This paper is a study of computer-mediated intergroup contact within Project I-57, a larger educational technology project conducted during the 1998-99 school year. Participating institutions were five middle and high schools in three distinctive geographic/cultural regions along north-south Illinois highway I-57: the Chicago area, the central farm belt, and southern Illinois. The students varied not only geographically, but also socially by community size, ethnic make-up, and age. The Department of Educational Psychology at the University of Illinois (Urbana-Champaign) served as one partner institution. The project's goals were to foster multiple skills (reading, math, etc.) via authentic student research on their communities and to "make [their] students' worlds bigger" through sharing about themselves and their (cultural) communities with classes in other regions to create an appreciation of the state's diversity. The goals of this present study were to evaluate expected changes in students' understanding of the other two regions and populations in the twofold sense of knowledge of and attitudes towards the "outgroup"--more positive ones, it was hoped--due to the virtual contact and greater knowledge facilitated by the project. (MES)
Building Positive Attitudes among Geographically-diverse Students: The Project I-57 Experience

By: Paul A. Sundberg
Building Positive Attitudes Among Geographically Diverse Students: The Project I—57 Experience

Paul A. Sundberg
University of Illinois-Urbana-Champaign
p-sundb@uiuc.edu

Key Words: Computer-Mediated Communication (CMC); contact hypothesis; multiculturalism; regional diversity; social, ethical and human issues

Introduction

This paper is a study of computer-mediated intergroup contact within Project I-57, a larger educational technology project funded by a one-year ISBE grant (Technology Literacy Challenge Fund) and conducted during the 1998-99 school year. Participating institutions were five middle and high schools in three distinctive geographic/cultural regions along north-south Illinois highway I-57: the Chicago area, the central farm belt, and Southern Illinois. The students varied not only geographically, but also socially by community size, ethnic make-up and age. The Department of Educational Psychology at the University of Illinois (Urbana-Champaign) served as one partner institution.

The project’s goals were to foster multiple skills (reading, math, etc.) via authentic student research on their communities and to “make [their] students’ worlds bigger” through sharing about themselves and their (cultural) communities with classes in other regions to create an appreciation of the state’s diversity.

The goals of this present study were to evaluate expected changes in students’ “understanding” of the other two regions and populations in the twofold sense of knowledge of and attitudes towards the “outgroup”—more positive ones, it was hoped—due to the virtual contact and greater knowledge facilitated by the project. As Stephan & Stephan (1984) write: “Due to the information exchange, intergroup interaction … can increase knowledge about outgroup members and reduce intergroup anxiety, which in turn broadens the perceptual field to allow impressions of outgroup members to become more accurate and more favorable.”

Such optimistic expectations have commonly been laid on the Internet to be such an agent of positive social change by expanding mutual knowledge among diverse communities/nations. The results of such virtual contact, however, have not always lived up to the hype and have at times contradicted it. Meagher and Castaños (1996), for instance, write of their experience in a CMC project between a Mexican and US high school in which Mexican students’ attitudes towards US culture grew less positive after a CMC cultural exchange, although students felt greater commonality with the American individuals they had communicated with. Similarly, some post-test essays by Project I-57 students reveal an increased (supposedly more knowledgeable) negative perception towards the communities and individuals they have been in contact with. Other studies have also detected decreased self-esteem in the lower-status group after intergroup contact.

These are useful reminders, then, that successful social change via CMC activities is not a given. The potential for hardening already negative attitudes is just as real. This paper therefore is an attempt to find theoretical guidance from research in the “Contact Hypothesis” framework in (a) interpreting the complex virtual contact experiences of this real-world cross-cultural project and (b) devising principles for planning future such projects to more predictably live up to educators’ idealistic social expectations.
Types of CMC

The grant goals mandated engaged learning activities through student research on their local communities, the data from which was communicated to the other schools via class Web sites and other CMC media such as electronic Web postcards, on which students described themselves, e-mail keypal relationships, and CU-See Me live camera interactions. Despite technical problems, one of the key factors in the success of the CMC contact was the frequency of interaction, not the medium.

