# Report on the UCSD-UCLA Distance Learning Project 1996-1997

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# **INTRODUCTION**

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For the academic year of 1996-1997, the Practicum in Child Development classes at the University of California, San Diego and at the University of California, Los Angeles participated in video conferencing and E-mail activities. Each quarter the classes met four times for video conferences that lasted one-hour and twentyminutes. In addition to following the same syllabus, all students at both campuses conducted ethnographic fieldwork with children in a unique after-school program centered around computer-mediated learning known as the Fifth Dimension.

The practicum encouraged students to consider cultural historical theories of development in the collection and analysis of their ethnographic data. The distance learning component of the course was envisioned as a medium through which students would share their empirical/theoretical syntheses in a collaborative learning environment. Students were expected to be active participants during the video conferences and lectures by professors were kept to a minimum. This scenario is unlike the usual distance learning environment where one professor, teaching from a host institution, instructs students at his/her local site as well as students at a distant site. In this more common arrangement, models of traditional classroom teaching are often imported into the video conferencing setting; i.e. the distance learning course is conducted by one instructor who lectures to a relatively passive audience of proximal and distant students. While much of the literature on video conferencing emphasizes the supposed need to imitate as closely as possible the "normal" classroom setting, the goal here was to implement a use for the technology that went beyond the average university lecture. Our project was carried out by two professors every quarter who collaborated with one another and with a UCSD distance-learning coordinator, whose job it was to plan the video conferences and provide the support necessary to carry them out.

In our case, video conferencing involved two-way audio and video communication over a T1 line which sends full-motion compressed video between the two campuses. For the winter and spring quarters, the students were also assigned to cross-campus groups for E-mail activities and had access to a joint mailing list. The last conference each quarter was student-planned and studentmoderated. For the winter and spring quarters, a web-page bulletin board served as the coordinating artifact for the cross-campus planning of this event. Student planners also held their own "mini" video conference the week before the last session.

After each video conference, the students were required to write a fieldnote about the experience. Each fieldnote included a "narrative" section, in which they reported what took place at the conference, and a "reflection" section, in which they wrote their personal thoughts, feelings and opinions about the relative worth and success of the video conference. These fieldnotes constitute valuable data from which we learned a great deal of (sometimes surprising) information about how social interactions play out during video conferences. Over the course of the project, 83 UCSD undergraduates and 72 UCLA undergraduates participated in the distance learning activities.

What follows is mostly an account of how the social interactions unfolded over video conferencing and what we learned from them. To some degree technical difficulties were always present. One or more of the following "glitches" usually compromised every session: echoing, audio drop-out, freeze-framed images, blurring, slow switching, poor camera work, and poor lighting. These sorts of technical disruptions are not reported here unless they had a profound effect on the interactions. Most participants throughout the year were surprisingly tolerant of the technical imperfections of this medium.

Also not detailed here is the fact that each quarter, before the first actual video conference, an orientation was held at each campus. During these sessions the students were introduced to the medium of video conferencing by the attending technicians and the distance learning coordinators.

# FALL QUARTER 1996

## October 10, 1996

#### What we did:

The first video conference was intended to be an overview of the Fifth Dimension project and an open question-and-answer session. The UCLA professor and a UCSD TA each made a 10 minute presentation on the connections between the universities and the communities in which the Fifth Dimension projects are run. We then showed a 17-minute video. This video, called "The Fifth Dimension Sampler" was an introduction to the UCLA site and to the three UCSD sites and included footage sent in from other Fifth Dimension sites around the U.S. and from Puebla, Mexico. We dedicated about 40 minutes for questions and open discussion. Two TAs from UCSD with extensive experience in the Fifth Dimension project tried to elicit The students in questions from the students at both campuses. general were quite reticent, which left the TA's doing a lot of "fillingin". One TA even resorted to answering questions he *thought* they might have, but were too intimidated to ask. Only a relatively small number of students asked questions or offered observations.

## What we learned:

1) The students reported being "impressed" with the technology and were very enthusiastic about the fact that it allowed them to make connections with students at a distant university. They very much enjoyed watching the video of the various sites and, to the extent that they participated, seeing and hearing from other undergraduates at the distant university.

2) Even though the presentations were kept intentionally short, the students still complained about them. They found it very hard to

pay attention to even 10 minutes of a presentation delivered over a monitor. This shouldn't be surprising, really, since few among us would choose to watch 10 whole minutes of a "talking head" on television. For the rest of the year, we never *planned* to have any one person (professor or student) talk for more than a few minutes. We would, however, inadvertently make this mistake again (see October 24, 1996).

