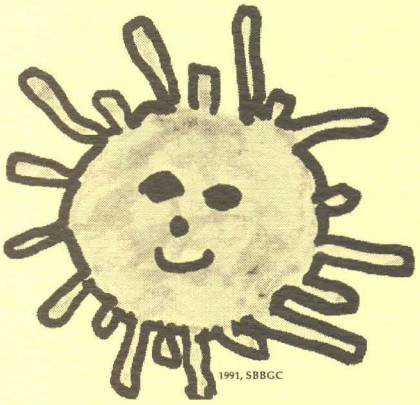
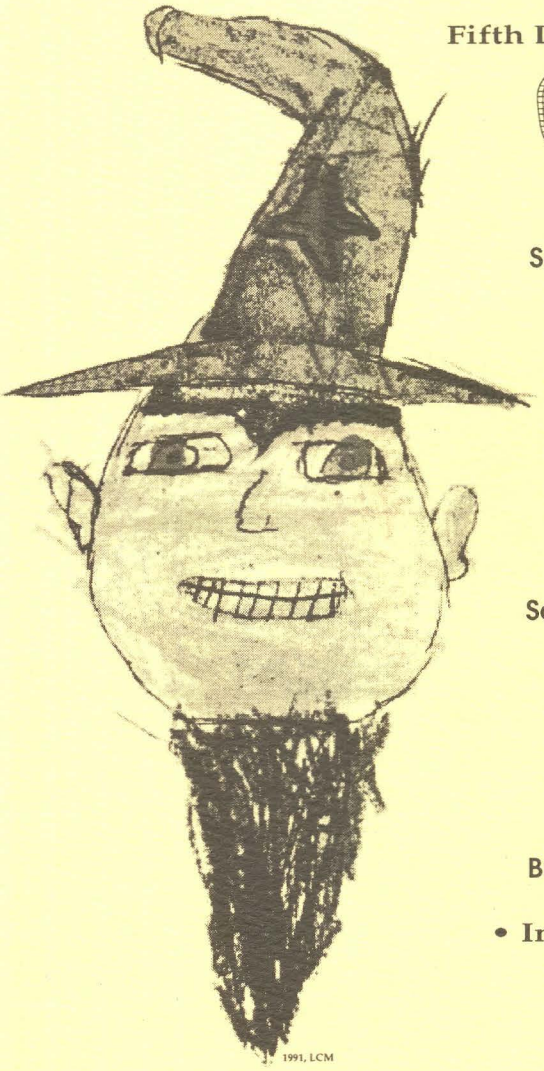
Using New Information Technologies in the Creation of Sustainable Afterschool Literacy Activities: From Invention to Maximizing the Potential

Third Year Report: July 1996 - June 1997

Submitted to Andrew W. Mellon Foundation





Fifth Dimensions

Worldwide

- **Regional**
  - Solana Beach †
  - Escondido †
  - La Jolla
  - San Diego
- **State**
  - San Francisco
  - Berkeley
  - Palo Alto †
  - Santa Cruz
  - Fresno
  - Santa Barbara †
  - Whittier †
  - Los Angeles
  - Riverside
  - Irvine
- **National**
  - Boone, NC †
  - Burlington, NC †
- **International**
  - Sweden
  - Denmark
  - Russia †
  - Israel
  - Mexico
  - Australia

Michael Cole, Principal Investigator

Grant: Mellon FDN Cole 10.0% 6/97

The Laboratory of Comparative Human Cognition, University of California, San Diego

† - Mellon Literacy Consortium Partners

Appalachian State University, Boone, North Carolina

The Appalachian State University Fifth Dimension program continues to interface very smoothly with the after-school program in the local school system. Currently, there are Fifth Dimensions at Parkway School, Blowing Rock School, Green Valley School, the ASU campus, and Vale Crucis School. The program is perceived as an asset to the extant after-school program because it enhances the supervision and activity of the kids.

ASU's Fifth Dimension Program is now a part of the University of North Carolina Model Clinical Teaching Program. Blanton *et al* are to conduct research on early clinical teaching experiences for prospective teachers and to develop and evaluate technologically rich learning environments that contribute to the growth and development of both undergraduates and children. Blanton has a budget that enables him to direct resources to the Fifth Dimension project.

This year, ASU purchased CD components and hard drives for the technology labs for the Fifth Dimension. In addition, they now have the funds to provide a stipend for the local technology lab teachers. In turn, those teachers will assist in the continued development of the Fifth Dimension and in maintaining a link with the school building. There is also a budget that enables ASU to continue to add new software and games to sites. More importantly, they have funds to provide stipends for the graduate students who coordinate the sites. These funds are now included in the university yearly operating budget, meaning that ASU does not have to request them each year. In addition, the funds are earmarked specifically for ASU's project.

ASU has funds to provide one quarter time faculty salary to support the role of Site Director for the Fifth Dimension. This person is Professor Melanie Greene. Her responsibilities will include developing sites, working with site coordinators and creating a more productive link with the local school system. She will also be developing a Fifth Dimension site in a middle school located in another school system. The school selected will be a professional development school for teacher preparation program, using middle school education interns to work with children.

ASU's First Big Test

At the end of last year, ASU realized that there were no "old timers" left in their site coordinator corps, as staff members graduated. The crisis mode of the first year ASU implemented a Fifth Dimension was repeated. This time ASU had the artifacts and a better understanding of their local context. But they lacked cognitive artifacts, routines, and continuity.

The above problem was confounded by having graduate students who were from the School Psychology, a program of another college. These students tended to approach the Fifth Dimension as "work for pay". Their cognitive focus was on their own academic work in another college. More importantly, the ethos of their home program was behaviorism. The requirements of their program (visiting schools, doing internships, getting the best class schedule, etc.) took precedence over their Fifth Dimension activities. This contributed to a decrease in the quality of ASU sites, a decrease in the quality and amount of site fieldnotes, undergraduate contact, and site management.

Talking to faculty and programs across colleges at ASU is difficult at best. Blanton's group had known that having a limited number of graduate students from other departments and colleges in the Fifth Dimension was not a problem. Unfortunately, his team learned that depending exclusively on other students to adopt and promulgate the Fifth Dimension ethos was not a reliable strategy.

Blanton notes *"We maintained in survival-mode all year. If this had happened the second year of the project, I am not sure that the Fifth Dimension would have survived. No doubt, our survival is evidence that the Fifth Dimension is institutionalized and is being sustained."*

Presently, Blanton's group is re-thinking the site that is on the ASU campus. In the past, they provided university transportation for Hardin Park School children to go to the campus site. This activity invited bureaucratic hassles, having to do with using a school bus (obtaining parent permission, negotiating with the university attorney ways to free the university of liability, making sure the bus left the motor pool and arrived at school, making sure interns were at the school to ride with the children, and maintaining a "reasonable" atmosphere on the bus on the way to and from campus). Blanton plans to open the site to children of the university community and to other children who can be brought to the site by parents. This may require us to run a more flexible site that provides a two hour window for children to arrive and participate.

The 26 counties surrounding ASU form an education region that coordinates in-service and curriculum development for the school districts. ASU has been asked to introduce the Fifth Dimension to after-school program directors of the 26 school systems. ASU is developing a 2 day program that will introduce these directors to the Fifth Dimension, the on-campus course, and allow them to visit the sites. The school systems will provide transportation and other support for the directors. The school systems will also provide funds for graduate students to produce the workshop.

This activity is not a part of the Fifth Dimension Clearinghouse; it was initiated earlier. However, Blanton will locate it under the rubric of the

Clearinghouse. Blanton notes "*We think it is important for a number of reasons. First, this is a beginning step in developing and testing our ideas about outreach. We will receive feedback that will be important for our dissemination effort. Second, the North Carolina legislature has mandated that the University System provide courses for credit that can be transferred to teacher preparation programs. (It seems that we are going to have more college bound students than was anticipated and this is the plan for handling the numbers.) We are already offering our introduction to teaching course on community college campuses a hundred miles away. We might be able to create an introduction to teaching course that can actually be offered by community colleges that use a local Fifth Dimension to provide clinical experiences similar to those we provide on campus, along with being networked with the campus course and Fifth Dimension. We expect this to be a controversial move!*"

Over the last three years, Blanton has developed a Laboratory on Technology and Learning (LTL). This lab, modeled after LCHC in San Diego, houses the ASU Fifth Dimension and faculty group. Along with providing an institutional "safe space", LTL is creating an environment for other faculty activity. The college has just given permission to physically reorganize LTL to house the Fifth Dimension Clearinghouse, a multimedia area, a video-conferencing area, and upgraded computers for Fifth Dimension games. Upgrading hardware and connecting to the North Carolina Information Highway, is next, enabling high and low bandwidth interactive video-conferencing.

Finally, Blanton is negotiating a gift from Apple Corporation. He will be receiving a number of high-end Macs to complement the existing PC environment. It also appears that Blanton will have funds to invite visitors to the Learning Technology Laboratory to lecture once a year.

California State University, San Marcos, Escondido, California

This past year, CSUSM has maintained a relatively good relationship with their host Boys and Girls Club. The only conflicts seem to develop over the use of the computer room outside the Fifth Dimension operating hours. Schustack has continued to conduct one particular research project (The Computer Merit Badge) that requires the use of the entire computer room for one child at a time, so that it cannot be conducted during the Fifth Dimension session. This has required Schustack to negotiate the use of the computer room outside of regular Fifth Dimension session times. There is consistent "forgetting" that the testers have arranged to use the room those times, and often the research assistant finds the room occupied with other (non-computer) activities on those days.

The Boys and Girls Club had shown interest in developing their own computer program, but has never had the equipment, nor experienced staff to do so. Recent developments at the club included a change of branch directors. The new branch director has approached Schustack with the possibility of the Boys and Girls Club having their own computer activity, which will require some rearrangement of the room to accommodate more BGC-owned computers. They have obtained their own computer equipment and hired a college student to run a computer-based activity.

Schustack's group is currently negotiating room use for next year, and for this summer (when they run a non- Fifth-Dimension computer activity called Summer Games to collect data on individual children for evaluation studies). Schustack does not anticipate that the changes in local personnel at the Boys and Girls Club will affect the regular Fifth Dimension routine, and she is establishing a relationship with the new club director.

Elon College, Burlington, North Carolina

Site/community institution development this year was full of change at the Fifth Dimension. In a meeting in June of 1996, Missy Lineberry, director of the after school program at the Burlington YMCA, and Professor Catherine King of Elon College discussed the plan for academic year 96-97. In her summary of that meeting, King recalls:

"This was to be a time of gradual reduction in the participation by myself and my students from Elon and a gradual increase in participation by the YMCA staff. After this year we agreed that I would be available for staff training and trouble shooting and that I would try to arrange for students to work in the Fifth Dimension as volunteers but that the Y staff would learn to run the Fifth Dimension, including working with the computers and buying any new software. At that point Missy made it clear that the YMCA has a vested interest in the continuation of the project and agreed to support the project herself by learning the nuances of the Fifth D and making sure that her staff attended the training sessions we would provide and participate in the program.

"We have had similar conversations in the past which have not seemed to have much impact on the actual day-to-day participation of Missy and her staff in the Fifth Dimension project, but I hoped that the promise of leaving the computers with the Y would be an incentive for this year. I did not receive any funds from the Mellon Foundation this year. There was some money left in the account from the previous year and this was used to pay two students in the fall semester: Heather Zeis, a psychology major, and Meghan McGlinn, an education major. Both were senior students who were quite experienced in the Fifth D. Heather continued on in the spring, doing an internship through the psychology department focused on staff training. The three of us met at the beginning of the year to discuss our goal of

think the staff remembers about the computers unless she is there. On the other hand, when the children did come, they seemed as engaged and enthusiastic as ever.

"In April the roller-coaster rose again. The staff at the Y began to spend more time in the computer room and to learn to play some of the new games we had brought. As the Elon school year came to an end, Heather had many conversations with Missy about the YMCA's role in the Fifth Dimension. We have ended our "official" participation in the program on a cautiously optimistic note, acknowledging that probably more support and encouragement will be necessary for the YMCA to truly run the Fifth Dimension on its own. Heather and Meghan graduated; Heather will go to graduate school at Seton Hall in Counseling Psychology and Meghan is on the job market as a secondary history teacher.

"Missy has applied for admission to the M.Ed. program here at Elon and will most likely be in my classroom in the fall! And the beat goes on..."

King's group made several changes in preparation for this effort to stimulate and simplify uptake by the YMCA: worksheets inserted into children's folders to track their progress helped to counteract the chaos caused by staffing reductions in the YMCA after school program. "Table time" was initiated at the beginning of each Fifth Dimension session, in order to bring order to the start of each session. New child-groupings and changes in activities still occurred during the session but the "beginnings" of the afternoon were easier to manage.

The presence of the wizard faded from Elon's site, as writing to and from the wizard ended. This is sad news, given the crucial role of electronic mail correspondence with magical entities at Fifth Dimension sites, and in light of the place of "the wizard" as a key concept in the "core principles" that project implementers have identified over time (see section III "Adaptations and Core Principles") .

King notes: *"This <u>was</u> very difficult because I think the Wizard is one of the most important components of the Fifth Dimension. However, we reflected on the attitude of the YMCA staff toward the Wizard and the likelihood that anyone at the Y would be interested in or capable of sustaining a Wizard correspondence with the children. This is time consuming work and requires a sense of play and nurturing that we have not seen in the staff at the Y. It is also too bound up with the day-to-day activities in the Fifth Dimension to be done by someone at the college after other college connections are reduced to a minimum. "*

The Elon site also increased the amount of software for non-readers and early readers, as the number of kindergarten and first graders attending the after

school program increased. The availability of drawing and free-writing non-computer activities was increased. This was a point of consensus with the YMCA staff and with the "non-FifthD" aspects of the after school program.

