undergraduates at the University of Michigan. They administered the IDI before and after the program, and the reflective journals (along with close interactions with faculty and diverse teams) were said to have immediate impact.

Straffon (2003) used the IDI with 336 students at an international high school in Southeast Asia, then followed up with 10-question interviews with students whose IDI scores appeared at the extreme ends of the model. The quotes from those interviews provide an opportunity to hear the voices of students at one point in their development. Lin (2009) includes the IDI in a list of effective intercultural sensitivity scales, and suggests that qualitative, first-person accounts of the adjustment and enculturation of non-native students on a U.S. campus triangulates quantitative research.

In summary, the literature suggests the IDI is an appropriate tool for classes such as Intercultural Communication and for related training, and is helpful in the development of intercultural sensitivity. In addition, there appears to be an opportunity for additional qualitative research to determine how students use their feedback on the IDI, and how they incorporate that feedback into other course requirements such as intercultural interviews and

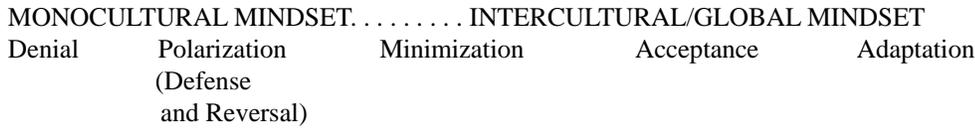


Figure 1. IDI Version 3 developmental model

reflective writing. There is a need for more primary data such as personal accounts that give voice to the development of intercultural sensitivity and to the use of the IDI. Hence, the following research questions are proposed:

- RQ1: What major categories emerged in the journal entries of students regarding conversations with an intercultural partner after the introduction of the IDI?
- RQ2: In what ways did the journal entries of students in classes that included the use of the IDI differ from the journal entries of students in classes that did not include the use of the IDI?

Method

Participants

For approximately eight years, the researcher taught one or two sections of the Intercultural Communication course at two colleges in the U.S. Midwest. From 2006-2008, students were asked to contribute their reflective writing entries to ongoing research; 81 out of 109 students from six classes agreed to participate and their entries were catalogued in an earlier research project (Barnes, 2009). These participants are identified as Group One. Group Two consists of 34 out of 36 students in year 2009 classes that included the use of the IDI throughout the term. Students were assured of anonymity for themselves and their intercultural conversational partners. Consent to participate forms were taken directly to a third party and returned to the instructor after grades were posted. Students were told they would have access to published results of the study, but had no incentive to participate in the research other than to contribute to knowledge about intercultural communication. The instructor followed ethics guidelines throughout data gathering and data analysis stages (Creswell, 1994).

The predominantly sophomore through senior respondents in both Group One and Group Two represented a variety of majors and chose the class either due to personal interest in the topic or to satisfy a cross-cultural studies general education requirement. In informal discussions, it was discovered that multiple students had participated in short-term mission trips to other cultures. No attempt was made to identify the demographics of the respondents in this study or to separate by demographics the responses in either group. If students mentioned demographics, those comments were left in their quotes unless doing so would compromise anonymity. Over the period of the research, the college population was approximately 66% female, and approximately 92% was age 17-24. Students identified as

White dropped from approximately 83% to 79%, and students identified as Minority rose from approximately 17% to 21%. This was a faith-based college with a variety of faiths represented.

Procedure

Grounded theory is a qualitative research method that has been referred to as a constant comparative method of analysis (Strauss & Corbin, 1990). The goal is to use “. . . a systematic set of procedures to develop an inductively derived grounded theory about a phenomenon” (p. 24). Open Coding breaks down and categorizes data, and Axial Coding puts the data back together in new ways as it connects the categories.

A qualitative approach to data collection such as this allows unexpected information to be revealed (Marshall & Rossman, 1989). This study focused on the building relationship between student and intercultural partner, and the development of intercultural sensitivity using constant comparison typical of the grounded theory method of research. Timely and fairly unstructured journal entries allow reflection on a variety of topics and can include what is being heard, learned, and felt in the process. More importantly, respondents report in a way that is different and more extensive than a quantitative approach allows. This can include the meaning behind beliefs, and allows a respondent to question out loud what they are discovering about themselves in this process.