3) We knew from previous quarters that the course, its purpose and the students' roles as researchers, are all confusing to them initially. However, our expectation that they would voluntarily ask a lot of questions was naive, given the intimidating atmosphere of the room, with its multiple mics, cameras and monitors. Also, even though those leading the question-and-answer session were graduate students, undergraduates still saw them as "authority figures" and felt their questions had to be "smart" and "insightful" before they could ask them. For the first video conference of winter quarter we asked two undergraduate students from the fall quarter to moderate instead. Voluntary participation was much stronger under these circumstances (see January 16, 1997).

4) UCLA students reported feeling less included than the UCSD students. This imbalance arose because the two moderators at UCSD could not always see when the UCLA students had their hands raised. If the camera at UCLA was not set on a wide shot, the monitor at UCSD would not show the whole UCLA class. The UCLA professor was sitting among her students and was not in front of her class to notice her students' raised hands. She was under the impression that the UCSD moderators could see her entire class. We learned that in this configuration it is imperative to have someone facing the class who can "clear the floor" for a student wanting to participate. This became a common practice for the rest of the year. If a student at one site wanted to talk, it was necessary for the moderator at that site to announce something like "Janet here at UCLA would like to ask a question". This practice alerted the camera and audio technicians and cued the distant audience to pay attention. In order

to maintain the collaborative atmosphere so important to our project, it was imperative that each campus be given "equal time". This balance between the sites would be an ideal we would struggle to maintain all year.

5) Several students said they thought we should have had everyone introduce themselves. We did not do this because we did not want to *force* anyone to speak on camera and we thought it would take too much time with nearly 60 students. Instead, we asked students to state their names whenever they spoke. At the end of fall quarter I asked the students if we should do a round-robin of introductions in the future. They offered that it would be "scary" for the students but that is was a good idea for two reasons: 1) because they would have a better sense of "knowing" one another and 2) because they would see right away that it wasn't "so bad" to talk on camera. We followed their advice for the subsequent two quarters and made time for introductions during the first video conferences.

# October 24, 1996

#### What we did:

The topic of this conference was Vygotsky's concept of the "zone of proximal development". The class meeting before this video conference was dedicated to increasing students' comfort-level in discussing this and other related concepts from the readings. We showed them three actual videotaped university student-child interactions from some of the Fifth Dimension research sites and asked them to consider whether or not they illustrated "zone of proximal development". We showed this same series of videotaped interactions again during the video conference for more discussion.

We began the video conference by having the UCLA professor and her students discuss the definitions they arrived at during their last class session. The UCSD professor then made some brief comments about how the UCSD pre-conference discussion generated similar and different ideas than those arrived at by the UCLA class. 5

We then showed each videotaped interaction and had the students discuss their interpretations after each one.

## What we learned:

1) Since the professors went over the material during the preconference class session, the students knew what was expected of them and were therefore more comfortable participating during the video conference. This was certainly no small achievement. However, the way we chose to prepare the students had a drawback. With both classes having discussed the relevant theoretical concepts and having arrived at separate conclusions in some cases, the presentation of ideas by each campus to the other impressed many undergraduates as performative. Many students remarked that the all-important process of *jointly* arriving at understandings was absent. As a result, the exchange was experienced more as a competition than as a true collaboration. The following fieldnote excerpt is representative of how many students felt:

I think it was good that the material we discussed, we had previously examined. But, I think it might help to have a greater amount of new material as well. I think coming to conclusions jointly with UCLA would prove both interesting and helpful...Whenever we discussed material that both schools had already looked at, it felt like we were defending the conclusions we had derived separately, instead of working together to understand (H.O., UCSD).

2) The beginning of the conference was beset by a lack of coordination that led to some interesting interpretations by the students. After some brief "hellos", the UCSD professor attempted to initiate a round of introductions. This gesture was interpreted by the UCLA professor as a reference to the script generated for the conference, which specified that each student *who spoke* would introduce him/herself, rather than taking the estimated 15-20 minutes for a complete set of introductions. The UCLA professor therefore smiled, said "Okay" and then launched into her class's

presentation of ideas. In other words, the UCSD professor was trying to get the students to introduce themselves individually but the UCLA professor thought he was merely reminding the students to introduce themselves when they spoke. While the UCLA professor went ahead and interacted with her students about the concepts, the UCSD professor watched with a perplexed look on his face. Not knowing about the script we generated for the conference (which excluded individual introductions) the UCSD students interpreted the UCLA professor's actions as rudeness.