Things that remained constant at Elon's site included the maze; the wall charts which show the games in each room and the consequences for each level of accomplishment; the use of "creatures", the game folders, which organized by room and contain the game cards and any hints and documentation on playing each game; the computers: 4 apple IIgs computers, 2 Mac LCs and an MS-DOS machine. Elon's site has always been self-consciously low tech--and there has yet to be a CD-ROM equipped machine in Elon's site. The central emphasis at Elon has been on working together within and across peer/age/gender groups.

University of California Santa Barbara, Goleta, California

Operations of the Club were managed on by two staff members, Tom Vogt, Director of Education and Technology at the Goleta Boys & Girls Club and Rosalba Villanueva, the site coordinator for Club Proteo. Mr. Vogt is a long standing Boys & Girls Club employee who has been involved with Club Proteo since its inception. Ms. Villanueva served as an undergraduate participant assisting children at the Club during the second year of the Club (1995-96) before becoming its site coordinator in the Fall of 1996.

The roles of the Club Proteo Coordinator and Boys & Girls Club Director of Education and Technology were complementary. Major responsibilities of the Club Proteo Coordinator included oversight of day to day Club activities, making sure that Proteus responded to children's e-mail, assisting children with intersite e-mail, keeping track of children's and undergraduate assistants' attendance, maintaining an inventory of Club Proteo materials, posting notes to the xmellon Fifth Dimension e-mail network on Club activities, planning and running orientations for undergraduates, and aiding in the recruitment of undergraduates. Some of these responsibilities were routine, like having folders ready for new members and setting up the Boys & Girls Club computer room for Club Proteo, others were not, such as gauging and responding to the changing needs of the Club members.

The responsibilities of Mr. Vogt, the Boys & Girls Club Director of Education and Technology included the upkeep and maintenance of computer hardware, software, and multimedia technology for Club Proteo, development of the Club world wide web page (which may be found at this address: (http://www.ucsbngbgc.com). Vogt also helped the Club Proteo Coordinator to set up the Boys & Girls Club computer lab each day. During the 1996-97 academic year Mr. Vogt and Ms. Villanueva both attended the weekly undergraduate course taught by the overall project director (Richard

Durán) and a new faculty collaborator (Mary Brenner) of the UCSB Graduate School of Education.

Becky Simon was employed by UCSB faculty member Richard Mayer who was in charge of conducting an evaluation of cognitive outcomes of Club Proteo. Simon was the liaison between UCSB and La Patera Elementary School. She assisted in recruitment of La Patera School children to participate in Club Proteo and, under supervision of Richard Mayer, conducted cognitive testing of Club Proteo children and comparison group children not participating in the Club.

Parent Involvement

A first gathering of parents and Club Proteo children was conducted as a start-up activity in September 1996. Fifteen families attended a casual *"tamalada"* dinner at the Boys & Girls Club. The purpose of the activity was to welcome children back to the Club and to introduce new children and parents to the Club and its activities. Dr. Olga Vásquez, coordinator of the UC San Diego, *Clase Mágica* attended and briefed parents in Spanish on Fifth Dimension activity, adaptations, history, and its goal of assisting children and parents to plan for the college education of children.

A second parent activity was held in November. This meeting was attended by about 4 parents and 5 children from Club Proteo and was organized by Becky Simon. The meeting was attended by several parents representing the La Patera School Site Council, none of whom had children attending Club Proteo.

The meeting was requested by the La Patera School Principal, Dennis Namain. It combined the La Patera School Site Management Council and non-English speaking Latino parents of children participating in Club Proteo. The School Site Council for 1996-97 had no Latino parent participants prior to the meeting, although nearly half of school children at La Patera School were from Spanish speaking backgrounds.

The goal of the meeting, which was conducted in Spanish, was to recruit Latino parents of Club Proteo children to join the Site Council. As a result of the meeting one Club Proteo parent, agreed to join the Site Council. A second purpose of the meeting was to have Club Proteo children conduct a presentation to the La Patera School Site Council on the activities of the Club. The presentation was well received by parents. This event was significant in that the presentation was designed entirely by the children with minimal supervision of Club Proteo staff.

At the end of Winter quarter, parents attended an end of quarter party. About 10 parents and several siblings of current members joined in the festivities.

Certificates for participants and special recognition were given to those whose attendance was high, showed the most progress in their journey, wrote to Proteus the most times, etc. Club members performed a skit entitled "Company Coming". The evening concluded with the children, undergraduates and parents dancing *La Macarena*. The parents were also invited to our end of the year celebration which is mentioned later.

Activities for Younger Kids

Additional activities of Club Proteo during 1996-97, supplementing the main activities tied to progression through the maze and use of software, included the start-up of Club Proteo Jr. serving younger children, production of a Club Proteo video news broadcast, two field trips to community institutions, and a closing party and talent show produced by children. In the meantime, members of Club Proteo, created a 6-room mini-maze for the children and placed one game in each room.

The site coordinator designed most of the task cards for the games -- intended more for the helpers of the kindergartners. One female Club Proteo member made the task card for Word Rescue. Folders for the Club Proteo Jr. children were prepared by about four of the Club Proteo members with some help from the site coordinator. These logs are similar to those at Whittier and other Fifth Dimensions, where the helper writes comments on children's progress on the child's journey log.

The first day of Club Proteo Jr. started with the members introducing themselves and telling the new children about Club Proteo Jr. The kindergartner's attention, however, was lost after about 3 minutes. The comments made by the Club Proteo members during the debriefing periods after each sessions were often the same words spoken by undergraduates about how they had found it difficult to orient children to Club Proteo. The last day of Club Proteo Jr. was celebrated with chips and soda brought in by the helpers and by circulating certificates of accomplishment to Club Proteo Jr. members.

Community Activities, Presentations and Publicity

Project staff conducted presentations on Club Proteo and the Fifth Dimension network at two Computer Using Educators (CUE) conferences and at the Ontario Technology Symposium. Olga Vásquez represented La Clase Mágica at the Fall CUE Conference session. The three presentations focused on goals and functioning of Fifth Dimension computer clubs and especially on ways that Club Proteo and La Clase Mágica serve the literacy and technology learning needs of Latino children from immigrant backgrounds.

The debut of a Club Proteo News video broadcast took place during Winter quarter of 1997. The Design of the video paralleled the production after the La Patera News, a weekly video show produced by students at La Patera School.

Two field trips were taken during 1996-97, to have children explore the surrounding community, its social and cultural organization, and to see how technology and computers were used in activity settings. Related to this goal was a desire to demonstrate how language and communication operate in authentic social and cultural practice, and later on, to ask the group to reflect on the relevance of these experiences towards their interpretations of social and cultural practice.

The first field trip occurred in Fall quarter and involved touring Goleta Toyota, new car dealership around the corner from the Goleta Boys & Girls Club. The owner of Goleta Toyota pointed out the various activities of the dealership and how computers were being used for different purposes. In the accounting department, the children saw how computers were used to keep track of the financing of automobile purchases. Another computer kept track of all of the car parts in the service department. A third helped diagnose a car that was being repaired or tuned up.

Undergraduates also explained to children how information was communicated in the setting. Romeo explained how to read the price stickers attached to a new car window. A group of about 17 female Club Proteo members attended this trip along with about seven undergraduates. In a note, one of the UCSB implementers noted:
"At the end of the tour, one of the children asked, "Why do the girls get stuck doing the hard work and the boys get to do the easy work?" She was referring to the all female accounting and back office department versus the all male sales team. The field trip concluded with free popcorn. "

A second fieldtrip took place in the Winter quarter and involved touring a Spanish language FM Radio station known as "La Musical." The children experienced the production of radio programming as literacy-based planning, production, and enactment and delivery of radio programs. They witnessed a commercial being made based on a script, and the use of sound and vocal effects to enhance audio-only communication. A couple of children got to record their own draft commercial.

Club Proteo children, undergraduates, and the coordinator participated in a lengthy on-the-air interview which was broadcast live to the general Santa Barbara community. Club Proteo participants were asked to explain the purposes of Club Proteo, the nature of its activities, and ways that additional children might participate in the Club. Some children also took the opportunity to greet family members over the air. At the end of the visit, children received a poster of Enrique Iglesias--a well known singer.

Once they returned to the club, children and staff to each other and wrote to Proteo about the possibility of having a Club Proteo radio station. A Club Proteo micro-FM radio station is planned for next year.

End of Year Party and Talent Show:

An end of the year party occurred in June. Participants included members of the club, 6 parents, undergraduates, professors, graduate students, and members of the community. Children presented awards to other children, and each child was able to showcase their abilities.

Technology

During 1996-97 the Goleta Boys & Girls Club added three multimedia Pentium computers as a result of a Santa Barbara County Boys & Girls Club grant secured from the Winegart Foundation. The Goleta Boys & Girls club also received a donation of a network server and nine networked 386's from a local environmental company. Steve Morse, a volunteer member of the Goleta Boys & Girls Club, generously donated his time and technical expertise in installing software on the server and adding two multimedia AST's to the network.

The Goleta Boys & Girls was also able to send five of the older 286 and 8086 computers with the last of the Apple IIgs's to its sister day care center on the campus of UCSB, where they have started a second computer lab. The daycare center on the campus of UCSB serves mainly families of UCSB professors. Another change in the hardware of the club was the addition of a VGA monitor used to display "Club Proteo Announcements". The announcements were displayed continuously via PowerPoint while Club Proteo was in session.

Through UC Links funding, Professor Brenner, working with graduate student Reagan Curtis, provided additional software and accompanying task cards. Reagan Curtis developed task cards for the following "new" games: Big Science Comics, Dr. Quandry's Island, Get Up Close, Museum Madness, Tessel Mania, The Amazon Trail, Widget Workshop, and The Secret Island of Dr. Quandry. Since these games were added so late in the year, the team decided to place them in the waiting room of the maze. Their arrival was announced via the Club monitor and the kids were encouraged to explore them, while their placement in particular maze rooms was being worked out. Sim Town, Island Survivor, and an additional copy of Treasure Cove have also been purchased for the club through UC Links by Prof. Brenner. We are working on task cards for those games. These are all on CD ROM.

Maze changes

The maze underwent the following changes during 1996-97: plaques indicating the name of the room and the software choices for the rooms were added, the rooms were numbered with large wood numbers, and color coded arrows were placed on the maze floor reinforcing the "consequence routes." Before making changes to the wood maze, a paper poster maze, made in the year prior, was modified as well. A separate consequence chart was removed from a bulletin board and the consequences were re-represented on the poster maze floor by green (beginner), blue (good) and red (expert) arrows leading into and out of rooms in the maze. The idea to place arrows in the maze itself was a result of reading xmellon fieldnotes from the Solana Beach Boys & Girls Club, where a similar "revamping" of the maze took place.

Artifacts

In an effort to increase the kids' motivation to play games in the maze under the guidance of task cards, their "personal map", originally located inside their folder, was taken out of their folder and glued to the outside of their folder. Children's progress through the maze was charted with green (beginner), blue (good) and red(expert) mini-dino stickers. In addition, once they completed ten rooms, their progress was charted with stars wearing either green, blue, red shades, depending on the level they completed.
This has increased the kids motivation and awareness to work on their journey through the maze.

Task Cards

Goals for 1996-97 included having a task card for every game posted on the maze, making the existing task cards shorter, and translating all task cards into Spanish. Progress toward these goals has been continuous throughout the year. However, the task cards need to be modified to meet the changing needs of members. For example, The Bilingual Writing Center has three different task cards, one of which was written by two Club members. The other was written by Rosalba and translated by a female club member.

Proteo's Mail

In the Fall of 1996, our electronic entity, "Proteo" received 85 letters from the children and one letter from an undergraduate. Sixty-eight percent were written in English and 32% were written in Spanish. The girls wrote 87% of the letters and the boys wrote 11% of them. Three percent of the letters had unknown authors. The Wizard received 6 letters, mostly prompted by task cards.

In the Winter of 1997, Proteo received 46 e-mail letters from the kids. Roughly 80% were written in English and 20% were written in Spanish. The girls wrote about 72% of the letters and the boys wrote 28% of them. The Wizard received 2 letters. In the Spring of 1997 Proteo received 44 e-mail letters from the children. Approximately 84% were written in English and 16% were written in Spanish. The girls wrote 75% of the letters and the boys wrote 25% of them.

In the Winter quarter a sign up sheet was introduced in efforts to facilitate the formation of dyads between undergraduates and children. The undergraduates signed in on a sheet stuck to the wall as they entered the computer lab, and the children signed themselves up with an undergraduate.

University of California, San Diego

There are separate reports in this section for three sites in San Diego: The Fifth Dimension at the Boys and Girls Club, The Magical Dimension, and La Clase Mágica.

San Dieguito Boys and Girls Club, Solana Beach, California

The distinctive features of activity at the Solana Beach B & G Club Fifth Dimension this year were heavy female involvement, a wide age range among participants, and the diversity of intellectual levels attained in activity with numerous participants. Kids from the "Kinder Club" program at the club came to play Facemaker and Kidpix, the teenagers came in particularly for the World Wide Web, and all ages converged around the video camera as they were all interested in creating their own videos.

The Fifth Dimension continues to enjoy the support of the Boys and Girls Club at its local site, but it is a support strongly mediated by the Club's organizational structure and ethos. Moreover, Michael Cole continues to play an overly activist role in the day to day troubleshooting of the system. To quote Cole: *"I continue having to push the Club when their standard operating procedures are, from my perspective as a University professor, inadequate to their agreed upon role as providing a working laboratory of my undergraduates".*

When the site coordinator was absent, a backup system was in place, but it was only functional due to the existence of a special program at the school which reduced Club attendance, and hence the Fifth Dimension population drastically. Turn around rate for club positions remains high. Most qualified persons cannot not afford to work for the establishment on a part time basis without benefits for an extended period of time. This makes it difficult to get the club to hire someone as a back up who could be trained to take over because they are already short staffed.

