Varied Teaching Methods in Intercultural Communication
Effectiveness: Promoting Student Outcomes in Affect, Expectancy, and Self-Reports of Behavior

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Abstract

Various teaching methods have been found to affect student outcomes in intercultural communication, but problematically so. In a longitudinal study at a Southwestern Plains University, students’ self ratings and personal expectations (Hawes and Kealey [1979] AG and AC scales) and perceptions of others (a sentence completion task) were compared across experimental and comparison teaching conditions that varied intercultural contact and theoretical orientation to determine the effect of teaching methods on student outcomes, measured here as shifts in self ratings of behaviors and expectancies.

Analysis of the AG scale items revealed effects of teaching conditions such that groups with directed interaction had significantly more positive results post test. Analysis of the sentence completions for the general stem indicated that: (1) all groups showed significant change, (2) the group with segmented exposure to descriptors, (3) the groups with directed interaction showed a significant decrease in negative descriptors. For the specific item, only the groups with directed interaction showed significant change.
Intercultural communication is a critical art; one reason for teaching it is to promote positive relationships between people of different cultures, international or domestic (cf. Asante, Newmark, & Blake 1979). Moreover, given our global economy and our multiethnic society, it is as necessary to be an effective communicator interculturally as [ well as ] interpersonally or organizationally. Whether one defines intercultural communication as a specific field or one believes that all communication has a cultural component in all classes, there are desirable student outcomes and a growing body of tested teaching methods (Casmir 1991 a,b; Martin 1986, 1989; Pusch 1979).

Nevertheless, the efficacy of these methods seems to be problematic. For example, Stull and Von Till (1995: 8) discovered that students who took “courses emphasizing cross-cultural relations” were more strongly in agreement with collectivism and high risk-taking and less strongly in agreement with high-power distance than were students without such courses. Focusing specifically on the diffusion of innovation and on foreign assignments, Javidi and Hill (1987: 98) found that one specific teaching method (directed contact among international and American students) reduced stereotypes and “[increased the] likelihood of sustained interactions with the contact and developing interest in contact with other international students”. On the other hand, Gudykunst (1979) found that while participation in the Intercultural Communication Workshop (ICW) (based on the principles of the “contact hypothesis” and laboratory training) did provide a structure for friendship formation it did not change intercultural attitudes in the predicted manner.

Stephan (1985: 646) similarly details mixed responses to teaching intercultural/interracial communication. A single lecture, a twelve-hour race related curriculum, an eight-week curriculum that involved writing reports did not reduce prejudice. On the other hand, positive changes were found in seven studies with varied teaching methods including, but not limited to, the cultural assimilator, multimedia classroom and intergroup contact, and a four-week multiethnic curriculum.

Good reasons, such as environmental influence (Schaefer 1990: 78-81) and variation in student background (Gudykunst 1979) have been forwarded to account for the variation in student outcomes (see also Stephan 1985). Furthermore, Cumber and Braithwaite (1995) note that intercultural communication looks different in different contexts; they propose that different types of universities might need to vary strategies (around a few
core strategies) in order to have the same desired outcome. Stephan (1985: 646) indicates, however, that this problematic of differing results will not be resolved until there are more studies that do not “suffer from a number of limitations,” such as inadequate control groups, short duration, and lack of alternative techniques.

Preliminary assessment of the results of alternative techniques will give the instructor greater assurance in choosing an approach to intercultural communication and in making assignments, whether in the intercultural class, per se, or as a unit or sub-theme in any other course. Different methods of teaching can be chosen for different populations or for different outcomes.

In order to help clarify the problematic of differing results and in order to provide information for the instructor on the efficacy of specific methods, this study explores the influence on student outcomes of five different methods of teaching intercultural communication at a Southwestern Plains University, one that is located in an urban area with a hegemonic Anglo-European culture in the midst of diversity. We start to redress some of the problems noted by Stephan (1985) in that: (1) we provide a control group and experimental group; (2) we provide comparison groups; (3) we assess a relatively long duration (one semester); and (4) we look at alternative teaching techniques.

Additionally, we use research methodologies from two bodies of literature that have done considerable research on intercultural effectiveness--intergroup contact and development--in order to look at affect and perceptions of knowledge and behavior as well as expectancies in intergroup contact (Hamilton 1981: 347; cf. Johnson 1981, chaps. 2-3). The methodologies and philosophy of the field of intergroup contact help us understand the initial stages of relationship development, whereas the methodologies and philosophy of the development literature provide the rationale and context for sustained relationship development (Dodd 1995; cf. Rose 1981).

