
Insert Table 1 about here

During the winter quarter the Children's Center's staff unexpectedly decided to send two new groups of children, but this time the age concentration shifted downward. Suddenly we were confronted with a large number of 5-year-olds. In principle a Fifth Dimension program can be devised for children who cannot read (or write) and experience has shown that a limited number of 5-year-olds can be sustained in the program along with older peers when it is working well. At this time, the research staff had to attend to two other new sites, and since there were no older peers in this setting, the appearance of very young children proved rather difficult to deal with. During the winter quarter, the pattern of attendance shifted drastically and children who attended only once increased from 0% to 27%, while at the same time the percentage of children who attended often decreased from 86% to 36% (see Table 1). There was also a much greater variability of who came to site so the undergraduates did not have their "regulars" as they had during the fall quarter. Still, the site operated at its maximum capacity and on the average six children participated in the Fifth Dimension each time (there were only three operating computers this quarter) (see Figure 3). By the end of the winter quarter two children had visited all 20 rooms and were promoted to the status of Young Wizard's Assistants, an accomplishment that was achieved at about the same time only at the Library site.

An Account at the Institutional Level

The Children's Center provided a small classroom, adequate for the needs of the program, where the Fifth Dimension took place every Tuesday and Thursday

TABLE 1

Proportion of children (absolute numbers in parentheses)
attending the Fifth Dimension program at the Children's Center
for Fall 1987 & Winter 1988

Days of Attendance	Drop-In (1)	Low (2-3)	Med (4-5)	High (6-7)
FALL 1987	0%	7% (1)	7% (1)	86% (12)
WINTER 1988	27% (6)	14% (3)	25% (5)	36% (8)

from 3:30 to 5:00 p.m. Despite initial promises from the computer program director of the elementary school for this district, computers and other resources were provided only by the University and the research team.

The school system had promised to help the Children's Center provide access to a telephone line so that electronic mail communication could become readily available at each site. Ready access to electronic mail is seen to be an essential aspect of the program in order to promote and sustain the play and fantasy element that surrounds the rules and the goals of the Fifth Dimension. When children are able to read and write letters through electronic mail, without the continuous intervention of the adults in carrying the letters to and from the Wizard, it is expected that the children will be more likely to develop strong relationships with the Wizard and, as a consequence, with the world of the Fifth Dimension that s/he oversees.

Although this feature of the program never materialized, the negotiations around it provide a good indicator of the types of difficulties we were encountering at the Center. As mentioned earlier the Children's Center is institutionally under the wing of the La Playa School system, whose phones it uses. As a consequence of the internal workings of the school system's phones, the Children's Center's telephones were difficult to link up with a telecommunications line. But it is possible that this failure was acceptable to the Center, because it did not act on any of the solutions we were offering them, including the offer of installing a special line at the project's expense. We see this failure to act not as any indication of ill will, but rather as indicating the extreme difficulty the Center was experiencing in admitting the Fifth Dimension into itself.

An interesting aspect of this experience is that the difficulties undercutting the growth of the system were initially external to the Fifth

Dimension program, but did not remain so for very long. Lack of on-site electronic mail did not seem to have affected the children's frequency of writing to the Wizard or even adhering to the rules of the Fifth Dimension. From field notes, it is clear that the children at this site wrote to the Wizard as readily as did the children at other sites. But, the coordinator of the Fifth Dimension at Children's Center considered telecommunications to be extremely important and thought it unfortunate for the children that they could not have the opportunity of a live chat with the Wizard; in actuality, the children at this site seemed to be enjoying themselves and to be as committed to the program as were the children at the Library site, and even more than those at the Community Youth Club--at least during the fall quarter. Soon such perceptions, however, began to affect the operation of the system itself.

A major cause of concern for the directress was the high number of undergraduates that came into contact with the children, and the degree of anxiety this introduced. As a practical, day-to-day matter, the first priority for the staff of Center is to see that no children hurt themselves on the premises and that they would not come into contact with non-Center adults.

At the end of the second quarter, the difficulties being experienced by the Children's Center staff were apparent. Therefore, it was mutually decided that we should suspend operations for the next session. The directress was greatly relieved. She thought that the activity was wonderful for the children, but the hassles it caused her in worrying about all the people coming and going left her in constant state of work overload. Although we thought of reviewing matters later on, it soon became clear to us that the difficulties were too great. We will return to an evaluation of our experiences at this site at chapter 7.

(2) The La Playa Community Library

A Fifth Dimension program at the Library ran successfully over the entire phase II: from September 1987 to July 1989. Although we encountered some problems in recruiting children at the beginning of each academic year, soon this site was operating at full capacity. It had the most stable population of children each year of all the sites; they achieved high levels of expertise in the games; and both the children and the undergraduates enjoyed their activities at site.

An Account at the Fifth Dimension Level

As we pointed out in Chapter 2, the plans of the Library for Phase II centered around materials. There was great interest in software that promoted the use of reference materials (e.g., a mystery game called "Carmen San Diego" that calls for the use of an atlas and an almanac), and in developing new computer-based materials that exposed children to the varying services and materials available in the Library. When the head librarian decided upon the Fifth Dimension as the organizing metaphor for the Library's activities, she explicitly expressed an interest in having the children use the Fifth Dimension as a way to learn more about the library and its resources.

Thus, we decided to use world geography as an overall theme for the Fifth Dimension Library's maze as opposed to the names of animals used in the other two sites. The different rooms of the Library's maze were named after different countries, and the two activities that could be played in each room had some connection to the country represented. For example, the game "Karateka" was placed in the Japan room and the child was asked through the task card devised for this game to look up in the encyclopedia and write to the Wizard using the electronic mail facilities at the site about the origins of

this game. The other activity was "Origami". In short, through their journey in the Fifth Dimension, children were to learn something important about each of the different countries represented in the maze as well as how to use the reference materials in the Library (regular or electronic encyclopedia, appropriate books, etc.). (It should be mentioned that the children in the Library rarely complained about the school-like character of these task cards; and there was an occasional child who got immersed in reading the encyclopedia. In contrast, this kind of task was very difficult to initiate at the Community Youth Club site.)

The first impression that strikes visitors to the Fifth Dimension at this site, as they often told us, was its smallness, orderliness, and its restricted physical conditions, as compared to those at the Community Youth Club site. The Library's Fifth Dimension took place in the same large room as the rest of the activities of the Library. This is a medium-size library on the first floor of a shopping mall and occupies a single rectangular room. Most Fifth Dimension activities took place at the furthest right-hand corner of the Library on a reading table next to the furthest set of stacks. This table was normally used by the patrons of the Library, except when the Fifth Dimension was taking place. This arrangement restricted the capacity of this site because it could hold, with some difficulty, up to 4 or 5 computers when the Fifth Dimension maze was also placed on the table, and up to 6 computers when the maze was balanced on a chair. In short, given this limited arrangement, compounded by the fact that the operating computers ranged from 3-4 and more rarely 5-6, the maximum number of children that this site could accommodate comfortably was somewhere between 6-8 and with more difficulty 10-12.

Near this main table there was a small cabinet that contained an IBM-compatible computer with a modem, which could be used for hooking up to an

electronic reference manual, when the Fifth Dimension was not in operation, and was used for game playing and telecommunications during site. In the children's section of the Library, which was located at a diagonal from the Fifth Dimension, there was a T(exas) I(nstrument) computer that was also used for the activities of the Fifth Dimension. When the children chose to play a non-computer game, like Battleship or Mastermind, they had to hunt for a place to sit. They often sat on the floor at the other side of the Library, next to the encyclopedias, other reference books, and other Library patrons. In short, the activities of the children in the Fifth Dimension were mainly confined in one corner of the room, but they also extended to other parts of the Library. The children's presence was easily felt; and when they got excited about their activities, they had to be reminded either by us or by the librarians that we were in a library where other people were studying and they should try to speak more softly.

During the fall and winter quarter of the first year of Phase II, this site operated for two days a week; and by the spring quarter it was operated it for four days a week. This same four-day schedule was followed the entire second year. Just like the other two sites, it operated for an hour and a half each day, 3:30 to 5 p.m.; but we normally had to stop 10 minutes before closing in order to put all the equipment away.