One particularly successful cross-cultural activity was a live CMC show-and-tell between classes at Benton and Maine East (Chicago) in which each student brought an object that was precious to them and explained why. Benton’s mainly WASP students showed family heirlooms or favorite collectibles, whereas many of the immigrant students at ME showed religious objects.

Student Demographics

Geographical variance was one of the assumptions of the original grant: students from parts of Illinois that rarely interact would, thanks to the computer, finally connect. At Maine East and West High Schools in the NW Chicago suburbs, students were multiethnic, at-risk freshmen. One private boys High School in the same region, Notre Dame, also participated. Fisher Grade School’s 4th and 5th grades represented the central downstate farm belt, although surprisingly most students’ parents did not work directly in agriculture. Benton Middle School’s 8th graders represented far southern Illinois, a former coal-mining community culturally more Southern than Midwestern. None of the teachers or students had previously communicated with Illinois schools outside their own area, and although many in central Illinois and a few from Benton had visited Chicago, hardly any from up north had visited Southern Illinois.

Socially, schools differed by community and school size: large Chicago suburban communities with large schools versus small town schools in Fisher and Benton, where “everyone knows everyone.” Classes also differed in ethnic make-up, with Fisher and Benton mainly composed of white, native-born students and the Chicago schools composed of a multiethnic, heavily immigrant student body. Age was another variable, with students ranging from 10 years old in Fisher to 16 at Maine East, a cognitively and socially significant gap.

The ‘Contact Hypothesis’ and Related Research

To better interpret the complex qualitative data in this study, I looked to the “Contact Hypothesis” (Allport 1954). CH, at its most basic, is the prediction that positive contact between different groups and increased mutual knowledge will reduce intergroup bias, conflicts, and tension. It is not value-neutral in that proponents also advocate practical interventions to achieve this outcome.

Originally the hypothesis was meant to lessen racial prejudice in the US and led to educational solutions such as school desegregation and bussing of minorities. However, it deals with intergroup bias in any form, and indeed the framework has been extended to conflicts between Arabs and Israelis (political and ethnic), Catholics and Protestants in Northern Ireland (religious and political), and merged corporations (c.f. Hewstone & Brown 1986).

Studies show that people are more helpful to members of their ingroup than an outgroup and apply different, more generous standards of morality, justice, and fairness to ingroup members. Intergroup competition and historical conflict load any contact with anxiety and status inequality. Increased knowledge of the outgroup, however, and positive personal contact is theorized to lessen bias.
Allport and others in the framework list various prerequisite conditions for successful intergroup contact:

- equal status contact between groups (inside and outside contact setting)
- minority group representatives coming from the higher status within their community
- supportive norms (ground rules) that support egalitarian intergroup interaction—perceived support from authorities
- Pre-training of both groups in higher expectations about the lower-status/minority group

And conditions during planned contact:

- working together: cooperative intergroup interaction / interdependence on functionally important common tasks
- opportunities for personal acquaintance between outgroup members
- intimate/personal contact rather than casual (Amir)
- high enough frequency of interaction to increase knowledge of the outgroup (Hamilton & Bishop)
- avoidance of potentially divisive issues and differences in early stages (Ben-Ari and Amir)

Amir also lists negative contact conditions:

- contact which produces competition
- contact which is unpleasant, tense
- contact which lowers one group’s prestige
- each group holding conflicting moral/ethical standards that are objectionable to the other
- minority group members being of lower status in any relevant characteristic than majority members

One contemporary cognitive model derived from the CH framework is the Common Ingroup Identity Model (Gaertner & Dovidio 2000) in which the goal is to recategorize competing groups’ cognitive social representation from separate groups to one superordinate group while not losing a positive original group identity (e.g. members of the same team with different roles/strengths). They list various mechanisms to foster recategorization and reduce bias:

- planning for Intergroup cooperation (not competition) and interdependence, with full interaction best
- cognitive priming: Emphasizing existing commonalities and creating new ones (e.g. identical dress, new group name) to form a common identity
- introducing new common goals or fate / shared outcome
- affective priming: Manipulating affect (feelings) prior to group contact to create a positive mood (for neutral intergroup situations)—i.e. giving candy bars, showing a comedy (This may not work for intergroup situations with negative histories and attitudes.)
- encouraging “dual identity”: Don’t threaten positive subgroup identities and distinctiveness—multiculturalism
- when a superordinate group identity has been established, encouraging prosocial behaviors such as self-disclosure and helpfulness, which further solidify good relations
- Match groups by status based on complementary, not competitive, expertise (positive distinctiveness)
In naturalistic intergroup situations, however, it is often difficult to establish all the conditions called for by CH theorists, especially the prerequisite that both groups be of equal social status. This is particularly true in the Project I-57 school pairings. Higher status is linked to variables such as one’s community (urban vs. rural), age (older vs. younger - critical among K-12 students), family income (middle- vs. working class), family occupation (urban versus rural jobs such as farming or coal-mining), nationality (native-born American vs. immigrant), and race/ethnicity (white vs. non-white).

Status inequity (Stephan & Stephan 1984) can result in differing degrees of awkwardness, self-consciousness, confidence, defensiveness, comfort etc. within group members. Living in adjacent neighborhoods can also create feelings of threat and anxiety, which are minimized by the distance CMC projects like Project I-57. The more a superordinate group is perceived by all, however and the more favorable the contact, the lower the anxiety and outgroup bias.

Results
Data comes from pre- and post-survey essays about the other two regions and pre- and post-survey questionnaires (see Web site for more). The pre-survey questionnaire gathered demographic information on students; the final questionnaire dealt with CMC experiences and changes in attitude/knowledge. Data from the partner schools’ communication is regrettably unequal. Benton and Maine East (Chicago) had the most extensive and successful communication and therefore the most complete data. Fisher communicated minimally with Notre Dame High School, but post-survey documents were never received from the latter institution; thus, data comes from only one side of the intergroup interaction. Maine West (Chicago) communicated only once with Fisher, and thus I chose not to include that post-survey data. All responses are unedited.

Benton—Maine East (Chicago)
Benton n = 20 (8 male, 11 female, 1 not mentioned), ages 13-14
Ethnicity: white (all)
Birthplace: US (all)
Language at home: 18 English, 2 spoke a foreign language at home

Maine East (ME) n = 41 (21 male, 20 female), ages 14-16
Ethnicity: 16 white, 7 Hispanic, 20 Asian (various), 1 black
Birthplace: 23 born overseas
Language at home: 36 spoke a foreign language

E-mail frequency
Benton—17 at least once a week, 2 almost every day, 1 a few times a month
ME—17 at least once a week, 3 almost every day, 12 just few times, 7 only once (2 at ME complained that their Benton keypals never responded.)

Initial attitudes and stereotypes
Benton re Chicago/ME: Chicago was seen as full of crime, violence, and gangsters. “All people from the north are in gangs.”
ME about Benton: “very big accents”, “Beverly Hillbillys”, “stupid”, “a million farms”, “nothing there”, “wear overalls, with shirts that are torn”, “all of Illinois like Chicago.”
Pre-existing bias

Benton: No bias—13, Some bias—5

Most mentioned religious pluralism as acceptable. Two who admitted bias attributed it to ignorance "I wasn't really for sure about them and didn't have a good understanding". Other bias was religious (mentioned Buddha), and immigration: "I think that people from their countries should stay there."

ME: No racial bias—34, Some racial bias—2

Many statements affirmed values of multicultural tolerance and diversity: "None no!! I live in a diverse community." Only one boasted (?) of being a "racist".