The Club has increased the wages of the site coordinator to $10 an hour. This is a major development. Through June of 1997, the rate was still $8 per hour. The position of site coordinator was divided between Nathaniel Sims and Tami Kopischke during Fall quarter, to accommodate Tami's school schedule and her impending graduation. Tami spent her Club hours preparing the site and setting up the computer technical support group, which will have to be re-established next year.

A note on the salary increase: In this social ecological circumstance, of low status and wages to child care workers and educators, it is a big investment. The Club has recently hired as site coordinator for next year a highly qualified person (J. Pérez) who knows a great deal about computers, is bilingual, and was trained extensively at La Clase Mágica .

While the site coordinator was hired with a tiny bit of lead time, and the Club is getting better about hiring, payroll and reimbursement procedures, they are still experiencing a LOT of difficulty making the Fifth Dimension their own in the same way that they "own" the crafts room.

Site Coordinator Tami Kopischke's Report

"The major goals of my tenure as site coordinator were: 1. To set up a computer technology support group. 2. To transfer the knowledge of how to run the Fifth Dimension to the staff of the Boys and Girls Club. 3. To update the artifacts and the maze. 4. To document attendance patterns.

"At the beginning of year I tried to bring all supplies and tools of the site coordinator into the club so that the club could SEE the work that the site coordinator did. It became impossible to sever the club and the lab because the lab provided resources which the club depended on. One thing that is necessary for moving site coordinator tasks into the 5D is a copy of Pagemaker so that new game guides/task cards could be designed on site. A printer would be useful for on-site work, as would software that would allow the coordinator to upload fieldnotes to e-mail .
There was a point, during winter quarter, where the club staff actually became interested in having access to and reading fieldnotes for their own reports and to look into some case studies. This created some tension and interest evaporated by the beginning of Spring quarter. If the site coordinator is truly a club employee and not seen as a university affiliate they will have to be prepared to share the responsibilities of the other club staff members. For example, numerous times I was asked to go pick up the kids from school for the "Kinderclub" program, and to cover gaps in library staffing. The club's problems with staffing are significant. Simply put, it continues to be

impossible for a lone site coordinator to oversee and manage two activities that are occurring across borders (inside and outside the Fifth Dimension).

I was successful at getting the club to provide copying fees for materials, They also reimbursed me for supplies. However, the university still provided new software as the gifts for new YWA's at Fifth Dimension parties..

Hopefully some of these things will become the responsibility of the Solana Beach Coalition which was started this year. The coalition provides a resource specifically for the project that is separate from both the university and the club but housed in the club.

Summary of the Fifth Dimension Environment Remediation
Nathaniel Sims, LCHC

The central aim of the Fifth Dimension redesign was to improve the flow of activity in the club. We wanted a system of rules and artifacts that would smoothly coordinate play and learning in the same space. We needed tools that would be simple to use and yet flexible enough to withstand the various technical and organizational contingencies that were typical of life in the Fifth Dimension

Knowing that a rapid and fluctuating turn-over of expertise was inherent to the structure Fifth Dimension, we needed a system where crucial pieces of knowledge were embedded within Fifth Dimension structures. Since undergraduate students came and went according to the cycles of the quarter, the site coordinator typically new and overworked, and the equipment unreliable, we needed easy-to-use tools that could be sustained through children's' expertise in times of transition.

- **Maze** The physical maze, its contents and the possible paths shown on the maze were redesigned to focus attention on the maze-- both as a coordinating artifact and as a metaphor for imagining one's path through the Fifth Dimension. The consequences of one's play of a particular game at a beginner, good, or expert level were removed from an abstract "consequence chart" and embodied into the room and doorway structure of the physical maze. Rather than having to work out complex relationships between the task card, consequence chart and maze, Fifth Dimension citizens could visually plan their path through the Fifth Dimension simply by charting their course through the maze. The Maze was redesigned to make structured moves toward becoming a Young Wizard Assistant by creating different paths of movement based on different levels of success with the task levels. A player who completes beginner level in each room will follow a circuit through a quarter of the maze; to leave this circuit and have more choices, they must complete a

higher level on the task card. A maze that is really easy to use and has real consequences for its use seemed the best way to coordinate the structured play of the Fifth Dimension. This is where the visual design of the maze really stands out; it is possible to clearly see the paths through the maze at different levels of ability, and to plan many steps farther in advance-- a strategy for getting to a particular room. This also has the effect of involving the site coordinator less in citizens' movement through the maze.

- **Consistent Task Levels** All the game guides now have a unified approach to levels. Any level may be attempted; for those games where knowledge of prior levels is required to continue, this is noted or required in the guide itself. This moves away from the notion that development is the sequential acquisition of expertise and enables children to choose their own level to pursue. This has minimized a recurring source of disruption found in previous videotapes and field notes.

- **Critters:** Changing the design of Fifth Dimension citizens' tokens furthered the maze metaphor by enabling citizens to physically place representations of themselves within the maze. The new "critters" are made from Polaroid photos and index cards with names and information clipped to the stand. These tokens enable citizens to identify with the tokens used to mark their paths through the maze, but unlike earlier versions, are less worthy of stealing.

- **Cosmic Entrance** The cosmic entrance ensures that orientation is done in the central room of the maze. Instead of entering from the outside edges, new citizens must pass a beginning level of expertise with the constitution of the FifthD in the central room of the maze-- before beginning play in the maze. This makes the indoctrination process part of the maze and allows for the measurement of different levels of citizenship expertise. The cosmic entrance works within the game-guide metaphor to integrate and reinforce a FifthDimension guide system.

- **Tourbook, Passport and Visa Stamp** The orientation given by the site coordinator is supplemented and reinforced by a printed form of similiar instructions. This affords a smoother use of FifthD rules and less reliance on site coordinator. Other structures, such as the Passport (an undergraduate assisted, spatially organized log of citizen's activities and progress through maze) and the CWA visa stamp (a unique stamp signifying an achieved game-level) allow for consistent and coordinated certification of progress. This reduces the load on the site coordinator, helps child plan and lets the UG know that the child is not returning to rooms already completed.

- **Move On, Free Key, Magic Carpet Ride & Points** These bonuses simplify some of the confusing and misunderstood differences between their predecessors: "room out of sequence," "free pass," and "truly free pass" as well as clarifying the circumstances under which a citizen may be likely to receive such a bonus. In a "move on", the child leaves a room for which both games are unavailable (due to flow or technical problems) through the beginner door. Whereas the free key allows players to leave their current room through any door without completing the task level; the magic carpet ride flies a citizen anywhere in the maze. Both the free key and magic carpet ride can be purchased by earning citizenship points

- **Software Map & Software** The map of Fifth D visibly displays the computers and platforms that allow particular software which provides for an easy search for the appropriate computer and software. Software was changed to provide for further flexibility. Netscape provides access to the Fifth Dimension web-page and has a built in way to e-mail the wizard. Integrating wiz-mail and web browsing creates a draw to the Fifth Dimension web page, the web, and e-mailing the wizard. Similarly, Mac shark creates a more interesting and flexible version of the Shark game by updating it with new media possibilities (color graphics, improved sound and interface, etc.)

- **Site Coordinator and Undergraduate Roles** A separate coordinator for the Fifth Dimension and library allows the site coordinator to focus more attention on the Fifth Dimension and receive less feedback from outside activities-- thus giving more space and time for Fifth Dimension activities. Undergraduates on the other hand, take on more responsibility by tracking attendance. Undergraduates use a sign-in sheet track attendance and mark who they played with, on activities, and whether they were videotaped, etc. In tracking details useful to the research process, it might be argued that kids not paired with UGs may fall through the cracks. This is still a possibility, but freed from other duties, the site coordinator (theoretically) has more time to review the attendance sheets and check for omissions.

Summer Activities at the Club

Richard Smith, LCHC

(Editors note: Richard Smith, and undergraduate student associated with the Fifth Dimension who has been enrolled at UCSD doing "special studies" projects with Michael Cole will offer Photography and HTML classes at the Boys and Girls Club this summer).

Richard notes: *"I am looking forward to teaching the photo and HTML classes in Solana Beach this summer. I hope they are the first steps toward providing the knowledge and incentives for children to consider their lives and their society, the dynamics involved, and to provide them the means of gaining additional information through the Internet, as well as opportunities for collaboration with others and for expressing a voice. I believe this knowledge/ability can, with the right conditions, extend to the parents and broader community. I hope to do an Honors Thesis in Communication during the next year, emphasizing these issues, with the inclusion of Rosa Parks Elementary School if possible."*

Smith will be instrumental in linking high-technology and low technology based activities to the interests of different populations across the San Diego node of the Consortium, and to help those populations stay connected to each other. On-line newspapers at the Club, and at LCM and Jose Pérez's HTML class for adults at La Clase Mágica are all now intertwined and mutually supporting.

The size of the summer classes Smith will offer is limited. The Club has a very small darkroom and only a few computers that can be used for production of Web pages. Both the chemical and digital based classes include opportunities to combine peer/social interaction with the acquisition of technical expertise. Both basic photography and HTML classes will stress collaboration among all those involved, hopefully from the several 5D sites in Solana Beach. The Club has helped with start up materials and publicity.

The Magical Dimension, Skyline Elementary, Solana Beach, CA
Honorine Nocon, LCHC

The Magical Dimension opened for the 1996-1997 academic year on October 7, on the San Diego schedule, this was one week late. The late opening was occasioned by the departure of the elementary school principal who had invited the program to start at her school. While the Superintendent of Solana Beach Schools had endorsed the program, even appointing a district representative to the Solana Beach Coalition for Community Education, she did not want to force an external program on the incoming Principal. In addition, there was a possibility that the computer lab would be eliminated due to the state mandate to reduce class size. Opening remained uncertain until early September, when the new Principal came on board and it was determined that the computer lab would continue to occupy a room at Skyline.

Site Coordination

During its first two quarters of operation, the Magical Dimension had three cooperating site coordinators, one from LCHC, one funded by the Lomas

Santa Fe Boys and Girls Club, and one funded by the school district. The district had decided to withdraw funds for this year. The Boys and Girls Club employee was funded for the Magical Dimension's hours of operation and for walking children to the Boys and Girls Club after site. The LCHC-funded site coordinator assumed responsibility for preparation and administration of the program as well as participating in each session, approximately 15-20 hours per week. While these arrangements remained the same for all three academic quarters, the third quarter was significantly different from the other two, due to the changing composition of the site population, especially the numbers of child and undergraduate participants.
Midway through the quarter, a new computer teacher was hired, but she left the school before the quarter ended, adding to the sense of disruption in the system.

Membership

Last year the Club had strongly encouraged paid membership in the Club for Magical Dimension participants. The program was advertised as free in order to attract new potential members through visible educational programming in collaboration with UCSD. This move was made due in part to negative perceptions of the Club among some parents at Skyline.

In the course of meetings with the school staff and PTA it was suggested that the Magical Dimension was perceived as a program for children with special needs, such as limited English proficiency or learning disabilities. Therefore, parents of children who did not face such challenges had not really considered the program, nor had their children. At several meetings in March and April 1997, it was communicated by LCHC to staff and PTA that the Magical Dimension was there to serve all Skyline children.

Skyline's Resource Teacher came forward as an advocate for the program. While flyers and articles had been used to publicize the program, these methods had not increased participation. At the suggestion of the Resource Teacher the LCHC-funded site coordinator sat at an information table during parent-teacher conference week (just prior to Spring 1997). Seventeen new participants were signed up. In addition, the Resource Teacher took groups of Magical Dimension participants from classroom to classroom to endorse the program. Attendance increased significantly in the spring 1997 quarter. A total of 42 new children were served.

In Spring 1997, a new individual filled the Club-funded site coordinator position. The increase in attendance by children coincided with a low enrollment in the practicum class which places undergraduates at the site. This resulted in adult to child ratios of one to four or five. It became difficult to manage the children, especially when the children made lots of happy noise, on their way in from waiting outside, running, shouting and swinging

from trees. It was difficult for the new Club site coordinator and the undergraduates to assume the role of disciplinarians while being in "peer-mode" in the Magical Dimension.

Conflicts With School Routines

Two or three Skyline teachers began to come out of their classrooms to reprimand the children. A partial solution was achieved by having the Club site coordinator and some of the undergraduates take the children to the school playground for 15-20 minutes. This was effective for a while. However, some of the older boys would hide when it was time to play computers, or would actively resist coming indoors. It was necessary to have four general discipline talks within the Magical Dimension in order to elicit attention to school rules. The lack of a direct programmatic link with the school made it difficult for our Fifth Dimension staffers to know and understand school rules.

Modifications to the Design

We introduced a colorful maze adapted from the Fifth Dimension's new design, and a hot pink "progress cake" developed by an undergraduate was also introduced. However, the numbers of adult and child participants as well as the pragmatic issue of attendance caused less attention than usual to be paid to following the maze. A group of 4th and 5th grade boys became very regular in their attendance because they could play "whatever they wanted." While the maze was not stressed, a small number of children continued to pursue becoming YWAs in an essentially self-directed manner.

The Spring quarter brought still more adjustment. The increase in child participants with the concurrent decrease in adult participants changed the dynamics of the site. The maze was de-emphasized in favor of supporting the growth of a child culture. That culture was characterized more by free play than by adherence to the Fifth Dimension's game-metaphor structure. It was also characterized by the development of an inter ethnic and inter cultural group of children which formed a diverse play community. The decision to foster the growth of the child play culture was motivated by a desire to develop a "critical mass" of child participants who would attend regularly and bring friends. Parents of several new children called or wrote the school district in support of the program. At the same time, the Club communicated its ongoing commitment to the Magical Dimension and to Skyline as well as offering program participants free Club memberships. The strategy of increasing participation proved successful in persuading the school district to fund a site coordinator for academic 1997-1998 and beyond.