As soon as we initiated the Fifth Dimension program in the Library, we were faced with the problem of actively recruiting children because typically there were not that many children attending the Library as there were in the other two sites. The children in the Library were there with their parents who were checking out books or using other Library facilities. There was a very small number of children who came during the after-school hours to do their homework there while they waited for their parents to come and pick them up.

Recruiting took place in several ways: Signs and brochures were available for parents using the Library; we notified nearby schools about the program; we announced it in the Friends of the Library Newsletter, and so on. On the other hand, parents had to make some arrangements because this Library is located in a rather inaccessible place. It is far away from any of the near-by schools and only the older children could get there on their own. Thus, the children participating were brought to this site either by their parents or other caretakers; only a few of the older children walked or bicycled by themselves. This helped establish a schedule of who came to site and when, so that when we shifted to a four-day schedule, we decided, by agreement with the Library, to have a new set of children attend the other two days. In this way, we established two "shifts" per week, Monday/Wednesday and Tuesday/Thursday; children had to choose one or the other, and thus could participate only two days a week at most.

Because of the need for recruitment, each year the site started rather slowly; but as time went on, it established a long waiting list of children who were eager to participate. During the first year of Phase II, we started with only 3 children but after a few weeks the number increased up to 6-8 children (see Figure 4), which is the maximum capacity for this site given that the first year we only had on the average 3 to 4 operating computers and about 4 undergraduates. The range of children at site, after the initial slow start, varied from 5-6 to 8-9 per day. This site did not serve a large number of children the entire year (32 in total), but the same children came regularly to site, which allowed for the development of good interactions with other children and undergraduates. The undergraduates not only had their "regulars," but also their "favorites," and they often worried when particular children did not make it to site. Several children came to know each other so well that

sometimes the coordinator had to worry about the best way to pair the children because they were overly playful together, which was disruptive for the Library setting.

Insert Figure 4 about here

The first year of the operation of the site, the drop-out rates were rather low (6%) (see Table 2). The majority of children (66%) showed low attendance (from 6 to 12 days out of a possible 45 days), although 28% showed medium-low and medium-high attendance. Given that a second new site was introduced only in the spring, that this is a voluntary after-school activity, and that some coordination with parents (or other care-takers) was required for children to at least participate, these children show pretty good attendance rates.

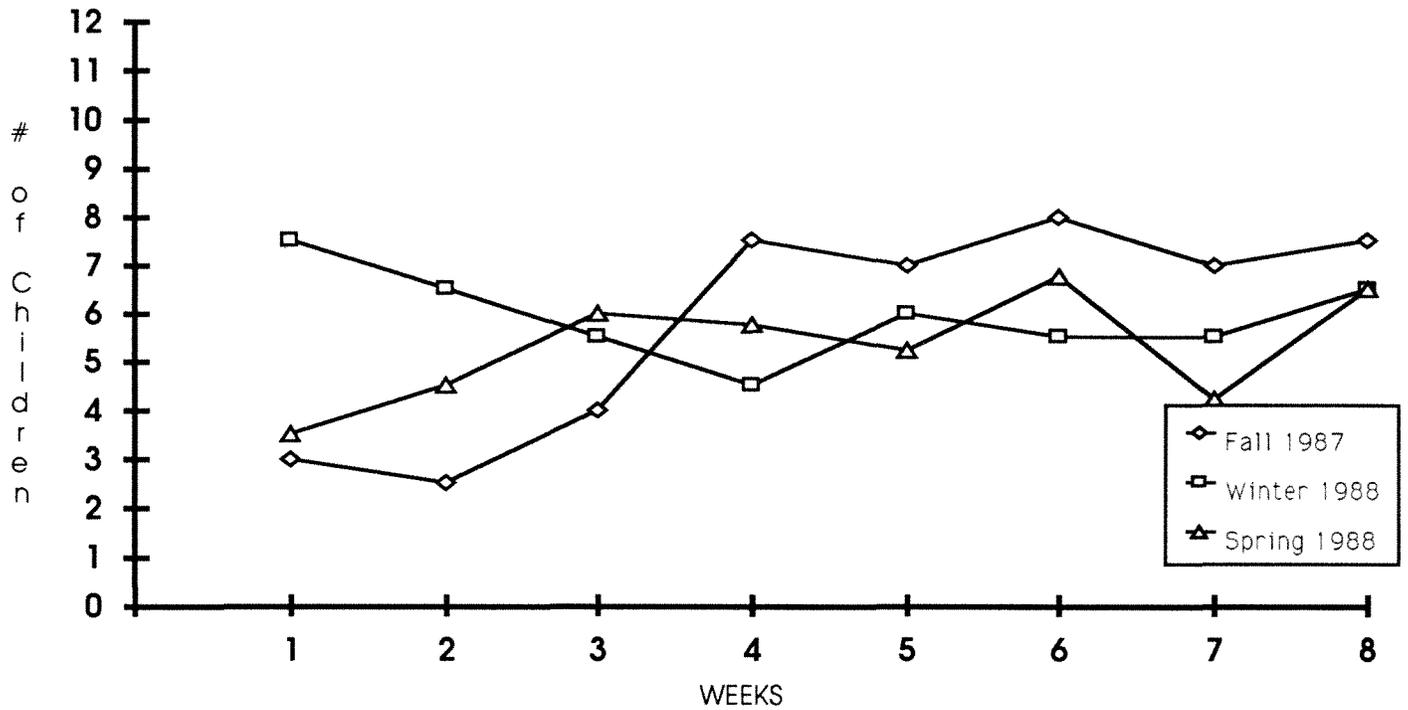
Insert Table 2 about here

By the second year, the number of children who attended this site almost doubled (58 as opposed to 32) (see Table 2). Despite the fact that we had contacted several of the children who had attended the Fifth Dimension the previous year and all those whose names were on the waiting list, the number of children who came to site during the fall quarter was rather low. The range per day varied from 2 to 9, and the average number varied from 3 to 7 children (see Figure 4). The difficulty was that while we had a good number of children attend the Tuesday/Thursday "shift," there were not many children who could attend the Monday/Wednesday "shift." Monday/Wednesday was the new shift and somehow a regular group was not established, while for the Tuesday/Thursday group we still had a number of previous years' children who were eager to

Figure 4

Average number of children per week participating at the Library's Fifth Dimension program for Phase II