This study is consistent with several characteristics identified by Janesick (1994): “Qualitative design looks at relationships. . . refers to the personal, face-to-face, and immediate. . . and is focused on understanding a situation versus making predictions about it” (p. 212). With 115 participants writing four to six 800-word entries, there was a sufficient body of information for a qualitative analysis of what occurred in these two groups.

This qualitative study involves the researcher/instructor as the research instrument when observing class behavior and reading student entries, then coding and categorizing the data. The researcher/instructor admits a bias for a qualitative method of data collection and analysis, and a strong interest in the topic of intercultural communication. The close proximity over time to the students in this study afforded a unique perspective and the opportunity for constant comparative analysis (Janesick, 1994).

Introduction of the IDI to the course. After a pilot study with six students, the instructor added the IDI Version 2 (Hammer, 2007) to two sections of the three-hour, 15-week Intercultural Communication course; all other assignments, class activities, and most extra-curricular activities remained the same as in Group One.

Within the first week, the instructor explained how the IDI would be used for the first time in the course, previewed the instrument, distributed passwords, and made the on-line instrument available to 36 students for three days. Problems were minimal: 100% of the class completed the 50-item multiple choice IDI and answered open-ended context questions about their previous intercultural experiences. The instructor retrieved the data using Version 2 software received during IDI training and completed the tabulation, printed the three-page, color-contrasted reports for each student and prepared for group and individual feedback sessions.

Feedback to the IDI. Two 80-minute class periods were devoted to the IDI. At the first session, the instructor assigned readings on the IDI and shared group feedback; individual feedback sheets created with the IDI software as well as additional information about the instrument were distributed at the second class session.

Students scheduled late afternoon or evening feedback sessions in the instructor's office; four students chose to come in pairs. The instructor cancelled one regular class session to allow time to take the IDI and participate in a feedback session. Here the instructor returned copies of students' qualitative responses to context questions, discussed with the students how those experiences may have led to their placement on the IDI, reviewed the IDI print out, explained their placement on the IDI continuum, and discussed next steps in their development. These sessions followed the protocol recommended in the IDI facilitator training. Most individual sessions lasted 20-30 minutes, though several lasted 45 minutes and at least five lasted an hour or longer.

Interviews with intercultural partners. All students were required to invite a person from a culture different than their own to spend several hours in face-to-face, phone, or email conversations over eight weeks of the term. Partners included international students who had been notified by the instructor of the project. They were fellow sports team members, students recognized from previous classes, even roommates. Some partnered with people from the same geographical region but of a different race, faculty members, former foreign exchange students, and people from other cultures who had married into their families.

Students and their partners worked through a variety of short exercises designed to stimulate conversation on culture-related topics, and the enrolled students responded to journal prompts that tied course material to their intercultural conversations. The instructor gave brief electronic feedback to each journal entry, and clarified any misunderstanding of concepts or terms. The journals were a combination of spontaneous reflective writing and responses to semi-structured interview questions.

Ongoing use of the IDI. In addition to the focus on the IDI very early in the term, the instructor discussed intercultural sensitivity as measured by the IDI when appropriate throughout the course. The instructor used the descriptive terms of the stages of the IDI Version 2 model to explain behavior in case studies, course readings, videos, and specific examples from current events. Placement on the IDI Version 2 continuum starts with ethnocentric behavior and moves toward ethnorelative behavior: Denial, Defense/Reversal, Minimization, Acceptance, Adaptation, and Integration (Hammer, 2007). Students better understood the concepts of Denial and Defense after they saw a video that gave a close-up view of a culture they previously knew nothing about, and recognized that regardless of peoples' positive attitudes about intercultural communication, they could be in Denial if they had only limited exposure to different cultures. Students discussed the need for extensive contact with persons from other cultures in order to achieve Acceptance and Adaptation. In late 2009 the model was modified for IDI Version 3 (Hammer, 2009a, 2009b); the change did not affect the results of this study.

At the end of the eight-week intercultural interview assignment, students reread their journal entries and in an 800-word summary paper identified the themes they saw in their

own writing. Instructions for the assignments were the same as for Group One, classes that had no exposure to the IDI.