3) Having the UCLA professor start the conference off by demonstrating the understandings she and her students arrived at was not a good idea. As the UCSD students watched the UCLA professor and her students talk among themselves for several minutes, they grew bored and felt left out. The UCSD professor took note of this and instead of carrying on a similar discussion with his own students, as was planned, he was careful to make the rest of the session more interactive. The combination of events described in point 2 above and here in point 3 led UCSD students to interpret the situation in terms similar to those expressed by this UCSD student:

My first impression was that we had prepared ourselves for an open forum where we would go through the Key concepts of the reading, with the professors acting as mediators. Obviously UCLA thought differently, and decided to create their own format for our discussion, taking control of it immediately. It then turned into a session of 'lecture-sharing', which wasn't as interactive as it could have been. UCLA created their collective hypothesis, for us to listen to and compare to ours. This format obviously upset [UCSD professor] as I could see it on his face [recall the professor was actually confused about the introductions, not about the presentation. The presentation was his idea]. My take on the situation was that UCLA obviously wanted to make a grand statement that they knew exactly what was going on and that they seemed to hold the answers. [D.Q.-H., UCSD].

November 7, 1996:

## What we did:

The third video conference was a three-way interaction between UCLA, UCSD and Fresno State University. The students at UCLA and UCSD were reading a book co-authored by the professor at Fresno. The idea for this conference was to have the students ask questions of the "visiting" author based on their own site experiences. The UCLA and UCSD students were told during the preconference class session that they were expected to contribute to the interaction in this way. Since a three-way video conference is cumbersome to carry out smoothly, it was decided that the professor from Fresno would be appointed to lead the conference and call on students at the other two sites.

The UCSD professor began the conference by making some introductory remarks. He then had the professor at Fresno address the two classes. Next, the Fresno professor asked for comments or questions from students at either UCLA or UCSD. No one volunteered at either campus, so the UCSD professor went over some key concepts and then said, in a warning tone "My students have come here prepared to pose questions from the reading and I'm going to give them about five seconds here to volunteer before I call on somebody." The UCLA professor replied "Actually...my students came prepared as well [laughs]". At that point a UCLA student asked a question and the exchange between the three campuses unfolded.

# What we learned:

1) Those students who asked questions of the "visiting" author from Fresno were very excited about the conference. They felt involved, engaged and pleased with the opportunity to meet "in person" an author whose work they were studying. One student wrote: "...I enjoyed this conference. It was probably because I felt engaged with a question. Once you involve yourself with the discussion I think it helps a lot..." (N.H., UCSD).

2) While most students wrote positive evaluations of this session, several reported feeling an undercurrent of competition. There are at least two reasons for this. First, it was planned that the professor at Fresno would rotate student feedback, allowing each campus equal participation. However, since neither the UCSD nor the UCLA students stepped forward when the floor was initially thrown open to them, the professors at UCSD and UCLA felt they had to step in and encourage the students to speak. This in effect took control away from the Fresno professor and for the rest of the conference each site had to be aggressive about getting in its respective contributions. Second, the UCSD professor's comment "My students have come prepared to pose questions from the reading and I'm going to give them about five seconds here to volunteer before I call on somebody" was interpreted by the UCLA students as criticism directed at them, as in "I don't know about your students, but my students came prepared." The UCSD professor's intention was to warn his own students to speak up, not to criticize anyone at UCLA. Nevertheless, several UCLA students interpreted the comment that way. One UCLA student wrote the following:

I don't know if it was just my own bias, but I feel [UCSD professor] was continually trying to 'out shine' UCLA. He kept saying things like 'I don't know about UCLA, but we came prepared. Well if you guys (meaning UCLA) are going to be so quiet we have people here who will ask questions'.

Since we have a videotaped recording of the session, we know for sure that the UCSD professor did not say this. It is interesting, though, that this is how his remarks appeared to UCLA students. For their part, several UCSD students interpreted the UCLA professor's response "Actually...my students came prepared as well [laughs]" as defensiveness. One UCSD student wrote:

...I still felt a lot of tension between UCLA and UCSD. For instance [UCSD professor] said 'I believe it's UCLA's turn'. The professor's reply was 'I know!'. I think we need to have a more at ease relationship between the two professors...The professor at UCLA seems like she has to one up our professor...(K.N., UCSD).

Again, the actual remarks were very different from this account, but it is interesting that the UCSD students interpreted them this way.