Although the Fifth Dimension model was very loosely applied at the Magical Dimension in Spring 1997, the child and adult participants learned about cooperating in a loosely structured diverse group. The Magical Dimension became a site where high academic achievers worked and played with children in the resource program Children of mixed ages, genders, and language/culture groups played Oregon Trail in groups, kickball outside, and tri-lingual (English, Spanish, Russian) Boggle. The easy mixing was new to the Magical Dimension and was not typical of interactions at the school.

Due to increased participation, the Magical Dimension has been funded for next year (and beyond) by the Boys and Girls Club and the Solana Beach School District. It is acknowledged that the LCHC site coordinator will offer training and will turn over materials as she withdraws from direct operation of the site. The new site coordinators will have another opportunity to stress the maze and other elements of the Fifth Dimension model.

La Clase Mágica, Eden Gardens, California

This section contains Spanish language text by Lourdes Duran and other team members. English translation provided by Marc Camras.

Nuevos Eventos

"La Clase Mágica ha recibido un nuevo apoyo de la Universidad ademas de la ayuda de los estudiantes que colaboran con los ninos este año. Roberta Camarena, una funcionaria del departamento de admissions, visito a LCM para informar a los padres de familia y a los asistente ya que la mayoria de ellos estan en los grados 6 para arriva. Ella hablo de información general para asistir a la Universidad. Tambien informo de materias que deben tomar a tiempo para calificar, becas y ayudas financiera. "

Recent Changes

LCM has received additional support from the University apart from that provided by the undergraduate students. This year, Roberta Camarena, from the universtiy's admissions office, visited LCM in order to inform and assist families with children who have finished elementary school. Since many of the LCM children are in Jr. High or High School, Roberta brought materials regarding entrance requirements for UCSD, and information concerning scholarships and financial aid.

Artifacts

During the fall quarter there was a new artifact in LCM. It was the "Credit Sheet" and "First Step Pass." Each sheet has 4 or 5 questions on each side. The First Step Pass consist of questions for playing a game, this is to help the children better understand what they will do in the game. They have to fill

this side of the sheet first and then they turn it around to answer more questions about the game once they are done playing. The credit sheet (the second side) also serves as credit towards the position of a W.A. The credit sheet is a way of keeping track of how many games a LCM Ciudadano has completed. So far the addition of the First Step Pass and Credit Sheet has been a success. The children seem comfortable with this, and it also helps El Maga keep a record of all their completed games.

Cambios y adaptaciones en el maze y task card

"Las adaptaciones que tuvimos en el maze durante este año fue que se incluyeron estos juegos: Super Munchers, Number Munchers, Word Munchers, Tetris, Super Tetris, Spellbound, Outnumbered, la mayoria de estos juegos se incluyeron en las Computadoras Mac, se tenian anteriormente en IBM. Chessmaster se agrego como juego de mesa. Las Taskcards que se adaptaron fueron Spellbobound, Isla de sobrevivientes, Super Tetris, Kidpix, Super Munchers, Magic School Bus. Las adaptaciones que se haran en el maze y en las Taskcards en Quarter 26, 1997 seran Magic School Bus, Around the World, Gizmos and Gadgets, Carmen San Diego, Print Shop. Cambios importantes que surgieron en La clase magica St Leos Mission en el periodo de 1996-97. '

'Orientacion sobre la LCM a los estudiantes de UCSD En la orientacion que los asistentes dan a los estudiantes en cada Quarter, se incluyo un folder que se la llamo "Amigo Aplicacion" en este folder se encuentra el Maze, La constitucion de la clase magica, the clase magica Amiga/o que da toda la informacion general sobre la informacion que tiene el folder de los ninos y la aplicacion para los amigos de la clase magica, en este aplicacion se pide informacion personal del estudiante. Despues de cada seccion de la clase magica tubimos "five minutes junta" donde los estudiantes podian espresar como fue su esperiencia con el nino, sobre las actividades y algunas beses frustraciones por las esperiencia en ese dia con el nino y los retos a los que se enfrentaban para solucionarlos."

Changes and adaptations in the maze and task cards

There were a number of adaptations that were made in the maze this year. Several new games were added including Super Munchers, Number Munchers, Word Munchers, Tetris, Super Tetris, Spellbound, and Outnumbered. The majority of games were put into the Macintosh computers as were other games that were on IBMs. One of the board games added was chess. Task card adaptations were made to Spellbound, Island Survivors, Super Tetris, Kidpix, Super Munchers, and Magic School Bus. In the coming quarter, they will adapt the following task cards; Magic School

Bus, Around the World, Gizmos and Gadgets, Carmen San Diego and Printshop.

A folder has been included as part of the orientation that the Wizard Assistants give to the undergraduates every quarter. This folder is an "Amigo Application" and inside is found a copy of the Maze, the LCM constitution, general information for the undergraduates, information that is contained in the children's folders, a Wizard Assistant's application, and a background questionnaire for the undergraduates asking for personal information. After the end of every LCM session, their is a five minute meeting where the undergraduates can talk about the activities, their experiences with the children, their frustrations, and the different ways they have found to solve problems that occur.

Coalition

"A sido un año muy interesante, en cuestion de union y apoyo para salir adelante con el programa. Se formo un grupo externo a La Clase Mágica compuesto por: Padres de familia, Head Start, Coalition, UCSD, Boy Girls Club y por parte de la Iglesia donde nos encontramos ubicados. Este grupo " The coalition "se han reunido un 12 veses para planer y organizar. La meta de este grupo es crear una entrada de dinero que ayude a la Clase Mágica a subsitir. El esfuerzo y trabajo de este grupo a sido un exito. The Coalition a recibido una donacion de $10,000 dolares de parte de Gene Garfield, para el sostenimiento de La Clase Mágica. '

'Por primera vez El Boy and Girls Club organizo el salario de la coordinadora y pago gastos que fueron soportados y giados por las donaciones que a recibido el grupo coalition. "

Coalition

It has been a very interesting year, particularly in relation to the question of collaboration and support for the continuation of the program. A group has been formed from various members both inside and outside of the LCM community, consisting of parents of participants, Head Start, UCSD, the SB Boys and Girls Club, and the little section of the church where we are located. This group is called The Solana Beach Coalition for Community Education and has now met 12 times to plan and organize. The goal of this group is to create a fund that will financially support the continued existence of LCM. This group's work and energy has been successful in that $10.000 dollars was donated for sustaining the project.

For the first time, the Boys and Girls Club paid the Site Coordinator's salary, and additional expenses incurred at LCM. They also managed the distribution of the generous donation.

(Editors note: For more discussion of the emergence of the Coalition, see Section VIII "The Propagation Effort" of this annual report).

Adult Class

In addition to serving children and teens, La Clase Mágica aims to help develop new possibilities for the larger community. The program encourages parents of LCM "cuidadanos" to participate and help with the project. In the past several years, LCM offered an Adult Computer Class that was held once a week on Wednesdays. A research Fellow from the San Diego Supercomputing facility (Joe Deken, UCSD Fellow, involved 1995-6) established a space for adults to learn about computers on a drop- in basis. An adult computer class, offering more structure and a curriculum than the informal arrangement started in the Fall of 1996.

The Adult Computer Class at LCM offered bilingual instruction to anyone wanting to learn regardless of their level of education. Class was held once a week on Fridays from 5:30-7:00 p.m.. Working without Spanish language computer manuals or Apple product literature, Jose Pérez created specially designed worksheets to facilitate group learning.

During that first quarter, three students attended each week. Pérez began with the "Operating System of a Macintosh", then moved on to "Microsoft Word". The group meet seven times in the Fall of 1996.

The second quarter, Pérez developed worksheets both in Spanish and English so that the adults could take home and review in both languages. On average, four students per week attended. Hardware review and exercises were added, and the practice of in class group review was developed.

One of the key issues arising in the Spring was the sustainability of this adult class. Sustainability had been discussed because the adults were aware that class was going to be over soon and there had been difficulty solidifying interest among one of the students to assume the leadership role. Pérez made a few more changes to the curriculum. First, he offered the class twice per week, and organized the worksheets in a booklet for the adults. The group covered "Mario Teaches Typing " software and HTML for making web pages. As a class, we constructed a web page which is located at: http://communication.ucsd.edu/LCM/AdultClass.html.

Seven students attended class on a regular basis. Again, sustaining the Adult Class was discussed but no one seemed to feel skilled enough to take over the class. Pérez notes:
"The skill level of many of the adults participating varies along with their educational background. The lack of confidence may be reinforce by the belief that being an expert at something requires an extensive amount of education and experience, but the growth that I have seen and the things that we have accomplished in this last quarter doesn't reflect this belief. In a short amount of time the adults were able to do things that a great number of people in our society are not able to do. Sustainability of the Adult Class requires more time in order for the students to recognize their accomplishment along with acknowledging what they have learned. The way class has been taught has been in a group setting in which we interact with one another so learning has been in a sense informal or nontraditional.

The Adult Computer Class has made an impact on the community, raising the profile of La Clase Mágica, and encouraging more parents and their children to use the programs offered there.

Headstart

"Este año Head Start adaptó el programa de La Clase Mágica para los niños Pre-escolar. Como parte de la enseñanza y aprendizaje que los niños reciben, ellos fueron apollados por la Universidad que envio durante los tres trimestres estudiantes que ivan 2 veces por semana por una hora y treinta minutos. En conjunto con las maestras, los estudiantes de UCSD ayudaron a desarollar lo que aprenderian los niños y asi reenforzaron con este programa de computadoras las destresas y conocimiento. '

'En este verano tendremos un cambio de directora en Head Start. Este cambio sera muy significativo porque ayudara en la relacion y comunicacion entre los dos programas y la comunidad ya que la nueva directora es bilingue. Este es un gran exito para la comunidad que damos servicio porque el 95% de personas son de habla hispana. "

This year, Head Start adpated the LCM program for its preschool children. In addition to the education that the children received from Head Start staffers, they were assisted by the University of California, San Diego. The University provided undergraduate students for three quarters. These students came to Head Start twice a week for an hour and a half. Together with the teachers, these students developed a computer curriculum for the children's education. This program reinforced both the skills and knowledge the children had in regards to computer use. During this coming summer, there will be a new Director for Head Start. This change will be significant in that there is a chance for improved communication in the relationship between

LCM, Head Start, and the community, particularly because the new director will be bilingual. This is a significant outcome for the community, which provides services to a population in which 95% of its members speak Spanish.

For the 1996-97 year the La Clase Mágica program at St. Leo's Head Start served approximately 40 preschool-aged children. Part of this year's programming entailed increased Head Start teacher and staff involvement, as well as increased undergraduate participation in the production of new task cards. Two undergraduates also assisted in putting together a simplified Head Start manual, that will be given to the new Spanish/English bilingual center director, L. Hayes, and the teachers, for their input. On of the teachers suggested renaming "the computers (the computer class)" "Mi Clase Mágica" showing an increased sense of identification with the program.

Included in the manual are the age-appropriate games used this year and three task cards. Two of the cards are primarily teaching tools for the undergraduate/preschooler dyads. The remaining one is primarily for Head Start teachers to use in the classroom. This task card introduces El Maga to the children as a computer entity, and encourages the children and adults to think creatively. Also included in the manual are recommended daily and quarterly agendas.

Head Start has provided supplies, including hanging files, manila folders, and a folder crate, which are housed at the site. Each child enrolled in Head Start receives a folder, which includes an activity of records sheet that tracks their progress. Rhoda Yoder, Head Start's Education coordinator purchased $200 worth of software for use in the upcoming year. It is anticipated that the new center director will be taking an active role in the delegation and production of new task cards for the new games.

Participacion de los padres de familia

"Participacion de los padres de familia. El apollo de los padres a motivado en la asistencia y la participacion de los niños. Durante el ano tubimos 10 juntas con los padre de familia y hubo muy buena participacion. Este año los padres acompañaron a sus hijos mas seguido que otros años a las computadoras en las horas de la Clase. Regularmente contamos con su presencia los viernes que es el día en que los padres han tomado la responsabilidad de ayudar en La Clase Mágica. Ellos son apoyados por los asistentes del maga. Los padres participaron en 4 actividades para levantar fondos. Se organizo, ventas de articulos "Garage Sale," venta de comida, raspados de hielo y la Fiesta del 5 de Mayo. Todas estas actividades han sido un exito especialmente por la participacion en conjunto y el apoyo general de los diferentes grupos. El objetivo de estos eventos fue de sacar fondos y apollo para que La Clase Mágica para que siga adelante con el exito que hasta ahora a tenido. "

Parental Participation

Parental support has meant additional assistance for the children, and has increased the children's motivation to participate. During the year, ten meetings were held with the parent's children. Meetings were well attended, and parents contributed a great deal to the discussions. This year, parents came to site more often than in previous years, and worked more with the children on the computers than they had in the past. They continued running the entire program on Fridays, and together with the Wizard Assistants, were integral in the program's coordination. The parents participated in four fund raisers which included organizing a garage sale, and selling food and popsicles at a Cinco de Mayo celebration. All these activities were a great success because of the participation and unity of the different groups involved. The objectives of these events were to not only raise money, but also to support the entire LCM enterprise so that its accomplishments and benefits could continue.

Exitos y grandes logros que La Clase Mágica a traido a los ninos, padres de familia, estudiantes y Universidad.

