TELECOMMUNICATIONS AND THE WRITING PROCESS IN A GRADE SIX CLASSROOM

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B.Ed., University of Lethbridge, 1975

A One-Credit Project
Submitted to the Faculty of Education
of The University of Lethbridge
in Partial Fulfillment of the
Requirements for the Degree

MASTER OF EDUCATION

LETHBRIDGE, ALBERTA

March, 1992

ACKNOWLEDGMENTS

As with any undertaking of this nature, there are a lot of people who contributed to it in some way. I would like to express my thanks to the following people and organizations:

-my supervisor Dale Burnett for all of his encouragement and assistance. He always kept me focused on what was important in the project and asked the right questions to help me critically examine what I was doing. Without his many hours of work and dedication this project would never have been possible.

-Lou Ganske for his painstaking editing of the document and for the excellent telecommunications course that I was able to take while in the beginning stages of this project.

-AT & T for offering an excellent teaching tool in the form of the Learning Network and for the technical and curricular support that they offered. Also a thank you to Margaret Riel for her interest in this project and the articles that she shared with me.

-The students in my grade six classroom who were a wonderful bunch for such an endeavor. Their enthusiasm and willingness to work helped to make the project a success.

-Lethbridge School District No. 51 for providing the funding in the form of an innovative curricular grant to enable me to take part in the Learning Network.

-Maurene, Corey, Jay, Skye, Kailey and Scott for their patience for all the times I was not at home but putting in the hours needed to complete this endeavor.

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I INTRODUCTION

A. Rationale

The use of computer technology in elementary education is becoming more common, both to assist in instruction and as a tool for the students to use. There is substantial activity in the area of Computer Assisted Instruction (CAI) in which the students are instructed or drilled in specific curricular objectives using the computer as a teaching or tutoring machine. There is also widespread use of the computer as a tool. Computer as a tool applications include using the computer as a word processor to aid in the writing process, using the data base capabilities of the computer to store and categorize information, and using the computer as a publishing machine for such activities as producing school newspapers as well as for day to day writing assignments. These uses of the technology can be very effective in helping teachers to reach their curricular objectives.

Telecommunications use in education offers some exciting new possibilities by giving teachers and students access to schools and people in geographically diverse locations. It provides an opportunity to share ideas and participate cooperatively in projects of mutual interest. In the area of writing, it may give additional purpose to students' work. The students have an opportunity to write for a real audience and not just for the teacher who would be evaluating the written work. It also gives the students the opportunity to participate in the regular use of an important technology that has gained widespread use in occupations outside of education. The focus of this project was the linking of a grade six classroom with nine other elementary classrooms in a learning circle using telecommunications technology. The classrooms worked together on a curricular project which focused on creative writing.

B. Definitions

With the advent in recent years of computer and telecommunications technology, there has been widespread use of these technologies to send information from one location to another. There are a variety of technologies in use, including satellite data transmission, satellite broadcasts, Interactive Television Fixed Service (ITFS), audiographic conferencing, telephone audioconferencing, video phones and fax data transmission. One of the more popular uses of communications technology is the linking of computers in diverse locations through the use of modems and existing telephone lines as was done in this study.

Telecommunications technology encompasses a variety of different applications such as electronic messaging, teleconferencing, electronic mail and electronic bulletin boards. Distinctions need to be made among these different terms.

Electronic messaging refers to the sending of messages via a modem and telephone line from one computer to another. The term teleconferencing means that the users are sending and receiving messages in real time, just as when two people are using the telephone. Electronic mail refers to a system in which a person sends a message to a receiving computer which stores the text in an electronic bulletin board which may be accessed by other people at a different time.

This project involved the sending of messages from school based microcomputers via a modem and the phone lines to a central main frame computer located in New Jersey where they were stored in an electronic mail box. The messages were then accessed by the other schools in the network, using similar technology.

C. Educational Objectives

The action part of the project was to initiate and carry out a curriculum project using the AT & T Learning Network. The project was carried out with a grade six classroom using the *Mind Works* curriculum. An Apple IIe computer was used with a Hayes 2400 baud modem. The computer was located in the computer room of the school and a dedicated phone line was installed in the computer room. The computer was used exclusively for this project so access was not a problem. It was available for teacher and student use during regular school hours as well as such non-instructional times as before and after school. Initially, two one hour blocks of time per week were scheduled for the entire class to come to the computer room to participate in the project.

The objectives for the project were:

1. to introduce the students to the use of telecommunications technology.

2. to provide the students with motivation and purpose in developing their writing skills.

3. to improve the students writing ability through the *Mind Works* curriculum.

4. to allow the students to gain insight into and understand the ideas and views of students from different geographic locations.

5. to enable the students and teacher to exchange ideas and make contacts with colleagues.

6. to enable the students to use and improve their research skills.

7. to acquire the hardware, software and expertise for the school in order to enable teachers to make use of this technology in the future.

D. Research Design

From a research perspective, this is a descriptive study which falls into the category of ethnographic research. The primary source of data was teacher observation with records kept in a journal.

The purpose of the project was not to prove or disprove a given hypothesis but rather to explore the area of telecommunications with certain research problems of interest in mind. Some of the research questions that were asked are listed below.

1. Does the use of telecommunications technology give clearer purpose and motivation to student writing?
2. Is there an improvement in student writing through the use of the technology over quality of writing without using the microcomputer?
3. Do the students make connections with other students in the network and gain cross cultural knowledge?
4. Do the students use and improve their research skills?
5. Do the students actually learn to use the communications technology or is this important?

A detailed journal account of what took place, noted successes and failures, problems and triumphs. Technical problems and how they were, or were not, overcome was also included.

At the conclusion of the project the students were asked to complete a questionnaire in an attempt to gather additional information on their attitudes towards the project. They were asked how they perceived the project and what they felt were its strengths and weaknesses. The first part of the questionnaire was in the form of a Likert scale. At the end of this part the students were asked some open ended questions in which they had the opportunity to express some of their personal likes and dislikes and opinions about the project. The questionnaire was filled in anonymously to encourage the students to express their genuine opinions and was completed when the teacher was not present in the room.

In summary, the focus of the project was the implementation of a curricular innovation involving student writing and telecommunications using the AT & T Learning Network. The research aspect of the project was descriptive in nature and attempts to give a detailed account of what took place in relation to the stated objectives and research questions.

II REVIEW OF LITERATURE

A. Telecommunications in the Classroom

1. Types of Projects

There have been many uses of telecommunication technologies by schools and other educational institutions. Electronic mail and teleconferencing have been used to enable students to correspond as pen pals with students in distant geographic areas (Beazley, 1989). Students have been able to use telecommunications to complete distance education courses and thereby been able to communicate quickly and effectively with their teachers (Clark, 1989). Bulletin boards have been used to enable classes in diverse locations to work cooperatively on a variety of curriculum projects and to permit teachers to exchange ideas and communicate on topics of mutual concern in education (Crowley, 1989). Elementary students have been able to receive instruction from personal tutors using electronic messaging (Ross, Smith, Morrison and Erickson, 1989). Gifted students living in isolated rural areas have been able to participate in projects with other gifted students using electronic bulletin boards (Southern, 1989). School districts have made data bases, encyclopedias and other resources available to teachers and students for research purposes (Goldberg, 1988). Students studying foreign languages have been able to communicate directly with native speakers their own age using video phones and other technologies (Mageau, 1990).

Educators must be careful in the use of telecommunications to be sure there is a genuine need for the tool and they are not just creating a need. There are many contrived uses for computers that are just electronic representations of traditional pen and pencil curriculum activities. Some of the reasons for the

failure of these uses are:

1. they are not interesting to the children

2. they are better done in a traditional way

3. the teachers use the electronic communication system and not the students. So the activity is beneficial to the teachers but not to students (Upitis, 1990).

In an AT & T Learning Network project, the excitement for the kids came not from the curriculum project that was being worked on, but the prospect of being linked up with students from distant schools. Much of the potential magic and learning was lost by not letting the students explore this interest (Upitis, 1990). The students were unable to explore their interest in communicating with distant students on an informal basis but were limited to the curricular project. In this situation a great deal of potential learning was lost by not allowing the students to pursue this interest.

In contrast to contrived uses, there are many uses for telecommunications that respond to real needs such as correspondence courses, communications with isolated schools such as in Canada's north and access to central data bases and information systems. It is important to remember that in a writing activity such as letter writing to improve writing skills, the telecommunications technology is the tool and not the object of the exercise. The students need a reason to communicate other than just to please the teacher. Only then will a real use of the technology develop. The technology must not become the most important element of the exercise but rather the vehicle or tool to be used to achieve other more important objectives.

An appropriate use of the technology is the Kidsnet science project. In this project, students in classrooms all over North America gather data on the amount of acidity in the precipitation in their local area and send it using

computers and modem to a central computer where patterns of acid rain and other data is generated. It is an opportunity for students to participate in some hands on science and an example of a real rather than a contrived use of the technology (Upitis, 1990).

2. Benefits and Positive Results

There are significant potential benefits for students in using telecommunications in a classroom situation where they are communicating on an informal basis with other students at a distant location. Since most of the students seem to enjoy it, it provides a natural motivation to learn to write clear, concise and interesting messages. The writing skills of the students will improve (Beazley, 1989, Cohen and Riel, 1989, Riel, 1989). The students are given clear purpose for their writing and an audience made up of their peers. Since the students know that their writing will be accessible in some situations to a number of other students and teachers, they want their written work to be the best that they are able to produce. They can also gain valuable cross cultural experiences. They have the opportunity to share their values and beliefs and what it important to them with their new distant friends. It could also improve their research skills. Students in such a project use atlases and encyclopedias to locate where their new correspondents live and to locate places that they read about in their correspondence (Crowley, 1989). The fact that the students are physically invisible can also provide a couple of advantages. It may be effective in breaking down cultural barriers of race, age or social class that would occur in the classroom (Knapp, 1987). Also, it could provide an opportunity for shy individuals to use more communication skills than they would in a normal situation.

It has been observed in various projects that "high motivation resulting from this electronic language exchange shows that students read more and

read with more interest and enjoyment"(Beazley, 1989). When the students are teleconferencing the rate at which the electronic messages appear on the screen (either 300 or 1200 baud rate) requires that the students scan the text and then make a hard copy to read themselves or share with classmates. So there are many opportunities for not only writing activities but also reading activities.

There have been significant and important advantages to students in isolated areas when telecommunications technology has been used to assist with distance education. In this situation students are able to send assignments to teachers and receive feedback using the computer and modem (Clark, 1989). There is also the possibility for teleconferencing using this technology. In the Canadian north, these means have been used to bring educational opportunities to people who otherwise would not be able to pursue some learning activities. The advantage over conventional correspondence methods are that electronic mail enhances the working relationship between learner and tutor. It creates a feeling of working one to one (Burpee, 1989). Also the immediacy of electronic mail helps in efficiency. It cuts down in the frustrations that result from delays and turn around time.

In an application related to distance education, telecommunications are used to network gifted students in isolated communities so they are able to work with other students of similar ability on curriculum projects. It is often not possible for these students to interact with students like themselves. One such project also provided access to the information and human resources of a major university (Southern and Spicker, 1989). Over the period of three years that the project was in effect, student information requests and social contacts increased sharply in the second and third years. So, at least in this particular case, it appears that the novelty of the technology was not the main reason that the students made use of it. As they became more comfortable with the technology

and understood to a greater degree the possibilities it held for them, they were more willing to use it.

One of the fastest growing uses of telecommunications in education is the linking together of classrooms in networks to meet curricular goals. Much of the growth has come as a result of the number and variety of projects being sponsored by commercial publishers and non-profit institutions. Some of the more prominent examples are AT & T Long Distance Learning Network, FrEd Mail Foundation, Global Lab, Iris, Kids 2 Kids, National Geographic Kids Network, Teleclass International and World Classroom. The common thread among these projects is that they all attempt to link the telecommunications experience directly to the curriculum. It is felt that the technology is a positive motivation for the children along with the fact that they are able to communicate with and work together with peers from other locations. These projects emphasize cooperative learning and the network activities serve as models of what students will be doing in real life when in the workplace (Mageau, 1990). It is felt that increasingly in the future we will depend on and work with people who are not in the same room. The network concept also promotes cooperation among teachers since they must come to some agreement on the nature of the project that they will be working on together. It gives teachers the opportunity to get together and plan curriculum in a technology oriented way.

The networks also enable students to share data on science oriented projects such as Global Lab and Kids Net. Students are able to participate in real scientific projects whose scope goes far beyond their own schools or communities. In many cases, it also gives them access to the expertise of professional scientists who are able to help them interpret their findings. Projects such as this enable the students to view environmental concerns on a global basis and expand their thinking beyond their own limited experience (Mageau, 1990).

The learning networks also give the students the opportunity to learn about other children. It was found in a number of these types of projects that the students soon made informal use of the bulletin boards to establish contacts and communicate about areas of personal interest with the other students in the network. They were soon consulting atlases and encyclopedias to find out about the places where these children lived and thus increased both their knowledge and research skills (Crowley, 1989).

One of the most effective methods of teaching is by the use of personal tutors(Ross, Smith, Morrison, and Erickson, 1989). Due to a number of reasons, including cost and proximity, it is not possible to give students access to a personal tutor on an ongoing basis for any length of time. With the use of telecommunications, however, it is possible to link students up with personal tutors through the use of bulletin boards and electronic mail. The success of the distance tutoring programs depends to a large degree on the commitment and talents of the human tutors. In one such project conducted in Memphis, Tennessee, at risk 5th and 6th grade students were matched up with graduate students in education who tutored them in writing assignments for language arts (Ross, Smith, Morrison, and Erickson, 1989). Students in the project showed superior results as compared to a control group in reading and math performance on standardized tests. Their writing skills were also higher on several dimensions such as clarity, organization and grammar than the control group. The experimental group generally wrote more concisely and with better organization. The gains made by the students were probably not due completely to the technology but the important point is that the technology allowed for tutoring to take place.

The communication that takes place between students in distant places need not be restricted to their native language. The opportunity exists for

students to communicate on a meaningful basis with native speakers of a foreign language that they are studying through the use of telecommunications technology. Teleconferencing can be used, or, if oral communication is desirable, then video phones such as Luma Phones can be used. The ability to see and speak with the other person is provided by this technology and this gives the personal motivation to learn the language that is lacking in most language courses (Mageau, 1990).

3. Cautions and Problem Areas

Despite all of the positive results reported by teachers and others involved in telecommunications projects, there are some problem areas and drawbacks that need to be recognized and addressed. One of the problems that appears consistently in the projects is the expense of online time for sending data and accessing commercial data bases and bulletin boards. In many of the projects, funding is obtained from sources outside of the school since budgets do not allow for the added expense of a project of this type. The cost of the hardware needed is a one-time expense and is rather small compared to the ongoing costs of telephone line time especially since long distance costs would probably be involved (Crowley, 1989).

Another problem, especially for distance education, is access to hardware in the homes of those who need the service. This is not a problem in the schools since the hardware needed is almost always in place but it becomes a problem for individuals wanting to avail themselves of this technology (Burpee, 1989).

In some projects there are problems with telephone lines in the transmission of data and this is especially true in rural areas (Crowley, 1989). The technical problems associated with such projects cannot be

underestimated or overlooked especially in the initial stages of the project and if the teacher has had little prior experience in the use of modems. The teachers or leaders of the projects need not have a lot of expertise in telecommunications at the outset but must be enthusiastic about the project and willing to work through the little technical problems.

As mentioned earlier, there must be a real need for the technology. The activity should not be contrived or there will very likely be little gain on the part of the students. The successful projects are not the ones that attempt to showcase the technology but rather those that use the technology to achieve genuine curricular goals.

A caution is also issued in having a very enthusiastic teacher dominate the technology at the expense of the students. Although the curricular goals are important, it is important also that the students gain some knowledge and expertise in the use of the technology. So if the teacher is doing all the uploading and downloading of data, then the students are missing out on a valuable learning experience (Southern and Spick, 1989).

4. Implications

What are some of the implications for teachers embarking on some sort of telecommunications project for their class or their school?