1987 - 1988



1988 - 1989

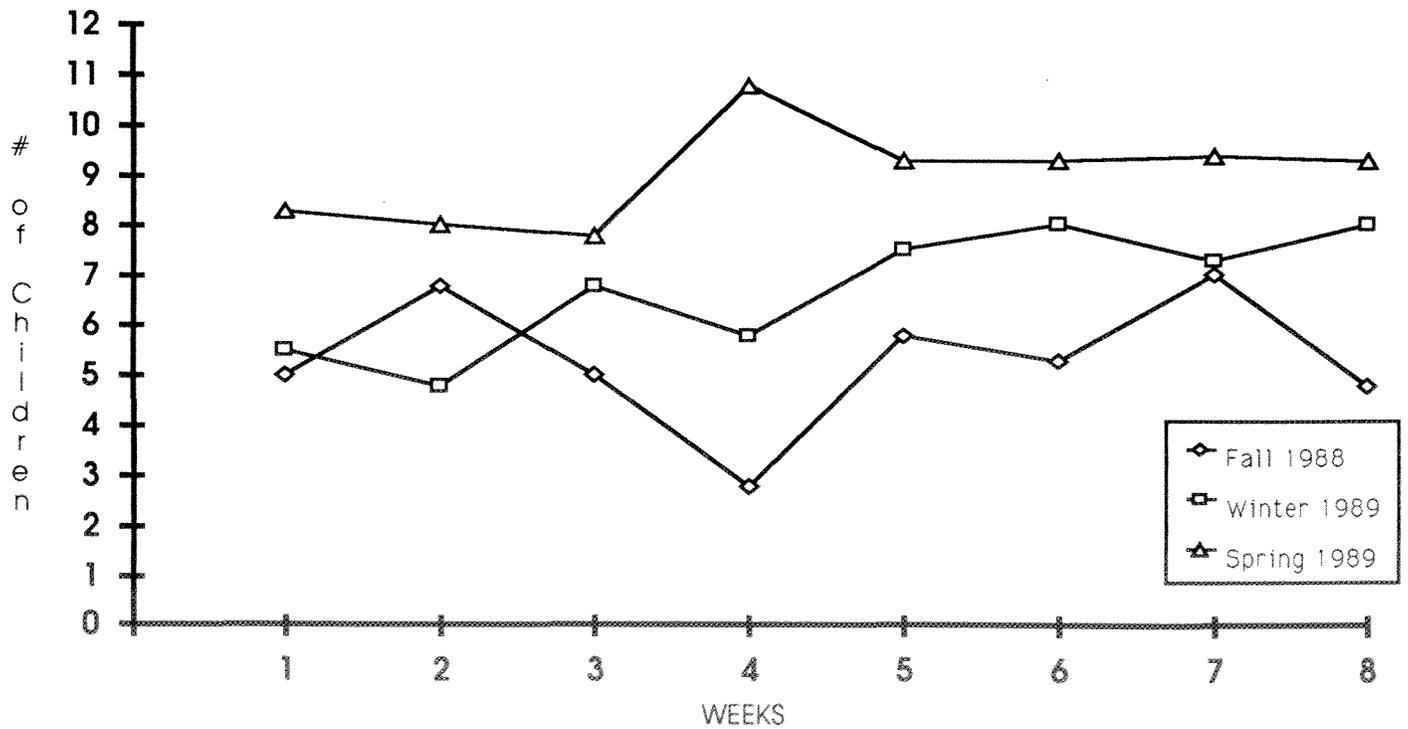


TABLE 2

Proportion of children (absolute numbers in parentheses) attending the Library's Fifth Dimension for Phase II

		Rate of Attendance					
Days of Attendance		Drop-In (1)	Low (2-12)	Med-Low (13-23)	Med-High (24-34)	High (35-45)	
1987—88	M	5% (1)	67% (14)	10% (2)	19% (4)		(N = 21)
	F	9% (1)	64% (7)	9% (1)	9% (2)		(N = 11)
1988—89	M	21% (8)	53% (20)	18% (7)	5% (2)	3% (1)	(N = 38)
	F	5% (1)	60% (12)	20% (4)	15% (3)		(N = 20)

continue on a regular basis.

Through our efforts to advertise the program in schools, but mainly because parents who came to the Library would see the Fifth Dimension taking place, children's attendance increased steadily during the winter and spring quarters (see Figure 4). During the winter, the range of number of children per day varied from 4 to 12, with an average per day varying from 5 to 8. During the spring quarter, attendance increased even more; the range of number of children per day varied from 6 to 12, with an average varying from 8 to 10 children.

As the parents of the children informed us, the fact that the Fifth Dimension was in operation in the Library every afternoon attracted the attention of both parents and children who were using the facilities of the Library. In addition, a few of the undergraduates brought children they knew; and several of the children brought in their friends to join the Fifth Dimension. Thus, by the spring, the Library was full of eager children who came rushing in from school to participate in the program.

Both years this site achieved markedly friendly interactions between children and undergraduates as well as children themselves. Some children were already friends before they came into the Fifth Dimension, but others made friends as they travelled together through the maze. The fact that the undergraduates had their "regulars" with whom they worked, made them very attentive to the child's level of expertise and also got them involved in the child's progress; thus, most undergraduates came to know several children quite well and their interactions with the children were rather intense, as both the content and the length of fieldnotes attest. These factors contribute to the high quality of interactions and collaboration achieved at this site. In turn, these warm personal connections contributed further to the greater frequency

with which children attended the program; although in the winter quarter only 3% of the children attended the site with a high frequency (13-16 days), 21% did so during the spring quarter. But, as children became more intensely involved in their activities, and the level of attendance rose somewhere between 10-12 children, this was far more than this small site could accommodate, as we will see later on.

An Account at the Institutional Level

During the first year of the operation of the Fifth Dimension program (second year of the research project), there seemed to be several signs of a continuing coordination between the research/teaching team at the Public University and the Library staff, which, as in the previous year, it mainly amounted to the local Library branch head.

In the fall of 1987, for example, she met a few times with a University undergraduate who was involved in creating a data-base "treasure hunt." This treasure hunt was to be included as one of the 40 activities in the Fifth Dimension program. The plans worked out between the student and the librarian were that the treasure hunt would be confined in the Library; and that the search would require children to research pertinent information in the Library by using various library resources, like the Atlas, Readers' Guides, card catalog, micro-fiche, the reference librarian, and so on. In short, this data-base "treasure hunt" was one of the ways to bring to fruition the hopes of the librarians to involve the local children with the library and its resources. (Another way, as previously mentioned, was by adapting the task cards for all the games in ways that required children to use these different library resources before writing their letter to the wizard.) (This data base "treasure hunt" was never really used by any of the children. It did not seem

to generate much enthusiasm and, as they always had an option of which activity to do in every room, this was not one of the activities they choose. At some level, it might have been too adult-oriented.)

Another line of evidence concerning the Library's involvement was the way they handled the task of installing the telephone line to be used for telecommunications. Although a special telephone line was not there as promised when we began our activities, the head librarian did everything she could to get the phone line, and also allowed us to use the main desk's phone to connect to the University computer. The Library, to an even greater extent than Children's Center, is bureaucratically administered from the county system and allocation of funds and resources (or even positions) follows the same route. It is instructive that in order to allow us to use their phone line the head librarian had to get permission from the county office. Furthermore, the librarian had to go to lengths to demonstrate the validity of the program in order for the county office to approve the money for the phone line; in the meantime, we can also see the initial interest and excitement of the head librarian about the project.

"L. explained that the request for the phone line came at an inconvenient time for the library, because the county has put a HOLD on funds. However, the library is receiving a lot of attention from the Head Office because of the project and there are a lot of people pushing to get the paperwork through. Furthermore, she has been calling once a week to keep reminding them. She went on to say that due to the interest in the project and the high visibility of the library (at present), X, the deputy chief of the library and second in command of the library system in the county, plans to visit the site with her son (around Nov. 10th).... She told me that a mother is so pleased with the progress in her son that she

wants him to continue with the activity at the library on an ongoing basis even after the project. We bade farewell and as I was leaving, I heard her muttering about having X visit on Nov. 10th. X is the head of the library system in this metropolitan area" (RH's field notes, 10/30/87).

A phone line was finally installed by the end of the fall quarter. But, despite the set of high powered officials that she mobilized to approve the money for it, she only managed to get half of its cost, while the rest was picked up by the Friends of the Library.

Not long after this, the Library also began to provide its own equipment when several usable Apple computers were donated to the Library by one of the children's parents. It took awhile to get the computers running, but during the second session of the first year of the operation, the Library became largely self-sufficient in providing the material infrastructure for its own system. Later on, the Friends of the Library picked up cost of equipment repairs.

During the winter session of the first year of Phase II, the Library welcomed and supported our efforts to institute a "homework hotline" for two other days per week, when the Fifth Dimension program was not meeting. We deemed this activity necessary because there was a long waiting list of children who wanted to participate in the Fifth Dimension, and we were not yet ready to run this site four days a week. This hotline activity simply required a few knowledgeable or eager undergraduates and telecommunications; thus, children could get tutoring help from the University students and from the online-wizard who engaged them in discussions about their homework, gave hints about finding more information by using the library resources, and so on. This activity proved reasonably popular with the children; but it was discontinued during the next session when we started operating the Fifth Dimension four days

a week.

During the second year of Phase II (the third year of the project), this picture of support from the Library staff became much more ambiguous. When we talked to the librarian or any of the other staff about the children's achievements and development at the site, they were always very eager to listen and were generally supportive. But when we wanted to accomplish anything more substantive, things were more difficult.

For example, during the summer of 1988, we were trying to arrange a meeting with both the head of the Library and the head of the local branch of the Community Youth Club to discuss ways to prepare for Phase III. During these efforts, the librarian was rather unapproachable. There was absolutely no time when she could meet; and when we suggested to meet after work, she did not think that this was appropriate. In her scheme of things, such a meeting would clearly be work, and could only be happen during work hours, but she claimed that the Library was too busy and kept postponing a meeting date. Significantly, the research staff member who was trying to contact her was new to the position (the third major shift in the research personnel) and was never able to establish contact. In fact, during the third year of the project the librarian resisted any contact and we did not feel that we had a direct line of communication with her.