"Los ninos tubieron la oportunidad de relacionarse con la tegnologia, apredieron y aumentaron su conocimiento, nuebas tegnica sobre juegos, programas, telecomunicacion. Aumentaron conocimientos y posibilidades de ir a las universidad en su relacion con los estudiantes y la orientacion que Roberta Camarena les dio al informarles sobre este aspecto. Los padre junto con sus hijos tambien han mirado el gran beneficio que La clase magica a traido a sus hijo y a ellos mismo al enrolarse mas en La Clase Mágica . Los estudiantes han obtenido informacion aumentando el conocimiento de ellos en sus estudio, y en el aspecto personal ya que varios de ellos comentaban que el estar ahi era como sentirse en una familia. La Universidad a recivido de la clase magica toda la Informacion, informacion que ha despertado el interes a otros paises y Universidades a abrir programas como este. Por todo esto yo Lourdes Duran puedo decir que La Clase Mágica es un "Exito". '

'Laparticipacion y el apoyo que Olga Vásquez y Michael Cole han brindado a La Clase Mágica difinitivamente a sido de gran beneficio. Gracias a la direccion de ellos, el programa a tenido en la comunidad y en todo el mundo un enorme exito, tanto que varios paises lo han tomado como modelo. "

What LCM has brought to the children, parents and undergraduates

LCM children have had an opportunity to become acquainted with computer technology, new game technology, and to learn and increase their knowledge of computer programs and telecommunications. Additionally, they have increased their knowledge of the possibilities of a university education, what

to expect when one is in a university (provided by undergraduates), and any additional information provided by Roberta Camarena that would help them with the process of getting admitted into a university. Parents and children have also seen the great benefits that LCM has brought to them, and more children continue to enroll. The undergraduates have furthered their own education as they have gained more knowledge about the children, the children's families, the Eden Gardens community, and what it is like to be part of a larger family. The University has also received a large amount of information and data from LCM.

This information has awakened the interest of other universities, and people from many other countries who might be inclined to start similar programs. Because of this Lourdes Duran can say that LCM is a "Success." The participation and support that Olga Vásquez and Michael Cole have provided LCM has been the greatest benefit, and they deserve thanks. Due to their efforts, the program has been an enormous success in the community and around the world, so much so that various countries have taken it as a model program.

Whittier College, Whittier, California

In 1996-97, its third year with support from the Mellon Foundation, the Whittier Fifth Dimension continued to operate at the Boys & Girls Club of Whittier each Monday through Thursday, 3:30 to 5:00 p.m., throughout Whittier College's academic year. A very smooth, cooperative relationship between the club and site continued, with the club's staff offering the Fifth Dimension enthusiastic moral support and modest financial support while ceding nearly all decisions regarding the Fifth Dimension's operation to the Whittier College coordinating team of 12 undergraduate students and Education Department Professor Don Bremme.

As it has done in past years, in 1996-97 the Whittier Fifth Dimension served as a catalyst to the extension of educational opportunities in the Boys and Girls Club. Members of the undergraduate Fifth Dimension coordinating team developed a voluntary reading program after Fifth Dimension sessions every Monday through Thursday and at varying hours on Friday afternoon.

Other "spin-offs" of the Fifth Dimension for club members in 1996-97 included a field trip to the La Brea Tar Pits and its museum and a day-long visit to Whittier College, as well as continuation of homework help from 3:00 to 3:30 Monday through Thursday, and an eight-week summer computer program using Fifth Dimension resources and additional materials purchased by the club. Developments within the Fifth Dimension in 1996-97 centered on several efforts set as goals in last year's Whittier report: (1) The continued creation of Spanish-English bilingual materials; (2) restructuring to include

new rules for moving between the maze and supermaze, as well as new categories of citizens (Maze Magician, Supermaze Magician, Mage of All Mazes) to offer additional goals for children; and (3) redistribution of roles and responsibilities among the 12 members of the undergraduate "McCabe Scholars" to include all in site coordination, correspondence with children as the Wizard, and program maintenance on a rotating basis. With local funds, new software was added, additional memory was installed in computers, and external cd-rom drives were added and upgraded.

The remainder of this section describes the operations of the Whittier Boys & Girls Club and the relationships among club, site, and college as the three years of Mellon support for Fifth Dimension operations draw to a close.

Club Operations

Open Monday through Friday from 2:30 to 8:00 p.m., the Whittier club serves a predominantly low-income, mobile, Chicano/Mexicano population. Its daily 1996-97 attendance varied between about 40 and 100 members, with lower the numbers at the beginning of the school year and immediately after the winter school holidays, as well as on rainy days. The periods of higher daily attendance were largely in the weeks before Christmas and on school holidays.

The variations in club attendance had relatively little impact on the numbers of children who participated in the Fifth Dimension, however on all but a half-dozen or so days, the number seeking to participate in the Fifth Dimension exceeded the Fifth Dimension's capacity, set by the number of college students available to assist (10-14) and computers (15).

The 1996-97 year brought no major changes in how the Whittier Boys & Girls Club functioned in relation to the community, in how it operated internally, or in how its organization interfaced with the Fifth Dimension or Whittier College. No staff positions were added or eliminated at the club, and the individuals occupying staff positions remained the same as in the past two years.

For several days in late autumn, it appeared as if changes in club operations might be forthcoming. At that time, the club's director reported two financial setbacks. First and most significantly, a local philanthropic organization, the B. C. McCabe Foundation, had elected not to donate funds for the club's general operating budget this year. This was considered a significant loss by club staff, since McCabe had for many years been a major source of financial support for the club. (The reasons for the foundation's decision remained unclear. Loss of projected resources, however, had no observable impact on club operations during 1996-97; and nothing more was heard about the matter, or any concerning club finances, during the remainder of the year.

Throughout the Fifth Dimension's four years at the Whittier Boys & Girls Club, the club has functioned primarily as a drop-in, after-school care facility for younger children, as well as a "hang out" for a smaller number of teens. While the club's small staff seems generally concerned about the welfare of young people, it has not been pro-active in reaching out to the community to increase membership or in creating in-house programs for members. Club staff have mentioned that in the years before 1993-94, under the leadership of another administrator, staff members regularly visited schools and other community organizations to "talk up" the club and its activities. More recently, however, recruitment of new members appears to have occurred solely by word of mouth. Kids who attend bring friends; longtime residents, community workers, or teachers mention the club to new families.

The single exception to the complete absence of club outreach activities in the past four years occurred in December of 1995. At the suggestion of Fifth Dimension coordinators, the club and Fifth Dimension then shared the work and expense of sending home a one-page, bilingual "flyer" through local elementary and middle schools. The notice featured the Fifth Dimension and mentioned other club programs. Of over 500 sent, about 20 inquiries resulted.. When the Fifth Dimension's Whittier College faculty coordinator, Don Bremme, suggested a similar step in 1996-97, the club's Director of Programs, Sid Menzes, rejected it. "We really don't want any more kids right now," Menzes explained. "We just don't have the staff to supervise any more than we've got."

Club staff have initiated very few on-going programs for members during the years of the Fifth Dimension's presence. The principal exception has been the annual creation of intramural flag-football and basketball "leagues" in their respective seasons. Periodically, pool, fussball (table-top soccer), or board game "tournaments" are run for an hour or two. There have been two or three club field-trips or other special, one-time-only, events organized by club staff each year. Otherwise, were it not for activities provided by outsiders, a typical afternoon at the club each year has been a required fifteen minutes of homework or free reading in the library-like Learning Resource Center (LRC) followed by cruising among supervised free-play alternatives. The latter have routinely included board or computer games in the LRC; pool, air hockey, etc. in the games room, or gym sports, with an occasion videotaped film.

Budget constraints, small numbers of regular staff and few volunteers, along with staff members' perspectives on their work, probably combine to limit the range of viable in-house programs and reduce initiative for their creation. Be that as it may, it is easy for a visitor infer that the club's primary role is to keep kids (seen by many Anglo community members as potential or actual gang members) off the streets, supervised, and safely occupied.

All the foregoing can help to explain why the club enthusiastically welcomes programs and other opportunities that are offered to it by community groups and individual volunteers. Past Whittier reports have cited some of these. Examples include a "reading club" initiated by an individual volunteer; visits from a local police officer; and a week-long, spring-vacation camp funded by an outside agency; trips to sporting events made possible through donated tickets; and this year's karate demonstration presented by a commercial self-defense school. During 1996-97, only three such programs operated regularly. One was the Fifth Dimension. The second was the Leaders-in-Training program, a program for teenagers funded by the B. C McCabe Foundation of Whittier at several area Boys & Girls Clubs. At Whittier, this program engaged over 20 teens in performing service activities at the club and in the community. The third was a weekly Lapidary Club sponsored by the Whittier Gem and Mineral Society.

With the limited number of in-house and even extramurally sponsored programs, it is easy to see why the Fifth Dimension is highly valued by club personnel. Were it not for the Fifth Dimension, the pre-teens who constitute the daily majority of those in attendance would much of the year have little to do at the club but hang out or play games with one another. With the Fifth Dimension, these children gain educational opportunities, concerted interaction with adults and guided collaborative work with one another, and a variety of special activities created by the Fifth Dimension team: field trips, monthly parties for children who have "transformed" to achieve new Fifth Dimension statuses, and end-of-semester celebrations for all program participants, among others. As one member of the club's board remarked to faculty coordinator Bremme on a recent visit to the club, "Hell, if it weren't for the Fifth Dimension, we wouldn't have any 'program' at all in here for the kids in the afternoon. None."

The Fifth Dimension college students increase the number of adults available in the club to work with children 150 to 200 percent. Moreover, the club staff has consistently remarked on the "consistency and reliability" of the Fifth Dimension program and its college team, contrasting those with the "failure to follow through" of most volunteers or groups promising programs. Staff members have also frequently remarked on the college Wizard's Assistants as "knowledgeable and skilled" in working with children, noting that most volunteers lack those qualities.

In summary, the Fifth Dimension provides the club with a program where there were previously only limited options. From staff members' perspective, furthermore, it is a program that speaks directly and innovatively to the children's recognized need for adult attention and mentor ship and their perceived need for more and better education. Significantly, too, it is a glitzy program --with computers and e-mail, colorful wall murals and special tee shirts, and caring college students-- which the club

can show off and for which it can take credit. Club Executive Director Jerry Perisho and Program Director Sid Menzes treat the Fifth Dimension as a highlight of their club tours for community members and new families, enthusiastically pointing out the one-to-one attention, "computer skills," and "extra work on reading and math" that the program affords.

The Club-Fifth Dimension Interface

In 1996-97 the Whittier Boys & Girls Club continued to be an amenable setting for the Fifth Dimension. As in past years, the club welcomed the program and provided the Fifth Dimension with the same, excellent space as in the past year. The club also supported the Fifth Dimension with expenditures on maintenance (new wiring and ceiling tiles in the Fifth Dimension room), equipment ($400. worth of software, bulletin boards, replacement of a stolen computer memory chip), and services (Fifth Dimension phone lines and other utilities, general cleaning and upkeep). Throughout the year, the club's Education Director again assisted Fifth Dimension student coordinators with various aspects of their work: helping to organize daily homework/reading time and Fifth Dimension sign up, to supervise children, to prepare some Fifth Dimension materials, and to introduce new club members and their parents to the Fifth Dimension program. She continued to play an important role in providing the college team with useful background information on individual children, as well. Cooperation and communication between the club's staff and the Fifth Dimension have always been smooth. Again in 1996-97, the lack of friction was largely accomplished as club staff left all decisions about the Fifth Dimension and related efforts to the team of Whittier College student coordinators and faculty coordinator Don Bremme. At no time in the Mellon-funded project's three years has any club staff member made any suggestion, requested any change, or offered the slightest criticism regarding the program. Rather, they have deferred all matters concerning scheduling, regulation of participation, organizational structure, materials, rules and procedures, and ways of interacting with children exclusively to the college team.

Appalachian State University, Boone, North Carolina

ASU's Fifth Dimension program was sustained locally the first year it was implemented. We used the first two years of the funding to develop more sites. Again, this year, ASU was in a locally sustained mode, their program is institutionalized and has a history. New faculty who enter the college and stay do not remember that ASU never had a Fifth Dimension. Blanton notes that the Fifth Dimension is like all the other programs in the college with one difference: The other programs use the Fifth Dimension as leverage for change. At the same time, the Fifth Dimension acts on the local environment to obtain the ingredients for the "compost" needed in the garden which holds the "seeds" of the project.

Elon College, Burlington YMCA

The staff at the YMCA views the Fifth Dimension as useful primarily as a baby-sitter. It has been a long slow process to get the adults at the YMCA to view the computers as potentially friendly and the games as potentially worthwhile. Catherine King made some progress but it remains to be seen if what she has accomplished will last. Her plan is to recruit students to work at the site, one or two per semester, and to periodically inspect the site herself to see how the computers are being used. King notes ominously: *"I think that some version of the computer activity will be sustained at the YMCA but am hesitant to call it a 5th Dimension."*

Cal State San Marcos, Boys and Girls Club

Schustack sees her site's continuing health as still being very dependent on the involvement of herself as the single PI/implementer. There has been some degree of community uptake of this activity, for example the financial support for the site coordinator. In Schustack's view, the benefits of Fifth Dimension participation is centrally in the adult-child interaction (which is primarily with the undergraduates at her site). Schustack notes: *"I don't see that my host Boys and Girls Club could or would be able to recruit, train, and supervise appropriate adult participants without the University connection."*

Schustack has recruited a colleague who will teach the course next Spring while Schustack is on sabbatical--but this colleague will not pursue Miriam's research interests. She writes: " *In 1994, I was skeptical about the prospects of extensive community uptake. I remain pretty skeptical--I think that there can be greater involvement and responsibility on the part of the community host, but the role of the University partner is only minimally reduced by the increased role of the community partner. I do think that the system functions better with more involvement of the host, but it is not necessarily any easier on the university--just different. I have an increased respect for the*

importance of institutionalization--things are much easier when the university assumes the Fifth Dimension course will be taught, and the Boys and Girls club assumes that the Fifth Dimension program will be offered and also assumes that they will contribute towards its continued functioning".

U.C. San Diego, La Jolla California:

Fifth Dimension, Solana Beach Boys and Girls Club

In sum, after three years, the Club assumed responsibility for hiring a site coordinator, while continuing to see the Fifth Dimension as more "resource" than "responsibility". The BGC has not provided a means to train other staff for back up, to train or recruit future hires, to "channel" for the wizard or to maintain the web page. They still have not taken responsibility for securing their own internet access or electronic mail service.