First of all it is important to examine closely all of the related costs and seek adequate funding from outside sources if the school itself is not able or willing to bear the costs. A little research and imagination will usually uncover sources of funding for such projects especially if they fall within the realm of curriculum innovation.

The critical factor in the success or failure of such projects is usually not technological but rather human. This is the case no matter what the design or the objectives or the nature of the projects. The technological problems can be overcome. But the teachers' enthusiasm, commitment to the project and views of how computers should be used in education are vital factors for success (Crowley, 1989). It is also found that teachers who volunteer for such projects are more successful than those who are conscripted and that teachers who use the computer for classes other than computer science find the experience more rewarding than computer teachers. The computer teachers tend to view the technology as something to be displayed while the other teachers see the technology as a powerful educational tool. Computer expertise on the part of the teacher is not a necessary requirement (Crowley, 1989).

Different scenarios are attempted in class projects for providing student access to the computers. In some cases one computer with the modem is in the elementary classroom at all times and the students have sign on times of about 20 minutes each with the regular classroom activities going on around them. In another case the computer is in the classroom again with no fixed schedule but the students using it as it becomes available and they have some free time. The most effective scenario is a third one in which there is a specific messaging period for the entire class (Crowley, 1989). All of the students are engaged in an activity related to electronic messaging whether they are online, researching, reading messages, composing messages on a word processor or revising messages to send. The teacher's role is that of a facilitator.

B. Qualitative Research

Qualitative methods for conducting research in education, while not new, are becoming increasingly popular as opposed to the more scientific quantitative methods (Fetterman, 1988). The word quality refers to the essential

character or nature of something as opposed to quantity which refers to the amount.

One of the major underlying assumptions of qualitative research is that there are multiple realities that are socially defined. This view is the opposite of the positivist paradigm that says that behavior can be explained through objective facts.

There are many different types of qualitative research. These include ethnography, naturalistic inquiry, sociological qualitative inquiry, qualitative inquiry and connoisseurship/criticism. There are some common threads or characteristics of qualitative research that set it apart as a distinct type of methodology.

First, the setting is very important to qualitative research. It is the direct source of the data. The context is important. What is true in one situation does not necessarily hold for all others. The researcher attempts to understand the situation through participation.

Second, the researcher is the key instrument in gathering the data. It is important for the person conducting the research to immerse her or himself in the setting and to try to understand it from a participant's perspective.

Qualitative research attempts to provide a rich description of the phenomenon being studied. It is anecdotal in nature and attempts to describe using words rather than numbers. This type of research attempts to describe, appreciate, interpret and explain the educational phenomenon (Cziko, 1989). This can be accomplished through surveys, interviews, case studies, photographs, drawings, observations, journals and samples of work. There are no standard methods.

In qualitative research, the educational process is important and not just the results or products or outcomes of a certain teaching method or treatment. The process involved in the teaching is taken into account rather than narrowing the perspective to examining the results.

The questions or theory in this type of research emerge as the study takes place. The researcher does not necessarily enter the study attempting to prove or disprove a certain hypothesis. The theory emerges from the bottom up. As the study progresses and the researcher becomes more familiar with the context, the questions that are most significant to that situation emerge and are studied.

Phenomenology is very much a part of qualitative research. This emphasizes the subjective aspects of peoples behavior and attempts to understand the subjects from their own point of view.

This method of research seems to hold a lot of promise for teachers who are interested in understanding and improving their own classroom performance. They can thoroughly study what is taking place in their own classroom and apply their findings to improve effectiveness in subsequent classes with similar situations. It could also be helpful for other teachers in similar situations.

III THE AT & T LEARNING NETWORK

A. Overview

The AT & T Learning Network has been in existence for a number of years. The design is based on the Intercultural Learning Network that originated at the University of California in San Diego (Mageau, 1990). The network joins six to nine classrooms from the United States, Canada and overseas together in a learning circle. The participants in this circle work cooperatively on a curriculum project of their choice and, to a large degree, of their own design.

In the initial stages the teacher who is interested in joining one of these circles sends in an application form to AT & T. On this form the teacher is required to indicate the grade level of the students that will be involved, the choices of curriculum projects that they would like to be involved in and the type of hardware that they will be using in their school. The fees for joining the network vary according to the length of time you wish to be a member of a circle. Currently the fee for a full year subscription is $745 and for a semester it is $445.

B. The Technology

The technical requirements for the school are few, basically requiring only a computer, modem and phone line. The schools can use any Apple II, Macintosh or MS-DOS compatible computer and any Hayes compatible modem. They require a dedicated phone line that does not run through a school PBX.

The learning network supplies the rest of the materials and support necessary for participating in the program. This includes items such as the following:

1. the curriculum guide for the project chosen,

2. on-line support that facilitates curriculum planning,

3. specially tailored communications software for the type of computer to be used by the school,

4. 24 hour access to AT & T Mail, an electronic mail service,

5. free use of AT & T 800 number hot line for technical and customer support,

6. a tutorial disk for training, and

7. a subscription to the AT & T Learning Network Newsletter for sharing ideas and activities of participants. (Riel, 1990)

The fixed charge that is paid at the beginning of the project covers all components of the educational program. There are no hourly or monthly rates for computer use and there are no charges for use of the telephone lines.

The classrooms in each learning circle communicate through an electronic message system. By the use of the modem and the communications software, messages are sent to the AT & T central computer. The computer deposits the messages into electronic mailboxes where they may be accessed by all members of the learning circle. Each member of the circle also has a private mailbox that can be accessed by only them. It is possible to send student compositions created with most existing classroom word processing software.

C. Learning Circles

The interaction in the learning circle begins with each classroom completing a survey in order to introduce themselves to the other members of the circle and to begin the planning phase for the curriculum projects. At this point each classroom sends a "Welcome Pack" via the regular postal service to each of the other classrooms. This serves as an introduction of the class to the other members of the network and can contain such things as photographs of the students, information about the school and maps, brochures and information about the community in which they live. Each class then decides on the project that they will be sponsoring for the final publication. When this has been finalized the exchange of student work begins. The classes put together a final project publication before the deadline for finishing the project.

AT&T LEARNING NETWORK

Learning Circles

- **Interactive Groups of 7-10 Participants**
- **Culturally & Geographically Diverse Participation**
- **Shared Curriculum Topic**
- **Elementary, Middle & High School Level**
- **Volunteer Learning Circle Coordinator**
- **Circle News**

An AT & T Education Program Team provides direction and advice for planning curriculum projects, exchanging student work and completing final publications. One teacher member of the learning circle serves as the coordinator and helps facilitate group interaction, summarizes group discussion and helps monitor the group's progress. There is also a mentor coordinator who is a teacher with experience in the network who coordinates the efforts of

several circles and is there for support with problems that the circles may encounter. The mentor coordinator along with the circle coordinators share a folder for exchanging information and discussing topics of mutual concern.

D. Curriculum

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|                                                          |
|                   Curriculum Choices                     |
|                                                          |
|   ●  Computer Chronicles (Journalism & Language Arts)    |
|   ●  Mind Works (Creative & Expository Writing)          |
|   ●  Places and Perspectives (History & Geography)       |
|   ●  Global Issues (Social Studies & Current Issues)     |
|   ●  Society's Problems (Social Studies)                 |
|   ●  Energy and the Environment (Science & Current Issues)|
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There are four different curriculum projects available to elementary classrooms from grades three to six. Mind Works is an English/Writing curriculum which is designed to enhance creative writing skills and develop different forms of self-expression. The curriculum focuses on the writing process and the mechanics of good writing. At the end of the project the students in the circle publish a Creative Writing Journal. The second curriculum option is entitled Computer Chronicles. In this project the students work together to produce an issue of the Computer Chronicles Newspaper. It is possible for each classroom to focus on whatever topic they wish for the paper. The third curriculum, Places and Perspectives, encourages students to explore

regional history, culture, government and geography and share this knowledge with people from different locations. The goal is to expose students to places beyond their own schools and communities in order to expand their outlook on life and broaden their views. Each classroom sponsors a project for a section in the Places and Perspectives Review. The last option is entitled Energy Works which is a science curriculum focusing on dependence on energy. In this curriculum, the students explore and learn about energy and share scientific experiments with diverse and distant audiences.

The two other curriculum projects, Global Issues and Society's Problems, are available only to Middle School and High School circles.

IV THE NETWORK IN ACTION AT LAKEVIEW

A. Beginnings and Expectations

Part of the appeal of being involved in the education of elementary students and being a subject generalist is the opportunity for learning. Teachers who are willing to take a few risks and venture into new areas are able to stretch and grow in many ways. But it is necessary to take that initial step, to be willing to venture into unknown areas and risk failure.

A brochure arrived at Lakeview School in the fall of 1990 from AT & T which described linking classrooms together using telecommunications technology. I knew very little about modems and telecommunications of any sort and had never used a modem to do anything. But this idea of working with other teachers and classes in diverse areas on curricular projects was very appealing. The computer, in this case, could be used as a tool to achieve curricular ends and be a motivation to students to improve their writing.

With encouragement from colleagues at school and my principal, I applied for and received funding from the school district in the form of an innovative curricular grant to be a part of a Learning Circle. The school purchased a modem which was not covered in the grant and also installed the needed phone line. As time went by things seemed to fall into place. There were, of course, many details to do with funding to look after and proposals to write but those administrative duties, while causing some anxiety, seemed to move along quite smoothly.

The expectations and hopes for the project were many and based on no experience whatsoever in telecommunications. I could see initially that there

would be benefits from the project for me and the students but my focus was on the students at this stage. I hoped that they would be excited about working with students in distant locations and that they would be able to get to know some of them. I also wished that the students would be excited by the technology itself and be able to see some of the applications. I had some apprehensions about the curriculum and my ability to come up with writing projects that would be motivating and exciting to the students. One of my great hopes was that the technology and the linking with distant peers would help the students improve their writing skills.

B. The Technology

1. Lakeview School

Lakeview School has a computer lab that serves all of the students from grades ECS to six. It is located in a classroom close to the library and is the prime responsibility of the librarian at the school. There are 22 Apple IIe computers in the lab and two dot matrix printers. Most computers have one disk drive and a color monitor although some have two disk drives and some have monochrome monitors. The lab is used very heavily, mostly for drill and practice type activities.

The modem purchased was a Prometheus 2400 baud internal modem which was installed on one of the Apple IIe's with 128K of RAM, two disk drives and an Epson printer attached. The phone line was installed in the computer room as the computer was located there.

When all of the hardware was in place and the phone line connected, I was ready to try out the new technology and , as it turned out, set myself up for the first of many frustrations.

I decided to try to connect to ASPEN (the Alberta Special Education Network) to try out the system. It was very frustrating because things seemed to be working properly but the keyboard did not work. Attempts with different combinations with the software were no more successful.

Fortunately, I was taking a telecommunications course at the same time that the network was beginning. This turned out to be extremely helpful. Before the network started, I had already become familiar with much of the technology associated with telecommunications and put it to use in other applications. This did not eliminate all of the frustrations but certainly minimized them.

With the help of my instructor, Lou Ganske, we determined that the problem was software related. The software that came with the modem did not provide VT-100 terminal emulation that was required by ASPEN. So I obtained some new software that would provide that option and logged on to ASPEN with little trouble.

Shortly after that the curricular and technical materials arrived from AT & T. Before logging on to the system officially on Monday, February 4, I was to try to make contact with their computer by sending a message to myself and then downloading it. I wrote in my journal,

> "Well I tried to do that tonight and experienced nothing but frustration. Its funny how this technology has a way of doing that to a person."

I was able to communicate with ASPEN and Dialog so I knew that the hardware worked properly. I checked my parameters on the software over and over again. I phoned the technical support at AT & T and talked to them about

five or six times that evening but nothing they suggested would enable me to even dial out using their software. They phoned me back the next day with some suggestions but none of them worked.

I tried again on Saturday with no success even after spending another hour on the phone with the AT & T people. At this point I was beginning to panic. I was getting excited about the project but felt that the technology was holding me back and felt powerless to do anything about it.

I received a phone call on Monday morning from Mary Lou Miller at AT & T. We talked about what was happening and I could sense immediately that this was a person who could probably give me some much needed help. I told her the type of modem we were using and right away she came up with a suggestion to enable the software to work. Apparently, someone in a Learning Circle three years ago had a similar problem using a modem like ours and it was related to the hardware. The programmer for the AT & T software used to work for Prometheus and was able to solve that problem so she suggested that I try the same thing. It involved moving a plastic cover from two pins to cover another two pins on the modem. I attempted to send the test message and it worked! I tried to download any messages for me and got a list of the other 8 classrooms in our circle. I surprised even myself at how excited I got. It was totally thrilling. I thought to myself that there would probably be other technical problems.

Interestingly enough, after those initial frustrations, there were no more technical problems in sending or receiving messages. The software and hardware performed almost flawlessly.

The only other problem related to the technology was the importing of files from my students word processor. The students worked with Bank Street

Writer III. The literature from AT & T stated that you need to import files done on this word processor into the communications software in order upload them. When the files were imported, they became illegible and could not be uploaded. I was working with someone at AT & T on the problem, when one night at home I received a call from Mary Lou. She had noticed my messages on the computer about the problem. She said that she didn't know much about Bank Street Writer III but would do some homework and get back to me. Within two days the problem was solved. It was very fortunate that the students did not have to learn to use a new word processor to participate in the project.

The communications software from AT & T was excellent. I was able to send and receive messages with a single keystroke. It was very simple to use and proved to be very reliable. I was unable to make full use of the filing capabilities of the software, however, because of the memory limitations of the hardware. The software would let you create file folders for organizing incoming and outgoing messages. Because of the memory limitation, only an "in" file folder and an "out" file folder could be created. As a result, I had to keep track of and organize messages manually using real file folders. A machine with more memory (internal and disk) would have made the organizational task easier and more efficient.

2. The Other Sites

Very soon it became obvious that technical problems in the circle were the norm rather than the exception. During the course of our project, most members of our circle had some sort of technical problems and for some it meant very limited participation in the circle. However, as was the case for our school, the technical problems were eventually ironed out and most schools participated fully in the project with few further problems.

The coordinator of our circle, whose school, ironically, was located in Silicon Valley, was still having problems getting online after a week of trying. As it turned out later, this would change my involvement in the circle significantly.

Peter Kilby, the teacher for the class in Salmon Arm B.C., expressed his frustration in his initial message.

> "Hopefully, we will have made it this time! You wouldn't believe the fun and games we have "enjoyed" trying to get into the circle. We won't bore you with the details, but this correspondent was NOT a happy camper until last Thursday when it appeared we had finally done something correctly. Thankfully, we have a school district technician who can save those of us who are somewhat bewildered and ignorant when it comes to the nitty gritty of the computer."

Amazingly, the teacher in Freeport, New York, who is a full time computer teacher and had been involved in four previous learning circles, had trouble getting online.

But the technical problems with modems and messaging that we teachers in North America experienced, were small compared to the problems that Todd Frimoth in Riyadh, Saudi Arabia and Paula Frease in Cairo, Egypt had to put up with on a regular basis. It is amazing that they managed to participate at all. They had a lot of trouble uploading and downloading messages. It was expensive and very time consuming for them personally. Part of Todd's message of April 23 outlines some of the problems he was experiencing.

> "The downloading procedure is still a problem for us here in Saudi Arabia. I'm still receiving messages that are three and four weeks old, and the connection via the satellite is troublesome. When we download, I receive only a quarter of the messages in our folder. This is the reason for our inconsistent participation in your projects."

In spite of all the problems that Todd experienced, he remained upbeat and participated as much as he could. The next part of the above quote attests to this.

> "In lieu of all these problems, the class continues to be excited about learning from students across the globe and are fascinated with the technology. They are writing letters on their own to some of your students, and the poems, stories and other writings are wonderful lessons for them. Important and pertinent learning is taking place, and that's the important thing!"

The problems that Paula experienced in Cairo were, unfortunately, more severe than Todd's. We only received three transmissions from her during the entire circle and very little student work. She sent the following message on April 30.