3) This session was one of those occasions when technical issues compromised the video conference in important ways. There was no technician at the Fresno site. Instead, the Fresno professor was given a touch panel and briefly instructed on how to move the camera. This is a difficult arrangement because the Fresno professor was required to pay close attention to what was being said and to remember when to adjust the camera at his own site. Through most of the conference, the camera was set on a wide-shot of the Fresno professor, his three colleagues and two students. As a result, UCSD and UCLA participants could not see their faces or read their name cards when they spoke. Also, the Fresno professor did not know that he was supposed to set his audio on mute when another site is This must be done because the inter-campus switching presenting. mechanism is triggered by audio. It automatically selects the site where the loudest noise is coming from. While UCLA showed a video tape, participants at Fresno got up, walked around and talked to one another. Because their audio was not set to mute, the automatic switching mechanism kept reverting to their site, where the loudest noises were emanating. As a result, the UCSD students were forced to view their activity and did not get to see much of the video being shown from UCLA. The UCSD students were therefore at a disadvantage when discussion about the video content arose.

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#### November 21, 1996:

#### What we did:

The last video conference was planned and moderated by three UCSD students and two UCLA students. The students exchanged ideas and outlined an agenda over E-mail. The moderators began the video conference by introducing themselves. The UCLA students then showed a video about their Fifth Dimension site and the children with which they interacted. The UCSD students then asked questions of UCLA students about their site. Next, the UCLA moderators called on four different UCSD students to describe in detail each of the four UCSD research sites (these students were preselected and had prepared their commentary in advance). UCSD then took questions from UCLA. During the last half of the video conference, three students at each site asked a broad question which they had formulated in advance. Before opening it up for responses, each of these students gave an answer to their own question in order to give participants further insight into what they were asking. For example, one UCSD student asked "What experiences will you take away with you after this class is over? For me personally...". Finally, the UCSD students showed a video about the San Diego research sites and took questions from UCLA.

## What we learned:

1) The students immensely enjoy being in control of the video conference. These comments are representative of how the students at both campuses felt:

"This conference had a much more Progressive, non-traditional feel to it, which i think was conducive to learning. The experience of the video conference was much more educational because students were able to share their ideas, and run the conference themselves...The set up of this conference exemplifies Dewey's arguments in his book that it is better for there to be a mixture of traditional and progressive education" (D.K., UCLA)

"This last video conference was brilliant. Not only did I thoroughly enjoy myself, but I felt that I learned quite a bit as well. The free flow of information between the two sites was super beneficial" (R.G., UCLA).

# "IT WOULD BE GREAT IF ALL THE CONFERENCES COULD BE RUN BY DIFFERENT STUDENTS EVERY TIME" (M.M, UCLA).

2) Because of the students limited experience with the medium and the lack of time to plan and coordinate across campuses, the UCSD distance learning coordinator was required to step in and move things along more quickly. The students were slow to respond to one another's E-mail and still were in the "discussing" stage long after they should have been settling on an agenda. The distance learning coordinator was also required to help the planners move quickly beyond ill-conceived ideas. At one point, the students were excited about playing a game of Jeopardy. The distance learning coordinator pointed out that they would never know who reacted first, since it is very hard to see everyone at the distant site on the monitor and it is impossible to watch both sites at once. More importantly, she reminded them of the competitive feelings between the two campuses which tended to undermine the collaborative atmosphere. Competing in a game of Jeopardy did not seem well advised. The students were very receptive to these comments and understood very well what was at stake.

#### **WINTER**

# January 16, 1997

# What we did:

For this introductory video conference we asked two students at each site who had taken the class in the fall to moderate rather than the professors or the TAs. We also had each student introduce him/herself. To allow time for this, we showed the 17-minute "Fifth Dimension Sampler" video during orientation. At the pre-conference class session, the undergraduates were told that the moderators would ask each of them to say their name, major, reason for taking the class and to offer an observation or question about the course and/or the research sites. Once this was accomplished, the UCLA students showed a video of their site that updated the information in the "Fifth Dimension Sampler" video.

# What we learned:

1) Telling the students they were required to bring a question or a comment and that they would definitely be called on to share it resulted in some wonderful, thoughtful questions. Unfortunately, the students often did not receive satisfying answers. This was because the UCLA professor thought her role was to remain on the sidelines and because the UCSD professor was out ill. The site director from UCLA was present, as was one TA at UCSD with a history in the project. These two answered some questions, but could not answer all. Also, it seemed the student moderators thought they were supposed to answer a lot of the questions, even though they were told to assign someone else to answer them. They too found it hard to respond to some of the questions. The distance learning coordinator should have secured an iron-clad promise to attend from various individuals associated with the project.