Cole notes: *"Our site is unique in the degree to which the local sites supports it monetarily. It is at the high end of systems that provide children with a myriad of in-your-face alternatives to the 5thD, and perhaps unique in dealing effectively with diversity of kids who differ from each other with respect to academic abilities. It is uniquely positioned among Solana Beach sites because the Club that sponsors the 5thD in the Club building also provides umbrella support for other 5thD's in the community through its participation in the Coalition".*

La Clase Mágica, Eden Gardens, California

LCM has demostrated that it has become an integral part of the community of Eden Gardens. LCM is no longer just an afterschool program but a community project that serves the needs of the community by providing service to Headstart kids, elementary kids, teenagers, and the adult community. The program is no longer a project coming into the community, but a project that continues to exist because the community wants it to remain and continue growing.

U.C. Santa Barbara, Club Proteo, Boys and Girls Club Goleta, CA

The ability of Club Proteo to sustain itself has grown over the past three years, though it is far from secure. The Boys & Girls Club is committed to support Club Proteo, but to date is only able to guarantee funding of the Club Proteo Coordinator on a quarterly basis. The bottom line is that when the funding for the coordinator has been needed it has somehow always been procured. During the 1996-97 year, the Club Coordinator funding was paid one-third by

the Boys & Girls Club and two-thirds by the UC Links Project. The Boys & Girls Club is now embarked on proposal development to secure three years funding for the coordinator along with funding for a major renovation of the computer facilities for the Club.

UCSB faculty and academic support for Club Proteo on an ongoing basis seems secure except for support for a TA. Ed 124 now exists as a regular academic offering of the Graduate School of Education. And two faculty members are now committed to teach the course annually, with a third faculty member nearing a commitment to join the faculty team in the coming year. One supportive development has been that experience among undergraduate and graduate students in participating in the Club has grown. This has not only facilitated our efficiency, it has also strengthened the versatility of staff who can serve the Club.

Duran offers the following quote, taken from a fund raising pamphlet for the Santa Barbara County Boys & Girls Club as a concluding note for the UCSB report on Implementation. Duran notes : "It highlights how our efforts link back to having Club Proteo achieve the long-range objectives of 5th Dimension Club." The quote is from Sal Rodriguez, the former Director of the Goleta Boys & Girls Club and now the County-wide director. It is a good index of the commitment Rodriguez has shown for programs like Club Proteo. Rodriguez remarked: "The first time I heard about college was at the Boys Club."

Whittier College, Whittier, CA

In each of the project's three years, several formal meetings have been held with club staff members to solicit their ideas for program improvement and to encourage their input regarding changes the college team is considering. The staff members consistently expressed pleasure with the way things were going and responded "Sounds good! Whatever you want" to proposed innovations. Every year, faculty coordinator Bremme has routinely been on site three days a week. In addition to exchanging information on upcoming events and the progress or difficulties of individual kids with the club's Education Director, Program Director, Executive Director, and other staff, Bremme and student coordinators have regularly solicited their suggestions and concerns about the program, as well as their responses to tentative plans. On each occasion, club staff voiced the view that "everything's fine" or offered a small tip regarding a proposed plan, e. g., "I think you'd get more back if you gave out the parent permission slips for the field trip at the beginning of the week." There have been only two exceptions to the foregoing generalizations. First, the Education Director has occasionally volunteered a comment on the style or skill with which individual college students interact with children. Second, the Program Director has presented

his views on matters that involve the club's physical plant, although in so doing he consistently works to facilitate the college team's goals.

All in all, one might characterize the club as an enthusiastic but deferential host of the Fifth Dimension program, offering it modest support. It's manifest lack of interest in shaping the program can be seen as an instance of the club's general operating style, described earlier.

Part of the club staff's deference to the college team's decisions and wishes, as well as of the staff's consistently voiced enthusiasm for the program, almost certainly reflects genuine appreciation of the program and of the resources and energy it has brought to the club. Some of the deference and unqualified positive evaluation may also reflect a desire not to disaffect a goose that has lain so many golden eggs. Meanwhile, the Fifth Dimension has evolved as -- and will almost certainly continue to be-- largely the creature of Whittier College.

UC Links Program

Charles Underwood, and Lora Taub
University of California, Office of the President , Berkeley, CA

Today UC Links represents a statewide network of university-community-school partnerships in computer-based after-school educational activities for K-12 children throughout California. Since early 1996, a network of over 25 university faculty, together with university and community support, has established a total of 15 sites serving over 700 K-12 students. In Fall 1996 the project engaged approximately 125 undergraduates and 25 graduate students from 9 UC and 4 CSU campuses in field-based coursework and research related to UC Links. [See Table 1]

This statewide faculty initiative thus serves to integrate the University's three-fold mission of research, teaching, and community service. It does so by providing K-12 youth with access to new instructional technologies after school, while affording both academic and community service opportunities to university faculty and students. Through informal interactions with undergraduates, K-12 youth receive intensive learning experiences in computer-based math, science, and basic literacy activities. The undergraduates, in turn, develop research skills as ethnographers of children's computer and learning practices while helping to facilitate a pipeline to higher education for these children. Participating faculty pursue research in the areas of culture, language and learning through instructional technology and carry out applied evaluative research on the benefits derived from participation in this community-based after-school program.

In less than a year, UC Links has grown from a total of three sites at two campuses (UCSD and UCSB) to 15 sites at all nine UC campuses. In Fall 1995, a core group of faculty and staff from UCSD and UCOP, including Professor Michael Cole (UCSD, Psychology/Communication), Professor Olga Vasquez (UCSD, Communication), Charles Underwood (UCOP), and Scott Woodbridge (UCSD-LCHC), had visited the nine campuses to ascertain faculty and staff interest in developing UC Links system-wide. They encountered enthusiasm among faculty and staff throughout the system. A systemwide faculty network was thus established and in February participants drafted a multi-campus proposal, including site development proposals for each campus. This multi-campus proposal was submitted to UC President Atkinson, who agreed to provide seed funding for initial project development. This funding helped the faculty work collaboratively with local community and school representatives to create the infrastructure for the 15 existing sites. The process involved:

- allocating space for after-school activities in school- and community-based sites;

- securing essential computer hardware and software for the program's activities;
- instituting an undergraduate practicum course at each campus, to train UC students to work with K-12 youth from diverse backgrounds and to feed them into the after-school activities as mentors and tutors;
- creating the physical and collaborative mechanisms for carrying out the ongoing program activities.

To help coordinate these efforts, in August 1996 a statewide UC Links office was created at the Graduate School of Education at UCB. This office supports site development and networking throughout the UC Links system, provides technical assistance, and is primarily responsible for securing external support.

This report outlines the progress made in the past year by describing the development to date at each campus of the UC Links system.

Campus-by-Campus Site Development

UC San Diego (Part I)

The statewide UC Links model of after-school educational activities based on new instructional technologies had its origins in the 5th Dimension program, an after-school activity which the UC San Diego campus started ten years ago at the Solana Beach Boys and Girls Club. The site first expanded to a second site at St. Leo's Catholic Mission (the La Clase Mágica site), where the program was culturally adapted to serve a largely Latino student population. In the past year, UC Links has expanded further to a third site, to make a total of three UC Links settings now in San Diego: St. Leo's Catholic Mission (La Clase Mágica), Skyline Elementary School (the Magical Dimension), and the Solana Beach Boys and Girls Club (the 5th Dimension).

The 5th Dimension, at the Solana Beach Boys and Girls Club (the founding UC Links site) serves approximately 90-100 children between the ages of 6-12 each year (the site began in 1987). Many come from single-parent homes or reside with each parent alternately in this primarily Anglo middle-class community. At the B&G Club, children have a range of choices for their after school activities—the 5th Dimension is a long-standing favorite.

La Clase Magica (LCM) is a bilingual/bicultural adaptation of the 5th Dimension that provides culturally relevant activities for Spanish/English bilingual elementary school children. LCM runs three afternoons per week and serves Head Start children two days per week. Approximately 20 children attend site each day of operation, and the site serves approximately 60 children per quarter, ranging from pre-schoolers to high-schoolers. LCM parents are also encouraged to participate in weekly adult computer classes at site.

The Magical Dimension targets children identified by their school teachers as needing additional instructional time. The site, which opened at Skyline Elementary School in December 1995, serves elementary school children in grades K-6 in a computer lab at the school. Operating four times per week, the Magical Dimension served roughly 46 children between December 1995 and June 1996, climbing to over 75 children at present.

The strength of UC Links at UCSD stems from the tripartite commitment among three academic departments -- Psychology, Communication and the Human Development Program -- to provide course resources. Professor Michael Cole (Psychology/ Communication), Professor Olga Vasquez (Communication), and Professor Margaret Gallego (Communication) teach courses related to the 5thD and La Clase Magica. Campus resources also support teaching and research assistants. Institutionalization of the program

has been further assisted by the Teacher Education Program and Thurgood Marshall College's service learning requirement, and the new Human Development major. In 1996, more than 100 UCSD undergraduates participated in the UC Links project. UC Links serves as a research focus for several graduate students whose research spans issues of language and culture, evaluation, program dissemination and sustainability. Community support has grown steadily,: to raise money for the project, collaborators have formed the Solana Beach Coalition for Community Education. In the next year, project participants will continue to work to institutionalize and coordinate undergraduate course, to concentrate on efforts to bring Anglo and Mexicano communities into more productive contact, and to build the educational pipeline with special attention to pre-school and junior/senior high school students from a wide variety of backgrounds. This latter effort is currently underway with teachers and administrators at two local high schools, Torrey Pines and Sunset, and involves learning specialists from the San Diego Housing Commission (HUD).. The sites are also building connections with Healthy Start and with faculty and students in UCSD's School of Medicine, in order to develop a range of health and social services for K-12 students at local UC Links sites.

UC San Diego (Part II)

San Diego Links: A Proven System of University-Community Cooperation in Educational Development

Michael Cole and Katherine Brown,, LCHC

This is the executive summary of a project to provide, simultaneously, improved education for a wide range of undergraduates in San Diego County institutions of higher learning, to increase the number of educationally disadvantaged California children and youth eligible for higher education, to provide a life-sized model of how universities can work together with local communities, and to provide a unique medium for research on how to enrich the health and education of area children.

This program is based upon the proven, positive experience of UCSD and its sister campuses involved in the UCLINKS project. Each node of UCLINKS consists of a university side and a community site which, together, provide health services and enriched educational experiences for K-12 children and improved education for undergraduate students. The university side is a laboratory course that requires a heavy dose of theory and research methods, supervised work with children, and a lot of writing. University faculty do research on the effectiveness of the systems and help in design changes. The community side provides the laboratory facilities for the university in the form of eager children, space, hardware, software, and a supervisor to work with the students, and professor from the University. The precise content of the activities at the community site and the precise form of the course at the university (college) site are matters that differ somewhat according to local possibilities, but all sites share a common concern with after school hours, voluntary participation of children, a mixture of education with play, intergenerational learning, and a bias toward heavy involvement with new technologies. while serving as a medium for research on human development. The current proposal is to invite SDSU and USD to participate with UCSD in a single coordinated entity, SDLINKS, modeled on UCLINKS, which has full access to, and involvement in UCLINKS to the degree desired by local members.

<u>San Diego State University's Role</u>

SDSU's team will be led by Kathleen Jones, Associate Dean of Arts and Letters and Elsie Begler, director of SDSU's International Studies Teacher Education

Program (ISTEP). They are planning an undergraduate course at San Diego State university that will introduce students to the UCLINKS model and its core concepts. They will involve the undergraduates in tailoring model to the needs of a new target population of adults, elementary school children and teens in Mid City.

The University of San Diego's Role

USD has become a leader in the design of undergraduate service learning courses, which provides a strong foundation for their participation. The initial USD effort will be led by Steven Gelb, whose course on Theory and Practice in Early Childhood Education will serve the undergraduates, while Linda Vista Neighborhood House Head Start Center will serve as the community site.

UCSD's Role

UC San Diego's role is based upon a collaboration between the Division of Social Sciences, the School of Medicine and the Laboratory of Comparative Human Cognition, source of the UCLINKS project.
The Division of Social Sciences houses the three departments and programs that already provide the faculty member and t.a. support for the undergraduate course throughout the year in quarterly rotation: the Human Development Program; the Psychology Department, and the Communication Department.

UCSD School of Medicine is involved in helping to create health communities and educate the next generation of physicians to understand the requirements for implementing these concepts. The UCSD Division of Community Pediatrics is composed of pediatricians, psychologists, nutritionists, physical education specialists, health educators, biostatisticians, nurse practitioners, and social scientists with demonstrated experience designing and implementing culturally-competent programs targeting under served and at-risk populations. It is within this context that Pediatrics has been working with the community of Mid City to develop innovative programming for local youth and families.

The Laboratory of Comparative Human Cognition (LCHC)

LCHC will provide support for the initial implementations at the other institutions. This support will include a trained person to co-teach the course at SDSU in the first semester and another trained person to help evolve the programs at the Mid-City and Linda Vista sites. It will also provide ongoing evaluation of these efforts.

Implementing Next Steps

With respect to the bare essentials of start-up, almost all of the pieces are in place. However, if the program is going to work, some minimal additional resources will be necessary in the short-run for units outside of the social sciences at UCSD, and a systematic program for scaling up the effort needs to be initiated.

As a first step, we believe that UCSD must take the initiative to get induce the leaders of our sister institutions to provide some of the same resources that our campus already is already providing the UCLINKS effort. Our colleagues at SDSU and USD require release time for faculty to teach the associated course, which perforce runs all year long. Teaching assistant support for this kind of work is also indispensable.