At this institution, in an environment of status equals where intercultural contact is acceptable and expected behavior and the rationale for multi-ethnic/international contact is development, the transfer of technological software (ideas), in such a manner that alumni become bridge-builders of a third-culture of good will (National Task Force on Undergraduate Education Abroad 1993; Useem, Useem, & Donaghue 1963; Wilson 1985; cf. Lowe, Asking, & Bates 1984). This transfer of technology cannot occur unless there is, first, positive contact (expectations and affect)
among students (Kamal & Maruyama 1990; Westwood & Barker 1990), and, second, sustained healthy relationships (Hawes & Kealey 1979; Olaniran 1993). In other words, for the intercultural student to gain the desired technical knowledge and for this student to be willing to use this knowledge in ways that promote just and peaceful relationships, this student must have friendships with Americans of various ethnic backgrounds. For this to happen, the American students need to learn intercultural communication, i.e., the attitudes and skills necessary both for initiating contact (intergroup contact prejudice reduction theory) and for sustaining contact (the transfer of technology).

Thus our research question is: How do five specific teaching methods influence student outcomes in intercultural communication:

(a) the Experimental condition, in which the method is directing students to focus one report on people of a different ethnic/national background

(b) the Control condition, in which the method is to have no recognition or discussion of intercultural communication in the classroom

(c) Comparison condition 1, in which the method is a one-day introduction to intercultural communication

(d) Comparison condition 2, in which the “method” is a class on multiethnic diversity, taught from a theoretical standpoint with optional interaction

(e) Comparison condition 3, in which the “method” is a class in intercultural communication that does two things:
   (i) provides a theoretical background to understanding both domestic and international issues
   (ii) directs student to interact with someone from another ethnic/national background for a minimum of eight hours over the semester.

Student outcomes are operationalized by four specific measures; hence:

H1: Different teaching methods will create differences in the self-reports of the behavior and knowledge necessary for the intercultural interaction which sustains the transfer of technology (Hawes & Kealey 1979, AG scale).

H2: Different teaching methods will create differences in the self-reports of expectancies about interaction necessary for good
adjustment in the relationships necessary for the transfer of technology (Hawes & Kealey 1979, AC scale).

H3: Different teaching methods will create significant differences in the changes in descriptors about the general other (i.e., affect) (Kuhn & McPartland 1954; Pettigrew 1981) necessary for initiating relationships before the transfer of technology.

H4: Different teaching methods will create significant differences in the changes in descriptors about the specific other (i.e., affect) (Kuhn & McPartland 1954; Pettigrew 1981) necessary for sustaining the relationships for the transfer of technology.

**Methods**

**The University and the Population**

The university is a large southwestern university (25,000 students) located in a city that serves as a hub and crossroads for outlying ranching communities. At the time of this study (1992), about half the student body was from the region, the rest predominantly from major urban centers located throughout the rest of the state and neighboring states. Most of the student body was Anglo-American (approximately 89%); the remainder was African-American, Hispanic-American, and International. Even though 20% of the graduate students were international, the percentage of undergraduate internationals to general undergraduate population was quite low (01%), which hindered informal mixing between the two groups. Students participating in the study were taking classes in the Departments of Communication Studies or Anthropology. In the Communication Studies department, three of the relevant classes were taught by two of the authors of this paper.

**Subjects**

The total sample size was 114: 38 males and 76 females. The age range was 18-60+ years with the model age range 18-21 years of age; 94.8% of the sample were 18-29 years. The majority of the students (96.5%) were born in the U.S.; 0.9% were born in each of the following three countries: India; Mexico; Vietnam; and Singapore. The majority (95.6%) had completed some college courses; about 1% had already earned a bachelor’s degree. Sojourns in other countries varied: 65.8% had had no experience living or
working in another country; 22.8% had less than two years experience in another country; 5.3% had two-five years in another country; and 4.4% had more than five years experience in another country. English was the maternal language of 97.4% of these student; 35.1% had facility in at least one other language (28.1% in Spanish; 3.5% in French; the rest in scattered European and Asian languages).

The following intact groups constituted the sample:

- Experimental/ Directed Interaction (E/D) = 20
- Experimental/Control (E/C0) = 23
- Comparison 1/Minimal Theory (C1/M) = 30
- Comparison 2/Theoretical Orientation (C2/T) = 22
- Comparison 3/Theoretical Orientation with Directed Interaction (C3/TD) = 19

The group names are explained below.