2) Even though the students' questions were great, it was a mistake to require everyone to offer one. This is because many questions generated lengthy discussions that led us off track. As a result, an hour went by and only half of each class had introduced themselves. The moderators had to ask the remaining students to say only their name, major and reason for taking the class, so that enough time would be left to show the video. Consequently, not everyone got to ask their question. A few UCLA students wrote in their fieldnotes that they were upset by this. For spring quarter we had everyone state their name, major and reason for taking the class and only *after* we had accomplished this did we open it up for questions. (See April 17, 1997).

3) Having the students introduce themselves seemed to have the desired effect: the students witnessed one another's personalities and built some confidence in speaking on camera. One student wrote:

At first I was very uncomfortable knowing that we were going to have to introduce ourselves that I thought of not going to the video conference but last quarter I was fascinated by the technology and being part of history that I did not want to miss it. I thought I was going to be speechless, but when it came time for me to introduce myself I made it short and afterwards I felt it was not as bad as I thought it would be. Afterwards I thought to myself I wanted to help in the conference that was going to be ran by students in the class (M.F., UCLA).

# January 30, 1997

The students were given a hand-out one week before this conference which stated the following:

Every student is asked to write up an experience from site and relate it to *any* of the readings assigned up to January 30th. This write-up need not be more than a few paragraphs, but take whatever space necessary to tell your story. Bring this write-up with you to the conference. It counts as a quiz and will be worth up to 10 points. *Every* student will turn this write-up in at the end of the conference.

Prior to the conference, five students from each campus will be randomly selected from the class lists. These students will be called on to share their write-ups. When you arrive at the distance learning facility, the list of students chosen will be handed out to everyone in the class. The names will appear in the order in which they will be called on...

The list has two main purposes:

1. to let the selected speakers know in what order they will be asked to present

2. to provide a record of who has already spoken so that those making follow-up comments can refer to the presenters by name.

The role of the non-presenting students is to comment on or ask questions about what the speakers have said. If you find it appropriate to draw on your own example in these moments, please do so.

The role of the professors...is to comment on student presentations and moderate class participation.

When the students came to the video conference, they were handed a list of names alternating between UCLA and UCSD. Next to these names were a second set of 10 people selected as alternates in case any of the primary 10 were not present. After each student presented, the professors made follow-up remarks and facilitated discussion.

#### What we learned:

1) This format generated intense anxiety. Fieldnote after fieldnote detailed the terror students felt upon scanning the agenda for their names. Those not on the list said they were deeply relieved. Those who found their names on the list became very nervous. While the conference went very well, this aspect inspired guilt in the distance learning coordinator, who decided not to repeat the format during

the rest of the year. However, in hind-sight and in comparison to other formats tried, this one generated some of the best resultsin that the students were well-prepared and those who didn't normally participate got to demonstrate what they knew. In addition, many of the students felt good about their presentations because the professors were very skilled and positive in their follow-up remarks.

# February 20, 1997

## What we did:

For this conference, we assigned student presenters, but this time we did so in advance and with their agreement. In their fieldnotes for the January 30th conference the students were required to attach a short explanation of their "current main interest". Students were placed in cross-campus E-mail groups based on how their interests matched up. Over the course of the following weeks the distance learning coordinator followed their on-line discussions. Those with the most interesting exchanges were asked to present the content of their discussions at the February 20 conference. Three students who were engaged in a robust conversation about the "zone of proximal development" were asked to lead a discussion on the topic using a video taped interaction as an Five students were asked to talk about the appropriate illustration. role of the student researcher in the context of the Fifth Dimension. Another four were asked to discuss the examples they had documented of children crossing gender boundaries (the winter course focused on gender issues). Finally, there was an "open discussion" topic.

#### What we learned:

1) The student presenters did a good job preparing for this conference and the non-presenting students had a lot to contribute. Unfortunately, we did the presenting students a disservice because we packed the agenda too tightly. We had to move quickly through the list to accommodate everyone, so the presenting students were often rushed and they did not always get to respond fully to followup remarks.

2) We had not prepared the students to disagree respectfully. This is particularly important for video conferencing sessions in which the participants have not established in-person relationships. In this case, UCSD and UCLA students mostly knew one another through their brief appearances on "television", although most of them knew a few of the distant students through E-mail contact (see point 3). There were two instances in which critical comments were directed at a student from the distant campus which caused anger and hurt feelings. In the first instance, a UCLA student thought a UCSD student had distorted her remarks and criticized her unfairly. This student was so upset that she wrote a long E-mail to the UCSD distance learning coordinator. In the second instance, a UCLA student took issue with a UCSD student for referring to a child at the research site as a "brat". In their fieldnotes about this conference, several UCLA students said they were offended by UCSD's insensitivity toward the children. Several UCSD students wrote that they were taken aback by UCLA's arrogance. Both classes were subsequently cautioned about their generalized critiques of the distant students. It was pointed out to them that only one student at UCSD made the offending remark and only one student at UCLA made the follow-up criticism.