Our colleagues in the UCSD Medical school release time to get their part of this effort off the ground. Although everything is in place for start up, an important planning component will be to create a process for sustaining future growth. Elaboration of the sites, accumulation of hardware and software to keep pace with user needs; increasing the numbers of classes and sites and continuing ongoing research activities need to be part of an orderly process of future expansion.

We believe that this program is going forward in a way that will allow UCSD to provide leadership for an unprecedented level of inter-segmental cooperation between core educational and community institutions. It will be a model not only for the state, but for the country, at a time when the kinds of activities that we are proposing are especially needed, and our political leaders are offering almost nothing in the way of concrete proposals for dealing with those needs.

UC Santa Barbara

Club Proteo was created three years ago by faculty, staff and students at UCSB, a local adaptation of UCSD's 5th Dimension. In the last three years, the sustained growth of Club Proteo visibly demonstrates the transportability of the 5th Dimension model of after-school computer-based activity. Club Proteo helps children use technology and computers and the social network of the club to explore issues of community and culture. Located in the Goleta Boys and Girls Club, Club Proteo transforms the traditional 5thD maze (a cultural artifact designed to promote children's incentive to progress through the system) into an artifact whose rooms represent community institutions for children to explore 'virtually' and in person. During the Fall quarter, Club Proteo took a field trip to a nearby car dealership to explore the use of computers at work; later children continued their explorations on the World Wide Web site of the auto manufacturer. Other community field trips include a local Spanish language newspaper office and printing facility where children will learn how computers are used to produce the newspaper, and how they can use computers at the Club Proteo site to create their own newsletter. Club Proteo thus assists Mexicano and Latino children of immigrant, low-income families in strengthening their understanding of and connections with the surrounding community of Goleta.

Between 20-30 children are served by Club Proteo, which runs every weekday between 3-5:30. Professor Richard Duran (Education) and Professor Betsy Brenner (Education) teach the UC Links related undergraduate courses which combine coursework on child development with fieldwork with children at Club Proteo. Ten undergraduates enrolled in the course last quarter. Professor Duran approaches Club Proteo as an arena of discovery where children use computers to conduct collaborative research that produces meaningful information about their present and future lives. Career exploration research, newsletter production, and community investigation are some of the dynamic learning activities Professor Duran is encouraging at Club Proteo. Professor Brenner is using the social structure of Club Proteo to create a community of mathematics learners, similarly emphasizing hands-on projects and experiments that stimulate math and science learning.

Further University support comes from Dr. Yonie Harris, Dean of Students, and Raymond Huerta, Affirmative Action Officer, who serve as project advisors. The UC Linguistic Minority Research Institute (LMRI) serves as an ongoing institutional resource for the project. The UCSB Office of Student Affairs has also committed research assistant support for the current academic year. In the coming year, the priority is to consolidate resources to serve more students at the Boys and Girls Club. Participants are also planning to start up a new site at the UCSB community center in Isla Vista.

UC Irvine

The Kosmic Dimension is the local version of UC Links created through a collaboration between UC Irvine, Pio Pico Elementary School, and the Boys and Girls Club of Santa Ana. More than a cross-walk joins these two community institutions, located across the street from each other. Every school day, between 25 and 40 school children cross the street and enter the Kosmic Dimension, an arena of playful learning activities built upon the partnership between school teachers, the principal, the club director and staff, and faculty, researchers and students from UCI. The Kosmic Dimension serves low-income K-8 children principally from Mexico and El Salvador. The activity focuses on enhancing the children's English literacy, technology and social skills. The site runs five days a week, three hours per day. Children are joined in their journey through the Kosmic Dimension by UCI undergraduates enrolled in the Practicum in After-School Learning and Inquiry. In Fall 1996, 13 undergraduates spent between 3-6 hours at site per week. Winter quarter has seen undergraduate enrollment rise to 53, and a second Santa Ana boys and Girls Club site was added at Hoover Elementary School. As this site opens, the project will be in a position to benefit an additional 90 children. The Kosmic Dimension also provides opportunities for middle school students to participate as mentors to younger children. Between 2-5 middle school students served as mentors, or 'cyberguides' in the Fall, experiencing both the meaningful interactions with undergraduate peers and the positive benefits of serving as role models themselves to younger children.

The "Practicum in After-School Learning and Inquiry" course is taught by Professor Suzanne Charlton (Education) and focuses on issues of language and culture as mediators of children's learning, home, school, community boundaries, methods of fieldwork, and uses of technology in after-school learning. The project involves several faculty engaged in research examining after-school programs, their implementation, and their role in fostering the success of minority and low-income students. Dennis Evans (Education), Suzanne Charlton (Education), Joan Bissell (Education), Kimberly Burge (Education), Luis Miron (Chair, Education), and others are exploring UC Links and the interface between schools and community institutions. UC Links is part of the University Community Action Network (UCAN), an outreach project linking several research groups. Support for UC Links has come from Professor Miron, Chair of Education, who has provided resources to support two TAs (25%), one tutor (40%), one instructor, technical assistance, and importantly, one on-site coordinator. Judy Magsaysay, the principal of Pio Pico, has committed three computers and software, and John Brewster of the Boys and Girls Club provides seven computers, additional software, technical assistance and art project assistance. In the next year, project participants intend to institutionalize the Kosmic Dimension at the Boys and Girls Club sites. In just one year, the Kosmic Dimension has made a

tremendous impact on after-school care in Orange County: the research team has been asked to assist 22 sites in Anaheim City begin extended day care programs based loosely on the UC Links model, and inquiries have come in regarding possible sites in other nearby cities and districts.

UC Los Angeles

At UCLA, UC Links is a collaboration between the Departments of Education and Psychology, Chicano Studies, and Moffett Elementary School. The site is supported by an extended team which includes the principal, teachers, members of the community, and researchers, graduate and undergraduate students from UCLA. After just one quarter, UC Links is drawing wide attention--from school children and their siblings who wait in the hall for site to begin, from teachers, and from other institutions who want to collaborate in creating another UC Links site. A special feature of UC Links at UCLA is the distance learning focus shared with UCSD. During fall quarter, faculty and undergraduates on both campuses participated in collaborative discussions exploring the strong commonalties and the diversity of experiences at site. Courses on both campuses followed parallel syllabi organized around issues of technology and diversity. This quarter, the distance-learning collaboration is framed by issues of gender.

Professor Kris Gutierrez (Graduate School of Education and Information Studies) has directed the UCLA effort, with support from Professor Sandro Duranti (Anthropology) and Professor Elinor Ochs (Applied Linguistics). Lynda Stone, a postdoctoral researcher from Education and Information Studies, currently teaches the undergraduate courses. The site also provides learning and research opportunities to graduate students exploring ethnographic approaches to issues of language and learning. UC Links receives significant resources from the UCLA campus. Resources from the Chancellor's office provide for an RA. The Dean of GSE & IS provides funds for a TA. Chicano Studies contributes funds, office space and resources, in addition to video equipment for the project. Assistance has also come from the distance-learning specialist at UCLA. Support from the school and community has been generous. The principal of Moffett has provided technological resources, including 6 new CD rom drives, and support for supplies and treats for the children. In the following year, focus will remain on consolidating UC Links at Moffett School, further institutionalizing the undergraduate course at UCLA, developing distance education innovations, and pursuing expansion to new school sites whose staff have already demonstrated considerable interest in collaborating on UC Links.

UC Riverside

Faculty and students at UC Riverside have adapted the UC Links model to foreground connections to the local community in a program called the Riverside Trolley. Thematically organized around a trolley line similar to the historic transportation system that ran through the City at the turn of the century, computer activities in the Riverside Trolley actively foster children's understanding of and connections with their community. Each 'station' along the line represents an important place in the community: the local ewspaper office, the botanical gardens, the university, the child's home. Computer activities promote exploration of these sites. At the newspaper office, students learn practices of news gathering and reporting, and write articles of interest to their peers. Fifty sixth-grade students participate in the Riverside Trolley, which is housed in the library of Highland Elementary School. The Riverside Trolley is open two afternoons a week and serves 25 children per day. Participating children are from lower to lower-middle income families of diverse linguistic and ethnic backgrounds. They were nominated by their teachers and mirror the gender, ethnic and socioeconomic diversity of the school. Highland School has contributed part of its library to the UC Links site, along with various material supplies, and two members of the staff play leading roles in the project. Russ Plewe, a 6th grade teacher at Highland provides on-site computer support and has been essential to the process of designing computer activities, networking the computers, supervising hardware upgrades, and connecting to the internet. David Hubbard, the Categorical Program Specialist at Highland, serves as site coordinator.

UCR faculty members involved in the project are Professor Mary Gauvain (Psychology), Professor Keith Widaman (Psychology), Professor Sharon Borthwick-Duffy (Education), and Professor Richard Newman (Education). Professor Carlos Velez-Ibanez (Dean, College of Humanities, Arts, and Social Sciences) and Professor Irving Hendrick (Dean, School of Education) also have provided support for the site. The undergraduate field laboratory course is cross-listed in Psychology, Education, and the Program in Human Development. Mara Welsh, a fifth year graduate student in Psychology, is the teaching assistant for the 1996-97 year. Nineteen undergraduates were enrolled in the first quarter and served as mentors and tutors for children at site and conducted their own field-based research. Faculty are pursuing four central research issues: 1) the influence of social interactional processes on children's learning experiences; 2) the program's influence on individual children's analytic skills, literacy, communication, and school performance; 3) the effect of intensive interactional experiences on children's beliefs and attitudes towards learning; and 4) the impact of participation in UC Links on children's social behavior and adjustment at school and home. Prospects for future development include creating a distance education component using telecommunications and techniques of co-teaching with faculty at other UC

and CSU campuses. Faculty are looking ahead to opening the program up to fourth and fifth graders at Highland and expanding to a second site at Hyatt School in Riverside. UCR faculty are also assisting CSU San Bernardino and Pitzer College to establish UC Links programs.

UC Davis / CSU Fresno

In its brief existence, Fresno UC Links has helped to construct an unbroken educational pipeline for K-12 students in California's Central Valley. There, UC Links reaches 20 K-3 students, 160 4th-8th graders, and 20 9th-12th graders. UC Links responds to a tremendous community need for after-school programming, and the number of voluntary participants indicates that it is the 'best game going' in the after-school hours for many local youth. The program is produced through an extensive inter-institutional partnership between Carver Academy, Edison/Computech, the King Engineering Center, UC Davis, and CSU Fresno. UC Links in Fresno provides special opportunities for children to develop expertise with computer technologies (Powerpoint is a favorite). Many children have progressed so far they have become 'peer tutors.' In a recent program demonstration, Arrby, a 6th grader at Carver Elementary School, led a Powerpoint presentation of UC Links before an assembly of his peers, teachers, parents, the school principal, and community representatives. While his classmates took photos of the audience, Arbby transferred them to the computer. In seconds they were projected onto a large screen at the front of the auditorium. The presentation showed how UC Links helps children discover the uses of new technologies to communicate their ideas and interests. High school participants from Edison/Computech get involved as 'apprentice tutors,' and mentor younger children while they are themselves benefiting from positive mentoring relationships with undergraduates.

UC Links also serves as a site of instruction and development for CSUF undergraduates enrolled in Students for Community Service (three were enrolled last Fall), currently taught by Professor Robert DeVillar. Tutoring in UC Links helps undergraduates develop an understanding of the needs of at-risk students from culturally diverse backgrounds. The project also serves as a basis for teaching parents about computers, as well as professional development and training in instructional technology for school staff. In research related to UC Links, Professor DeVillar, Dr. Dennis Sayers, and colleagues at the University of California Educational Research Center (UCERC) are focusing on the description and documentation of academic development, technical proficiency, and language development through formal and informal assessments. They are also working to strengthen the inter-institutional relationships between UCERC and the school-and community-based collaborators. In 1997, UC Links will expand into Carver's new Science Workshop/Studio and develop computer activities focused on science learning. A distance-learning component linking Fresno children with peers in Puerto Rico is also planned.

accounts for use by the high school participants. The school sites contribute computer equipment and materials already available for student use.

UC Berkeley

UC Links participates in the Berkeley Pledge initiative at two elementary school sites in the East Bay. At Franklin Elementary School in Berkeley and Harding Elementary School in El Cerrito, UC Links serves kindergarten and first-grade children from economically disadvantaged families. Forty children attend the program; twenty at each site, two afternoons a week. Within the UC Links statewide system, this program is unique in its concentration on kindergarten and first grade children. By supporting early mathematics and literacy achievement of economically disadvantaged young children, UC Links at Berkeley establishes an early vital level of the educational pipeline. UC Links activities at UC Berkeley have been developed by Dr. Alice Klein (Institute of Human Development) and Professor Prentice Starkey (Education). Professor Starkey teaches the undergraduate course in human development which channels undergraduates into the UC Links sites as tutors. UC Links thus provides important opportunities for undergraduates to participate in a community-based service learning activity and supports career development for future teachers which emphasizes understanding and experience working in multicultural learning environments. Fourteen undergraduates enrolled in the course Fall 1996, and pre-enrollment figures for the current quarter are up to 25. Several students from last semester's course will continue to tutor the children in the program for field experience credit.

The UC Links project builds on Dr. Klein's and Professor Starkey's recently completed research and demonstration project, the Head Start Family Math project. Through UC Links activities, they will continue to research how to develop collaborations between parents and teachers which support sustained parental involvement during the school years, as well as a service component to make it happen for the targeted children and their parents. For next year, Dr. Klein and Professor Starkey have proposed to develop UC Links into an Interactive University pilot project targeting pre-K-3 students in Berkeley Pledge elementary schools. This project aims to enhance economically disadvantaged children's early mathematics achievement by effecting an integration of teacher-guided classroom mathematics instruction with computer-assisted instruction. The next year may also see the expansion of UC Links to other new sites in East Bay schools and community institutions which have expressed deep interest in developing the program for the children they serve.