Perceptions of self

ME: "... I thought that they would think that were weird because we have different ethnics here"

Final attitudes towards other students/outgroup (10, 12)

Common response in positive intergroup contact situations: "they are just like us" Many statements unsurprisingly described positive attitudes towards the keypal, rather than generalizing to "people" in the region:

Benton—5 more positive, 0 more negative, 13 no change

Positive attitude changes were seen in responses like: "I felt pretty close to the students I communicated with because they were very common with us." [more positive] "because some of them lost their family members in shootings". ME students were described as "pretty cool", "nice", "just like us", "I liked how they were from different cultures." A number described the experience as "exciting". One student who reported no change in attitude said, "We never really got to know them."

ME—25 more positive, 2 more negative

Statements frequently reflected positive attitudes towards the keypal: "They were both good kids and I liked them a lot", "I felt good talking to a friend that was miles away from me." Some could be referring to the whole regional outgroup, however: "I felt that they were nice people.", "Nice and honest", "normal". The most frequently remarked discovery was that the regional outgroup was "just like us."

Many mentioned a change in attitude: "They changed positively, because they are a lot like us and I hadn't known this." "Yes, because I found out they weren't Beverly Hillbillys." But not all attitudes changed: "No, because I kind of knew that they lived that way because they lived on a farm."

The two negative questionnaire responses involved the keypals looking "immature" and frustration at their partners not responding. The essays revealed more negatives; however, describing people as "closed-minded", "old fashioned". One wrote: "I think the people or student down in Benton are mean hicks. They give attitude in there e-mail. Never write back. I think there like that because nothing ever exciting happens down there."

Some statements reflected ambivalence about the experience, again frequently due to frustration with CMC problems: "It was kind of fun talking them but at the end it started to get boring"
because sometimes our e-mails wouldn’t go through and we had to type it again”, “They are okay, some are a little weird or boring but still positive because I learned about them

Final attitudes towards region
Benton: More positive = 1, more negative = 2, no response = 1, change = 5, No change = 7

One positive comment was: “That place would be nice to live in. Main East is a positive place with few negative things.” One declared s/he wouldn’t live in Chicago. Some said that they had changed their negative impressions, mostly about crime and violence: “Yes, my feelings about the town changed. I did think mostly of violence up there but it’s not like that.” Most, however, admitted they hadn’t “talked much about our town.” Some had no change in attitude: “I pretty much knew.”

ME: More positive = 9, more negative = 4, no change = 12

ME: Change = 15, no change = 15 (mainly due to lack of preconception)

Some were pleasantly surprised: “I think its not that bad living in a farm, they still act like a normal kid.” Some were attracted to the life-style: “I think that hunting, farming, fishing, and stuff like that is very relaxing and I would not mind at all to go live there.” Positive traits mentioned were that Benton was “quiet” and “safe” (no gangs) with “more space” and that people were “friendly.”

Even after putting the best spin on one’s community from a community research project doesn’t guarantee a tourist draw: “I still won’t live there, too farming.” “there town sounds weak, boring”. “Yes, it sounds like it quiet area. Not of lot of thing do down there”. “Well they don’t have alot of good things down their when they e-mailed me, they told me that this town is pretty boring and not much happens here.” Benton was “boring”, “quiet”, whereas Chicago was “active”, “loud”. A frequent comment was the lack of ethnic diversity in Benton, a major concern to the heavily minority Chicago students: “I still think Chicago is a better place to live because there are lots of people that have the same background as me. If I went to Benton I would be lonely. I need to talk to somebody my language too.”

Final ME essays still display a surprising amount of stereotypes: “I think people who live their always wear overalls with a long piece of grass in their mouths. And they have pigs as pets instead of dogs or cats.” “I think people down in Benton are old-fashioned too. I haven’t had time to look at their pictures or read many of their letters, but this is what I think.” “I think the people out there are probably disciplined because they would have to do allot of farming to survive. I also think the people are very poor and that there are allot of bums. There also probably no fancy restaurants out there to have a nice family dinner.” And these responses from students who communicated frequently! Telling were the occasional uses of “probably” and “maybe”, implying speculation.