3) The importance of having arranged E-mail contact between the two campuses became salient during the fallout of this conference. During class discussions the students at both campuses pointed out that they had enjoyed positive interactions with one another over E-mail. This fact provided some perspective in the midst of harsh judgments. Not *all* of the students at the other campus could be so bad, they offered. Most people seemed to know someone they liked. Also, through E-mail contact the UCSD distance learning coordinator was able to address the concerns of the first UCLA student, which helped her overcome her anger.

# March 13, 1997

## What we did:

Given the repercussions of the last session, the students who planned this video conference felt it was necessary to address the tension between the two campuses. The students at UCLA decided *on their own* to prepare and read the following statement:

...In a class like this which encourages active discussion we have become comfortable with our classmates and we get to know one another. In distance learning a closer relationship is difficult to develop. Speakers are not able to see audience's faces or make eye contact but merely see a reflection of themselves in the camera lens. And yet we engage in the same level of discussion here as we carry on in class. But because of the distance -- excuse my pun -- in location and relationship, in addition to the uncharted territory, tension is inevitable. That is why it is important to understand the limitations and inhibitions of video conferencing...In a classroom, if the wrong comment slips out or is taken the wrong way, the speaker has a better opportunity to correct it or clarify it. It is crucial for the mediators, whomever they should be -- teachers, guest speakers, or students -- to recognize this and enable the students to clarify a point they made as soon as possible. Misunderstanding is our enemy...I want to close with a comment put together by some of the planners at UCSD: "Our goal is to create a collaborative dialogue and in order to do so we hope that you will all participate and be thoughtful in your remarks".

Following this prepared opening by UCLA the UCSD moderators introduced themselves and then turned it back over to UCLA. One UCLA moderator gave a detailed description of the UCLA Fifth Dimension. Next, four UCSD students described each of the four San Diego research sites. Following the site descriptions, there were two role play presentations, one presented by each site. UCSD students began their presentation with a prepared mix of "Twilight Zone" music and a voice over. Two UCSD students then acted out a scenario that actually happened at the research site. The UCLA students did the same. After discussions about the role play presentations, each campus showed a video of their respective research sites.

#### What we learned:

1) Again, the students did an excellent job organizing the last conference and the fieldnotes were overwhelmingly positive.

2) Certain changes in the planning procedure made a positive difference. First, the students were asked to volunteer after the second conference rather than after the third in the interest of providing them more planning time. Second, a web-page bulletin board was created so they could post their ideas and respond to one another in sequence. Third, we organized a "mini-conference" for the planners one week before the last video conference. This opportunity to speak "face-to-face" helped them move quickly through ideas and onto a concrete agenda. These changes in the procedure allowed the distance learning coordinator to step back from the planning a bit. She was present at the "mini-conference" to see to it that the students formed a concrete agenda and helped prepare the audio introduction to the role play presentations. Other than that, the students were on their own.

#### **SPRING**

#### April 17, 1997

## What we did:

Because we has some trouble arranging for the participation of vetern students, it was decided that the professors at each campus would moderate this introductory After introducing themselves, the TA's, the site coordinators, and a few guests, the professors asked the students to state their names, majors and reasons for taking the class. Once everyone had introduced themselves, the "Fifth Dimension Sampler" video was shown. This video was put back onto the first conference agenda because when it was shown at orientation during winter quarter, the students seemed to forget the content and it's utility as a shared object of discussion was diminished. Afterward, the

floor was open to voluntary questions and remarks. Several people with a history in the Fifth Dimension program, including the founder and director, were present to answer questions.

# What we learned:

1) As usual, the students expressed excitement about the technology. They wrote that it was helpful to listen to one another's comments and concerns. They were also very pleased that the founder and director of the Fifth Dimension program was present to answer their questions.

2) UCLA and UCSD professors did a very good job moderating student participation. One UCLA student repeating the course wrote:

I noticed that people's comments about the video conference were quite positive afterwards. As I was leaving the studio, people spoke positively about the exchange between the sites. I noticed that compared to last quarter's distance learning, there were no real awkward silences between topics. I think this was due to a good job of keeping the flow of conversation up by way of both [UCLA professor] and [UCSD professor's] moderation of the forum (J.W., UCLA).

Regardless, some of the students who were repeating the course, including the student quoted above, mentioned that they still preferred to have their peers moderate as they did in winter quarter's introductory conference.