During this year, our line of contact with the Library staff was through the "Friends of the Library." We often attended their monthly meetings and either talked about the progress of the Fifth Dimension or about specific concerns or issues we had. It is through this group that we raised the issue of recruitment and the need for a more substantial advertising campaign. And it is through them that we began to pursue more seriously what it would require to pass to Phase III.

Before closing this account, we would like to mention one more negative indicator that was building up between the Library staff and the staff of the Fifth Dimension program. This involved the closing of the Fifth Dimension two days a week when the Library was also closing at the same time (the other two days they closed much later). Because children were often engrossed into their activities, the undergraduates were reluctant to cut them off and sometimes would actually have them finish right at the time when their parents came to pick them up, which was close to 5. (In fact, an undergraduate working with a child would often wait until their parents came to pick them up; this was done rather naturally without setting any norms for the undergraduates.) Two days a week the Library closed right at 5, and the Library staff wanted to leave as close to 5 as possible. But, some days the Fifth Dimension program would delay them for a few minutes, and there a silent grudge developed between the groups. During the spring quarter of the third year, a librarian began to come right at 10 minutes to 5 and announce in an authoritarian voice that we had to close the Fifth Dimension right then and there and would not leave until all the computers were shut off and put away. This was very bothersome to the undergraduates who felt that they were volunteering their services to the Library and the Library staff did not seem to appreciate it just as it was bothersome to the Library staff to be kept later by volunteers.

(3) The La Playa Community Youth Club

A Fifth Dimension program was initiated in September, 1987 at the Community Youth Club in La Playa and subsequently was adopted by other Community Youth Clubs in neighboring communities. During Phase II, the program at the original site posed some interesting challenges to the research project, and it is to this account that we now turn.

An account at the Fifth Dimension Level

The Fifth Dimension at the Community Youth Club took place in a rather spacious and sunny room that was gradually dedicated to us for these activities. There was plenty of room for a large number of computers; but, because we aim for the creation of collaborative learning situations we started with 4-5 computers during the first year, and increased them 6-7 during the second year. There were an equivalent number of undergraduates working in this program. Because of ample space, the Fifth Dimension maze and its map were well displayed. Furthermore, because we were the only ones using this room, the walls were decorated with banners, pictures, and photographs related to the Fifth Dimension.

The situation that greeted us in the Community Youth Club was unlike anything we had experienced before. From our first year of observations, we knew that this well-appointed community center took in children from 6 years to early teens, keeping them busy with athletic games and shop activities; we knew that the population served was quite diverse, varying from the affluent to the economically depressed; and we also knew that lots of children flowed through the Club daily. What we did not fully appreciate was the impact of the standing norm of the Community Youth Club that children could come and go as they pleased, and if lots of children came, it was expected that we would accommodate them.

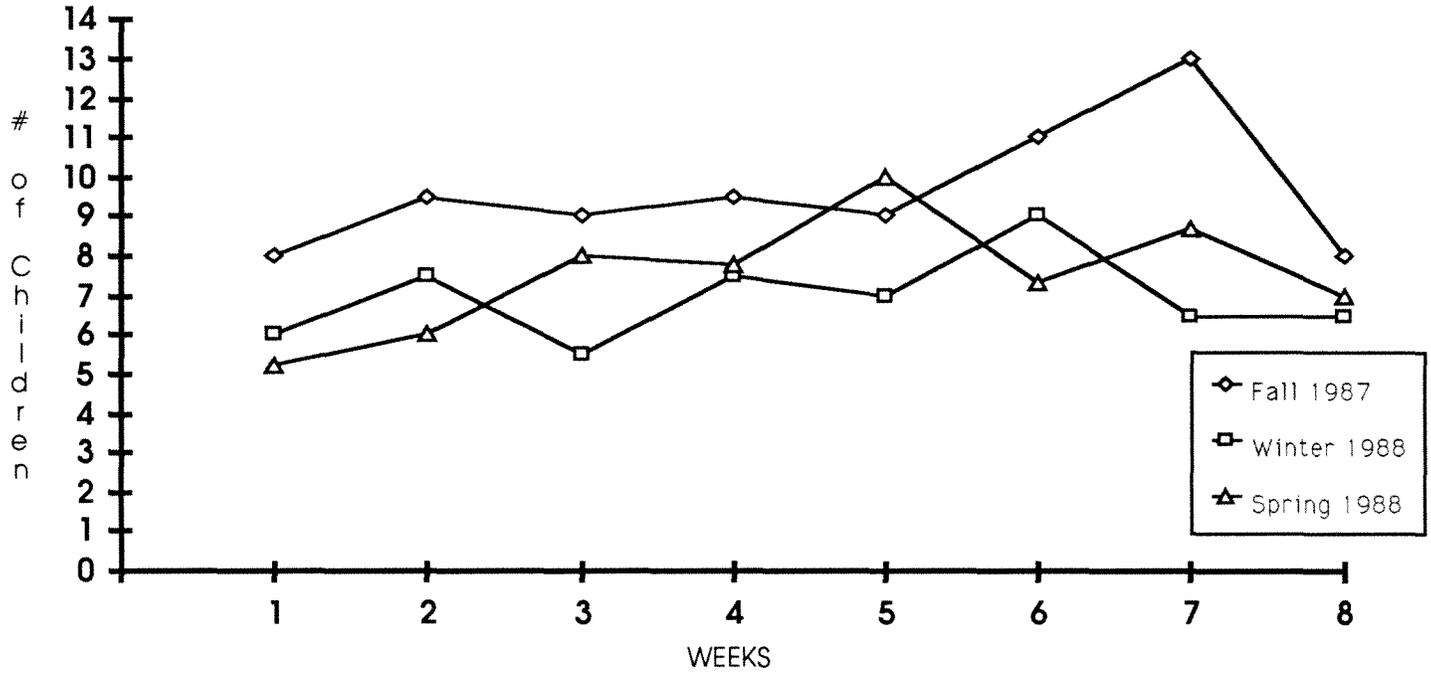
Insert Figure 5 about here

The number of children who passed through the Community Youth Club site per day was high from the first week of our operation, being on the average 8-9

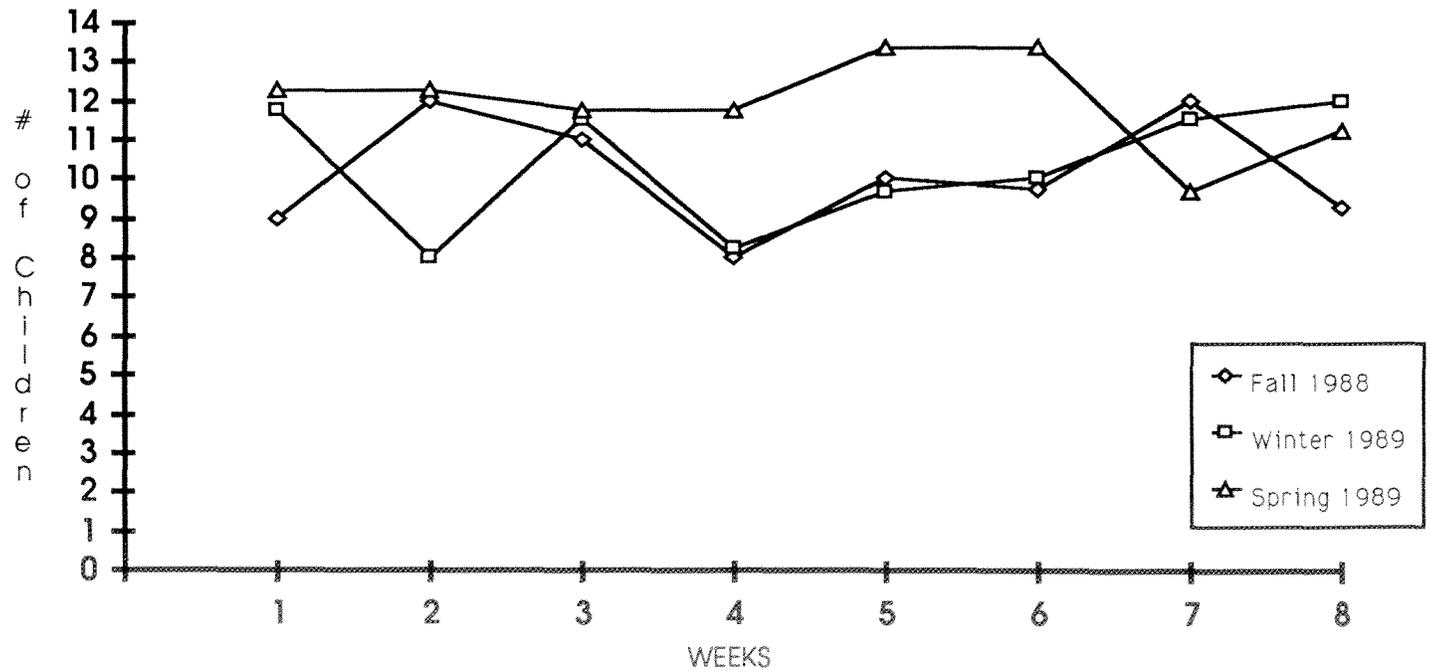
Figure 5

Average number of children per week participating at the Fifth Dimension program in the Community Youth Club for Phase II