**Teaching Methods**

One of five teaching methods was used to intervene into the process of intercultural communication. Four teaching methods were part of normally scheduled classes at the university, taught in the usual manner: Small Group Communication (E/C), n = 23; Introduction to Communication Studies (C1/M), n = 3=; Understanding Multicultural America (C2/T), n = 22; Introduction to Intercultural Communication (C3/TD), n = 19. Small Group Communication (E/D), n = 20, was regularly taught at the university, but for this study an intervention method to teach intercultural communication was added as an experimental treatment: students were directed to do their group project focused on international or multiethnic issues.

The classes in small group communication (E/C, and E/C) were the experimental groups; the other classes (C1/M, C2/T, and C3/TD) served as comparison groups. Subjects in the experimental groups were enrolled in one of two sections of the small group communication class taught by one international professor. The classes were randomly assigned to use either the treatment or the control method.

Students in the experimental group E/D (i.e., the class with an intervention as a teaching method) were informed that their class project had to focus on international or multiethnic students on the campus. Final projects included activities such as researching and designing an orientation program for international students. All projects involved some directed interaction with interethnic or international student, usually one or more
informational interviews. When we surveyed the students about their experiences, we were able to use all 20 of their surveys, pre- and post-test.

Students in the experimental control condition (E/C) were told that their class project could be on any campus problem. No one chose to work with international or multiethnic concerns. This class provided neither directed interaction with international or multiethnic students nor theory about such groups or interaction. The method was to teach the class as per normal. When we surveyed the students about their experiences we were able to use all 23 of their surveys pre and post-test.

Subjects in the comparison groups were in a variety of classes. Students in C1/M were enrolled in Introduction to Communication Studies, a large (100 student) class that fulfilled general education requirements. No particular emphasis was placed on Multicultural or international issues in this class; a brief (1 day) introduction to intercultural communicant was a normal part of the course. The only surveys used from this class were from those thirty students who were not enrolled in any of the other testing conditions and who completed both a pretest and a post-test.

Students in C2/T were enrolled in Understanding Multicultural America, a large (100 student) class in Anthropology that fulfilled general education requirements. The course focused on the cultural and political aspects of interethnic relations in the United States. Students in this class were not required to work with international or multiethnic students. At the time of testing, this class had provided a theoretical orientation to multiethnic groups in America and for interaction among such. The only surveys used from this class were from those twenty-two students who were not enrolled in any of the other conditions and who completed both the pretest and the post-test.

Students in C3/TD were enrolled in a normal sized (25 students) class in intercultural communication and were paired with international students from Intensive English (IE) classes or English as a Foreign Language (EFL) classes. This intercultural class was based on integrated training techniques (Gudykunst, Hammer, & Wiseman 1977); the methods were comparable to those described by Javidi and Hill (1987). Nineteen surveys were used pretest and post-test.¹

Research Design

In this field study (Redding 1970), we used a unique research design with both experimental and non-experimental elements (Cook & Campbell
this design takes advantage of intact groups of students in real-life situations having some intercultural/educational experiences in common and yet presumably having different perceptions of the multicultural/inter-national environment.

The core of the design is a two group experiment, with one group serving as the treatment condition, the other set of groups the control condition. Students in small group communication classes were randomly assigned to one of the two teaching methods. In the experimental treatment group, “Experimental/Directed” (E/D), students were required to participate in a project involving multiculturals (interethnic or international). In the control group, “Experimental/Control” (E/C), students completed a similar project but were given no instructions regarding the topic, the usual class method. No student in this group chose to do a multicultural project. The instructor for these classes was an international instructor, a Nigerian with permanent residency in the US.

Three more classes were incorporated into the design as comparison groups (see Table 1 on the next page). Assignment of participants to these teaching conditions was not random. Rather, these were intact groups of classes found in the college catalogue and taught as normally taught in the semester with no treatments.

The first comparison group, “Comparison 1/Minimal discussion” (C1/M), consisted of American students in an introductory class to communication Studies with a brief (1 day) introduction to intercultural communication. They were not instructed to interact with multietnic or international students. In other words, this was an average class on campus as far as intercultural awareness is concerned.

A second comparison group, “Comparison 2/Theoretical orientation“ (C2/T), were American students in an Anthropology class: Understanding Multicultural America. They were given theory about interacting in a multicultural environment but they were not required to interact.