Even those with the most positive attitudes, however, still preferred Chicago over Benton due to greater variety of activities.

Visit

“Would you now be interested in maybe visiting some of the communities and students in Illinois you learned about in Project 1-57 during this school year?” (Question reflected attitudes toward the area rather than just the students.)

Benton re Chicago: Yes 20, No 0
Many expressed strong excitement: "very much so!!!!!! Please !!!!!!"

Chicago (ME) re Benton: Yes 23, Maybe 2, No 14

Only one listed a negative perception: "No, because their area is very dull, quiet, and it's a small town". However, there were many positive reasons: "Yes I would be interested because I talked to them and they seem really cool" and "Yes, I learned a lot about them and it was really interesting."

Perceptions of ethnic difference
Benton about ME: Yes = 12, No = 0

Understandably, the mostly white B students remarked on the variety of ethnicities and religions of the ME students as well as their accents.

ME: Yes = 14, No = 5, Didn't know = 9

Three mentioned religious differences (Benton students were "Christian"), four mentioned racial sameness "They were all white" (very frequent response) One essayist wrote: "The people who live there are all mostly white, and same religion. They all talk the same way. I know this because of the pictures they have took. I didn't see not even one Indian, or black, or Chinese, just white." The multicultural classes at ME were a surprise to Benton students: "When they got to know how we have different people from all around the world they were really exited [sic]."

Differences
Benton re ME: different religions, nationalities, complexion, dress

ME: Age, age-related activities, (Southern) accent, bike-riding, go-karts, hunting, using guns, urban vs. rural, lack of ethnic diversity (white)

Commonalties
Benton: sports, hanging with friends, TV, both religiously devout,

ME: Sports, hanging out, movies, similar styles, cars, music, pets,

Main E-mail topics (some were assigned)
Benton / ME: Home/family life, community/where I live, school, school violence, hobbies, how they live, activities, sports, their community, my perfect weekend, future jobs

A few also mentioned unique regional topics: Benton caves, farming (no mines?). Only one mentioned a more controversial topic, religion.

Fisher Grade School—(Notre Dame High School)
Fisher n = 20 (8 male, 12 female), ages 10-11
Ethnicity: 17 white, 2 Native-American, 1 mixed-race
Birthplace: US (all)
Language at home: English (all)
E-mail frequency
3 several times, 3 once, 14 never

Initial attitudes and stereotypes
Chicago was seen initially as dangerous with gangs and robbers, where you can "get killed for your shoes". "the people are rude, obnoxious [unclear] and are unpatient" and "troublemakers". It was also noisy, congested, and busy. On the plus side, it is "exciting" and "fun" with shops, landmarks, attractions, and professional sports. "People of all different kinds, blacks, whites, chinks, Japans, robbers." Many, however, admitted that there were both "nice" and "bad" people there.

Perceptions of self
Fisher is a better place to live because it is small, quiet and safe.

Final attitudes towards other students/outgroup (10, 12)
Attitudes were generally more positive, seeing the suburban kids as "normal" and "nice": "Most of the people I talked to were very nice." I think that the people are a lot better than I thought." But personal contact influenced both ways: "Most are O.K. but some are snobs." The experience can be transferred to the entire population: "I think the people in Chicago were stuck up."

Perhaps due to the high number who had no CMC contact, outgroup perceptions stayed very general and impersonal: "Some are bad & some are good." "I have no problem [sic] with them. I think have [sic] of the homeless people are just trying to find a place to sleep." Indeed, many essays didn’t even mention the other student group or individuals in it.

Final attitudes towards region (13)
Many of the same general observations are found as in the pre-survey essays: Chicago is crowded, noisy, crime-ridden, etc. It also has shops and attractions. But most were able to find both good and bad points to mention in the post-survey essays.

Most still held a positive attitude towards their own town for its friendliness, small size, quietness, lack of traffic, safety and lack of gangs.