Results

When an early version of this paper was presented at the International Association for Intercultural Communication Studies Conference in Kumamoto, Japan, the audience members from Japan, China, Malaysia, and the Philippines asked for more voices of students from the U.S. on the development of intercultural sensitivity. In some cases a single voice appears to be able to clarify this development for the hearer in a way that quantitative data and the coding of many voices cannot. Therefore, student voices predominate in the Results section of this paper. Journals were not graded on form, and in some cases, minor writing errors have been corrected for clarity. In the open coding stage of data analysis of Group One, students wrote on approximately 30 themes; these were combined and collapsed into the following five categories during axial coding of Group One (Strauss & Corbin, 1990):

- Category 1: Evidence of learning about self;
- Category 2: Recognition of cultural values;
- Category 3: Focus on both nonverbal and verbal communication;
- Category 4: Statement of future intentions;
- Category 5: Reaction to learning experience.

A compilation of student voices in Group One on these five categories is in process now (Barnes, 2009). These five categories were used as a baseline for the analysis of Group Two entries for the current study.

Group Two Compared to Group One

Using constant comparison to the five categories originally identified in Group One, it was found that students in Group Two, with the use of the IDI, wrote about these same categories, though to a lesser extent. Brief quotes from Group Two students on Categories 1-5 appear below as background information.

Category One: Evidence of learning about self. Students in both Groups One and Two said they learned a lot about themselves, as well as their intercultural partner, as a result of interviews and reflection. For example:

Much of what I learned doing Journal One was about myself . . . I was surprised to find that [my partner's] responses were very similar to mine. . . and while I was very interested to see how she responded to these items, I think deep down I was more interested [in] how I responded.

In one case, a student reflected on interaction with her partner before the course:

At first, I judged [him] as not being as smart or competent as me. I had a [] class with him last semester and we had to do a project together. Right away I judged him as not knowing what he was doing because he spoke kind of broken English. I kind of ignored his input at first and was not very patient with him. However, through spending more time with him, I learned that he is very competent and very smart. He may not be able to express it as quickly as I can in English, but that is because English is not his first language. That is just one example of how I lost my stereotype for people of his culture.

Category 2: Recognition of cultural values. Very early in the term, students were introduced to how cultural values are passed from generation to generation:

By the end of my first journal entry, I described American culture this way: “It’s related: we pride ourselves on being individualistic, but then, in a sense of equality, figure we all should have as much as the guy next to us, if not more (materialism), and so comes the competition, where we take hold of science and technology to help us progress and change things faster and better than the guy before us.” That is where I began to realize the so-called “logic” of American culture.

On the values of individualism and collectivism:

I could tell from how [my partner] reacted to some of the things I said that he was very shocked at how independent I was from my family and how much I value individualism. I had to explain to him that this is the norm for America. While at first he may have found it odd that I didn’t want to live with my parents and I may have found it strange that thirty-year-old men still live at home, after discussing our values and cultures it no longer seemed odd, simply a different way of doing things.

Students often put family very high in their list of values, but were surprised by how that looked in other cultures:

I was forced to think about whether or not I could possibly deal with my whole extended family living in my house. Now I live in a pretty large house and the thought of my extended family living with me made me want to pull my hair out. I love all of them and only a few really annoy me. However, it would still drive me insane to actually live with them. I couldn’t even share a room with my sister when I was little, let alone with five or six others.

Category 3: Focus on both nonverbal and verbal communication. The Intercultural Communication course typically includes a substantial amount of information on the details of verbal and nonverbal communication, so it was not surprising when Group One journals included extensive entries on the topics. By comparison, Group Two included them but wrote less about the specifics of communication:

For instance, he shared that [they] are peaceful and easy going people, but [they] do not easily trust strangers. He says often, [we] will smile and laugh and be kind, which may sometimes be seen as signs of comfort and trust, but [we] tend to be very wary. However, he shared that at least for himself and his family and friends, that when someone earns their trust, they have it completely.