A third comparison group, “Comparison 3/Theoretical orientation + Directed interaction’ (C3/TD), consisted of American students in a class in intercultural communication. They were provided with both an orientation to intercultural interaction in a multicultural/international environment and directed to interact with an international student.
Table 1

Research Design

<table>
<thead>
<tr>
<th>Group ID</th>
<th>Type</th>
<th>Instructor</th>
<th>Directed Interaction</th>
<th>Theoretical Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/D</td>
<td>E</td>
<td>International</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>E/C</td>
<td>E</td>
<td>International</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>C1/M</td>
<td>C</td>
<td>American</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>C2/T</td>
<td>C</td>
<td>American</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>C3/TD</td>
<td>C</td>
<td>American</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

Note: GROUP codes: E/D = Experimental /Directed Interaction; E/C = Experimental/Control; C1/M = Comparison 1/Minimal instruction; C2/T = Comparison 2/Theoretical orientation; C3/TD = Comparison 3/Theoretical orientation = Directed interaction. Type: E = experimental group; C = comparison group.
Subjects completed two questionnaires: a pretest and a posttest. No attempt was made to make all five groups equivalent at the outset or to control for other extraneous variables such as linguistic ability, multicultural experience, and the like. Instead, all subjects completed all measures during the first weeks of the semester and then completed the measures again during the final weeks of the semester. The experimental elements of the design permit some preliminary assessment of the cause and effect. The addition of comparison groups permits an assessment of alternative explanations of any between-group differences that result.

**Instruments**

There were two classes of measures. One class assessed self-perceptions of behavior and expectations about the class project and interaction. For this assessment we chose two scales from Hawes & Kealey (1979): (a) Form A, Part G, Self-ratings on the Self-Report Questionnaire [for the change agent] (AG scale), and (b) Form A, Part C, Personal Expectations on the Self-Report Questionnaire [for the change agent] (AC scale). On the surveys scale anchors for the AG scale read from 0 = Not Applicable, 1 = Hardly at All to 5 = Completely. For analysis the anchors were recoded to anchors for the AC scale read from 0 = Not Applicable, 1 = Strongly Disagree to 5 = Strongly Agree. For analysis the Not Applicable responses were recoded as 3. All anchors stayed the same.

The second class of measures assessed perceptions about others. For this we developed an indirect measure of attitude, a sentence completion task modeled after Kuhn & McPartland’s (1954) Twenty-Statements test (see Appendix for scales). The first measures are a link to the literature on international assignments and development (specifically through the transfer of technology); the second measure is a link to the literature on intergroup cognition and conflict through symbolic interactionism.

The Hawes and Kealey AG scale was used because it was the most practical measure available for looking at effectiveness within the Canadian International Development Agency (CIDA) tradition (cf. Spitzberg 1989). These scales were chosen rather than interpersonal measure (Koester & Olebe 1988) because of the interest in the skills that sustain intercultural relationships in an on-going task relationship. Items on the AC scale had previously been found to correlate with adjustment overseas during the transfer of technology (Hawes & Kealey 1979: 14, 56).
This scale was chosen over interpersonal measures of intercultural competence (Koester & Olebe 1988) because of the classroom focus on cultural background and analysis rather than on the development of interpersonal skills. The AC scale also is a cognitive measure of expectancy. Use of these scales helps to build a solid tradition of use of the measures developed by CIDA, a practice that Spitzberg (1989) argues is important in this field (cf. Martin, Bradford, & Rohrlich 1995).

An open-ended measure, the sentence completion task, was used to elicit respondents’ perceptions of others. Respondents completed a sentence beginning with two types of stems, a general stem (“Internationals are”) and a specific stem (“My international colleague is”). Responses were coded according to evaluative tone (positive, neutral, negative; cf. Nishida 1985) as an indirect measure of attitude toward others. (For a recent review of attitude measurement, see Dawes & Smith 1985). Our aim was to determine whether, as intercultural relationships developed over the course of a semester, the proportion of positive to negative descriptors of the other would change. The open-ended format was chosen to reduce the social desirability responding that tends to occur when people are asked to evaluate others.

**Procedures**

Data were collected during the Spring semester of 1992. Surveys were initially handed out during Week 1 of the semester and collected during Week 2. A second survey administration took place during the last weeks of class with responses collected no later than during Week 15. Surveys were handed out in class by the instructors with simple verbal instructions. In C2/T the verbal instructions indicated that students should consider people of different ethnic backgrounds rather than different national backgrounds when answering the survey. Extra credit was awarded for each survey returned.

**Results**

**Primary Analyses**

Cronbach’s alpha on the AG scale was .88 for the first administration and .92 for the second administration, which is sufficient for scale reliability. Item 3 of the AC scale (“I was concerned I would have trouble...”)
interacting with people of another culture”) was reverse scored to make it consistent in evaluative tone with the other items. Cronbach’s alpha on the AC scale was .35 for the pretest and .70 for the posttest. This reliability is too low to interpret any results. The responses to the AG scale were analyzed by repeated measures ANOVA (using SAS Procedure GLM) to assess potential changes over time (repeated measures), the effects of group membership, and their interaction. One trained person (upper level undergraduate) coded all the sentence completions.