Perceptions of ethnic difference (11)
Knowledge is slightly more accurate: "I know now that there are a lot of different ethnic and religious groups." "All I know about the people that live there are there are lots of different religions [sic] and lots of different background like there [sic] color ...."

Conclusions
From the virtual intergroup contact experience of Project I-57 interpreted within the CF framework, certain preliminary recommendations can be offered for future CMC projects:

- Intergroup contact via CMC technology needs to be frequent and substantial enough lest insufficient interaction time leads students to prematurely "fossilize" their partial knowledge and attitudes in a simplistic, sometimes negative form resistant to later amendment. If students have been led by instructors to believe the planned intergroup contact will teach them about other geographic regions and the people who populate...
them, they may falsely assume they have learned all there is to know no matter how little the actual exchange of information was.

- Coordinators should frequently monitor students for frustration with secondary problems such as technology glitches and lack of keypal response to minimize negative experiences that may transfer to negative attitudes towards the other group.

- Good relations and attitudes towards individual outgroup members who participate in the collaborations may not necessarily extend to other outgroup members (not generalized) unless sufficient context is provided. There was a surprising amount of self-confessed ignorance in the post-survey essays about the wider communities and populations the other CMC participants came from and repetition of old stereotypes. To counteract this, the Web sites on each community could have included information on a greater variety of local citizens in addition to city landmarks. Due perhaps to the distance, it was not hard to maintain distinct dual group identities during the period of contact (one theory-based recommendation (G&D)) but perhaps the outgroup was never contextualized enough for such transfer of attitudes.

- Although the two sides of a CMC contact situation may be theoretically conceived of as two homogeneous ingroups, the reality may be more complex, with intergroup tensions even on one side of the communication situation. Educators, therefore, should try to create as much "team" cohesiveness on their own end before engaging virtually with the team on the other.

- To maintain as much status equality as possible when planning a grant proposal, it is best for CMC partner groups to be of equal ages (HS paired with HS, etc.) due to commonality issues such as social maturity, interests, etc. Inescapable status inequities, however, can also be balanced successfully, as with the lower status younger Southern Illinois group (yet socially white middle class and native-born), who were paired with higher status urban students, socially middle- to working-class in special at-risk classes. This is not optimal according to the Contact Hypothesis, yet it is a manipulable variable. In addition, status bias can be reduced by encouraging each group at the beginning to recognize mutual superiorities and inferiorities -complementary forms of expertise.

- CMC activities should be collaborative and of practical value and aim to decrease competitiveness to create positive intergroup attitudes and reduce bias on each side. The community research activities in Project 1-57, while not collaborative, were of obvious authentic and practical value to each community, thereby increasing feelings of local self-esteem and personal expertise while at the same time not encouraging competitive comparison between communities.

- Geographic distance lessens feelings of threat and anxiety from contact, which validates distance CMC projects like Project I-57. Therefore, the more distant the groups, the less threatening the intergroup contact should be. Geographic proximity, however, even if mainly through virtual contact (e.g. Maine West and Iroquois HS, both Chicago schools), may carry greater threat because the competition and conflict is pre-existent.

- The level of original positive/negative attitude is another determining factor in how contact should be planned. When groups are in historical or immediate geographical competition, increasing group members perceptions of common ingroup identity is the only realistic strategy for reducing bias". Affective priming (e.g. starting by watching a comedy) is strongly advised against.
Supporting Web Sites
I-57 Project site: http://lrs.ed.uiuc.edu/i57/
Student essays and demographic data: http://lrs.ed.uiuc.edu/i57/PSessays.html
Formative mid-project evaluation (12/98): http://lrs.ed.uiuc.edu/i57/Paul/eitevalproj.fin.html

References

Hewstone, M. and Brown, R. (1986). Contact is not Enough: An Intergroup Perspective on the 'Contact Hypothesis'. In M. Hewstone and R. Brown (Eds.), *Contact and Conflict in Intergroup encounters* (pp. 1-44). Oxford: Blackwell.
NOTICE

REPRODUCTION BASIS

☑ This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☐ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").