Messages sent by the use of time also are elements of nonverbal communication:

I love the concept of just going slow and relaxing. That's exactly what they do in Mexico. I asked [my partner] about Mexico time and he started cracking up. He said, "You *sit down here* and you hear about it. If you *don't sit down* in Mexico, you hear about it. Totally different, you know what I mean?" [emphasis added]

Category 4: Statement of future intentions. Both Group One and Group Two journals included spontaneous references to how students planned to use what they gained from the intercultural experience. After his partner shared how it felt to be searched in an airport around the time of September 11, one student wrote:

The thing that I learned from [my partner] was to do away with all of the preconceived notions that you have about people . . . giving everyone a clean slate, and letting everyone stand on their own merit. I can apply this to my life now, and my future endeavors as a Special Education Teacher As an American in the dominant culture, it is important to realize that just because somebody is doing something different, doesn't mean that it is the wrong thing to do.

Category 5: Reaction to learning experience. Students in both groups used the term *enjoyed* frequently and referred to partners as friends: "I respect [my partner] for what she shares with me, and I appreciate having her in my life. We are growing closer together each time we meet and I am thankful for that!"

Students made a commitment to the assignment, commented on teaching methods that were most effective, and suggested what could be improved for future classes: "Forty-five minute meetings [with my partner] were far too short. . . I feel that at least an hour to an hour and a half would have allowed for more depth to each of our meetings."

The postings in both Group One and Group Two included a wide range of personal, powerful, and in some cases, lengthy journal entries, especially as students shared their overall reaction to the learning experience. Their entries included discussions of personal faith, values passed down by parents and grandparents, and appreciation for the opportunity to learn as much as they had from their intercultural partner:

As I interviewed my Aunt [] I learned so much more about myself, my family, and our worldview through Mexican eyes. I learned that the Catholic religion is a huge part of her life. I also learned that my family is the most important thing in my aunt's

life. Lastly, I learned that inter-cultural marriages were a huge issue in my family. We began each interview with a prayer and ended the time giving thanks to God for the time we got to spend together as an aunt and niece My aunt's undying faith really encouraged me.

Identification of Categories 6-10 in Group Two After Addition of the IDI

Data analysis in the Open and Axial Coding stages revealed five unique categories:

- Category 6: Recognition of stages of intercultural sensitivity;
- Category 7: View of the developmental nature of intercultural sensitivity;
- Category 8: Recognition of need for intercultural competence beyond the classroom;
- Category 9: Understanding of both similarities and differences between partners;
- Category 10: Focus on the growth to come.

Note that some entries were written very early in the course, before there was a clear understanding of key elements of intercultural communication and the IDI. As students explained what they were learning and the changes they saw in themselves, they took risks and shared personal information. The students wrote about their reactions to the IDI placement and conversations with their partners, even when the reflections were not particularly flattering.

To assure that Categories 6-10 did represent Group Two, the researcher reread every journal summary paper in those two groups; Categories 6-10 were verified. To verify that Categories 6-10 were in fact unique to the classes that used the IDI, the researcher returned to a random sample of the writing of Group One (reviewing the writing of every 6th student for a total of 16 students). The result of this constant comparison verified that Categories 6-10 were not present in the writing of most students in Group One, classes without the use of the IDI. In summary, it is important to note that the exercises provided for use with intercultural partners and the instructions for reflective writing assignments did not change over the multiple years of the research. The only major addition to the course for Group Two was the introduction of the Intercultural Development Inventory.

Category 6: Recognition of stages of intercultural sensitivity. Using the vocabulary of the IDI clarified behaviors and allowed students to openly discuss sensitive topics:

In my second journal I wrote about how my partner feels more comfortable hanging out with minority students than white people. I also wrote how I understood that because I feel more comfortable hanging out with people that are similar to me. After meeting and going over the IDI I thought more and realized that maybe that is not okay. It also got me thinking that maybe [he] hangs out with students who are a minority because he feels like an outcast or uncomfortable in a group full of white people. I know that we like to associate and get involved in situations that we feel comfortable with but after meeting with [the instructor] about the IDI I know that I need to interact more with people from other cultures in order to reach the

Acceptance level. All of this has got me thinking that maybe it is time to step out of my comfort zone and interact with people who are different than me.