> "I am extremely disappointed, but I can no longer continue to be an active member of the learning circle. Its demands on my time are unreasonable. Due to the telephone connections in Cairo, it takes me anywhere from forty-five minutes to an hour to make a connection. The only time that I can ever get a connection is either in the evenings, very early mornings or on weekends. I have spent many long hours working on this. When I do make a connection, it is often broken and I have never been able to work on-line. Most frustrating is to find that I finally have connection and that my mailbox is too full. Then I have to download selectively. The last time I did this took over two and a half hours."

As the learning circle progressed it became obvious that I was handicapped by the technology we had at Lakeview or rather the technology that we did not have as compared to many of the other schools in our circle and in the core. The computer hardware that we used was adequate but with a more sophisticated system the task would have been much easier. It would have been easier to download messages, store and retrieve information and organize the various messages from different sources. Indeed, one of the most

time consuming tasks was organizing and keeping track of all the incoming and outgoing messages. More speed, memory and a more sophisticated system would have been of enormous benefit. These feelings were expressed in the following entry in my journal on April 8.

>"My organizational problems would have been much fewer with better hardware. The Apple II is very limited by speed and memory for a project such as this and using the software that we have available. With more memory and speed in a Mac, I could have set up electronic file folders for all my needs instead of the real ones. I can only have an "in" and an "out" folder on the Apple II. The limited memory also makes it difficult when there are many messages to download. The disk cannot hold all of the messages so I have to go into the AT & T computer and "manually" download my messages a few at a time. A person needs a Mac for a project like this! I get very envious of some of the other teachers in the circle because of the hardware available to them. I know I could do a better job if the right hardware was available to me."

C. The Learning Circle

There were nine schools that participated in our circle. These schools formed a very diverse group. This is a short introduction to each of the schools and the projects that they sponsored for our circle.

1. Lakeview School

As previously mentioned, I entered the learning circle with no previous experience with this AT & T project or with telecommunications in general. I had, however, used the computer with students for several years in many different subject areas and for a variety of applications.

The class consisted of thirty grade six students who all participated in the project to some degree. They were a heterogeneous group academically. We had access to our computer lab, that was described earlier, for two one-hour

periods a week, one-hour on Monday morning and one-hour on Friday morning. Unfortunately, three of the students who went to the resource room for reading assistance, went during those two periods so their participation in the project was limited. There was open access to the computer that included the phone line and modem.

The students used Bank Street Writer III for a word processor. They were familiar with this program as we had used it several times previously in the year for writing assignments. We sponsored a project for the Mind Works curriculum called *Incredibly Interesting Incidents*. In this project, the students in the other classes were to write a short anecdote about an interesting single event that took place in their lives.

2. The Other Sites

Salmon Arm, British Columbia

The class in Salmon Arm was a fourth grade classroom taught by Mr. Peter Kilby. This was his first time on the network. It was located in Bastion Elementary School which is a small suburban K to 7 school. The students used Apple II's for their writing and their teacher used an Apple IIgs initially and then a Macintosh Classic later on in the semester. This class sponsored a project called *Aboriginal Peoples*. In this project the other classes were to research an aboriginal group that lived in their geographic region and then write some fictional stories based on the information they were able to gather about these people.

Sunnyvale, California

This class was taught by Roy Bowman who was initially to be the coordinator for our circle even though this was his first time on the network. His was a fifth grade class of 30 students in a K to 6 school with a total population of 840. This school is located in "Silicon Valley" close to a lot of computer and electronic firms. They sponsored a project entitled *Mystery States* which proved to be very popular with most of the classes. In this project, the students researched a state (we decided to include some mystery provinces) and then made up a list of clues about the mystery location. They then sent the clues to the shared folder and other students guessed which state or province it was.

Ingram, Texas

Sharon Kubenka was the teacher for this group which was made up of 19 students from grades 3 to 6. They were part of the school's BEYOND program which was their program for the gifted and talented students. Sharon had worked with most of the students in this program since they were in kindergarten. Ingram was a rural K to 6 school with a student population of 607. Sharon was the computer lab teacher and along with an aide was responsible for the 40 classes that came to use the 20 Apple II computers in the lab. Many of the students in the group were Spanish speaking. The project that this class sponsored was entitled *Myths and Legends*. The students were to write about a local legend or write a fictional legend that they made up themselves.

Freeport, New York

The teacher at Atkinson School in this Long Island community was the computer teacher in a grade 5 and 6 school with 900 students. She included all of the grade six students in the project which was 450 students in 17 different

homerooms. The school had two computer labs and has offered computer assisted instruction for 17 years. One lab had 65 Atari 1040 computers which were used for computer assisted instruction and the Apple lab had 35 Apples of assorted varieties and offered word processing, critical thinking skills instruction, hypermedia and instruction in other computer applications. The school was very active in other local telecommunications projects such as teacher forums, a service for teachers to download and preview software and an online student forum for current events discussion. This class sponsored a poetry project which was wide open and generated a lot of participation from all of the other classes.

Bath, Pennsylvania

Dorothy Reimer was a fifth grade classroom teacher at Moore School which is a small rural K to 6 school. All of Moore's students are bused to school. This class sponsored a *Food Fun* circle story which received little participation for a number of reasons which will be discussed later.

Waterbury, Conneticut

Rotella School is a K to 5 school with 376 students. The teacher in this school was Janice Looney who was a third grade classroom teacher. There were 17 students in her class. This class had one computer that was located in the classroom with the modem and phone line in the room. They sponsored a project called *Community Symbols.* The students in other classes were to write about important landmarks or attractions in their communities that others would be interested in learning about. This project was to fit in with their current social studies curriculum.

Madison Heights, Michigan

The teacher originally scheduled to participate from this school was unable to because of health problems so one of her grade three colleagues, Claudine Herrington, took her place. An aide, Michele Pisa-Jones also did a great deal of work at this school for the network. This class sponsored a project entitled *Fractured Fairy Tales*. The students were to choose a well known fairy tale and then change the characters and settings to produce a humorous spinoff. This proved to be one of the most popular participation choices for the students in my class.

Riyadh, Saudi Arabia

This class was the star of our circle and generated a lot of interest throughout the network. This was due to the location of the school in Riyadh during the gulf war. The class was located in the Saudi Arabian International School of Riyadh which is a private day school of 2200 students in grades K to 9. Todd Frimoth taught a grade 3 class that participated in our circle. There were also three other classrooms at the school that participated in other circles at the same time. There were students of 50 different nationalities at the school where an American curriculum was taught. There was an abundance of computer technology at the school including 125 Apple computers in various computer labs as well as a computer in each classroom. All of the transmission and messages from this school were sent to the core and some to the entire network. This class sponsored a project called *Unsolved Stories*. In this project the class in Riyadh started a story. Students in other classes would add to the story and send in back. Then the students in Riyadh would add some more to it. The story was to go back and forth three times.

Cairo, Egypt

This class was a late addition to our circle. One day we received a message from Paula Frease, a grade five teacher at the Cairo American College. She was rapidly made a part of the circle but only sent about three or four messages before dropping out prematurely. This class sponsored a project called *Dear Thot* in which the other students wrote about personal problems and the students in Cairo provided answers.

D. Curriculum

1. What Was Supposed to Happen

The central philosophy of the AT & T Learning Network is to provide the means for teachers to integrate telecommunications technology into the classroom. The idea behind the Learning Network is not to highlight the technology but rather to use the technology to help teachers and students reach curricular goals. In the primary school, "circle time" is a period of the day when students in a class share information with one another. One of the goals of a Learning Circle is to develop written communication skills with distant audiences. "Quality Circles" is a term used in the business community that refers to participatory management practices. In this situation workers and managers work together as a team. This cooperative approach describes the way teachers work with each other in a Learning Circle as they design educational activities to extend student knowledge and skills. Each teacher in the Learning Circle is both a learner and a part of the management team of the Circle.

Each of the four different curriculum projects available to elementary participants in a Learning Circle have goals that are specific to that curriculum.

The goals for the *Mind Works* curriculum as outlined in the curriculum guide are:

Enhance Communication Skills

-encourage writing by providing writing goals and distant audiences

- provide opportunities to read, evaluate, and edit the work of others

-promote writing across the curriculum

Foster Creative Problem-Solving in Writing

-engage students in careful observation of their surroundings

-involve students in research as they explore common topics

-suggest new ways to approach a topic

Share Individual, Regional and Cultural Perspectives

-learn to use language to provide rich descriptions

-promote intercultural and regional understanding

Develop Cooperative Work Strategies

-learn to work as members of a team with peers in other places

-understand responsibilities that come with group participation

(Riel, 1990)

To accomplish these goals the students and teachers worked together to produce a creative writing journal featuring the projects sponsored by the members of the Learning Circle.

In order to help meet the curricular objectives and to help provide some organization and make sure that the Learning Circle meets the objectives within the time frame of the Circle, a timeline was provided giving suggested activities for the various weeks. The timeline was organized as follows:

LEARNING CIRCLE TIMELINE
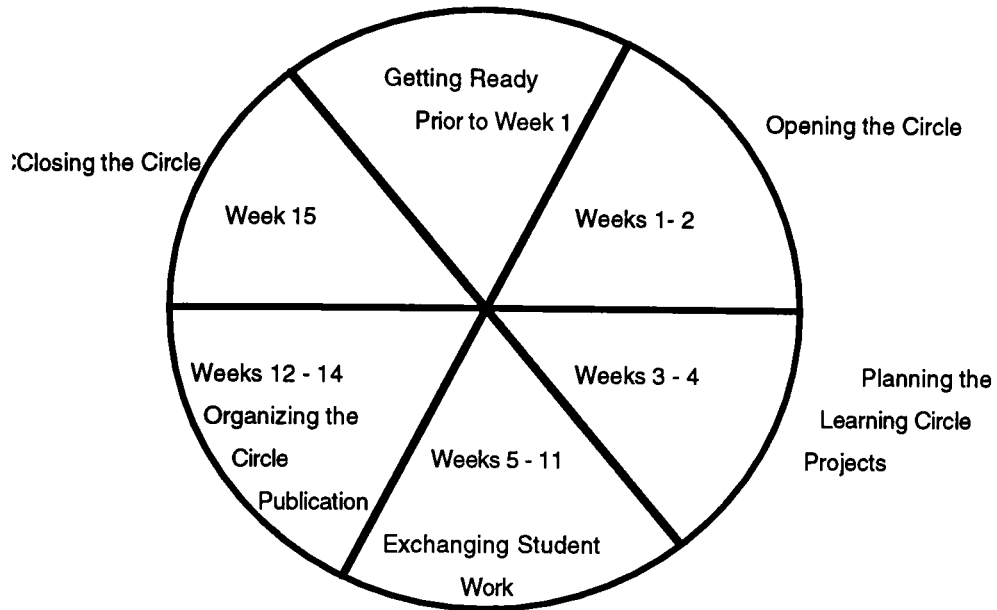
Weeks 1-2 Opening the Circle

1. Learning Circle interaction begins.

2. Classes log on and respond to the Electronic Roll Call.

3. Each teacher sends an introductory message to the Circle.

4. Teachers and students prepare and send their responses to the Classroom Survey.

5. Students prepare their Welcome Packs and mail them to the other classrooms.

Weeks 3-4 Planning the Learning Circle Projects

1. Teachers in the Learning Circle discuss the projects proposed in the Classroom Survey.

2. Each class selects a project to sponsor or co-sponsor.

3. The class sends a message describing the information it would like to receive.

Weeks 5-11   Exchanging Student Work

1. Students' work on the different journal sections is collected and sent to the Learning Circle once or twice a week.

2. Teachers and students continue to plan and share work related to the Learning Circle projects.

Weeks 12-14 Organizing the Circle Publication

1. Students evaluate, select, and edit the articles they received for their section of the journal.

2. Teachers work with students in the classroom to complete and print their project section.

3. Schools exchange project sections (electronically or via postal mail) and assemble their Circle publication.

Week 15   Closing the Circle

Teachers and students send their final good-bye messages and the Learning Circle closes. (Riel, 1990)

What was supposed to happen in each stage or phase of the Learning Circle was outlined in detail in the AT & T curriculum guide. The guide was very well organized and written and gave detailed instructions and examples for each step in the life of the Learning Circle. It was an excellent document and provided a great deal of useful and helpful information and instructions.

2. What Did Happen

The central focus of the project certainly turned out to be the writing and not the technology. The students were concerned with contributing to and receiving written work for the projects. The technology faded into the background which was indeed the intent.

The goals related to the enhancement of communication skills seemed to be met. The students found purpose and audience for their writing and almost without exception were enthusiastic about contributing their work to other schools' projects. We read and edited the *Incredibly Interesting Incidents* submitted to us together and the students participated and edited exceptionally well and in the process enhanced their editing skills.

The students working on several of the projects were involved in research in the library for the topics they were to write about. The research was mainly in the areas of social studies and science but there were some students researching and writing in other subject areas.

The cooperation and working together to meet deadlines and complete work for ourselves and other classes helped the students to understand the responsibilities that come from group participation. The students took many responsibilities themselves from gathering material for the welcome packs to choosing who should write for each project. The teamwork aspect, however, did not extend beyond the classroom. Although I feel the students felt a common purpose with the students in the other classes, there was no real teamwork or cooperation among the students in one class with students in other classes who were participating in the A T & T Circle.

The success of the welcome packs and the interest generated by them helped to promote intercultural and regional understanding. The letters sent by the students in Riyadh during the gulf war about their feelings and fears raised some real issues about the consequences of war.

What actually happened in the learning circle from a curriculum perspective came very close to meeting the stated objectives.

E. Telecommunication Use

1. Teacher-Teacher Interactions

The initial three to four weeks of the circle provided an opportunity for the students to exchange messages of greeting and introduction. The teachers introduced themselves in informal ways. There was a hesitency or reluctance that could almost be sensed in knowing what or how much to say since this was a completely new experience for most members of the circle. This was not helped by the absence of the coordinator since one of his duties was to encourage and promote communications in the circle. But the mentor coordinator filled in for him in the interim and did an excellent job.

One of the most enjoyable and positive aspects of the circle was the communication with the other teachers in the circle and the other coordinators in the core. Of course, much of the communication focused on topics related to the project, but there was also time for personal exchanges as well as exchanges on topics related to education. This communication went a long way toward alleviating the isolation that we as classroom teachers often feel. We developed a rapport and an ease in communicating with each other. I looked forward to receiving the electronic messages from my circle colleagues and contributing to the discussions that went around the circle. My only regret was

that there was not time to do more of this.

I participated very little in the core circle because of the time that the circle communications demanded. I was responsible to provide a weekly report of the activity in our circle but did not participate much in the discussions or in the "binary dancing". The one wonderful exception came at the end of the circle. After the learning circle communications came to an end and our account with AT & T was closed, the circle coordinators still had a week of online access left with the other members of their core. Most of the core members did not take advantage of this but when I downloaded one day of the last week, there was a very interesting exchange going on between Larry, the mentor coordinator and George from New Jersey. They were discussing experiences in the network and I decided to join in. I was disappointed when the week ended because I had lots of concerns and questions addressed by them and learned a lot from the exchange about the network. They talked a lot about electronic voice and how personality makes itself known on the network. It was very interesting.

We agreed to exchange final publications. It proved interesting to see work from different circles at different levels with other curricula. George had this to say about it,

> "I will send you a copy of our publication. I was hoping everyone at core would exchange. I think this would be a very beneficial thing. Especially for anyone who would consider being a coordinator again. The ideas presented in the publications would provide a resource of great value. Without this exchange of fresh ideas I fear coordinators could very easily stagnate into a comfortable pattern rather than experimenting and breaking new ground."

It is disappointing that I didn't have the time to communicate with the core. I did, however, feel a little intimidated being in the core group since it was

my first time on the network. So I didn't feel like I could contribute much to the communications.