1987 - 1988



1988 - 1989



children per day and ranging as high as 12 to 13 (see Figure 5). By the end of the first year of Phase II, we had records for 82 children who participated in the program--which is an underestimation of the flow because it fails to capture all the children who passed through the activity in a very casual way whose presence was not recorded owing to systems overload. (This number stands in sharp contrast to the 32 children that participated in the Library, which although a bit smaller in capacity, was not so small as to justify such a large difference.)

An interesting result emerges when we look at the pattern of attendance per children. The large number of children implies that there is a good deal of casual passing through this site: there was a large number of children who attended the program only once (40%), while the rest of them (55%) attended at a low rate, which means somewhere between 3 to 24 times out of the possible 90 times (see Table 3).

 Insert Table 3 about here

This sheer flow of children in this setting--both between and within days--created a particular set of difficulties: it made it difficult to get enough density of interaction between children and undergraduates to cultivate not only a deep penetration of the individual activities or to transmit the rules that are crucial in constituting the play-world of the Fifth Dimension. It should also be noted that given the large flow of children at this site the undergraduates were often rather uncertain of the rules and regulations that applied to the complexities that this site created and they did not often apply or enforce them uniformly.

This created a situation where some children felt that the rules were

TABLE 3

Proportion of children (absolute numbers in parentheses) attending the Community Youth Center's Fifth Dimension program for Phase II

		Rate of Attendance				
Days of Attendance		Drop-Out (1-2)	Low (3-24)	Med-Low (25-46)	Med-High (47-68)	High (69-90)
1987—88 SB	M					
	F					
1988—89 SB	M	42% (38)	51% (46)	5% (5)	2% (2)	(N = 91)
	F	57% (26)	43% (20)			(N = 46)

coercive and external to them so that they either resisted them, ignored them, or tried to get around them. This difficulty, coupled with the expectation of the Club that we should serve as many children as possible, convinced us to try to simplify the rules of the Fifth Dimension and create a situation where it would be easier for both undergraduates and children to handle this rapid turnover in the midst of heavy load.

Thus, instead of the Fifth Dimension and its rules, during the third session in the first year of the program, we shifted to a system that was heavily based on a chart of 40 games and activities that one could do in any order, however long and at whatever level they pleased. Children still were expected to complete the tasks specified on the task cards as to write to the Wizard or other locales, but the only general rule remaining was that a child had to complete "x" number of games and activities to become a "Young Wizard's Assistant." But, soon rules began to be reintroduced for one reason or another, and now they really had an arbitrary relation to the activity and were external to it. For example, it was decided that for a child to become a "Young Wizard's Assistant" he or she must complete 20 computer activities, 4 of the non-computer activities, and all of activities that involved computer hardware and telecommunications. Despite our goal of retaining part of the structure it became very difficult to have the children follow the task cards and play at different levels of expertise. In fact, task cards lost their function in the play-world, and the children stopped using them or played only at beginning level. Soon the undergraduates themselves wanted to introduce a rule that would define the number of activities that should be played at specific levels. In short, while the previous system gave children the possibility of taking control of the situation and its rules, this new system did not allow this possibility and the rules were really arbitrary and could be

changed at any moment and by anyone.

These experiences in attempting to simplify the Fifth Dimension had the opposite effect. The merit of the Fifth Dimension, despite its complexity, was soon recognized and it was decided that we would go back to it at the beginning of the third year. Thus, in the fall of 1988 the old system was re-introduced but this time we also tried to explain more carefully the rules and the rationale behind them to the undergraduates. Although the situation was no longer as chaotic as it often was during the previous year, attendance by a core of children was still low and variable (see Table 3).

Given the abundance of children around site, a good number of them came to the program as soon as we opened during the second year, and site attendance per day was generally high, reaching sometimes up to 15 or 17 children. It should be noted, however, that this does not mean that 15 or 17 or even 10 children were there at the same time, but rather these numbers indicate the flow of children per day. Sometimes children stayed for 15 minutes, while others stayed much longer. It was very rare at this site that a child participated the whole hour and an half (as did all the children at the Library site). But, in accordance with the ethos of the Community Youth Club, the children could come and go as they pleased.

This second year of the operation of the program, the overall number of children who participated in the Fifth Dimension increased from the previous year (137 as opposed to 82); but again, half of them attended only once (47%) and the rest of them (48%) attended at a low rate (i.e., somewhere between 3-24 out of a possible 90 times) (see Table 3). Given a large number of children who came to site infrequently, compounded by the fact that they often did not stay the entire period, the quality of interactions achieved by both children and undergraduates as well as the children themselves was, of course, affected.

In most cases, the undergraduates had not worked with the same child before or with the particular combination of children they had to deal with so they were handicapped in knowing how to guide them. This situation made not only collaboration difficult but also left the level of involvement superficial. It was only by the end of the quarter, or if an undergraduate had worked at this site for more than one quarter, that they were likely to have developed expertise and some connections with a few children, an element which we believe was very helpful to guiding and directing children's activities.

An account at the Institutional Level

From the very beginning, the La Playa Community Youth Club director and the educational director were very excited about starting a computer program and welcomed University involvement. A week after we began our activities, they offered us the spacious room so that we would be able to accommodate a large number of children.

During Phase II our main line of contact was to the Club's director or occasionally, and to a lesser extent, the educational director. Shortly after we began Phase II, in November, 1987 a new educational director was hired, who, like the previous one, was willing to be involved in our activity and volunteered to be trained along with the University undergraduates. But, it soon became difficult for her to find the time during site because she had to attend to her main activities.

The director's style of interacting with our research/teaching team has been friendly and supportive. During the first weeks of the program he was actively involved; but, soon he left us to develop our activity as we pleased, and he was there as we needed him.

For example, the only drawback of the room we were using was that it

lacked a telephone line for telecommunications. Thus, during the fall quarter of 1987, letters to and from the Wizard had to be hand-transported; this proved to be a highly inefficient system, especially for this site, that had a high turnover of children. Often letters got lost or were never delivered. We called a meeting with the director and the educational director, stating the need for a phone connection. Because the Club is a non-profit organization and depends heavily on fund-raising for its activities, during the Christmas break, the money was raised for the telephone line, which was installed by January.

This experience contrasts sharply with the experiences we had in the other two bureaucratically administered institutions. The Children's Center never got its phone money approved; and the Library, despite the good efforts of the librarian, got only half of the money approved, while the rest was supplemented by its own local fundraising organization, the Friends of the Library. This difference will prove to be crucial for the further adaptation of the program by the host institutions, a situation that would involve a far larger commitment of monetary resources.

Over the course of Phase II, the Club gradually became quasi-independent from the University with respect to its computer equipment, as community members donated (mainly old, but on a few occasions, new) computer equipment. It interesting to note, in this connection, that the Library had managed to achieve the goal of being independent in terms of equipment from the University much faster and more thoroughly than the Community Youth Club. This difference proved not to be as significant as it might appear; our later experiences with the Club have shown that it has a much greater flexibility in finding money than the Library, whose fundraising organization is very small and only tries to supplement the county budget, while the Club depends entirely on fundraising.