Students used the terms of the IDI continuum to describe intercultural sensitivity. Journal entries also identified for the instructor the need to correct misunderstandings about the IDI stages. Students took the IDI feedback seriously, and in some cases shared concern about where they had been placed on the developmental model, especially if it was close to the first step, Denial, or the second step, Defense/Reversal:

I feel that throughout my life I have been kind of closed-minded to other cultures since I was never really around any cultures different than my own My [IDI] results came back to say that I am [in Defense and] working towards Minimization. I feel that through this experience, I have learned so much about how to respect others' cultures. I have become closer to that step of Minimization.

The *R* [or Reversal] scale of the IDI indicates a worldview that reverses “us” and “them” polarization, where “them” is the superior, or favored, culture. Except for situations of reverse culture shock, this was a new concept for most students. Several students expressed feelings of Reversal in journal entries but didn't necessarily label it Reversal. For example, “It disgusts me sometimes that our culture is so materialistic, and I try not to be myself.” Several saw Reversal in their own IDI feedback and tried to understand the connection between learning about their own culture and learning about another:

I feel some guilt because I am brought to the realization that I do live in a culture that focuses on material things and a rushing lifestyle and I rarely take time to relax like I should. God has blessed us with family, friends, and beautiful creation all around us. I have learned . . . just how important it is to take time to appreciate what we have.

In contrast, other comments were less polarized, and emphasized the good in their own culture:

I love the idea of Americans' view on work and leisure. I think that what you do as a person is important because it is who you are, and you are supposed to take great pride in what it is that you are doing I think that the phrase “work hard and play hard” makes a lot of sense.

Students talked about their own next step on the IDI model, but at the same time they mentioned the highest levels of intercultural sensitivity,: Acceptance and Adaptation:

It is still early in the semester, and I have more meetings with my partner, which will help me further this attitude of completely accepting people outside of my own culture. [My partner] is teaching me to be more mindful and *accepting of other*

cultures through watching her be completely open to learning new things about American culture. [emphasis added]

Category 7: View of the developmental nature of intercultural sensitivity. Students came to understand the developmental nature of intercultural sensitivity as measured by the IDI, versus the idea that “people either have intercultural sensitivity or not”. Though there still was some discomfort with the gap between their perceived score and their IDI placement, students eventually focused less on where the instrument placed them early in the term and more on where they wanted to be in the future:

The meeting that you and I shared when discussing the IDI test helped me when thinking about my partner and her responses. I perceive myself and my intercultural sensitivity as higher than I actually am . . . I hope to close that gap a bit.

From another student identified in the Denial (first) stage of the model:

I do not see other cultures as better than mine, nor do I see mine as better than others. . . . My overall developmental profile is much farther back and is in the Denial stage . . . but through more work and practice and patience, I can get to a different level. I do not try to avoid cultural experiences but they are *also not on the top of my mind to do all the time as well.* [emphasis added]

This student later looked back on three journals, and wrote about the work ahead:

I think that with time and the practice of studying details and being observant, my perception could [improve].

This view of intercultural sensitivity as developmental also appeared to increase students’ tolerance when they identified Denial, Defense, and Minimization behaviors in class case studies and current events.

Category 8: Recognition of the need for intercultural competence beyond the classroom. Students looked ahead to intercultural issues in the workplace. For example:

I became very frustrated with [my partner] early on because of our differences in time. I always feel super stressed about time. I have tons of things to get done with little time to do them, so I try to be as efficient as possible with my time. [My partner] on the other hand, feels very [free] about time and doesn’t hold as strictly to a schedule as I do. Therefore, when planning times to talk, I had hopes of getting right down into the topic while [he] simply wanted to converse for a while first. I can see how the time issue can become a huge problem in more large scale issues such as business interactions. If companies do not understand how different cultures work they may get the wrong idea about their attitude or work ethic . . . I had to learn to be more patient with [him], understanding that it seems rude to him for [me]

to start getting into the “work” right away and [he] had to understand that I do have deadlines I need to make. It was only then that we developed a mutual understanding of each others’ way of thinking.

Category 9: Understanding of both similarities and differences between partners. In Group One, there were references to surprising similarities and amazing differences as students talked with their partners. But in Group Two, references to similarities and differences increased dramatically and often was the overarching theme identified in their journals. One student said, “As I reflect upon my last three journals, I feel what I have gained most from doing them is the ability to . . . look more closely for similarities rather than how my culture is different.”