I had a good working relationship with Margaret Riel who is the education program manager for AT & T. In doing a search for journal articles on telecommunications I came across an article written by her that was not available in The University of Lethbridge library. I decided to send a message to her personal mailbox and ask her if she could send me a copy. She offered to send me not only a copy of that article but also other articles that she had written or co-authored that related to the network and telecommunications. The articles proved to be both interesting and useful. She expressed interest in this project and I sent her a copy of the outline. She mentioned she would like to receive a copy of the project when completed and also a standing offer to become involved in any joint research projects that I may be interested in. We communicated a few times during the circle and she proved to be very helpful and supportive. She "listened in" to the exchanges between Larry, George and myself during the last week and sent me a message. She congratulated me on the work that I had done on the network and concluded with,

> "Thanks for helping out and we are lucky that there are so many good teachers out there willing to become an active part of the community that defines the Learning Network. Welcome to the team!"

2.   Student-Student Interactions

An electronic classroom survey which was sent out in week two for each of the classes to fill out and sent to the others. The students took a great deal of interest in completing the survey and looked forward to reading the surveys from other classes. (see Appendix A) They were especially interested in the questions about favorite clothes, musical groups, foods etc. This was to be expected as these are the things that are of interest to them rather than local

industries.

At the beginning of the circle each class was required to send a "welcome pack" to each of the other schools. These were sent via the regular postal service included information and photographs about the class, school and community. The students in my class were very keen about these welcome packs and came up with many excellent suggestions about what to include. When we had decided on what to include in our welcome pack, there were many volunteers to gather up 9 copies of each of the items. The class decided to include pins of Alberta and Lakeview School; photographs of our class, classroom and the school; individual pictures from our yearbook with the students names written underneath so the other students could identify the students in our class; a map of the city with the location of the school indicated; a map of the school with our classroom identified; a brochure of places of interest in Lethbridge; a couple of postcards; a school timetable; a class list and a letter talking about our school, class events, subjects and things of interest to kids. Our school librarian, Richard Chase, was good enough to photograph our class at various times and locations during the school day.

As it turned out, these welcome packs were one of the highlights of the circle for the students. They anticipated their arrival and were asking every morning if one or more had arrived in the mail the previous evening. Rather than just electronic messages, this was something tangible that the students could look at and most contained photographs of the schools and students and places of interest in the various communities. Many of them contained quite imaginative items such as sand from the beach in New York, a Saudi Arabian shopping bag, school bumper stickers and pencils. When each pack arrived, we passed it around the room to examine the items and then made up a big bulletin board display with some of the articles from each class. On the bulletin board was large map of the world and the United States with pins where the classes in our circle were located and string going to another location on the

bulletin board where the name and location of the school and the items from the welcome pack could be found. We decided to hold a lottery at the end of the project to distribute the items from the welcome packs that various students would like to have.

During the initial stages of the circle there were a few letters exchanged by the students to each other mostly for introduction purposes. There were some great letters from the students in Riyadh about their feelings about the gulf war which was in progress at the time. My students sent responses to their letters right away because of their great interest in the events taking place there. The idea of pen pals was not encouraged, however, since the focus of the circle was to be on working on the creative writing projects.

F. Student Writing

I feel that we were very fortunate to have ended up with a large number of schools in our circle (10) and also a wide variety of creative writing projects. In this way the students could choose a project to write for that really caught their interest. The different topics were *Poetry, Incredibly Interesting Incidents, Aboriginal Stories, Legends and Myths, Mystery States and Provinces, Dear Thot, Food Fun Circle Story, Fractured Fairy Tales, Local Places of Interest and Unsolved Stories.*

Different teachers in the circle organized their classes in different ways for the writing. I decided that they best way to proceed was to give the students a choice of which project they would prefer to write for first, making sure that initially, there were a least a few students contributing to each project. This worked out well with a fairly even distribution.

On the large side blackboard in the classroom, all of the projects were listed with the students who were currently working on each project listed underneath. As the students finished work on a project, they immediately sent their work to the shared folder and chose the project they would like to work on next. Some of the students completed work on one or two projects and others many projects. Some students wrote several pieces for one project. These decisions were left to them. This way of proceeding provided the students with some flexibility and allowed us to send along our work as it was completed and edited. Some classes did not send in projects until late in the writing cycle while others waited until the deadline at the end of the writing timeframe. My students became quite frustrated with this way of sending work when they had to wait so long for work to arrive for the project that our class was sponsoring.

When a student had completed a piece of writing, s/he would edit it herself/himself or get the help of a classmate in the editing process. They used the spell checker in the word processor to assist them. I had to import all of the files into the communications software before they could be uploaded so I had an opportunity to read all of the work at that time. As a general rule, there was little additional editing required for most of the writing. It appeared to be much less than for the regular work that we did over the course of the year in our room.

When we received all of the work submitted from the other classes for our project, I made a copy of the submissions for all of the students in the class. I asked them to read the work and then we read them together in class and they suggested editing that needed to be done or changes that needed to be made. The class did an excellent job of editing the work. It was the first time I had ever tried group editing and it was very successful under these circumstances. I feel that two contributing factors to this success were the relative anonymity of the authors and the fact that this work would be published.

There were a couple of projects that did cause the students problems and concerns. With the food fun circle story, the instructions from the sponsoring teacher were never clear to the students and they were unsure of how to proceed. I, as well as other teachers in the circle, tried on numerous occasions to get the instructions clarified but to no avail. So the students who wished to participate were rather frustrated. The other problem was with the project sponsored by the class in Riyadh, Saudi Arabia. In their project, a story was started by students in their class. It was sent to the circle mailbox and students in other classes were to add to the story and send it back. It was to go back and forth like this three times before the story was completed. The problem was a technical one. As mentioned earlier, they had such problems uploading and downloading messages that I suspect that they never did receive any of the work from my students. Of course, they were very disappointed about never receiving a reply.

G. The Role of the Coordinator

Each learning circle had one member who acted as coordinator. The role of the coordinator is to model learning circle participation to new members, facilitate group interaction, answer questions, share information and provide encouragement in the learning circle. The coordinator also has to report the activities of the circle to the core and take a leadership role in all aspects of the circle including the organization of the final publication. It is a task that is usually assumed by teachers with some previous experience in the network.

The coordinator for our circle was to be Roy Bowman of Sunnyvale, California. Early in the circle it became evident that because of technical problems Roy was going to be unable to fill the role of coordinator. Also, it was his first time on the network and he felt it would be better if someone else took

the position. Larry Adamson, our mentor coordinator, said he would fill in as our circle coordinator until someone in the circle stepped forward and volunteered for the position.

In the next couple of weeks, Larry asked in our shared folder if I would consider taking over the job of coordinator. The clincher came a little later when he sent a message to my personal mail box with a plea to take the position. I felt fairly positive about it so I said that I would.

I received a great deal of encouragement and support from the other coordinators in core five and especially from Larry. He was always very willing to help and give assistance whenever necessary. The members of the circle were also very supportive and really my role was just to continue to be an active member of the circle and to try to "lead by example" as much as possible.

The coordinator role did not involve a lot of extra time other than the weekly report but it was the extra responsibility that I felt that was the most demanding part of it. As well as just keeping up with my own responsibilities as a member of the circle, I felt responsible to make sure that things were running smoothly and things were happening in the circle. The task became especially busy near the end of the circle when the final publication deadlines had to be met and decisions made about format, length of sections and how we were going to "get it all together".

All things considered, it was a positive experience. First of all, it made me more aware of the problems encountered by the other teachers as they came to me with concerns and questions. Also, it afforded me the opportunity to become aware of what was happening in other circles through the core five group. It let me see how other circles operated and how some problems were common to other groups.

H. Impact of the Research Project

It is important to realize the order of events in this whole adventure. The commitment to try the learning network and to join a learning circle came first. I had obtained funding and applied to join a circle before the idea of the research project came into being. The learning circle was not an attempt to come up with an idea for a project for the university. It came to be through a genuine interest to be involved in a project of this nature.

The research project gave me additional motivation to try and ensure that our participation in the network was successful. I felt that if we had some positive outcomes that would make for a better project. It also motivated me to keep better records of what happened during the learning network experience. I doubt very much that I would have kept a journal or documented a lot of the things that happened during the network had I not been involved with the research project. This journal and other documentation provide me now with valuable resources to enable me to look back and see what happened.

On the negative side, the research project added a responsibility and an additional time commitment that may have detracted from the project itself. My meetings with my advisor, coupled with my journal and other documentation activities took a lot of time. When one considers that just participating in such a project as a full time classroom teacher makes a heavy time demand, the work that was required by the research project added some pressure. This coupled with the fact that I was the coordinator for the circle, made for a very hectic and at times pressure packed four months. I was involved in the network because I was very interested personally and because I felt strongly that it had the possibility of being a very worthwhile experience for my students. When one enters a project with a strong personal commitment, then one is more than willing to make some sacrifices to ensure its success.
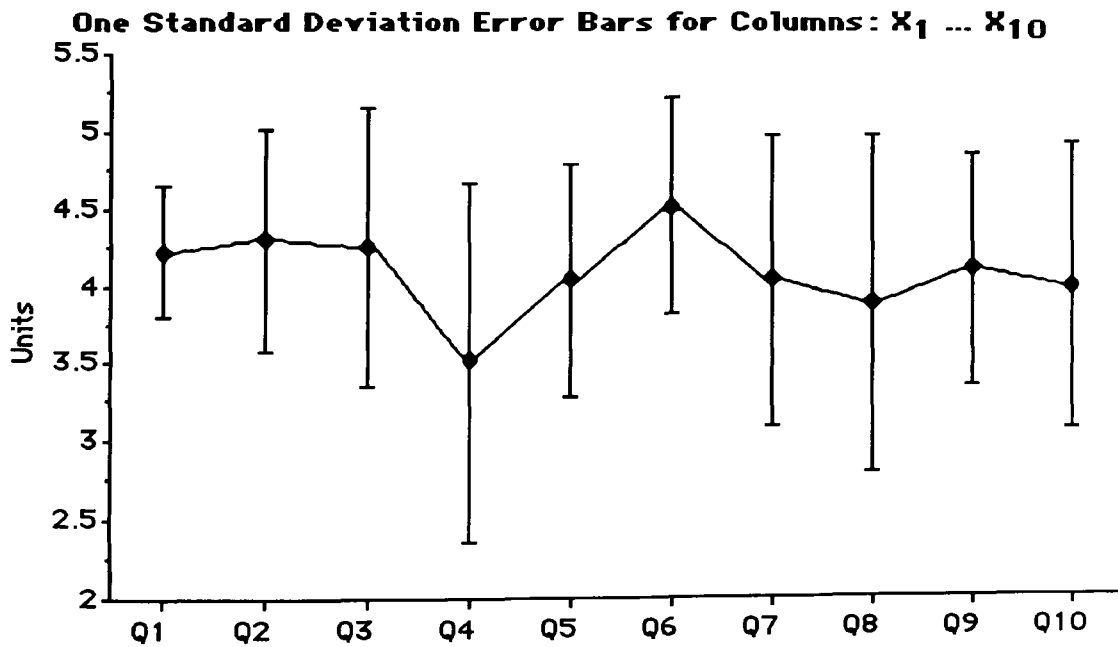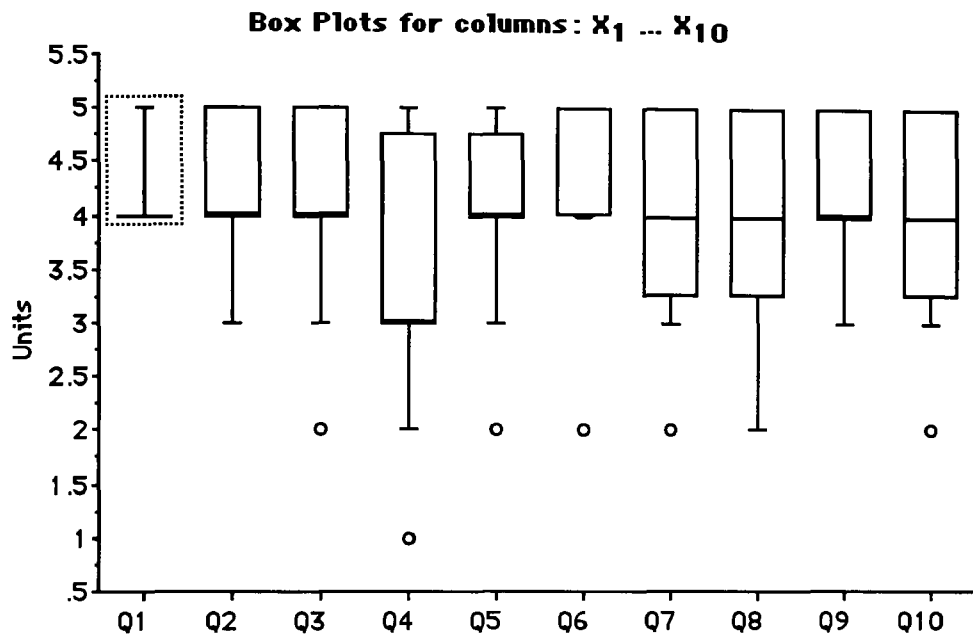
V. REFLECTIONS

A. Students' Comments

1. The Questionnaire

At the conclusion of the learning circle, a questionnaire was administered to the students to obtain feedback about their participation in the project. The questionaire was divided into two parts. The first part consisted of 10 statements phrased in the positive about the project. The students indicated agreement or disagreement with the statements by circling a number on a scale from one to five; a one being strongly disagree and a five being strongly agree. The second part contained three open ended questions that gave the students the opportunity to write about the project.

The questionnaire was administered within a week of the completion of the project. The students were not required to put their names on the questionnaire and they were given as much time as they needed to complete it. The importance of giving honest answers to the questions was stressed while giving instructions to the students on how to fill out the questionnaire. (Appendix A)

2. Statistical Summary of Part A

The student responses for each question in part A were tabulated and the results are represented in the figures which follow.

Box Plots for columns: $X_1 \ldots X_{10}$

One Standard Deviation Error Bars for Columns: $X_1 \ldots X_{10}$

The level of agreement or positive responses was high in all questions with the average falling between 4 and 5. The highest level of agreement was for statement 6 which read, "I enjoyed sending and receiving messages from other kids." The students seemed to really enjoy the exchange of messages with distant peers. Many wanted to carry out more pen pal activities but this was discouraged in order to focus on the curricular objectives.

The lowest level of agreement was for statement 4 which read, "I made a new friend in a different place." Individual messages of a personal nature between students were discouraged by A T & T. So the responses to questions 4 and 6 were perhaps related to the same desire of the students for more personal contact with other circle participants.

Given the strong positive responses, the students seemed to view their experience on the learning network as a very positive one.

3. Students' Comments in Part B

A complete list of all student comments is given in Appendix B. There were some comments that occurred frequently and they are presented here.

The first question on Part B of the questionnaire was:

What did you like the best about the project?

There were eight students who indicated that they enjoyed communicating with students from other parts of the world. Six of the participants indicated that they enjoyed learning about the people and cultures in other parts of the world. Five students indicated that they enjoyed writing for the different projects.

The second question on Part B was:

What did you like the least or dislike about the project?

There were seven students who stated that they sent messages to other classes and did not receive a reply. This was the most common complaint. Four students complained that the technical problems that some classes were experiencing caused much frustration. Two students stated that they did not have enough time to participate in enough different writing projects.

The third question on Part B was:

What would you change about the project if you could?

There were six students who stated that they would have increased the length of the project or the amount of time that we spent on it. Four students said that there should have been more classes or participants in our circle. There were also four students who said that they would not change anything. Two students stated that they would like to improve the overseas communications so the classes in Saudi Arabia and Egypt "could have fun participating too".

B. Teacher Comments

1. Views About Teaching

As a teacher I have always been interested and excited about the possibilities and potential of computers for students in the elementary school. At times it is depressing to see some of the uses and abuses that go on, but I always have hope that more and more good educational experiences can come to students through creative computer use. This project was thrilling for me as a teacher from beginning to end. It provided me with an excellent opportunity to challenge and improve the writing skills of my students no matter what their ability. It provided an excellent motivational tool. For the most part the students were enthusiastic about participating and always wanted to do

their best work.