Analyses of the AG Scale, H1

The interaction of teaching condition and the repeated measure was significant (F(4,109) = 3.70, p < 0.01). As shown in Table 2, the C3/TD mean was higher at posttest than a pretest, and it was also higher than all other groups at either time period.

<table>
<thead>
<tr>
<th>Group ID</th>
<th>n</th>
<th>Pre-Test Mean</th>
<th>Post-Test Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/D</td>
<td>20</td>
<td>3.81</td>
<td>3.69</td>
</tr>
<tr>
<td>E/C</td>
<td>23</td>
<td>3.37</td>
<td>3.25</td>
</tr>
<tr>
<td>C1/M</td>
<td>30</td>
<td>3.30</td>
<td>3.29</td>
</tr>
<tr>
<td>C2/T</td>
<td>22</td>
<td>3.42</td>
<td>3.65</td>
</tr>
<tr>
<td>C3/TD</td>
<td>19</td>
<td>3.74</td>
<td>4.46</td>
</tr>
</tbody>
</table>

Note. Scale values: 1 = Not Applicable, 2 = Hardly at All, 3 = To Some Extent, 4 = Quite a Bit, 5 = A Great Deal, 6 = Completely. GROUP codes: E/D = Experimental/Directed Interaction; E/C = Experimental/Control; C1/M = Comparison orientation; C3/Td = Comparison 3/Theoretical orientation = Directed interaction.
A series of two-way Chi-squares was performed on the sentence completions with Pretest-Posttest as one variable, and subjects’ perceptions (positive, neutral, and negative) of the general other as the second variable. The analyses were conducted within the five groups for the general stem responses (“Internationals are”) as shown in Table 3.

### Table 3
**Relation Between Frequency of Positive, Neutral and Negative Perceptions of Contacts and PRETEST-POSTTEST for Each of the Five Groups, General Stems**

<table>
<thead>
<tr>
<th>Perceptions</th>
<th>Pretest</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>E/D</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Posttest</td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>Observed</td>
<td>235.5</td>
<td>301.5</td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>254.73</td>
<td>281.8115</td>
</tr>
<tr>
<td>Neutral</td>
<td>Observed</td>
<td>25.5</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>14.71</td>
<td>16.301</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>2.46</td>
<td>-3.24</td>
</tr>
<tr>
<td>Negative</td>
<td>Observed</td>
<td>16.5</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>8.06</td>
<td>8.94</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>2.47</td>
<td>-4.13</td>
</tr>
<tr>
<td>Positive</td>
<td>Observed</td>
<td>305.5</td>
<td>187.5</td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>311.21</td>
<td>181.79</td>
</tr>
<tr>
<td>Neutral</td>
<td>Observed</td>
<td>39.5</td>
<td>18.5</td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>36.6</td>
<td>21.39</td>
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<tr>
<td>Negative</td>
<td>Observed</td>
<td>8.5</td>
<td>0.5</td>
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<td></td>
<td>Expected</td>
<td>5.68</td>
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<tr>
<td></td>
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<td>Negative</td>
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<tr>
<td>----------</td>
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</tr>
<tr>
<td></td>
<td>Observed</td>
<td>Expected</td>
<td>Observed</td>
</tr>
<tr>
<td>C1/M</td>
<td>492.5</td>
<td>488.18</td>
<td>25.5</td>
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<td></td>
<td>489.5</td>
<td>493.82</td>
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</tr>
<tr>
<td>D</td>
<td>-2.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2/T</td>
<td>91</td>
<td>96.10</td>
<td>13</td>
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<tr>
<td></td>
<td>142</td>
<td>136.90</td>
<td>5</td>
</tr>
<tr>
<td>C3/TD</td>
<td>210.5</td>
<td>221.80</td>
<td>21.5</td>
</tr>
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<td></td>
<td>190.5</td>
<td>179.20</td>
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</tr>
</tbody>
</table>
Notes. GROUP codes: E/D = Experimental /Directed Interaction; E/C = Experimental/Control; C1/M = Comparison 1/Minimal instruction; C2/t = Comparison 2/Theoretical orientation; C3/TD = Comparison 3/Theoretical orientation + Directed interaction. If a cell had 0 observations, .5 was added to all cells in that group.  