Students saw that minimizing differences between cultures could be a problem as well:

Although there are many similarities between [my partner] and me, we do have some cultural differences. The biggest of these differences is individualism. I am not opposed to asking for help, but I do like to try to figure a problem out on my own first My family tends to “throw you into the water without the floatation device” to make you learn how to swim on your own. [My partner], on the other hand, seems to rely more on community. When we are playing in the band together, he is always helping someone figure out the rhythm or the sticking pattern and always giving advice on how to play this or that instrument.

And from another student:

Before this class it was so easy to deny that we had cultural differences. I honestly didn’t know any better. I simply thought that all people are people and they should all be treated the same—to do otherwise would be racist. . . [but] it is important to recognize and celebrate the differences that we have in order to form effective cultural relationships.

The emphasis on similarities and differences in the writing by the group that used the IDI may be due to the number of students working through the stages of Defense/Reversal and Minimization. The action steps suggested in IDI materials to facilitate development beyond the Defense stage include starting to *see the similarities* between your own culture and other cultures. The action steps suggested to facilitate the move beyond the Minimization stage include developing a keener *recognition of the differences* between cultures. Most importantly, based on the Developmental Model of Intercultural Sensitivity (DMIS), students learned it is necessary to work through (to resolve) earlier stages of the model before it is possible to move to the next stage (Hammer, Bennett, & Wiseman, 2003). They appeared to be making an effort to take those action steps.

Category 10: Focus on the growth to come. As stated earlier, many students in both groups enjoyed the interview and writing experience and left the Intercultural Communication class confident about intercultural communication. They committed to learning from people

from other cultures in the future. In contrast, students in Group Two who had received feedback to the IDI stepped beyond enjoyment and confidence and instead wrote specifically of future personal growth, and seemed to understand more clearly the need for specific goals. They still wrote about their culture of origin and the values they had been taught, and still were optimistic about interacting with other cultures, but it was a subdued optimism. Humility often replaced the excitement of having already learned what was needed. Determination to press forward replaced the subtle message that “this class has already taught me what I need.” Journal entries in Group Two often were deeper and more personal and this change seemed to be tied to the realization that they needed to continue to develop and that it would be a challenge to do so.

Discussion

This paper used constant comparison and the Open Coding and Axial Coding typical of grounded theory research to compare the reflective writing of Intercultural Communication students in two classes that used the IDI to students in six classes without the use of the IDI. The first research question addressed the major categories that emerged in the journal entries of students regarding conversations with an intercultural partner after the introduction of the IDI.

When compared to the findings of earlier classes without the use of the IDI, students who were introduced to the IDI wrote about the same categories: (1) evidence of learning about self, (2) recognition of cultural values, (3) focus on both nonverbal and verbal communication, (4) statement of future intentions, and (5) reaction to learning experience.

The second research question asked in what ways the journal entries of students in classes that included the use of the IDI differed from the journal entries of students in classes that did not include the use of the IDI. There were three major findings. First, students wrote less on the five categories identified, above.

Second, five additional, unique categories of learning were identified in the classes that used the IDI: (6) recognition of stages of intercultural sensitivity, (7) view of the developmental nature of intercultural sensitivity, (8) recognition of need for intercultural competence beyond the classroom, (9) understanding of both similarities and differences between partners, and (10) focus on the growth to come.

Third, the study revealed pedagogical changes when the IDI was added to the course: (a) ability to see an IDI group measure of intercultural sensitivity, (b) fewer students on fringes of class academically, (c) greater commitment of class time and resources, and (d) greater sense of class as shared learning environment. A more complete explanation of the pedagogical changes follows:

Ability to see an IDI group measure of intercultural sensitivity. The IDI feedback places the group, as well as individuals, on the developmental continuum. This allows the instructor to add appropriate specific examples and supplemental materials to the course. It should be noted that for planning, the IDI can give a baseline of the intercultural sensitivity of specific groups or an entire campus or organization, even if time does not permit individual feedback sessions.