It is often said that students need to have purpose in their writing experiences in school. But I feel that teachers also need to have some purpose to their teaching other than just meeting curricular objectives. This project provided me with that extra purpose and motivation. I was very engaged in the project and it provided a little extra excitement and involvement in my teaching day.

Another reality of teaching is the loneliness that you sometimes experience. Although you are surrounded by students all day, it can be a very lonely profession. It seems as though you are isolated from the other teachers and have little opportunity for interaction as you are all so busy with your students during the day. The learning network provided me with the opportunity to communicate with the other teachers in the circle and to have a glimpse into classrooms in completely different settings and see what was happening there. We were able to communicate on topics of mutual concern in education as well as things that related to the AT & T project.

It was encouraging for me as a teacher to receive the positive feedback that I did from the parents of the students in my class. It provided an opening for communication between myself and the home and it was great to see how positively a number of the parents reacted to this project. Far too often the majority of the communication between the school and the home is of a negative nature. It was a welcome break from that trend.

The one negative aspect that I received as a classroom teacher was the extra burden that this project put on my time. Finding the time for the work that the students had to do during the school day was not the problem. The problem arose in all of the extra time that I as a teacher had to spend with the project.

This time took away from some other teaching duties. It is difficult to say if any specific aspect of my teaching or the students' program suffered, but there are only so many hours in the day and a person can only spread themselves so thin. I am definitely not saying that the effort or time commitment were not worthwhile, because I feel that they were. But as a teacher I have to realize that an extra commitment to one aspect of the curriculum usually leads to a loss somewhere else, either immediately or down the line. A person needs to evaluate the time commitment realistically to see if the project is worthwhile given the extra time that the teacher needs to devote to it.

2. Views About the Students

When I reflect on the students as we participated together in this project, the first thing that comes to mind is their enthusiasm for the contacts they were able to make with peers in distant places. During the time that we were waiting for the welcome packs to arrive, they were at my desk first thing every morning looking for mail from Riyadh or Salmon Arm or Sunnyvale. When the welcome packs did arrive they spent a great deal of time and care examining the contents. The bulletin board displays with the items from the various schools had students around them almost all of the time pouring over the various artifacts. The lottery that we held at the end of the project to determine which items from the welcome packs went to which student was quite an event. These were very treasured items indeed.

As far as the writing was concerned, I was always impressed with the extra care that the students seemed to put into their work, especially the editing and revising, to ensure that it was their best possible effort. There were seldom any complaints about writing and I got a sense the students felt the importance of what they were doing. They were writing for a large audience of their peers and others and that seemed to matter a great deal to them.

3. Views About the Role of Coordinator

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┌─────────────────────────────────────────────────────┐
│ AT&T LEARNING NETWORK  ░░░░░░░░░░░░░░░░░░░░░░░░░░░░░░ │
├─────────────────────────────────────────────────────┤
│                                                       │
│           LEARNING CIRCLE COORDINATOR                 │
│               VOLUNTEER TEACHER                       │
│                                                       │
│                                                       │
│      ● Serves as a Role Model                         │
│      ● Provides Curriculum Guidance                   │
│      ● Monitors Learning Circle Progress              │
│                                                       │
└─────────────────────────────────────────────────────┘
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The role of coordinator that I assumed in our circle was not by choice but rather came about due to circumstances. I enjoyed the role as coordinator but felt frustration at the same time because it was my first time as a member of a learning circle and I often wished that I could provide more assistance to other members of the circle. I would certainly never recommend that a person assume this responsibility as a first time participant in a learning circle. In retrospect, I received a lot of assistance from our mentor coordinator and with his excellent help the job became at least manageable.

Sometimes the nature of electronic mail was more of a frustration than my lack of experience as a coordinator. You would send a message to someone and hope first of all that it arrived in the mailbox okay. Then unless you received a reply from that person, you would never know if they read your message or not. Or if they did read it, if they just chose to ignore the contents. So as coordinator, when I had messages that I felt were important to the circle I could never be sure that the message was received or understood.

As coordinator, I was able to be involved in a core group composed of our mentor coordinator and the coordinators of several other circles. I enjoyed this experience as it gave me an opportunity to see what was happening in the other circles and to engage in dialogue. Every week the circle coordinators were required to submit a report about the number of messages sent by different members of the circle, involvement in projects by the member schools as well as a summary of happenings in the circle in general. Although I did not like the extra time and effort it took me to submit these weekly updates, I certainly enjoyed reading the ones submitted by the other coordinators. It gave me a chance to see what was happening in other circles and to also get ideas from the other coordinators on how to look after the circle.

I enjoyed the opportunity to be able to make contact with the other coordinators and discuss various topics especially as they related to the learning circles and computer use in schools in general. The only problem was that with all the other duties related to the project, it left very little time for participating in the core group. There were some very interesting members of that group who had extensive experience with computers and telecommunications and I wish I could have interacted with them more frequently than was possible.

4. Views About the Research Project

The inclusion of the research project added to the effectiveness and enjoyment of the learning circle. If it was not for the research project, I would not have kept a journal on the project and the keeping of the journal helped me to reflect on what was taking place and also to vent my feelings and at times frustrations.

As mentioned earlier, the task of researcher added to the time commitment required for the project. But it also provided me with incentive beyond my own personal interest to work for the success of the project. It caused me to look at what was happening in the project through "different eyes" if you will. I feel that perhaps I was more focused on observing and recording the various events and this led to a better understanding of the project and what had happened when it was completed. I feel I am now in a much better position to talk to other teachers about my experiences and to give them direction and advice.

VI CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

At the completion of this project, and upon reflection, I have reached the following conclusions:

1. The educational objectives of the project were met. That is

   1.1 the students were introduced to the use of telecommunication technology.

   1.2 the project provided the students with excellent motivation for their writing. There was enthusiasm and the students had purpose for their writing.

   1.3 the students improved their writing ability.

   1.4 the students learned about students in other parts of the world.

   1.5 the students, but especially the teacher, were able to exchange ideas and make contacts with peers in the circle.

   1.6 some students did significant research for writing projects.

   1.7 the hardware and software are in place in the school for future telecommunication use.

2. It was possible, as a technical neophyte, to participate successfully in a telecommunications project with adequate support and a great deal of patience.

3. Technical problems and frustrations happened. Most were overcome with adequate support.

4. Much more time was spent on the project than originally anticipated.

5. Opportunities for important and interesting exchanges occurred with other professionals.

6. Overseas participants had more technical problems and trouble participating than others.

7. There were disappointments for the students due to technical problems and lack of participation from other classes.

8. Parental support for the project was high and most felt it was a very worthwhile endeavor which was beneficial for their children.

B. Recommendations

I feel that can make the following recommendations for those who would attempt similar projects in the future:

1. It is necessary to ensure that you have more than adequate hardware before the project begins. The Apple IIe computer that I used was adequate but life would have been much easier with a more powerful computer.

2. If possible install the phone line and the computer with the modem right in your classroom. This will save you a lot of time and would be very convenient.

3. If a computer room is available with enough computers for the students in your class, then have all of the students working on project related tasks at the same time. This contributes to the group feeling and helps with student cooperation and collaboration.

4. Make sure that prior to the start of the project, the students are very familiar with the use of the word processor that you will be using during the project.

5. Be prepared to spend extensive time and effort with the project. This will help ensure that the project is a success for you, your students and the other classes participating with you.

6. Although the time demands can be heavy, take the opportunity to communicate with the other teachers. This can be one of the most rewarding parts of the project for you.

7. Make sure that the projects proposed by overseas participants are simple and do not require sending a lot of messages back and forth.

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Appendix A   Student Questionnaire

Part A

Please answer the following questions about the Learning Network project in which our class participated. Please be honest in giving your answers. By telling me the things that you liked it will help me to continue to do those things next time. By telling me the things that you didn't like, it will help me to change what I do to improve the learning network in the future. Circle the number from 1 to 5 that best represents how you feel about that question.

1 Strongly disagree

2 Disagree

3 Undecided

4 Agree

5 Strongly agree

1. I enjoyed the writing projects that we did in the network.

   1   2   3   4   5

2. I learned more about how to use the computer and telecommunications.

   1   2   3   4   5

3. I learned about other places in the world.

   1   2   3   4   5

4. I made a new friend in a different place.

   1   2   3   4   5

5. The classes seemed to cooperate on the project.

   1   2   3   4   5

6. I enjoyed sending and receiving messages from other kids.

   1   2   3   4   5

7. I enjoyed most parts of the project.

1   2   3   4   5

8. I got enough personal time on the computer.

1   2   3   4   5

9. I felt like I wanted to do my best writing for the project.

1   2   3   4   5

10. I improved my writing ability.

1   2   3   4   5

Part B

Please write a few sentences and answer the following questions about the learning network project.

1. What did you like the best about the project?

2. What did you like the least or dislike about the project?

3. What would you change about the project if you could?

Appendix B Student Responses to Part B of Questionnaire

What follows are the comments that the students wrote in answer to the questions in Part B of the questionnaire.

Question 1 What did you like the best about the project?

"That we sent messages back and forth to other places."

"Writing the stories and the other projects".

"The thing I like best is we got to know more about other countries".

"Reading other kids letters".

"The projects we sent to each and other different countries or states in our learning circle".

"I like the computer."

"Me? I liked receiving messages and sending messages."

"The things that I liked best about the projects were the welcome packs and the creative writing we received and sent. I liked making friends with people from other places and learning about them. But my favorite is the publication."

"Getting messages from other people. I also like mystery provinces."

"Learning about other people and their countries all over the world."

"I like to write fractured fairy tales and I also like receiving welcome packs."

"I liked reading other peoples messages and stories from around the world. I also liked sending messages to others."

"I liked the incredibly interesting incidents. I also liked the poetry."

"Getting the welcome packs. I like all the interesting stuff we got and it is interesting reading all of the assignments."

"When I learned about other countries."

"The thing that I liked best about the project was the opportunity to write on many different projects. I enjoy writing and this project enabled me to do so."

"I like learning about other places and their schools."

"Making new friends and learning things from all over the world."

"I liked the fractured fairy tales best. I also liked the myths and legends."

"What I like about the AT & T project is meeting other schools and finding out how different they are."

"I liked talking to other kids in the world and finding out different things in different places around the world."

"Being able to communicate with other members of the learning circle."

"I like the project because I could use the computer and because before I came to this school I never used a computer and because it was fun."

"I liked best about the project is receiving messages from the kids in other countries."

"I liked best that we had our own choice of what we wanted to write about. I also enjoyed that we were able to write letters to other parts of the world."

"What I liked best about the project is the different things you could do and that M.C. Hammer wrote to us."

"I liked the fairy tales and the mystery states."

Question 2 What did you like the least or dislike about the project?

"I didn't like the myths and legends."

"What I didn't like about the projects is some of the choices that we had at the learners circle."

"I didn't really dislike anything. I think that it would be better if the kids were able to use the computer to send and receive messages themselves."

"The one thing I didn't like about the project is that I didn't have enough time to do all the things."

"That none of my stuff was sent to the different places."

"There was a lot of technical difficulty."

"Some of the people could not communicate with us very often."

"They should send more stuff from other countries. They should give everyone one gift to remember on."

"What I liked least is that we didn't have enough time to work on the projects."

"I didn't get to send any of my projects."

"Sometimes the messages did not go through."

"The thing that I liked least was that when I wrote a personal letter to someone in a different place, I didn't receive a reply to either of the letters that I sent. This was very disappointing."

"Creative writing and thinking."

"That some of the places were having trouble communicating with us."

"When the other places never wrote back. I didn't really like the Dear Thot."

"The people from Bath, Pennsylvania didn't participate in the types of things that they sponsored."

"Some countries could not participate very much, but overall it was terrific."

"Some of my work didn't come back."

"Nothing."

"The only thing that I didn't quite like was how sometimes you wrote your very best and they didn't respond. This was frustrating."

"I disliked when other people didn't get my messages or didn't answer letters."

"The mess up with the machines that were having a hard time sending the machines."

"Some of the writing projects."

"Most of the messages I sent didn't go through."

"I liked everything."

Question 3 What would you change about the project if you could?

"Nothing."

"I would make it so you could talk to the person instead of writing to him/her."

"Do a few more guessing activities for the others."

"If we could talk privately over one computer. If we could see their messages on the screen as soon as they write them, we could communicate better."

"Nothing."

"I wouldn't change anything except to make it last longer."

"I would have a person every week so we could write to them and know their hobbies etc. Like a penpal."

"I would make sure that everyone participated in most of the projects."

"If I knew how, I would make the network work good for Saudi Arabia and Egypt, so they could have fun participating too."

"Not to have any classes overseas because the communications were very pitiful."

"I would expand the places and have more activities."

"I wish the circle started at the first day school started and ended the last day of school."

"I would make more activities that taught you about other places and less creative stuff."

"If I could change something, it would be that we(being the students) would have been able to send more personal messages and also been allowed to download messages."

"Nothing!"

"Be able to send my project."

"Give the kids the whole year to work on it and have more countries participating."

"Put a lot more stories in the package and have a lot more exciting stories."

"I would try to get more people in the network."

"I would like it to last longer."

"I wouldn't change anything."

"I would change it by maybe putting a little more time in the project because if you want to do your best you have to have more time."

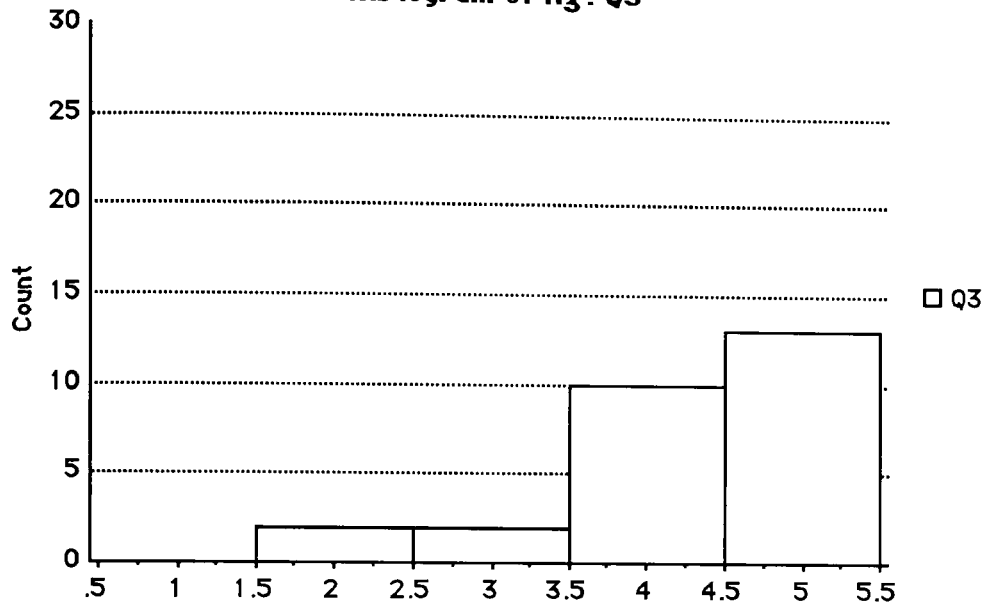"I would have the kids send and receive things on the computer."

"I would change the time limit so we could get more time and some of the projects."