Throughout Phase II we enjoyed the support of the Club and its personnel. It was clear that they were impressed with our activities, which attracted daily a large number of children, and could even involve difficult children. During the second year of the operation of site, the project was given an award, and the Fifth Dimension was nominated as the best new activity in a broad contest of their national organization. Pictures of our activity were included on the front page of their main advertising booklets, and the Club was proud that they could provide children with what they considered to be quality time and education using computers and telecommunications. They gradually became aware--to paraphrase a discussion with the director of the neighboring Club--that they needed to supplement their play, games, and sports program with a more directly educational activity.

II. The Peripheral Fifth Dimension Sites

At different points of the research, other Fifth Dimension sites in the near-by area were initiated from a combination of community and student support; but due to our heavy involvement with our main research sites, coupled with our limited number of supporting staff, these peripheral sites received much less attention from our research team. However, the point is that our main research sites served as the impetus and model for these other sites.

Significantly, while these sites did not start as fully operating Fifth Dimension programs and they had to achieve the state of full operation gradually, some of them enjoyed from the very beginning what we were trying so hard to accomplish in our research sites: the continuous commitment and support of the host institutions, combined with volunteer initiative and support, even if only from University students taking the class. In a sense this is only stating the obvious--we were the source of outside support in the

initial sites and the peripheral sites with one exception, by definition, had no such support. That we served as a catalyst by providing ideas and an example is not so obvious.

First, owing to the combined efforts of enthusiastic undergraduates, an activities director, and the local branch manager at the nearby Community Youth Club in Coast City, the Fifth Dimension was gradually introduced into this Club site and immediately drew more children than it could accommodate. It operated in a quasi-state in the fall of 1988; by the winter quarter the children and undergraduates together constructed a Fifth Dimension maze, a map, and anything else they needed. By spring of 1989 they were a fully operating system. Because this site has been based on initiative and commitment of the Club personnel, it was able to raise money for its equipment, telephone line, software and so on, over the course of a year of sustained effort. To anticipate some of the events of the next phase, this site came to be regarded as one of our major research sites along with the La Playa Community Youth Club.

Second, again through the "seedwork" of undergraduates, the Diamondville Children's School, a local private Deweyesque elementary school enthusiastically adopted the Fifth Dimension and incorporated it into their regular activities of computer curriculum. This success came as something of a surprise to us, because in Phase I we had been unsuccessful in involving the public school district. An especially intriguing aspect of this school's interest is that it extends to actual school time, not just after-school. We knew from a pilot study several years ago that, under some circumstances at least, the Fifth Dimension metaphor can be used to organize mathematics curriculum in the elementary grades, but had not pursued this possibility in light of our concentration on after-school time.

There were also some far-away Fifth Dimension sites that developed in Chicago, New Orleans, and the Soviet Union, which were not only modeled on our main sites but also the children of these sites exchanged letters with the children in our two main research sites.

Finally, we also mounted a special after-school activity at the Junior High School next to the Community Youth Club. Although school personnel were delighted with the proposal, and this activity survived for two quarters under the supervision of a University colleague, it was finally terminated because too few junior highschool children wanted to participate in it.

III. Preparations and Decisions for Passing on to Phase III

Throughout Phase II, but more rigorously during the third year of the research project, we pursued the goal of coordinating with the staff at the Community Youth Club and the Library to guide and help them in finding ways to transfer the primary responsibility for the operation and maintenance of the after-school program from the research/teaching team to the community institutions and the University. The goal was to delimit the University's responsibility in training the students to work with the children, in providing telecommunications support, and in visiting site from time to time.

Two main possible avenues for future organization emerged with time and discussion: (a) to obtain adult community volunteers to act as site coordinators; and (b) for the community institution to create a new position among its staff members that would fulfill the role of site coordinator.

The Library staff favored the solution of obtaining adult volunteers and as far as we know, this is the only solution they considered. The Library pursued several local avenues to advertise for volunteers: in the general Library pamphlet sent to its patrons; in local newspapers; and in a pamphlet

about the Fifth Dimension that we had written which was distributed at the front desk. Over the period of two years, half a dozen people expressed an interest: of those, about half came to site once and no one came a second time. We talked to all of them extensively over the phone and explained the program; and we were very careful to try to familiarize those who came to site slowly with the various aspects of the Fifth Dimension. Maybe, despite our good intentions and efforts, the program overwhelmed them; or maybe they were overwhelmed by the fact that they were the only volunteers.

As early as summer of 1988, we began discussing with the Community Youth Club the possibility of hiring one of the students who attended the University practicum class to become the coordinator. As we continued discussions, it became clear that getting institutional approval of the position for the next fiscal year would take awhile because they had to submit a proposal to their general board, which made such financial decisions once a year and it had already met for the next year. For this reason, we discussed with them the possibility of helping them write a grant to apply to some local community organization for support, until the position could be approved internally. Although they were eager to write a grant, it soon became clear--more to them than to us--that asking the local supervisor of the La Playa to write a grant, even with generous help from us, was much more than Club employees were trained or paid to do. Furthermore, given the internal organization and division of labor, the person whom we contacted to write the grant might not have been the right one to take on this responsibility.

Later a student from the class who was very involved in helping the nearby Coast City Community Youth Club start its own Fifth Dimension became familiar with the internal hierarchy of the Club and started seriously pursuing the alternative of writing a grant. After a series of meetings with the

directors of both Clubs, La Playa and Coast City, as well as the supervisor of all the local Community Youth Clubs (which includes the neighboring Seatown), it was decided that the Club should apply to philanthropic community organizations for support of the coordinator's position. The commitment of the Club was highlighted by the fact that the Club has now hired someone to raise money for them by writing grants. The grant pertaining to our after-school activity was written collaboratively by the student, a club staff person, and project staff. Besides helping them with the text, we also provided the Club with an extensive list of local philanthropic organizations that was compiled by our staff when we first started to pursue these ideas.

Final Decisions

To our great disappointment, after a series of meetings with the head librarian and other county officials, under the auspices of the Friends of the Library, the Library staff decided that they did not wish to see the Fifth Dimension continue at their site during Phase III. This decision was taken in spite the fact that the local Friends of the Library, which had supported and sponsored the activities to this point, was in favor of continuing them. There appear to be a combination of reasons for this decision, which we feel all boil down to the fact that while children who participated in the Fifth Dimension also used the Library, the activity was never seen as a major Library function. The official reason they gave was that the program was too disruptive to the Library's activities; the library staff could not do their work while the Fifth Dimension was operating; and there were complaints from patrons in the Library who could not do their work. While we do not doubt the legitimacy of these concerns, what was rather surprising to us was that such complaints were not mentioned to us earlier. It is true, that vis-a-vis its surrounding, the Fifth

Dimension was relatively boisterous and noisy, especially when the children became enthusiastic about their activities. However, we would expect that if this was a serious problem that the Library staff would have discussed it with us earlier so that we could have made the necessary adjustments; for example, we could have reduced our activities to two days a week as opposed to four days or reduced the number of children participating simultaneously, and so on. The point is that, while the main reason that the Library staff offered points to an interesting area of conflict between the Fifth Dimension and its surroundings, it can only be an index of the problem rather than the real cause of it.

A concurrent difficulty was that as a governmental (county) institution, the Library is underfunded. As our discussions progressed, it became clear that there was no possibility of the county picking up the costs of a supervisor for the activities. At the same time, county rules excluded charging a fee for participation in the Fifth Dimension to support a supervisor, although parent support and income were more than adequate to the task. Hence, the possible solutions discussed (a combination of creative funding by the Friends and the involvement of the county office to apply for a grant) were, in light of staff opposition, out of the question.

As our previous discussion has foreshadowed, the area where we experienced the most enthusiastic uptake has been among the Community Youth Clubs. The La Playa Community Youth Club is part of a regional and national organization. Once our system began to spread into a neighboring Club, the local regional office took an interest, and the plans for uptake that drew with them had a broad, long-term effect. They supported not only the continuation of the program in the original research site, La Playa, but also the continuation and more prominent integration of the first peripheral site, Coast City, into our

activities, as well as early provisions for the initiation of a Fifth Dimension program in a third neighboring area, Seatown.