D = Freeman-Tukey Deviate, shown only for cells where D +/- 2.00  

(Kennedy 1983: 63-4)  

<table>
<thead>
<tr>
<th>Group</th>
<th>CHISQ (2)</th>
<th>p</th>
<th>C</th>
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<tbody>
<tr>
<td>E/D</td>
<td>34.71</td>
<td>&lt; .001</td>
<td>.24</td>
</tr>
<tr>
<td>E/C</td>
<td>4.70</td>
<td>&lt; .05</td>
<td>.09</td>
</tr>
<tr>
<td>C1/M</td>
<td>7.11</td>
<td>&lt; .02</td>
<td>.08</td>
</tr>
<tr>
<td>C2/T</td>
<td>7.75</td>
<td>&lt; .02</td>
<td>.17</td>
</tr>
<tr>
<td>C3/TD</td>
<td>11.44</td>
<td>&lt; .01</td>
<td>.16</td>
</tr>
</tbody>
</table>

For the general stem, significant chi-squares were found for each of the five teaching conditions, E/D, E/C, C1/M, C2/T, C3/TD. Contingency coefficients, indicating the strength of the relation between pretest-posttest and perceptions in each table, were low to moderate (.08 to .24).

Freeman-Tukey deviates (D; Kennedy 1983: 63-4) were calculated to determine which cells showed a significant departure from independence (see Table 3). In teaching condition E/D, neutral and negative descriptors were higher than expected pretest and lower than expected posttest. In teaching condition C3/TD neutral descriptors were higher than expected pretest and as expected posttest. In teaching condition C1/M negative descriptors were less than expected pretest and as expected posttest. Although D was not significant there are strong trends in E/C and C2/T for an increase in positive descriptor and a decrease in neutral descriptors. Additionally, E/C shows a decrease in negative descriptors.
A series of two-way Chi-squares was performed on the sentence completions with Pretest-Posttest as one variable, and subjects’ perceptions (positive, neutral, negative) of the specific other as the second variable. The analyses were conducted within the five groups for the specific stem responses (“My international colleague is”) as shown in Table 4 on the next page.

For the specific stem, significant Chi-squares were found for two teaching conditions, E/D and C3/TD. Contingency coefficients were low to moderate (.12, .14), and the Freeman -Tukey deviates were not significant.

Discussion

The literature in intercultural communication - whether it be in intergroup contact (prejudiced reduction) or in the transfer of technology (third culture building) - shows problematic results in teaching intercultural communication. In this study we found how different methods of teaching intercultural communication (domestic or international) at a Southwestern Plains University created different student outcomes. This preliminary assessment of outcomes can help a communication instructor determine which methods are appropriate in a particular communication classroom even if the course is not a specific course in intercultural communication.

In this study all groups, experimental and comparison, were intact groups of classes. Within each group were students with a range of previous international/multicultural contact and linguistic ability. The students in the experimental groups had an international instructor for this study; the students in the comparison groups had American instructors. Nevertheless, these comparison groups and the experimental groups were comparable at the pretest in the AG scales in that they showed no initial differences in perceptions. At the posttest, however, the effects of the manipulation showed that C3/TD significantly differed from all groups (experimental or comparison) on the AG scale.

For the sentence completion general stem, each teaching condition created a significant difference in student responses. The classes with directed interaction, E/D (the core experimental group) and C3/Td were the ones that showed a significant decrease in negative or neutral descriptors over the semester.
### Table 4
Relation between Frequency of Positive, Neutral and Negative Perceptions of Contacts and PRETEST-POSTTEST for Two Groups, Specific Stem

<table>
<thead>
<tr>
<th>Perceptions</th>
<th>Pretest</th>
<th>POSTTEST</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>E/D</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>Observed</td>
<td>127.5</td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>130.83</td>
</tr>
<tr>
<td>Neutral</td>
<td>Observed</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>2.60</td>
</tr>
<tr>
<td>Negative</td>
<td>Observed</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>2.08</td>
</tr>
<tr>
<td><strong>C1/TD</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>Observed</td>
<td>106.5</td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>112.87</td>
</tr>
<tr>
<td>Neutral</td>
<td>Observed</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>2.18</td>
</tr>
<tr>
<td>Negative</td>
<td>Observed</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>0.36</td>
</tr>
</tbody>
</table>

Notes. GROUP codes: E/D = Experimental /Directed Interaction; E/C = Experimental/Control; C1/M = Comparison 1/Minimal instruction; C2/T = Comparison 2/Theoretical orientation; C3/TD = Comparison 3/Theoretical orientation + Directed interaction. If a cell had 0 observations, .5 was added to all cells in that group.

E/D CHISQ (2) = 5.08, p < .05. C = .14.