"I would have a writing category on favorite T.V. shows."
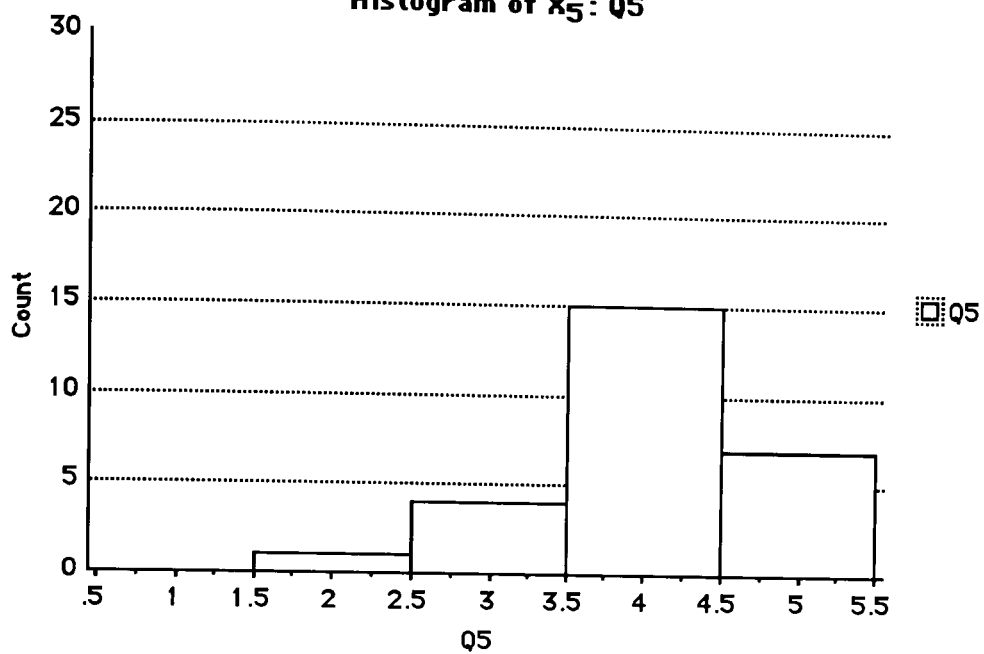
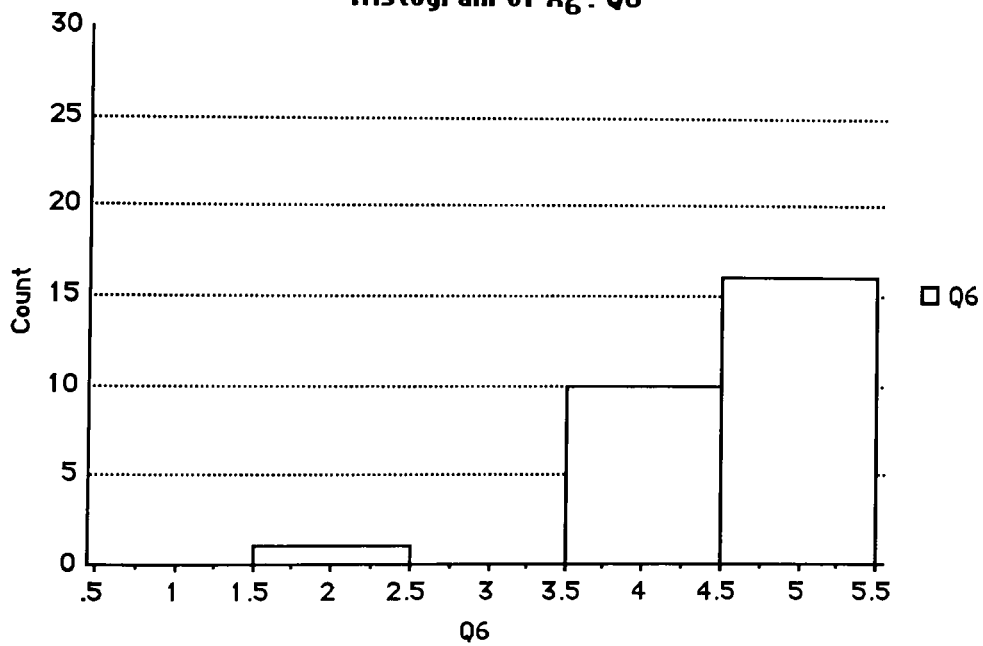# Appendix C Statistical Charts for Questionnaire

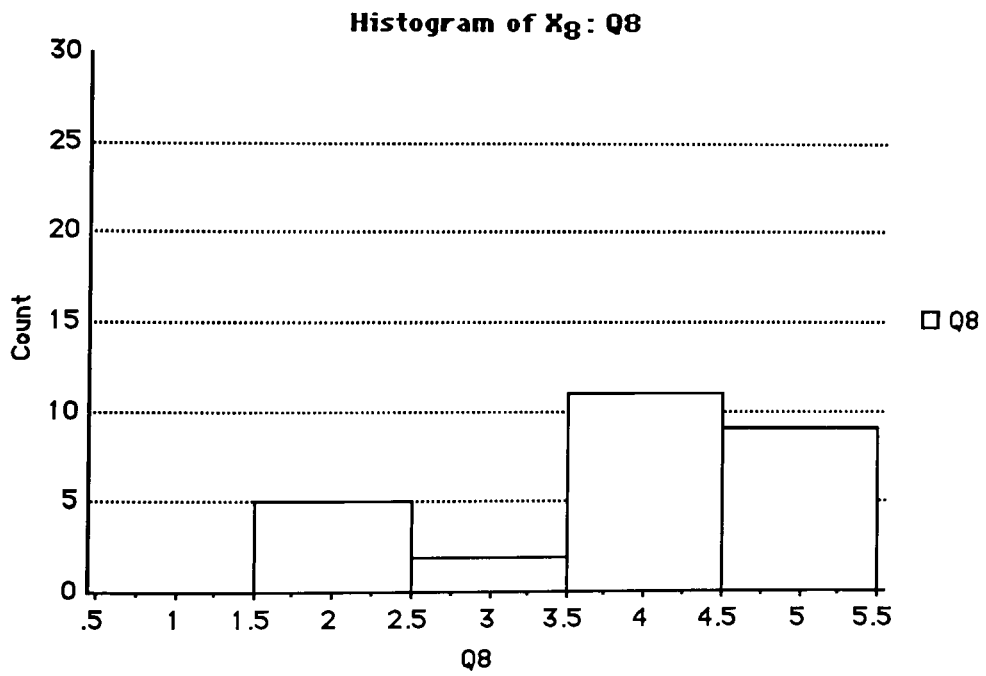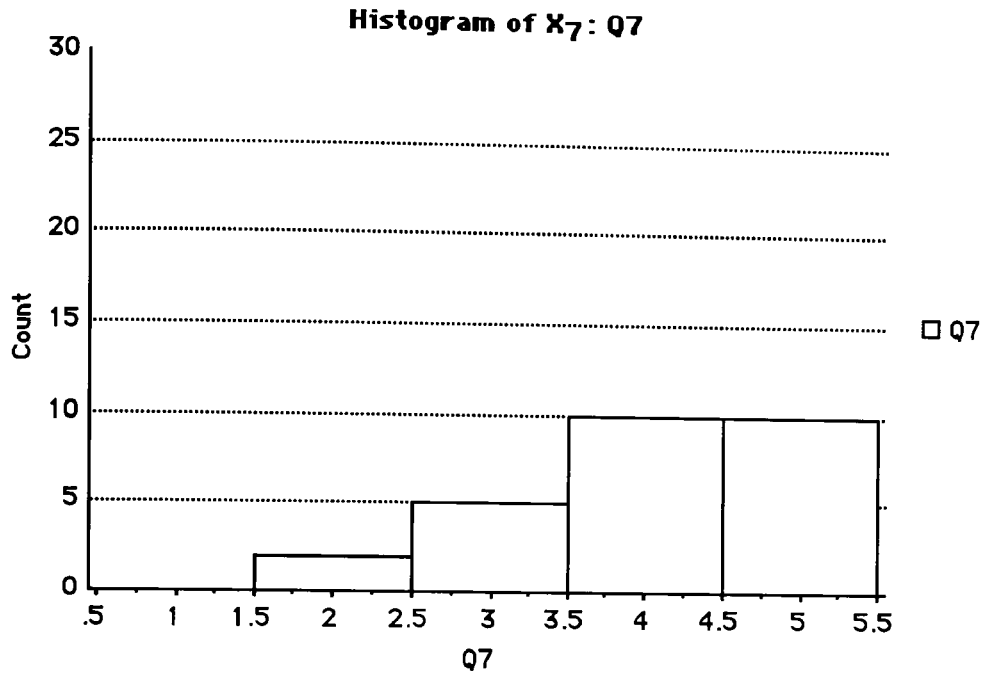**Histogram of X_1 : Q1**
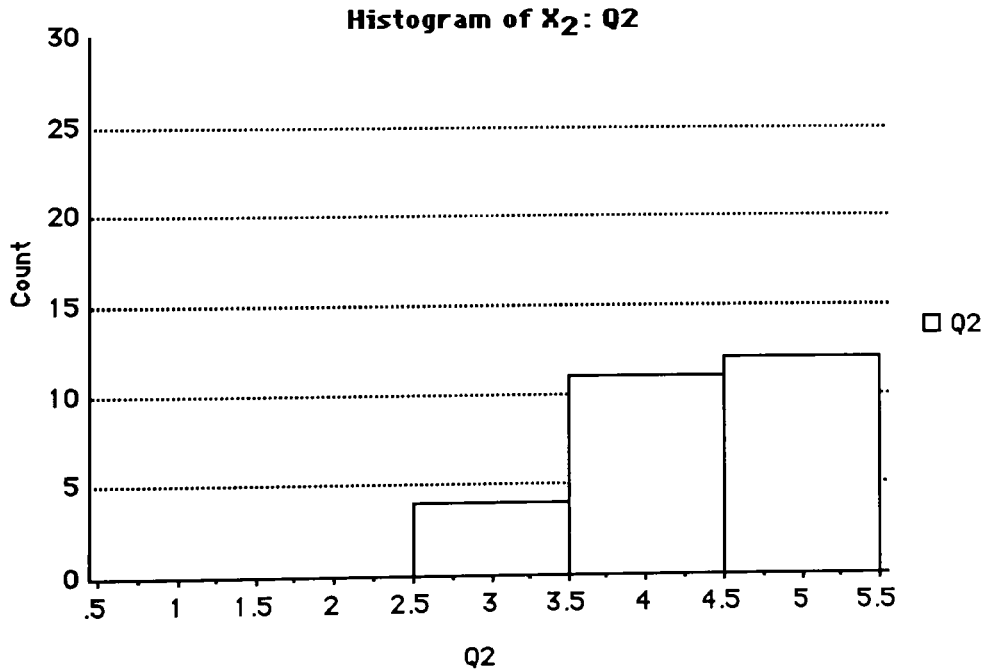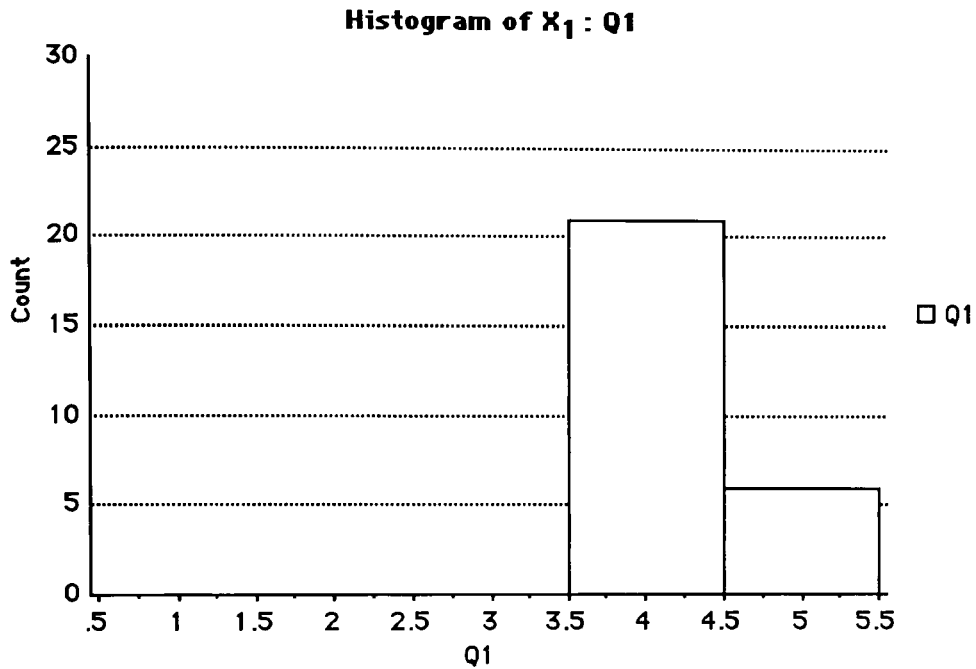
Histogram of X_2 : Q2

Histogram of X₃ : Q3

Histogram of X₄ : Q4
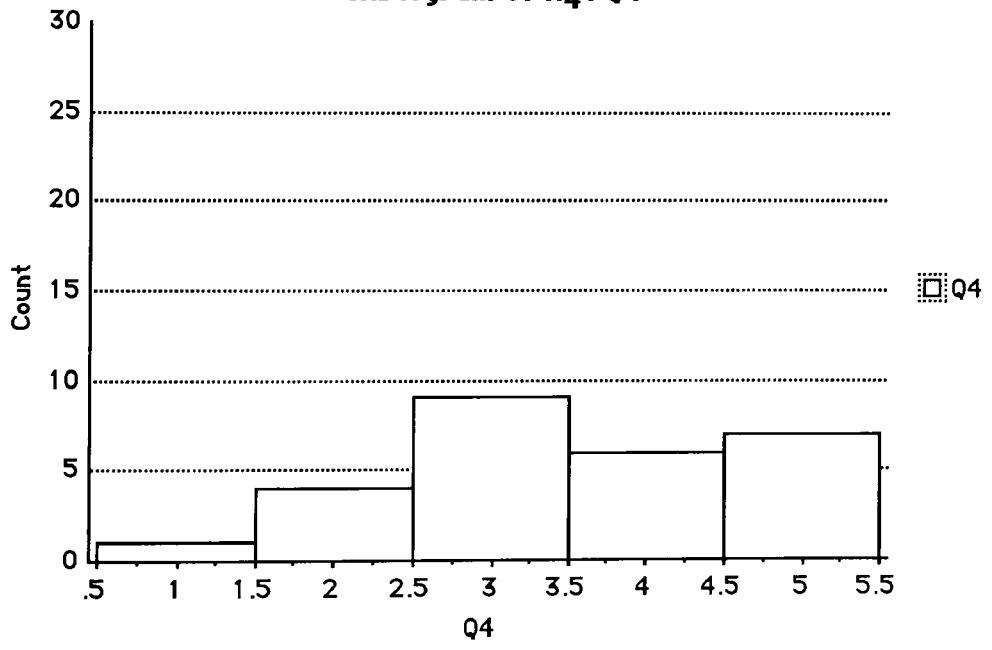
Histogram of X₅: Q5
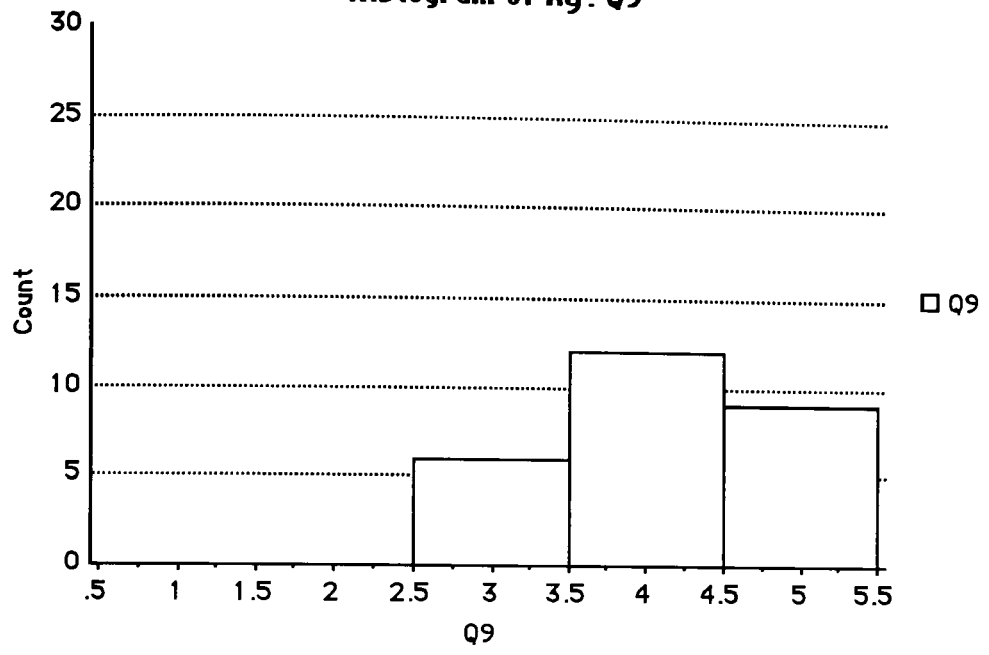