The Clubs' seriousness in this enterprise was demonstrated over the summer of 1989 when they hired two University students trained in our program to act as site coordinators and committed themselves not only to hiring these students for the next academic year (\$11,000 per center) but to raise substantial monies and make these activities a line-item in their annual budgets. One of the centers has become so enthusiastic about the activities that they are planning to expand their building and make an after-school library/study/computer center on the basis of their past year's experience.

Chapter 5

Phase III : Tracking the Institutional Uptake

The last year of the project (1989-1990) we were concerned with tracking the flow of activity in the system we had set up in motion to determine if it would be self-sustaining. In particular, we were concerned to track both activities at the University as well as the activity at the two main Fifth Dimensions sites for which the Community Youth Club's organization had taken up responsibility for financial support and day-to-day maintenance. One of these two sites was the original Community Youth Club site in La Playa, and the other was the Community Youth Club at Coast City. During this year we also tried to keep track of the plans to begin initiating a third Fifth Dimension program at the Community Youth Club in the neighboring town, Seatown.

To follow the flow of activity closely, two part-time research assistants alternated visiting each of the two well-developed sites every week. Every time they visited the sites, they wrote field notes of their observations. We also interviewed the directors during the Christmas break, attended some relevant meetings at the Club, and talked often with the Fifth Dimension coordinators, who were now employees of the Club. In addition, one of us (A. Nicolopoulou) taught the Practicum class for three quarters and kept in very close contact with what was going on at site, primarily by reading and grading the field notes that the students wrote. She purposefully went to site infrequently because we wanted to see whether the sites could run by themselves without our heavy input, except through the class, in line with our initial plans for the system we have tried to create.

In this section, we will report both on our observations about the sites and the community within they reside and on the strategies we employed to promote the continued growth of the system.

Some Relevant Observations:**Creating Conditions for Continuity and Growth**

We have come to realize over the years of experience in running the program, that the Fifth Dimension and the framework that encompasses it, like any cultural system, cannot be reduced neatly to a set of rules and procedures. No matter how large the number of manuals or "how-to" pamphlets we produce, these instruments cannot, by themselves, adequately transmit the rich cultural knowledge, theoretical framework, and orientations that permeate every aspect of our system. For this reason, even as we try to create conditions in which the system can continue to grow, we have tried to ensure that there would be the right conditions to allow for cultural continuity necessary for the further transmission of the knowledge pertaining to the Fifth Dimension. We have also been concerned to create a workable system so that the professor who teaches the class can do so adequately without having to worry too much about problems that fall outside his/her domain and jurisdiction.

A crucial role in this system is played by the site coordinator. The coordinator, as we articulated it in the previous year during the process of negotiation with the community institutions, serves as the liaison between the site and the class--or to look at it in a broader perspective between the community and the University. Thus, while the coordinator is an employee of the community institution, he or she must be also in close contact with the professor teaching the class. In fact, one of the requirements for conduct of the Fifth Dimension activity that we negotiated was that the coordinator attend class once a week, when the discussion centers on issues and problems pertaining to site and the practical aspects of field work.

The major responsibilities of the coordinator can be broadly described as three: (a) training the students at site, which requires intense effort during

the first two weeks and continues during the entire quarter; (b) maintaining a well-functioning Fifth Dimension site (e.g., attending and fixing any problems pertaining to hardware, software, and paper-work); and, also equally important (c) attending in keeping up the quality of the program. As was done in previous years, the coordinator attends site everyday and supervises its operation by facilitating the interactions between the undergraduates and the children as well as between children. To ensure the greatest continuity, s/he is also the person who answers wizard mail because s/he would be the one who knows the children the best. Finally, if any problem arises at site, the coordinator is expected to report it to both the director of the Club and the professor.

In short, the coordinator serves not only as the important liaison between the institutions, but also to transmit the cultural knowledge and theoretical framework of the Fifth Dimension to the new students as part of their field work. For these reasons, we thought that it was necessary that this person have taken the class, or have some other qualifications that would substitute for class experience.

During Phase III, both new coordinators hired by the Club (in close consultation with us), were two star students in the previous year's class. One of them had taken the class for three quarters and the other for two quarters. Throughout the year both of them were excellent in accomplishing exactly what we had hoped for: to provide the cultural substrate of continuity for the transmission of knowledge in an otherwise changeable environment (remember that the undergraduates change every 8 weeks and there is a high turnover of children in these sites).

There are other strategies that we came up with to ensure cultural continuity which in turn, as we will show (chapter 6), creates the conditions

for cognitive growth. For example, one problem that we encountered in the way the Fifth Dimension was designed and run was that the undergraduates have to learn a large number of games (about 40) early in the quarter if they are to be able to guide the children's performance adequately in these games. To make this task easier and achieve the best results, the students were held responsible learning two games well at the start of class and for devising ways to teach their fellow students these games. This technique helps several of them to become experts at a number of games, while at the same time managing to expose them to a wide variety of them early on in the quarter. Other such strategies could be listed. The main point, however, is the need for a constant process of renewal and interaction to sustain continuity of the Fifth Dimension culture. With these background comments in mind, we turn to describe the dynamics at each site.

(1) La Playa: The Community Youth Club

This was the third year of the operation at this site and it continued growing. A total of 158 children participated, with 70% of them boys and 30% of them girls (see Table 4). This continues to be the same ratio of boys to girls as it was the previous year and seems to reflect the ratio among the children who attend this Club in general. The La Playa Club tends to be dominated by a larger number of boys, particularly older boys, as opposed to the Coast City Club which seems to have a bit more balanced ratio of boys and girls. (As we report in the next section, this more balanced ratio shows up also in the ratio of the Fifth Dimension program at that site.)

 Insert Table 4 about here

TABLE 4

Proportions of children (absolute numbers parentheses) who participated in the Fifth Dimension sites over Phase II and III ^{[1],[2]}

		CC ^[3]	Library	CYC/LP	
1987 — 1988	M	64% (18)	66% (21)	59% (48)	
	F	36% (10)	34% (11)	41% (34)	
	Σ	(N = 28)	(N = 32)	(N = 82)	
PHASE II					CYC/CS
1988 — 1989	M		66% (38)	66% (91)	?
	F		34% (20)	34% (46)	?
	Σ		(N = 58)	(N = 137)	?

PHASE III 1989 — 1990			M	70% (111)	59% (115)
			F	30% (47)	41% (79)
			Σ	(N = 158)	(N = 194)

- [1] In these calculations, all children are included even if they participated only once.
- [2] It should be noted that the overall capacity of the site was very different. (That is, some had as few as 3 to 4 computers [CC] while others had as many as 7 to 8, even 10 computers [CYC/LP].)
- [3] This site operated for a shorter period of time than the rest of the sites (i.e., two quarters as opposed to three).

The age range of the children in La Playa forms a normal distribution, which varied from a single five-year-old and a few 6-year-olds at one end to a few 13-year-olds, and one 15-year old at the other end (see Table 5). The mean ages of the children who attended site most frequently were 8-, 9-, and 10-year-olds for both boys and girls. Drop-out rates were still high at this site (55%); and the rest of the children (53%) attended site at a low rate of attendance (somewhere between 3 to 24 days out of possible 90 days) (see Table 6). In short, the pattern of attendance did not change from the previous two years, except that this year there were fewer younger children. This might be related to the fact that the Club was concentrating in attracting teenagers to attend the Club--which would certainly keep out very young children when there is blasting teenage music in one of the Club's most central areas.

Insert Tables 5 & 6 about here

We also noticed a lot of fluctuation in children's attendance at the Club in general. In previous years we could predict that when there was a school holiday there would be fewer children at site; but this year this rule did not hold true. There were times that the Club at large was totally empty and other times it was as busy as ever; but one couldn't tell why. One interesting observation, made by both the research assistants and the undergraduates, was that often on days when the Club looked empty, the Fifth Dimension was the only place where there were still a good number of children. In short, the Fifth Dimension continued to be one of the most popular activities of the Club as the overall number of attendance reflects.