C1/Td CHISQ (2) = 4.35, p < .05. C = .12.
For the specific stem, only the groups with directed interaction (E/D and C3/TD) showed significant change. Although Freeman-Tukey’s deviate was not significant for any cell, the patterns indicate a decrease in negative and neutral descriptors over time. Teaching methods made a difference in student responses in the core experimental group such that the group with directed interaction (E/D) showed significant change over the semester. Teaching method also made a difference in student response in the comparison groups such that the group with directed interaction (C3/TD) showed significant change over the semester. These responses of the core experimental group, especially as supported by the comparison group, suggest that directed contact reduces negative affect and promotes positive affect, even among status equals in an environment that is supportive and among students who have differing levels of intercultural awareness in the sense of linguistic ability, travel, etc. at the beginning of the semester.

This study suggests that, even in an environment of status equals where the transfer of technology among different ethnic, racial, and national groups is part of the stated mission of the university and is expected and acceptable behavior, teaching methods do influence student outcomes in intercultural communication, for both relationship initiation and continuation. Method C3/TD positively influenced student responses on three of the three scales; method E/D positively influenced student responses on two scales. Methods C2/T and E/C positively influenced student responses on one scale. Method C1/M negatively influenced student responses on one scale.

Thus this study gives one example of how problematic outcomes could result among previous studies. Even at this one institution different methods created different student outcome in that student perceptions of either the general other (International students in general) or the specific other (my international colleague) were different at the end of different classes. Method C1/Â, brief-segmented exposure, increased students’ negative descriptors of the general other and had no other influence. E/C, no formal exposure to academic content about intercultural communication, but an international faculty and C2/T, semester-long exposure to theory both changed students’ descriptors of the general other tending in a positive direction. Over the semester E/D and C3/TD both markedly decreased students’ negative descriptors of both the general and the specific other. C3/TD additionally increased the positive self-perceptions of behavior and knowledge necessary for the transfer of technology.
Early literature suggested that scores on the AC scale would be positively correlated with success in the field (Hawes & Kealey 1979); that is, high scores would be associated with a great deal of success, and low scores would be associated with little success. More recent literature suggests that these self-report measures might not be good predictors of success (Kealey 1989). On the other hand, the type of measure (self-report or other) might not be the problem with assessing expectancy. Martin, Bradford, and Rohrlich (1995) indicate that expectancy is influenced by gender, prior transitional experience, and location. Billiet and Crabtree (1995) suggest that the type and context of the encounter is also important. Even though the experimental design controls for gender, prior experience, and location, scale items most likely did not have face validity for students enrolled in university classes.

The sentence completions provided supplementary information about the adjustment/acculturation process. These results support Hamilton’s (1981) argument that it is important to study affect in intergroup contact (cf. Martin 1986): positive affect appears to be related to specific learning conditions. We would encourage the use of qualitative measures in addition to quantitative ones in assessing the results of teaching strategies (cf. Javidi & Hill 1987).

The limitations of the study in terms of inferring causation include the use of nonequivalent groups along with the experimental groups and the inability to control (statistically or otherwise) for relevant respondent experiences. However, the results of this study are consistent with those of other field studies which indicate that intervention into this process of intercultural communication can have beneficial outcomes (cf. Gudykunst 1979; Javidi & Hill 1987; Schaefer 1990; Stull and Von Till 1990), but that such outcomes are problematic (Gudykunst 1979; Stephan 1985).

Furthermore, even with these limitations, this study extended research in the field of intergroup relations and intercultural contact in three important ways: (a) The study was longitudinal with a core experimental group; (b) it involved students with a variety of backgrounds in situations of both international and multiethnic contact; and (c) it looked at alternative methods of teaching intercultural communication. It thus begins to address the issue of which teaching methods are effective under which circumstances.

We would encourage continuing research into the issue of expectancy and further
research into the process of teaching as intervention into intercultural communication with greater control of conditions. We would encourage also the continuing integration between the literature on individual contact and the literature dealing with development to reveal more clearly what are situation-specific and situation-general methods for intervention. We would affirm the validity of teaching intercultural communication especially when theory and interaction are united.

Notes

1. Class lectures were culture- and process-general, firmly grounded in anthropology, sociology, and communication; class projects were culture specific. This class provided both directed interaction with international or multiethnic students and relevant theoretical orientation. Assignments were structured carefully so that over the semester they moved from less threatening to more challenging and enabled students to integrate theory and practice. The core assignment in this class was an extended analysis of an on-going intercultural interaction. Students were required to spend a minimum of eight hours over at least four sessions with a student from a different national or ethnic background. Extra credit was given for extra participation. Students were encouraged not to interrogate their partners but to do things together: shoot baskets, window-shop, cook meals, watch videos, and so forth. The analysis asked for some cultural information but emphasized looking for the challenges and benefits of the interaction. Before the pairing, one or two American students requested that they be allowed to work with prior acquaintances (either ethnic or international) from the community or campus. When it seemed as if class objectives could be met, permission was given. Although some sex pairs were encouraged, some opposite-sex pairs existed.