Histogram of X₆: Q6
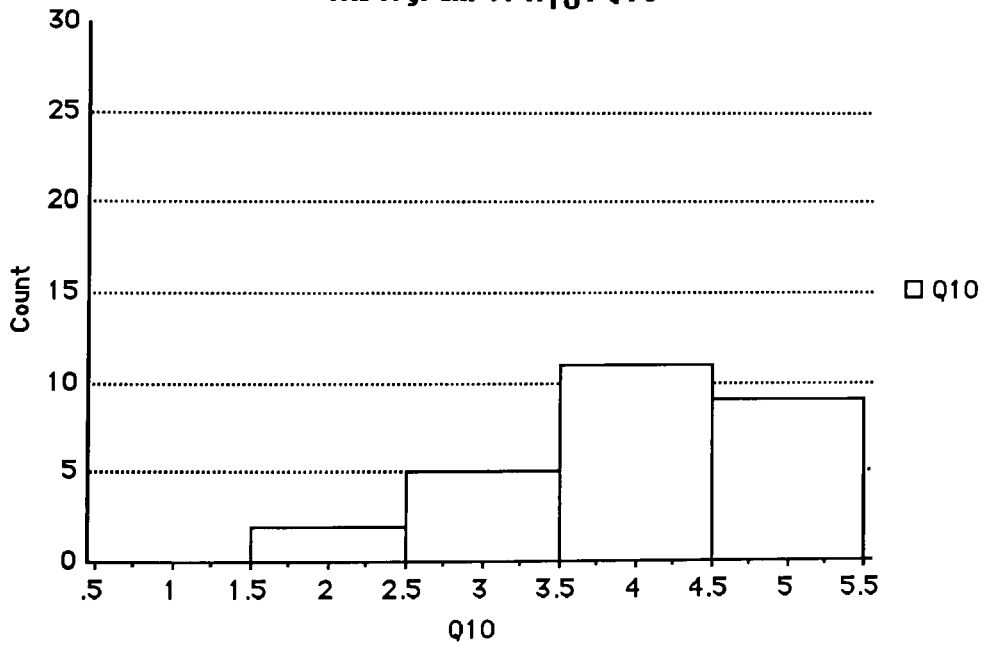
Histogram of X_7: Q7

Histogram of X_8: Q8

Histogram of X$_9$: Q9

Histogram of X$_{10}$: Q10

Appendix D Classroom Survey

Part I INTRODUCING THE CLASS

A. Name of the Teacher

B. Grade Level

C. Class Favorites

Name the class top five favorites in each category

1. Music groups

2. Authors

3. T.V. Programs

4. Foods

5. School Subjects

6. Sports

7. Video Games

8. Brand Names (clothing)

Part II INTRODUCING THE SCHOOL

A. School Information

1. Name and address of class and school

2. Number of students

3. Number of classrooms

4. Age of school

5. Building materials of your school

6. School emblem, colors or mascot

B. School Program

1. List three things about your school program that make it unique.
2. List school year calendar

PART III INTRODUCING THE COMMUNITY

A. Your Community

1. Name of your community
2. If not a city, name and size of nearest city
3. Location of your community
4. The area of your community
5. The population of your community

B. Special Characteristics

1. List three reasons why people come to visit your area
2. Describe any unusual land formation found in or near your community

C. Industries

List major industries or occupations in your community

PART IV INTRODUCING YOUR PROJECT AREA

Include your project ideas below so that you can get first choice and so that other teachers in the Learning Circle can help and offer suggestions if you need them.

Appendix E Project Journal

<u>Wednesday, January 16</u>

I am looking forward to participating in the learning network a great deal and it seems like the time to begin is taking forever to arrive. At the same time there have been so many things to do in preparation that it seems that everything will never "come together".

I am looking forward to the project both for the benefits that I think the students in my class will receive and for the learning that I will be able to do. I hope that the students will be excited by the prospect of sharing ideas and work with students in a distant location and that they will have the opportunity to get to know some of these other kids via the telecommunications technology. I hope that the children are excited by the possibilities of the technology itself and can see that it could be a powerful tool in their education.

I am quite apprehensive about the curriculum project itself and hope that the other teachers and myself can come up with something that will be motivating to the students and worthwhile doing. I hope that the motivation provided by the technology and the linking with distant peers will help the students to improve their writing skills.

There have been a lot of little details to look after in getting the project going which have given me a lot of concern but things are starting to fall into place. I received a letter from AT & T last week saying that my class had been accepted into the network and a package of materials would be arriving about a week before the start of the project. That was the first big worry out of the way! Our modem arrived a few days ago and there is someone from AGT arriving today to hook up the phone line. Between now and the startup of the project I thought that I would try to link up with ASPEN using the modem to try and gain some experience using it and to see if it actually works!

<u>Monday January 21</u>

The materials from AT & T have yet to arrive and I have had a very frustrating experience trying to connect our computer with ASPEN. I have tried on several occasions during the past week to get the modem and the software to connect correctly but although the connection has been made a message does not appear on the screen and the keyboard does not work. It is very frustrating. I have tried all kinds of combinations with the software with little to no improvement and I think the problem is that our terminal emulation is incorrect to match up with the other computer. Perhaps Lou will have some answers tonight at the university.

<u>Friday January 25</u>

Lou identified the problem to be associated with the software that we received with the modem. The ASPEN network requires VT-100 terminal emulation and our software did not provide that option. So he loaned me a copy of Proterm modem software that they use at the university to try here at the school to see if that would work. And it did!! I was able to log on to ASPEN with little problem at all. I left a message on their electronic mail service to Lou that the software worked and have had a quick look at some of the services offered through that Network. I think that the course that I am taking with Lou will be a real help with the project as I am beginning to get more comfortable with the technology already and will at least have an introduction to it before the project begins. During computer time today I am going to show the students the modem, explain a little about how it works and show them how we use it to connect with ASPEN.

The package of materials arrived from AT & T a few days ago and have spent the last few days reading through it. It is quite extensive and very well put together. They go into great detail about how the technical part of the project will work and also have a very good guide for the Mindworks curriculum. I am supposed to log on to the system on Monday to find out who our class will be linked up with for the writing project. Before Monday I am supposed to try to log on to the AT & T computer using the software that they sent and send a message to myself and then receive the message to make sure that I know how to use the system and that it works. Well I tried to do that tonight and experienced nothing but frustration. Its funny how this technology has a way of doing that to a person! Earlier in the evening I had used the modem to log on to ASPEN and also to DIALOG so I was quite sure that hardware wise everything is going fine. I had set the parameters correctly and used the correct Datapac number but it wouldn't work. I talked to Rick at the AT & T Customer Assistance Centre about five or six times and he had me try all kinds of things but for some reason we could not get the modem to dial out. We went to a manual dial out and it still would not respond. He is going to phone me back tomorrow to see if he can suggest a plan of attack to rectify the situation. I sure hope that he can.

Sunday, February 3

Rick phoned back on Friday with some instructions but they did not work. I am beginning to become most concerned about this problem but mostly because of my students. I discussed the Learning Circle with them on Friday morning and I talked to them about how it worked and how we were going to work on writing projects with teachers and students in some distant classroom. I told them that one of the first things that we had to do was to put together a

welcome pack to mail to all of the other classrooms in our circle. In this package we were to include information about our class, our school and our community. We brainstormed for some ideas of what we could put in it, taking into consideration that it had to be mailed, and I couldn't believe the enthusiasm and the interest and ideas that were generated. They came up with some excellent suggestions and we had lots of volunteers to look after putting the various things together. This idea seemed to really interest them and the thought that we would be receiving something similar from all of the classes in the circle got them really excited. They, of course, came up with some very good ideas that we could not include because we will have to mail this to 6 to 8 different locations in various parts of the world. They decided to include the following things: pins of Alberta, Lethbridge and our school, photographs of our class, classroom and the school, pictures from our yearbook so they could identify individuals, a map of the city with the location of the school indicated, a map of the school, a brochure of places of interest in Lethbridge, a timetable and class list and a letter talking about our school, class events, subjects and things of interest to kids.

When we wrapped that up I discussed the idea of each class in the circle sponsoring a certain type of writing for the other classes. I gave them some ideas and examples of kinds of writing projects that we could sponsor and told them to think about it and think of ideas of their own and we would discuss it again next week. There wasn't quite as much enthusiasm at this point but as they start to write and receive other students work it will be interesting to see what develops.

I tried again on Saturday to get the software working but with no success. I spent an hour on the phone with someone from AT & T and we tried everything imaginable but with no success. I finally tried to connect to their mail service going in the back door using our own communications software and it worked. The only problem is your have to learn a whole command structure and how to manouver your way around the computer. The software is designed for

ease of use and does most functions with a single key stroke. I am glad it is done that way as I can easily see that the technology would fade into the background so you and the students could concentrate on the curriculum and the shared learning with the other classes. I just hope so much that we can get the software to work so we can get on with the project. I could get so excited about this but that darn technology is holding me back.

Tuesday, February 5

During my prep on Monday morning I got a call from Mary-Lou at AT & T to discuss my problem with the communications link to their computer. We talked about what was happening and I could sense immediately that this was a person with some real experience in this type of project. I told her the type of modem we were using and right away she came up with a suggestion to enable the software to work. She said that the programmer who designed the software that we were to use used to work for Prometheus, the company that made our modem. Someone in a learning circle about three years ago who was using a modem like ours had a similar problem and it related to the modem hardware and he was able to solve the problem and she suggested that I try the same thing. She said there should be some dip switches on the modem and I should flip one so that the DTR was in a "true on state". After I hung up I had a look at the modem and there were no dip switches but there were three short pins with a plastic thing connecting two of them that would come off. So I took it off and put it on so it was covering another two pins and tried the software. I attempted to send my test message and it worked!!! Previously it would not even dial out. I tried to get it to download any messages for me and I got the list of the other 8 classrooms in our circle. I surprised even myself at how excited I got. It was totally thrilling. I realized that a major hurdle had been crossed and now we could proceed with the project. I imagine that there will be other technical problems along the way but at least we have a start.

The member classes in our circle come from a variety of geographic locations in the continental United States as well as a class in Salmon Arm, British Columbia. But the real prize is that one class is located in Riyadh, Saudi Arabia! I sure hope we can get some good communication going with them.

Thursday, February 7

I logged on to the Network last night and send my introductory message. In it I just told a little bit about myself and the school. I downloaded any new messages for me and there was an introduction from Todd Frimoth in Riyadh. He told about his school and the declining enrollment since the war started and I found it fascinating. I read it to my class this morning and it generated quite a bit of discussion. I also downloaded the class survey and we did it together in class this morning. The kids are really looking forward to getting the surveys from the other classes. I put a large map of the world and the United States up on the bulletin board and had one of my students locate the other schools in our network and put pins in the map. When we get surveys or welcome pack materials we will display them up there. He found every place except Madison Heights, Missouri. I couldn't find that either so we will have to consult a large atlas tomorrow.

Friday, February 8

I finally found Madison Heights today and it is located in Michigan not Missouri near Detroit. So I learned a little geography. I spent some time today discussing the writing project that we would sponsor with the kids and they could not settle on one but rather came up with three ideas that they will think about. The ideas were fractured fairy tales, riddles and autobiographical incidents. We asked the assistance of other classes in the circle to tell us which idea they liked and wait to see what they say. Got messages today from two more teachers in the circle and another one has a grade three class. I hope there are some classes closer to our grade level.

<u>Thursday, February 14</u>

We have received quite a few messages this week from other classes in the circle and it is beginning to fill up with more people getting online. The coordinator for our circle is having some technical troubles and our mentor is filling in for him in the interim as has asked if I would like to be coordinator. I am not sure that I want to take on that responsibility right now. I sent him a message that I am still considering the possibility. Technical troubles seem to be the norm in our circle rather than the exception even for veterans. The class in Salmon Arm, B.C. is finally on line after a great deal of frustration as expressed by the teacher Peter Kilby in his initial message. Also the class in New York is finally with us and she had some trouble also. I find it amazing in her case because this is her fourth time on the network and she is a full time computer teacher. I had my second technical setback this week. I tried to import files from Bank Street Writer III that the kids had written to send over the modem and it didn't work. The files would import but they were illegible after the transfer. The system worked fine for Appleworks files so it has me puzzled. I sent a message to the technical help people and am waiting for their response.

The students were quite excited to find out that the class in New York were grade six students and that there were 450 of them!! Actually the teacher there is using the learning circle with all 17 of her grade six classes that she teaches computers to. The class in Pennsylvania is grade five and they were happy about that. They asked if they could send a personal letter to the other classes so a number of them did and I sent them about two days ago. They talked about a wide variety of topics and most of them were fairly short like they couldn't decide what would be proper to say. One thing was interesting about some of the letters. An early message from our circle mentor had a picture made up of keyboard characters that I showed to the class and several of the students attempted to do similar pictures with their letters.

The class finished the welcome packs and we mailed them today. We have also received three class surveys that I have posted on the bulletin board and sent our class survey off earlier this week. I read the surveys from the other classes to the kids and it generated quite a bit of discussions. They were not too interested in local industries or what the schools were like but rather in the kids favorite foods and musical groups etc. This is quite natural I suspect.

Friday, February 22

I got a message back from the technical people about my importing of Bank Street Writer files and it wasn't much help. They suggested that I try writing the files to disk and then importing them but that didn't work either. Mary-Lou phoned from New York to give me that suggestion but I will have to phone her back to see what we can try next. I don't want to have to teach the kids how to use a new word processor so we can send files. I am sure that we will come up with something.

We received out first welcome pack on Wednesday and the kids were eager to see what was in there and look through the materials. Some were more interested than others and some were asking whether they could write poetry and wondering when they could begin to do some actual writing. I got a message Wednesday night from the teacher in New York that her class is planning on sponsoring poetry for their writing project so I will have one happy student come Monday.

I am beginning to slowly see that the technology is unimportant in this project and the human connections and learning that can take place through the technology is the important aspect. The technology makes it all possible but the connections for myself so far have been interesting at the least. I don't think that the students have really caught on to what is happening for the most part. Perhaps I am reading them incorrectly but the possibilities that this project could have for them are not yet obvious to them.

Wednesday February 27

I received a personal message on Monday from Larry our circle mentor pleading with me to accept the coordinator role for our circle so I accepted. It will mean some extra work on my part but my biggest concern is that this extra work does not detract from my work with the kids on the writing project.

We received an interesting message from Todd in Saudi Arabia that contained letters from his students expressing their concerns and fears about the war in the gulf and the kinds of things they have to go through with gas masks and shelters etc. because of the war. The kids found the letters very interesting and I had lots of volunteers to write letters back to those kids in response. I duplicated each of the 11 messages and gave them to 11 of my kids and they each wrote a letter back to one of the kids this morning and I will send them to Saudi Arabia via the network.

Most of the projects are getting firmed up now and we can begin to plan to participate in the actual writing process very soon. I still don't have the importing of Bank Street Writer files problem licked but am still working on it. It is a problem that must be solved however.

Still no more welcome packs have arrived but many have been sent so they are at least on their way. We are going up to outdoor education camp all of next week so we will be unable to communicate on the network. That will be hard to take.

Monday March 11

We are back from camp and back on the network in a big way. There were four welcome packs arrive while we were away. One of the first things two of my students said this morning was to ask if we had received any more welcome packs. They are on display and the kids are having a great time

looking at them. We discussed the projects being sponsored by the various classes this morning and the kids chose the project that they would like to work on first. The most popular was fractured fairy tales.