The coordinator of this site was a woman who had attended the library site the previous year for three quarters. One of her expressed goals was to import

TABLE 5

Proportion of children at various ages (absolute numbers in parentheses) who participated in the Community Youth Club in the La Playa and Coast City area

		AGE															
PHASE II		?	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
1987—88 SB	Boys	[Can not calculate proportions by ages accurately]														(N = 48)	
	Girls															(N = 34)	
PHASE II		<hr/>															
1988—89 SB	Boys	7 (6)	2 (2)	11 (10)	9 (8)	13 (12)	21 (19)	16 (15)	9 (8)	9 (8)	3 (3)					(N = 90)	
	Girls			2 (1)	15 (7)	13 (6)	4 (2)	26 (12)	17 (8)	11 (5)	4 (2)	4 (2)				(N = 46)	
PHASE III		<hr style="border-top: 1px dashed black;"/>															
1989—90 SB	Boys	3 (3)	1 (1)	4 (4)	14 (15)	13 (14)	18 (20)	22 (24)	13 (14)	12 (13)	2 (2)			1 (1)			(N = 111)
	Girls			2 (1)	17 (8)	23 (8)	17 (8)	17 (8)	13 (6)	4 (2)	4 (2)				2 (1)	(N = 47)	
PHASE III		<hr/>															
1989—90 Enc	Boys	5 (6)	9 (10)		20 (23)	15 (17)	14 (16)	15 (17)	9 (10)	10 (12)	3 (3)				1 (1)	(N = 115)	
	Girls	6 (5)	3 (2)	9 (7)	16 (13)	14 (11)	16 (13)	14 (11)	6 (5)	11 (9)	1 (1)	1 (1)	1 (1)			(N = 79)	
PHASE III		<hr/>															
		?	4	5	6	7	8	9	10	11	12	13	14	15	16	17	

TABLE 6

Proportion of children (absolute numbers in parentheses) attending the Fifth Dimension program at the Community Youth Clubs in La Playa (LP) and Coast City (CC)

PHASE II

Rate of Attendance

Days of Attendance	Drop-In (1-2)	Low (3-24)	Med-Low (25-46)	Med-High (47-68)	High (69-90)	
1987-88 LP	M					
	F					
1988-89 LP	M	42% (38)	51% (46)	5% (5)	2% (2)	(N = 91)
	F	57% (26)	43% (20)			(N = 46)

PHASE III

1989-90 LP	M	55% (61)	42% (47)	3% (3)		(N = 111)
	F	55% (26)	45% (21)			(N = 47)
1989-90 CC	M	60% (69)	37% (43)	2% (2)	1% (1)	(N = 115)
	F	58% (46)	42% (33)			(N = 79)

some of the conditions that are conducive to enhancing cognitive growth from the previous year at the library site (see chapter 6 for details). She wanted to try to create two "shifts" between Monday/Wednesday and Tuesday/Thursday, as the Library had. However, she soon realized that the extreme variability of children's attendance at the Club undermined such plans.

She managed to transmit respect for the rules of the Fifth Dimension to both undergraduates and children. The La Playa Community Youth Club looked quite orderly while children and undergraduates pursued their activities together enthusiastically. Because of the larger amount of equipment and space at La Playa, there were many undergraduates at site and often several of them worked with only one child. But there were also many occasions when groups of children worked together, most often when trying to solve a difficult game. In general, the site seemed to be doing as well as the previous year and the children, the undergraduates, and the coordinator were enthusiastic about their activities.

(2) Coast City: Community Youth Club

This was the second year of the operation of the Coast City site, but we do not have data about children's attendance from the previous year because it was not yet a research site. Even if we had such attendance rates, they could not have been used as a comparison point because the site did not begin to operate fully until the spring; even then, it was open only twice a week and there were only a few undergraduates who participated each quarter. What we know about the previous year is that there were a lot of children who wanted to participate and that many had to be turned away.

This year 194 children participated at this site (see Table 4). This is the largest number of children who have passed through any site in all the

years of our project. There is, however, the same pattern of weak attendance among the children as we find in the La Playa Community Youth Club (see Table 6): Most of the children simply dropped in once or twice to see what was going on (59%), while almost the rest of the children (39%) show a low rate of attendance (somewhere between 3 to 24 days out of a possible 90 days). Boys still predominate at this site as well (59%), but not to the extent of the La Playa Club. The age range of children who participated is again rather wide, ranging from a few 5-year-olds to a few 15- and 16-year-olds. Overall there were more younger children (6- and 7-year-olds) who participated at Coast City than there were at La Playa (see Table 5).

The Coast City Club does not simply operate in the after-school hours as does the La Playa Club. The school system at Coast City operates all year round; and in the Club there is always a mixture of children who come only when they are out of school and others who come only when they are in school (during the after-school hours). The Club has a large number of children and any time of the day one visits it, there are children all over the place. Strangely, this Club does not feel as rowdy and boisterous place as La Playa. Maybe that's partly because of its lay-out and partly because it has a larger number of younger children than La Playa.

Each day, when the coordinator announced over the loud speaker that the Fifth Dimension was open, a large number of children came forward to get their names on the waiting list. There were always plenty of children who wanted to participate, and there was not a single time that there were not enough children for the Fifth Dimension. The greatest limitation on the number of children the program could accommodate was the number of computers (about 4-5 operating), which, in turn, limited the number of undergraduates that we could place at the site (about the same number as there are computers). The number

of children attending site every day was somewhere between 10-12, which means that the undergraduates were working always with 2 children and sometimes 3. There was one undergraduate who had worked as a coach and would sometimes work quite well with 4 and 5 children: he would be in charge of the keyboard, but the children had to direct his every move, which they had to decide among themselves; he asked them a lot of questions so that they could all be involved, and he would also ask them for explanations or make the wrong move so that they would talk and articulate beautifully the reasons behind their decisions. This Fifth Dimension is bustling with life and excitement.

(3) Seatown: The Community Youth Club

According to the plans by the Club, last year Seatown was not to become a fully operating site. The Club has worked out its own procedure of introducing the children slowly to the activity until all the necessary materials are gathered to start a fully operating system. During the entire year, this site was open only one day a week and two coordinators from the other sites, with the help of one student, worked at it. Because there was still a lack of computer equipment, they had to bring in computers from the regular sites and have the children play a few of the most popular games. These games were played according to the task cards and children also wrote and received letters to and from the Wizard.

This seems to work as a way to introduce the children slowly into the whole idea of computers, the Fifth Dimension, and the Wizard so that later on one can even get them involved in constructing parts of its, like the maze or the map, and so on. This probably also works as the best strategy for fund-raising.

By the summer, all the necessary steps were taken to construct a fully-

operating Fifth Dimension; and beginning in September, 1990, Seatown as planned, obtained its own Fifth Dimension, and yet another new site, near Seatown, is starting up as this report is being written.

Some Reflections

During Phase III, the coordination between the community institutions and the university, the operation of the sites, and the class, worked quite well. As we saw, both sites grew; more children participated in each one of them than during the previous year, and a third site started up. The class stabilized to approximately 25 students per quarter, which is a good number to run the sites.

Several times over the year we talked to the Club directors as well as to other personnel from the regional organization. Both directors of ongoing sites expressed enthusiasm for how things were going. They felt confident that the organization would find the money to support the Fifth Dimension in the long run.

At the beginning of Phase III there were two pressing concerns connected with financing. The first was that the coordinators were being paid from the emergency funds, and they had not yet received approval for any of their grants. The second concern was that for the Fifth Dimension to qualify as a fund-raising activity it had to become a "line-item" and be written into the budget. By midyear, this goal was not yet achieved. When we talked to the director from the Coast City Club, this was exactly his goal: to make the Fifth Dimension a "line-item." It was clear from talking to him that he was a very strong supporter of the Fifth Dimension, and he was instrumental in promoting the Fifth Dimension at Coast City and then at Seatown, where he became the director. He had a very sophisticated idea about the Fifth Dimension and was determined to make things work at the financial end.

By the end of Phase III the Fifth Dimension became a line item and is now considered part of the educational activities of the larger regional Community Youth Club. This means that it is now funded like all the other activities at the Clubs. In short, by the end of Phase III of the research, we see a more complete incorporation of the Fifth Dimension into the Club's activities than when we started. And it has not stopped growing. Now, there are provisions to begin a fourth site at yet another Club (North City West).

As a final note, during Phase III, the Fifth Dimension spread to a larger radius than just within the Clubs. It was also adopted by a Catholic church in La Playa, the parish of a mini-barrio, where it serves a largely immigrant, Hispanic community. And it is still in full operation at an alternative Children's School, where we began the previous year.