2. Add 0.5 to all cells...in a Chi-square table makes Chi-square a more conservative test, for it tends to balance out the positive bias of small cells on the resultant Chi-square (Knoke & Burke 1980: 64)
References

Asante, M. K., Newmark, E., and Blake, C. A.

Billiet, T. O., and Crabtree, R. D.

Casmir, F. L.
1991a Culture, Communication, and Education. Communication Education. 40: 229-34.

Casmir, F. L., ed.
1991b Managing multicultural communication education. [Special issue] Communication Education 40.3.

Cook, T. D., and Campbell, D. T.

Cumber, C. J., and Braithwaite, D. O.

Dawes, R. M., and Smith, T. L.

Dodd, C. H.

Gudykunst, W. B.
1979 The effects of an intercultural communication workshop on cross-cultural attitudes and interaction. Communication Education. 28:179-87.

Gudykunst, W. B., Hammer, M. R., and Wiseman, R. L.

Hamilton, D. L.

36

Hawes, F., and Kealey, D. J.

National Task Force on Undergraduate Education Abroad.

Javidi, M., and Hill, L. B.

Johnson, B. M.

Kamal, A. A., and Maruyama, G.

Kealey, D. J.

Kennedy, J. J.

Knoke, D., and Burke, P. J.

Koester, J., and Olebe, M.

Kuhn, M. H. and McPartland, T. S.

Lowe, G., Askling, L. R., and Bates A.
1984 The impact of intercultural contact on host families. International Journal of Intercultural Relations. 8: 45-60.

Martin, J. N.


Martin, J. N., Bradford, L., and Rohrlich, B.

Nishida, H.

Olaniran, B. A.

Pettigrew, T. F.

Pusch, M. D., ed.

Redding, C. W.

Rose, T. L.

Schaefer, R. T.

Stephan, W. R.  

Spitzberg, B. H.  

Stull, J. B. and Von Till, B.  

Useem, J., Useem, R. and Donaghue, J.  

Westwood, M. J.  

Wilson, A. H.  
Appendix

Scales

AG scale

All ten items on Hawes and Kealey’s (1979) scale, Form A, Part G, were used. The items are given in the posttest form for the groups working with internationals. Items were rewritten in present tense for the pretest. The response scale consisted of: Hardly at All, To Some Extent, Quite a Bit, A Great Deal, Completely, and Not Applicable.

Item 1. To what extent did you speak and understand the accent/dialect of your international colleague.

Item 2. To what extent did you demonstrate the ability to communicate with your colleague of a different culture through methods other than the spoken word? (Note: Nonverbal communication includes skills such as s, appropriate eye contact, appropriate interpersonal space, etc.

Item 3. To what extent did you interact with internationals and have them as friends.

Item 4. To what extent were you interested in your international colleague’s culture and take the initiative to learn as much about it as possible.

Item 5. To what extent did you possess knowledge of a factual nature regarding your international colleague’s culture? (Note: Factual knowledge includes knowledge of history, geography, politics, religion, current events, etc.)

Item 6. To what extent did you accept your international colleague’s customs as different but valid.

Item 7. To what extent did you engage in a variety of enjoyable activities with your international colleague?

Item 8. To what extent did you possess the appropriate background for interaction?

Item 9. To what extent did you feel personally committed to interaction (i.e., interested and involved?)

Item 10. To what extent were you particularly concerned with sharing what you know with internationals?

AG Scale

All four items on Hawes and Kealey’s (1979) scale, Form A, Part C, were used. The items are given in the posttest form. Items were rewritten in present tense for the
pretest. The response scale consisted of: Strongly Agree, Tend to Agree, No Opinion, Tend to Disagree, Strongly Disagree, and Not Applicable.

Item 1. I expected my project assignment to be a rewarding experience.
Item 2. I felt confident I could prepare myself for this project in very little time.
Item 3. I was concerned I would have trouble interacting with people of another culture.
Item 4. I would do well on my project assignment.

Twenty Statements

The page was labeled “Concepts of Stem.” The instructions were: “Fill in all 20 blanks. Work quickly. Write the first words that come to your mind. Remember: There are no right answers nor wrong answers. Simply work as quickly as you can.” Twenty repetitions of the stem followed. All groups had the general stem, “Internationals are . . .” and the specific stem, “My international colleague is . . . .” Group 4 was verbally instructed to substitute “multicultural” for “intercultural.”