# May 1, 1997

#### What we did:

One week before this conference we asked the students to turn in a two-page write-up that related any of the concepts from the readings to an experience or observation from site. The UCSD distance learning coordinator selected four UCSD students to present their essays and the UCLA professor selected four UCLA students to do the same. The conference began with a brief review of the concept of "zone of proximal development" led by the UCLA professor. Following this were two presentations by UCSD students. Next, two UCLA students shared their examples, and on and on until we had worked our way through all eight students. The professors gave feedback to student presenters and moderated input from nonpresenting students. Finally, a video taped example of the "zone of proximal development" was shown and discussed.

# What we learned

1) This format was very successful. The students, having prepared their essays well in advance, were articulate and thoughtful. The fieldnotes were overwhelmingly positive and many students wrote that they learned something from their peers. A few examples:

I really enjoyed this conference because it was much more interactive. I like the fact that the conference gave the opportunities to the students to share their understandings and help each other. I think the conferences should be run like this always (M.B., UCLA).

I enjoyed this conference immensely, and found it to be a valuable supplement to the readings and lectures of the past few weeks. It was very interesting to hear about other student's experiences in which the theories that we have been learning about in class were actually evident/represented in the action that took place between the children and them at site (A.A., UCLA).

"I wanted to say that I thought the experiences flowed nicely with the theories as well as in their order of presentation. All the speakers were proficient in their experiences and portrayed the theories effectively. What is most prominent in my mind is the utilization of numerous strategies...I like that the professors had minimal input while the students constituted most of the discussion (D.L., UCSD).

### May 15, 1997

## What we did:

For this conference, the principal investigator of UCLA's Fifth Dimension project and a UCSD TA and site coordinator were guest moderators. This session was dedicated to expanding on the students E-mail discussions. The students had been placed in cross-campus Email groups of about 6-8 people and were asked to discuss certain "platform statements". Four students from each campus were selected to bring up a topic from their E-mail interactions. About half of these presenters directed their questions to specific students at the other campus, asking them to expand on points they made online. Other students added on comments and observations. The guest moderators followed up on student comments and offered further explanation of concepts and main points when necessary.

## What we learned:

1) This format was also very successful because the students were well prepared to ask and answer questions based on their E-mail conversations of the previous several weeks. Also, the moderators did a wonderful job managing the back and forth of the interactions and in their follow up commentaries. The fieldnotes again were very positive. One student wrote: The teachers stood quietly and listened to our comments and gave students a chance to express our beliefs. I was very awed to see this actually occurring in the conference. Actually, I can almost be sure that more time was spent on students talking than on teachers talking...In addition, I also noticed that the [guest moderators] served as mediators and redirected us when we were going off on a tangent or when our ideas seemed too unorganized. Many times we held concepts that were not actually full concepts until the teachers reworded or asked leading questions that caused us to think furthermore until we finally were able to grasp the main points. This was a clear indication of the 'Zone of Proximal Development' in action in our conference. (K.S., UCLA).

2) The UCLA professor appeared to do a particularly good job coaching her students to be fair. For the first time all year, comments such as these appeared in the fieldnotes:

In today's conference there were things said that I agree with and some things that I did not quite agree with. Rather than state them here I will use them in stimulating more 'dialogue' in our email activities. I want those who I disagree with to have a change to re-state or clarify their opinions" (N.H, UCLA).

I think the conference went very well. I know some people were a little insulted, but things will be clarified over the net (O.R. UCLA).

June 5, 1997

## What we did:

The student-planners decided to address the question "Does the Fifth Dimension really make a positive difference in kids development?" by presenting summaries of the research data in the Fifth Dimension year-end report of 1995-1996. Students in general were invited to share their examples of how the activities in the Fifth Dimension seemed to help children learn. UCLA showed a video of their site and the children they worked with. UCSD did the same.

# What we learned:

1) While the spring quarter students had the same time and were given the same tools (web-page bulletin board, "mini-conference") as the winter quarter students, the former were far less organized. The problem was that far too many students (10) had volunteered to be student-planners at UCSD (motivated by the extra credit involved). There were 4 student planners at UCLA. Responsibility at UCSD seemed distributed so very few people actually took any initiative. For example, the UCSD students wanted to produce their own video tape like the student-planners before them. Since none of them had any experience shooting or editing video, the UCSD distance learning coordinator offered to help. Although it wasn't part of the original agreement, the distance learning coordinator ended up shooting half of the footage and editing the tape herself. Also, the distance learning coordinator had to strongly urge the UCSD students to hold substantive meetings. The UCLA students were more organized and took their task more seriously than did UCSD as a group. However, the end result of the discoordination was that the session was not as interactive as it could have been. Building interactivity into the video conferences takes a great deal of forethought and planning. In addition, the students in general need to be prepared for participation. Many wrote in their fieldnotes that they had no idea what to expect when they arrived at the conference.