Fewer students on fringes of class academically. A greater number of students in Group Two engaged with their intercultural partners earlier in the term, and completed all requirements of the class with greater success than in Group One. This could be due to early exposure to IDI material and the desire to test the IDI results with their intercultural partner; more study is needed.

Commitment of class time and resources. The use of the IDI impacts class content and instructor time in positive and negative ways.

Weaknesses of the IDI for classroom use. The addition of the IDI to an already-full Intercultural Communication syllabus impacts instructor and students alike. Time needs to be spent explaining the Developmental Model of Intercultural Sensitivity (DMIS) and the IDI. Tabulation is required. A web-based system for tabulation of the IDI was put in place with Version 3; it is a fairly simple process for the trained administrator with minimal technical skills and the highly visual feedback was said to be sufficient and clear to most participants.

The individual feedback sessions can be fairly intense since the students take the IDI results seriously. Students incur a cost to take the IDI; it is minimal if the organization has an IDI Administrator on staff. It also is possible for an IDI Administrator to serve as an outside consultant to the school or organization.

Strengths of the IDI for classroom use. IDI Administrators are able to share with respondents the fact that the IDI Version 3 testing involved over 4,500 respondents from multiple cultures, and from high schools and colleges as well as profit and nonprofit organizations. The IDI is being used by over 1,200 administrators in over 30 countries (Hammer, 2009a). Hammer, Bennett and Wiseman (2003) include specifics on the validity and reliability of the earlier versions of the instrument. Hammer discusses the validity and generalizability across cultural groups of IDI Version 3 (Hammer, 2009a).

Based on the current study, the researcher/instructor believes that the addition of the IDI is of sufficient value to make the necessary commitment of time and resources for future Intercultural Communication classes. It should be noted that the researcher/instructor for this project has no personal investment in the IDI, but sees it as a tool for other instructors' consideration.

Greater sense of class as shared learning environment. The fact that the IDI is in use in business and not-for-profit settings encourages students to view themselves as lifelong learners with respect to intercultural sensitivity. Students know the instructor also is on a developmental plan, and there is a shared sense of discovery in the process. An unexpected outcome was the personal connection between instructor and students early in the term due to individual feedback sessions.

Limitations of the Study

First, the research focused only on the first year the instructor used the IDI. This allowed the instructor to see and hear student reactions to the change in course content, but the study was limited to one IDI administrator/instructor and two classes, and the administrator's limited experience with the instrument. However, this study can answer questions regarding first-year challenges, opportunities, and commitment required for the IDI administrator.

Second, the research involved students at one faith-based college in the U.S. Midwest. A larger sample would provide a wider range of responses of U.S. undergraduate students regarding intercultural experiences. Third, the results need to be viewed in light of the breadth of this study: a combination of IDI feedback plus interviews and exercises with an intercultural partner, and reflective writing, over the course of a 15-week term. At this time, the study did not result in a grounded theory on the use of the IDI in conjunction with student interviews and reflective writings. However, the study does identify student reactions to the learning experience in an Intercultural Communication course, and affords a reasonable opportunity to compare outcomes with and without the use of the instrument.

Implications for Future Research

In the future it may be of value to compare placement on the IDI continuum to students' qualitative responses to the reflective writing assignments, or to use a post-term measure of intercultural sensitivity to evaluate the impact of the interview and reflective writing experience on the development of intercultural sensitivity.

Future analysis of these reflective entries also could include more comparison to respondent demographics. An updated study would be appropriate when the instructor/administrator has had more experience and received more student responses based on the use of the IDI in this course. A close look at the reflective writing assignments of students in multiple classes has allowed the instructor to identify specific teaching and course management strategies, especially with respect to reflective writing. These strategies could be the focus of future research and publication. Finally, the combination of IDI, interviews, and reflective writing may be appropriate in non-academic organizations that seek to understand and develop the intercultural sensitivity of their members including profit, not for profit, and religious organizations. A modified training model that builds on this research would yield valuable information on the development of intercultural sensitivity in other contexts.

A clearer understanding of the use of an instrument such as the Intercultural Development Inventory is of value to persons teaching courses related to intercultural communication. In addition, hearing first-person accounts of U.S. students as they interact with intercultural partners can give insight to international students and other persons who intend to interact with persons from the U.S.

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