Conclusion

In its brief history as a statewide network of partnerships in after-school computer-based educational activity, UC Links has made a vital contribution to promoting the University's involvement in innovative instructional technology, after-school care for K-12 youth, research, teaching, and undergraduate distance learning.

Technology

At a time of rapid advances in computer-based technologies, the focus on instructional technology for K-12 youth is key to their eligibility and preparedness not only for higher education, but also for the 21st Century workplace. These technologies are especially important for California's educationally disadvantaged youth--students with multiple barriers to their educational development. UC Links engages University faculty, staff and students with local school and community leaders in the attempt to ensure that no one is left behind--that all California youth have access to these new technologies. In one year of planning and site development activities, the UC Links model has grown into a system that includes every UC campus and several CSU campuses. In this sense, UC Links represents a critical part of the human and technical infrastructure for carrying out the University's role in extending instructional technologies to K-12 youth from a wide variety of cultural, linguistic, and economic backgrounds.

After-school Care

UC Links also represents an effort to respond to the growing need for quality after-school care for K-12 youth. Through after-school activities that link learning and play, UC Links promotes children's academic and social development during these crucial hours between school and home. Importantly, each local UC Links site is adapted to the unique needs of the community's children and their families.

Research

UC Links is a crucial research initiative central to the University's role in supporting K-12 education, both in school and after school. UC and CSU faculty statewide are pursuing both basic and applied cross-disciplinary research relevant to a range of issues influencing the educational preparedness of K-12 youth. Research foci include:

- pedagogy and technology: what works and what does not work in instructional practice and educational software;
- human-computer interaction among young learners: the socio-centric approach to instructional technology;
- appropriate methods and strategies for evaluating after-school educational and other outreach activities;

- the sustainability of inter-institutional collaborative programs in education;
- cultural and linguistic dimensions of formal and informal instructional strategies.

Teaching

UC Links provides UC and CSU undergraduates with rigorous coursework and field training in the areas of child development, language, culture and cognition. Demand for the course was instantaneous throughout the system. The institutionalization of the UC Links practicum course connected to each UC campus enables the University to integrate its three-fold mission of research, teaching, and community service, while fulfilling its role in support of K-12 education in California.

Distance Learning

UC Links is on the forefront of creating a model of distance learning activities for undergraduate education. For the academic year 1996-97, the practicum courses at UCLA, UCSD, and UCD/CSUF are collaborating in exploring innovative uses of videoconferencing technology. The videoconferences provide opportunities for undergraduates at these campuses to interact on shared site experiences and a common set of readings. UC Links is thus providing a new alternative to the one-way transmission that has typically characterized distance-learning efforts. Lectures are kept to a minimum in these videoconferences foregrounding student participation.

Future Plans

In the years ahead, UC Links will consolidate its efforts at already existing sites, while expanding to new sites throughout the state. Many schools and communities throughout the state have already made inquiries about developing UC Links sites. UC Links is currently taking on international dimensions, with sites starting up in Mexico, Sweden, and elsewhere. The potential among university and K-12 faculty and students for research and teaching exchanges between sites both statewide and internationally is rapidly growing. In a single year, UC Links has moved from a very localized activity to an extensive network of university, school, and community participants engaged jointly in ongoing research, teaching, and community service efforts.

The Oak Flats High School (OFHS) 5thD Club, NSW, Australia,
Irina Verenikina, Institute of Psychology RAS,
and visiting fellow at University of Wollongong, Australia

Prehistory

When I moved to Australia my original idea was to try to establish the 5thD for aboriginal children. In July 1996 I contacted Margaret Valadian, Head of Indigenous Education, Development and Research Center, at University of Wollongong. I gave her descriptions of the 5th Dimension program, video and other materials and she liked the idea. Then she organized a meeting with the Minister of Education of NSW and I made a presentation at the Ministry in front of the group of Minister's advisers and assistants. They showed a great interest and we were promised financial support. We wrote a proposal but unfortunately didn't get the financial support for some political reasons around "indigenous issues".

Nontheless, Valadian put the Verenikina in touch with Oak Flats High School administrators who turned to be very enthusiastic about having the 5thD site at their place.

Principal Graham Wagener and Deputy-Principal Greg Peterson (Oak Flat High School) and Principal of the next door Baralang Primary School (BPS) John Currey showed great interest when I made presentations of the 5thD program at the school (August and November 1996). Deputy Principal Greg Peterson was interested in making the 5thD work as a part of his Master degree thesis at Educational Department, Wollongong University. Graham Wagener and John Currey were interested to use the 5th D program as a mean to strengthen liaisons between OFHS and BPS. So they decided to give it a go without financial support counting on the school resources and my volunteer help.

Preparation of Materials for the Site.

Eight boys from 9-11 grades at high School (14-16 years old) who are members of OFHS computer club, have helped us to install games, to settle a system for writing and even to produce task/adventure cards. Now they are helping us during the sessions as Wizard Assistants.(we didn't have that time any undergraduate students from the University).

We organized the space for the 5thD site in the OFHS IBM class. Greg had arranged for the wooden Maze to be built. Together we produced Constitution, Rules and other artifacts to put on the wall in the 5thD room (we used LCHC guide and ASU materials as the base of course). There were

several games at OFHS for teaching mathematics, physics and we put them into the 5thD maze. For some of them we had task/adventure cards from LCHC and ASU . They are: Ancient Empires, Kid Pix, , Operation Neptune Paintbrush, Tetris, Where in the USA is Carmen San Diego?, Where in the World is Carmen San Diego? Where in the space is Carmen San Diego and we used task cards for, Netscape/WWWSites. We then produced task cards for few games we had at school but didn't have task cards. We (me and Greg Peterson) worked on this with high school students. I found myself working with high school students in zo-ped: I couldn't produce task cards by my own because I didn't know how to play games and I couldn't be bothered to play them to learn. The high school students knew how to play game and I had a bit of idea how to produce task cards, and as a result of our collaboration we got couple of few task cards which still need more thought to put in, but at least we had more or less enough games in the maze to be able to start. We managed to fill two thirds of the Maze for the 1st session, and later we filled all the rooms.

Site description

The site started at April 24. The sessions were Thursdays, from 3:10 till 5:00 p.m. once a week. There were 20 kids there, 5 from grade 7 OFHS (12 years olds, with retarded development) and others are from the next door Balarang Primary School (10 years olds). There are 6 girls and 14 boys. The way to invite kids was the following. The Principal of Balarang Primary School announced about the 5thD and ask parents and kids to think who would like to participate. There were plenty of them who showed an interest and they selected 15 and put others on a waiting list. So on one hand it was a kind of selection of kids, but on another hand the participation is voluntary (kids and parents are told that nobody has to participate and everyone could leave if they don't want to participate). One 12 years old girl has already left, she said it was boring for her, but now her friend says that she is thinking about coming back :-). Children and their parents are pretty happy with the 5thD site. Almost all children already settle a nice relationships with the Wizard.

At our site we don't have undergraduate students from the University to spend time with kids and write fieldnotes, but we manage to do it with high school students. The high school students need to be motivated themselves, and they do not sit with the children all the time - the children come to the high schoolers with specific requests. But the students helpful - they are looking after the software, they visit the 5thD Web site through the Doorway, they got in touch with Rick Smith at UCSD, and they have pictures of kids from our site and are prepared to put them on the 5thD web site.

On 29 of May, 1997 I gave a presentation to the Educational Department of Wollongong University about Vygotskian psychology and the 5th Dimension program. I agreed with lecturers at the Department that next

semester which is starting July 21, we would be able to have students from there to come to the site. They are going to be students who are taking the course of psychology and they'll do the practical work at our site instead of one of the assignments.

The Fifth Dimension Projects: Promoting Education, Research, and Community service: A proposal for Karlskrona and Ronneby, Sweden

Berthel Sutter, University of Karlskrona/Ronneby, Sweden
Department of Computer Science and Business Administration

with Michael Cole and Katherine Brown, Lab of Comparative Human Cognition

This document was generated during the course of Berthel Sutter's weeklong visit to the L.C.H.C. in late January, 1997, and is intended to outline the current state of Swedish-American efforts to collaborate and to contribute to the propagation of a new international phase of development of the model systems of afterschool activity (known as the Fifth Dimension).

The University of Karlskrona/Ronneby has, like all Swedish universities has the tasks of conducting research and organizing educational training. In addition, there is a third task: to contribute to the local and regional development of society. In our individual and joint projects, our faculty members and project staff strive to accomplish all three tasks and to make them mutually constructive.

A number of faculty members at Karlskrona think that The Fifth Dimension project (Cole, 1996a, 1996b, 1995) stands as a compelling example of this triangulated approach to human development and the use of computer and networking technologies to enhance teaching and learning in both the home and in the community.

Education

In the Master of Education program "People, Computers and Work" (MDA is the Swedish acronym), undergraduates will participate in the Fifth Dimension mainly through three courses that run throughout the calendar year: "Computers and learning" (20 weeks), "Human Computer interaction" (10 weeks), and "Participatory Design" (10 weeks). Undergraduates will be required to work in to-be-designated field sites, to write extensive field notes, and to reflect on the relation between education and technology. The undergraduates will also help children from several age groups (elementary school, middle school and early teenagers) use artifacts as tools for learning, and they will design high and low tech artifacts together with the kids and the other participants in the Fifth Dimension sites.

Research

The MDA program is focusing on, first, the use of technology, especially computers and other IT artifacts, and, second, on use-informed design. The faculty members of the MDA research group have been active for several years in studies of communication technologies that support physician's cooperative work and the use of videoconferencing across geographic locations. The faculty members have conducted several research projects on technologies of this sort, influenced heavily by the work of Lucy Suchman and her colleagues at Xerox PARC. One focus on the MDA work with physicians has been on how technology can be used to support joint discussion of simulcast videotape (of x-ray images of coronary activity) allowing physicians to participate in necessary consultation and exchange without traveling. This group has developed an extensive range of theoretical and methodological tools in their analyses over the past decade. This has prepared them for the collection, exchange and analysis of their Fifth D linked project data without delay as they begin this work.

Community Service

Some brief comments on the background and suitability of Ronneby as a site for multilevel collaboration are necessary to provide information of how a Fifth Dimension inspired project may be beneficial to the local and regional community of Ronneby.

Ronneby is a town of thirty thousand people, and there are one hundred fifty thousand in the county. There is an ongoing transformation of the economy with the degeneration of the old industrial/manufacturing base and significant displacement, economic stress and concomitant social and developmental problems in the population. Unemployment is very high, especially among those in their teens and early twenties. For example, the displacement of metallurgic workers alone amounts to 18% in this sector.

At the same time, there has been a great deal of national interest in Ronneby as a site for studying the requirements for regeneration of local economies and communities, and as a resource center for people in the region. The municipality of Ronneby has started a "2003" site, (a ten year dedicated investment in transforming the society largely by help of Advanced Technology). Ronneby is recognized nationally for the promise it shows as a hub for local innovations in internet and advanced technology uses for daily work, school and home life activities of the members the community.

The Soft Center (one of the science parks in Sweden that became a famous example of Scandinavian hi-tech design initiatives in the last decade) is located in Ronneby, attached physically to the University, and is in fact one of the most successful in Sweden.

The university bridges the towns of Ronneby and Karlskrona. Ronneby's curriculum revolves around software development and use, while Karlskrona focuses on telecommunication. Also in the area are a public library with high-bandwidth internet access, the above mentioned SoftCenter and a newly started community development center called the "creative learning environment." A Fifth Dimension site can be housed in an old Villa, remodeled to host community functions and events; in a games room at the university; or at an elementary school, depending on the initiatives taken in the coming year.

This work is funded in several ways. An initiative for "New Forms of School Development" has a three year grant from the Swedish Government's human resources branch for developing the knowledge and competence of the citizenry especially around advanced technology. This involves cooperation and matching funds from two municipalities of the county of Blekinge, Ronneby and Sölvesborg, and the University of Karlskrona/ Ronneby. The budget for the work is roughly five million Swedish crowns per year--(roughly $800, 000/ US per year, for three years). At Ronneby, the Fifth Dimension will be one of several new forms of school development.

In the Spring and Fall of 1997, Sutter will be teaching the first groups of students who will begin this work, the resources and the technological infrastructure are already in place for this educational and developmental part of the project. What is needed now is to develop contacts and content domains for various aspects of the projects under the rubric of the funding and to make linkages locally and internationally around shared research and teaching goals.

Mike Cole is proposing that since interest in developing and theorizing cooperative uses of distance education and videoconferencing/ technology (a key research focus at San Diego's Fifth D node) is shared with the Swedes, that this could be a major focus in our collaborative efforts across teaching programs.

The LCHC seeks the expertise of Sutter's colleagues at the University and at Soft Center for developing appropriate software for the children we serve in the US and at other international sites. We also are

interested in continued feedback about what is appropriate research and teaching experience for diverse populations and age groups .

UC LINKS

In addition to interacting with UCSD, it is planned that the Ronneby Karlskrona group will also interact with the network of 10 University of California campuses currently running Fifth Dimension model programs One of the UC Links sites the Swedes are especially interested in collaborating with is UC Riverside, where the issues of involving teachers and the school staff in after school activity is of great interest to them as they plan their own activity. Another site of interest is the UCSF site, where older children and teens are engaged in creative activity that can help the Ronneby group anticipate the concerns of their older members.

(Editor's note: Berthel Sutter is a Senior Lecturer at the Department of Computer Science and Business Administration and is in charge of the department's master education program "People Computers and Work." Together with lecturers and faculty members Bo Helgeson, Gunnel Andersdotter, Bjorn Andersson, and Sara Eriksen, Sutter will be implementing the Fifth-Dimension inspired afterschool fieldwork component in collaboration and consultation with our network of colleagues in the Mellon Distributed Literacy Consortium and the UC Links project).

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