2) Most students wrote that even though the conference wasn't as interactive as it could have been, they still benefited from the session. This tone of this fieldnote is representative:

Initially the presenters threw a little too much information at us. I thought all of it was valuable, and should have been broken up and spread throughout the conference to serve as a starting point for several mini-discussions. Being swamped with studies, and sitting there quietly for a long time, put me in a mode for lecture, not discussion. The videos seemed to kick everyone in the butt, so that may have been a nice introduction to the conference. I thought the conference went well, and in particular I thought the last question (what has been the impact of 5D on you) was good (M.B., UCLA).

#### CONCLUSIONS

1) The sharing of experiences with the children and the unique circumstances of each research site were topics most consistently cited as those the students most enjoyed exchanging.

2) Students who actively participate during the video conferences -even those who are assigned and initially reluctant to do so -- are more positive about the experience and write more favorable reviews of the process.

3) Only a minority of students will participate without being explicitly assigned to do so. Of those students who do participate voluntarily, most do so only if they have had some advanced warning of what will be asked.

4) The students loathe being lectured to in this medium. Even ten minutes of lecture feels like a long time to students when they do not have the benefit of being engaged by the speaker's physical presence.

5) To assuage student fears of the medium, it is a good idea to have other undergraduates familiar with video conferencing moderate the first session. Students can be invited from other universities if no one with experience is available at a newly-participating campus.

6) In planning video conferences, participants should carefully consider how to cultivate true collaboration and avoid activities that can lead to feelings of competition between the campuses.

7) In the spirit of collaboration, one site should not be allowed to dominate the session. Dominance by one campus leads to feelings of

resentment at the other. Such resentment poisons cooperative feelings essential to *this kind* of collaborative project. Sessions should be carefully planned to move back and forth between each site. This kind of interaction also minimizes boredom among participants.

8) Moderators should be careful to give students a chance to respond to criticism and to clarify their comments. o

9) When tension results from exchanges over video conferences, it is a good idea to set aside a few minutes during the following class session to discuss any hurt feelings and perceptions of injustice that may have surfaced. Both campuses led students in such "debriefing" sessions and tried to relay how students at the other campus experienced the exchanges. Following these disucssions, students were more sensitive and eager to repair any rifts that seemed to have divided the two campuses.

10) Many of our findings regarding the E-mail activities echo those published by others on computer-mediated communication and collaboration. For example, students who tended not to speak during the video conferences or in regular class sessions wrote out long contributions on E-mail and frequently responded to other student's postings with thoughtful remarks. Some of our findings regarding the *video conferencing* activity and the goal of collaboration can be outlined as follows:

# Factors hindering collaboration

a) The presence of cameras, monitors and microphones intimidated the students and caused many of them to be reluctant to speak during the video conferences.

b) The act of speaking during a video conference often felt like addressing a void, since back channel cues and other body language signals from the distant site were not easily seen and interpreted. c) The synchronous and time-limited aspect of the video conferences left too-little time for clarification, rebuttal and all the follow-up comments and questions students wanted to contribute. This situation sometimes led to student frustration and embarrassment. Serious misunderstandings occasionally developed in this context.d) The students tended to be more judgmental of the students and professor at the distant site.

# Evidence of collaborative successes

a) The interaction with a different research community with the same mandate as their own led the students to feel as though they were part of something "larger", creating very positive feelings toward their ethnographic research.

b) Knowing they would have to present their ideas on "television" to an audience of distant peers led students to carry out their assignments with a great deal more effort than they ordinarily would have invested.

c) Students recorded in their fieldnotes many instances in which students from the distant site, as well as students from the local site, helped them understand theoretical concepts by sharing their ethnographic data. For example, students carefully recorded their peers' examples of Vygotsky's difficult-to-illustrate theoretical concept known as the "zone of proximal development" and reported finding this exchange of data helpful.

d) Many students acknowledged the value of receiving data gathered from another research context, articulating this practice in terms of a "cross-cultural exchange", where information about institutional contexts, artifacts, and rituals led students to recognize taken-forgranted practices, assumptions and strategies at their own research sites.

e) The most successful conferences were those planned and moderated by the students themselves. These conferences were the best illustration of the students as active subjects in the construction of their own learning.