One of the classes in California is sponsoring a project called "Mystery States of the USA". In this project they will provide clues about the identity of a state in the United States and send them over the network. Then our class is to guess what the state is. The teacher, Roy Bowman, phoned me this morning and asked a question about another project and I told him we liked the idea for his project and could we send them some mystery provinces of Canada for his kids to guess. He liked the idea and so did my kids and this turned out to be the second most popular project for participation.

We went to the computer room this morning for the students to begin their writing projects. We had at least two or three students participating in each one. About half of the students were in the library doing research for the province guessing activity or the research on the Blackfoot nation.

While we were in the computer room three of my students were supposed to be with the resource room teacher to work on reading. One of them, Kara, showed up about half way through the period with a poem she had written this weekend about Canada that she wanted to send as her contribution to the project sponsored by the class in New York. She was obviously very proud of her poem and sat down at the computer to key it in. While in the process, the resource room teacher came in to find her (she was AWOL) and turned and said with a big grin on her face, " I am sending this poem to New York. She was obviously very excited about her work.

The other students appeared also to be very "into" their work. From the one hour class, I have five finished products from students ready to send.

Wednesday March 13

While we were in the computer room on Monday, four boys were

working on the first installment of the unsolved story from Todd's class in Riyadh. His class had sent the beginning of the story and the boys were going to add a couple of paragraphs as a group and send it back. They had been working on it for a while when they called me over to their computer to read what they had written. They had a reference to obvious violence and I told them to think about the restrictions that Todd had asked us to follow in our writing. They remembered that there could be no violence or gore in it and realized themselves that they would have to do some editing of their work. I asked them to think about why he had made this request of us and didn't necessarily want them to answer but just to give it some thought.

They went right to work on their revision and it turned out to be completely different and in my opinion superior to their first effort. I think this was a good lesson in culture difference and tolerance for them.

I am so excited about this project it is sometimes hard to contain my enthusiasm and difficult to capture it on the computer screen. It occupies an immense amount of time and effort but if I had more time I would spent it telecommunicating with my colleagues in the circle and the core. I am most happy with the way the technology continues to be pushed to the background and the people contacts and curriculum comes to the fore. There are a lot of good things happening and the technology is the means not the end.

Friday March 15

This has been a rather discouraging and frustrating day on the old network for a number of reasons. I guess when you embark on a project such as this one you have visions of everything being wonderful and great and don't think about the downsides. I guess knowing nothing about telecommunications at the outset and going in blind was a blessing. All I could see was the possibilities for the positive, which I still see, and not the frustrations of the negatives.

We sent our first work to the shared folder on Monday and hoped that perhaps by now there would be some work from other classes for us to read by today. But there was nothing yet and I know that the students seemed disappointed. Derek must have asked me three times today if there was any writing from other classes yet. Instead, all I was able to download was a message from Peter trying to make sure that he understood the nature of all the projects. Trying to keep the communications going and having some confidence that messages have been received is beginning to be frustrating. You can never be sure that anyone has received or understood your messages unless you get a reply from them. Most of the time this has not been too bad but it can become a frustration. For example, I have had no indication that anyone has received the student writing that I sent on Monday or that it arrived in good shape. I am still concerned about importing Bank Street Writer III files and wanted to know if they were legible. I also had assumed that almost everyone understood what the others wanted for their projects that they were sponsoring. I guess I will have to fire off a letter this weekend reviewing the projects again for everyone.

As we were in the computer room this morning with the students doing their writing, Mrs. Decicco, my parent helper commented "It sure seems like writing is a painful process for these kids." As I looked around I had to agree. There was little enthusiasm on the part of the students. In one case, Brent had finished a project last week and was supposed to do some poetry this week. He hurried through a poem that must have taken him 5 minutes to write and then was frustrated because he had nothing to do. When I suggested some additions or changes to the poem he just became angry.

The fractured fairy tales continue to be popular and some students are writing a considerable amount. I have yet to see any products that are completed or near completion from this project.

I have set up folders in the classroom to put students writing in that we send and that we have received from other classes in the circle. I also have a large list of all the projects sponsored by other classes and what students are

currently participating in those projects. This should help organizationally to keep track of the writing.

<u>Wednesday March 20</u>

A few comments on editing by students of their own work since some of their writing is staring to come in. I received a fractured fairy tale from Trevor on Monday and it was very entertaining but the proof reading and editing left a lot to be desired. It was obvious from the spelling errors that he did not even run the spell checker program before he submitted his work to me. This is consistent with previous written work on other assignments in his case. Other work has been excellent. Derek, who also has been careless in the past with proof reading, handed in an excellent mystery province submission that was completely error free as far as conventions were concerned. I observed him working at the computer on Monday and he was very careful and spent a lot of time in proof reading. He usually hurries through his work and him main goal is to be finished as quickly as possible.

I downloaded quite a few messages on Monday and even some student work from other classes. My students were very impressed with the quality of the poetry from Riyadh. They were buzzing about it for quiet a while. Brent and the boys were disappointed that their unsolved story did not make it back yet from Riyadh.

Still having problems understanding Dorothy's circle story project!!!! She has received messages from four different teachers (two from me) for clarification of what she wants our students to write and when. Her reply this week was "Yes, my class project is the circle story idea. We welcome any and all additions and suggestions." Ahhhhhhh!!! For a circle story to be effective she needs to establish a schedule or order for each school to participate. I suggested this to her a couple of weeks ago and nothing!!!

I don't know what to do next without insulting her. Maybe she is not receiving

our messages?? Impossible! This is extremely frustrating.

Friday March 22

It seems I am becoming a resident expert in the school district on telecommunications. My aim at the outset of the this project was not to become an expert at anything. This was just a curriculum project that looked really interesting and I have had to learn a bit about telecommunications in order to do it properly. At any rate, Wendy Melrose from Park Meadows elementary and a teacher at Nicholas Sheran are trying to do some telecommunicating with their classes. They are having some problems so Wendy is going to come over here on Tuesday morning so I can give her some help.

I had to go to a meeting this morning during computer time so Shauna (student teacher) took over with projects for the circle. I was sitting in the meeting wondering how things were going and wishing I was with the kids. But I have a stack of disks on my desk with completed work and the students were enthusiastic when I finally joined them. I am concerned however that they will loose some enthusiasm if some work does not start to come in from other classes. There have been a few poems but that is about it.

I had a joke played on me by the office staff this morning about the phone bill for the line for the computer. I have been worried about being billed for long distance charges despite the assurances from AT & T that it was all covered. So they handed me a photocopy of the bill for the line from AGT and had doctored it up to include charges of $90 for data pack charges. I just felt sick wondering how we were going to cover these additional charges for the duration of the project. I could see the whole thing going down the tubes. I finally noticed that they had doctored the bill and had a good laugh afterwards but it wasn't funny at the time.

I finally had to come up with a new method for filing incoming messages since my binder has developed a definite bulge. I have another set of

file folders, one for each teacher in the circle, and will place printed out messages in the appropriate folder when they come in. The ironic part is that I could all of that electronically if I had some decent hardware to work with. Time to do my weekly update. What a pain!

<u>Monday April 8</u>

I have come to the conclusion that it would have been much easier to get things sent and received in this network if the phone line had been located in my classroom instead of in the computer room. I am always running down there to send or receive messages and it would have been much easier if the line was in my room where I had easy access to it.

Having a round 2 3600 student teacher here for the past few weeks has been a real help as far as the learning network is concerned. Because she is such a strong student, Shauna Larratt, I have been freed up to do a lot of extra work that would not have been possible otherwise. The work involved in being a coordinator is much more extensive than I had anticipated. If it had not been for Shauna, I don't think I would have been able to handle it as well as I have done. It does take some time and effort to keep track of all the messages from all the other schools and put together a weekly summary to send to Larry, the mentor. It is also an extra strain because I feel responsible more than previously for the success of the circle and need to keep everyone going. On the other hand, it really keeps me on the ball as I need to lead by example.

The organizational problems of keeping track of all the incoming and outgoing student work have taken up a lot of my time. I have developed a system of file folders for incoming and outgoing student work and also folders for incoming messages from teachers. The big plus for this system is it allows the kids in the class to have access to all the work for the various projects as I have the folders on a ledge in the classroom where they can look at them. I also have the names of the students who have participated in each project written on

the cover of the folder. I have columns on the chalkboard where the students can write their name under the project that they are currently working on. My organizational problems would have been much fewer with better hardware. The Apple II is very limited by speed and memory for a project such as this and using the software that we have available. With more memory and speed in a Mac, I could have set up electronic file folders for all my needs instead of the real ones. I can only have an "in" and an "out" folder on the Apple II. The limited memory also makes it difficult when there are many messages to download. The disk cannot hold all of the messages so I have to go into the AT & T computer and "manually" download my messages a few at a time. A person needs a Mac for a project like this!!

I get very jealous of some of the other teachers in the circle because of the hardware available to them. I know I could do a better job if the right hardware was available to me. Peter, in Salmon Arm B.C., started the circle with an Apple II, moved up to a IIgs and now has a Macintosh Classic. All in a matter of two months!! Larry has a new LC as has a teacher in San Diego. At Larry's school they just received an Apple grant and received 4 LC's, 2 SI's and an SE30. I am just green when I think about them and not an elementary school in the city has a single Mac. It is about time things started to change.

I think that if I do a learning circle again in the future I will join a middle school one. I feel that my grade six students would feel more comfortable working on projects with grade 7 and 8 students rather than grade 3, 4 and 5 students.

I am just starting to think over the options for putting together our final publication. I think I will allow each class to put together their own projects final draft and then mail it to each of the other schools. I will put together a title page, table of contents and a beginning description of each school in the circle and mail them along with our own project publication to the other schools.

My kids have been churning out the work for other projects at a good pace but are quite disappointed that no other work from other classes has been

sent for the project we are sponsoring "Incredibly interesting incidents".

Tuesday April 9

I just received a message from Todd in Riyadh and he sent with his message two incidents for our project. The first two that we have received!! They are from grade three students and are not very long but it is great to receive them. It is a start at least. I am just beginning to appreciate the problems that overseas members of the learning network have in getting online and sending and receiving communications. Todd said that they have so many messages in the in box after a week (they only transmit once a week) it takes 30 to 40 minutes to download and their transmission usually fails during that time. The teacher from Cairo mentioned that they are unable to transmit at all during school times and it usually takes an hour in the evening to get online. They must be very dedicated and patient people. One has to wonder if the benefits are worth all of the trouble. A quote from Todd in his message today, "One of the big pluses of this program is the motivation. Writing has a purpose! It's great."

Thursday April 11

It has occurred to me today (not for the first time) that the real plus of this whole exercise is not the technology but the avenues that the technology opens. I had great expectations for the kids to be excited about telecommunications but they are excited about the kids in the other classrooms and their writing. The technology has quietly disappeared into the background. I hope that they grasp the power of this tool.

I have a fear that I am dominating the use of the network too much and not allowing the students enough latitude or input.

I received a couple of very nice perks from AT & T this week. On Monday morning I received a very nice sweatshirt in the mail with A T & T

learning network written on it. I believe all teachers who are part of the network received one. Then on Tuesday I got a picture album with AT &T learning network engraved on the front and a letter thanking me for being coordinator of the circle. Nice little touches which are very much appreciated.

I gave a presentation to the telecommunications class at the university on Monday night. I think it was received very well and I hope that my enthusiasm for the project came through in what I said.

Wednesday April 17

I set some deadlines for completion of student work on the weekend and outlined how we were going to put the final publication together. I asked for input from the other teachers in the circle with their ideas and have received word from three of them. I must take it for granted that my ideas and deadlines were acceptable to the others.

The deadline for sending student work to other classes is this Friday and there certainly has been a lot more work on the line this week. The kids in my class have been excited that we are finally starting to receive some incredibly interesting incidents. Three of them actually wrote one of their own and they were quite good so I shared them with the other classes. Come to think of it this is something I should have done at the beginning as a model for the other students in the circle so they would have a better idea of what we wanted.

I encountered an article by Margaret Riel in a journal on telecommunications in an ERIC search that I conducted a couple of weeks ago. The journal is not in the University of Lethbridge collection and since she is the Education Program Manager for the network I sent her a message to see if I could get a copy of the article. She sent back a nice letter and is going to send me a number of articles that relate directly to the network. That should help me a great deal in the written portion of the project in my literature review on telecommunications in the classroom.

Having a student teacher is also a disadvantage in working on the project. I probably would have spent a great deal more time letting the students work on network projects this week but she had things she needed to complete with the students before tomorrow so that had to be a priority.

Tuesday April 23

I got a package in the mail yesterday from Margaret Riel. I contained a number of articles that she had written or co-authored in various journals that related to the learning network. I will be reading it shortly. I am curious to see what she has written about the network now that I have had the experience myself.

We have received quite a bit of work from other classes for our project. I always read them out to the students in the class as soon as we receive them. I noticed in silent reading period this morning that the kids are picking up the folders with the work on various projects from other classes and reading them.

I have put together all of the incidents into one large Appleworks file. I am going to print it out and duplicate a copy for each of the kids in the class. Then we will read them together, edit and decide which ones to put into the final publication. I hope that we will be able to include all of the stories in the publication but we are limited to five pages both sides. (my own idea!)   Then I will have the kids look for graphics that apply to the stories so we can include a few in the final publication. I mentioned this idea to Derek the other day and he has already come up with a list of graphics for a few of the stories.

I am really enjoying this experience with the kids. It is so exciting and fun to participate in. I think that the final publication will be a very memorable document both for myself and for my students. I hope all goes well in its publication. Todd has had some real problems in downloading and sending messages via the satellite. It has limited his participation a great deal. I don't think his section in the final publication will amount to much. Also his kids have

been limited in what they could contribute to. This is the same for the class in Cairo. I think someone (me) will have to take up the slack somewhere.

Wednesday, April 24

Just received word today that the innovative curriculum fund that funded this project had been cut by the board in the budget that they just passed for the next school year. That is bad news since I am quiet sure that I want to have this experience again next year. I want to try a circle in middle school, grades six to eight, and probably a different curriculum, places and perspectives. It looks like if I want to do it I will have to go looking for funding from some different sources. I am not sure where to look right now but I am sure I will think of something.

Thursday April 25

As I was working with the kids in my class today in editing the work submitted for our project, I was amazed at their skill in editing others written work. They were able to examine spelling, punctuation, sentence structure and meaning in an efficient and accurate manner. I did not suggest any changes myself because there was no need to do so. They were able to pick out all of the problem areas themselves. I think there might be something to this collaborative editing process. I think that even those who were not contributing directly were benefitting from the process.

I am beginning to realize as I look back through my journal and the messages that I have sent that the person who has benefitted the most from this experience is not the students but me. I know that they enjoyed this project a great deal and benefitted in many ways but it was me that the most excited about everything that was going on and learned the most. It was me that made the personal contact with other teachers and supervisors and communicated

the most and probably learned the most from my distant colleagues. I think that the project had kind of an energizing effect on me. It turned me on to the untapped possibilities in education. I love the contact and exchange of ideas between the teachers in the circle and look around and wonder why that same enthusiasm and exchange is missing right here in Lethbridge and in my school when I am surrounded by other teachers. I will need to reflect on that question. I think it is a good one.

Tuesday April 30

We are into the phase of putting together our publication so communications on the network has come to a standstill. Most of the work and involvement for the students has ended but I hope that they will be able to leave some good-bye messages before everything comes to an end. I had a group of them pick out suitable graphics to go with the incidents and I am just in the process of getting our layout done so we can mail our part of the project to the other schools. I am more that just a little frustrated by the quality of the output that we are getting for our pages because of the technology or lack of it at our disposal here. A lot of work has gone into this writing and I would hope that it could be published in a sophisticated and good looking manner. But we will just have to do the best with what we have. I had better get to it.

Thursday May 9

The network has been really quiet for the last few days as people are putting together their projects and putting them in the mail. We got our part of the publication completed on Friday and got in the mail. I got a message from Claudine in Michigan today that she received our work on Tuesday. Not bad for the old, much maligned post office. I got message from other 5 other schools this week that they had mailed their projects already. I am sure that the others

will follow shortly.

I have been rather frustrated by the lack of response to my request of teachers that they submit an introduction of their class for the beginning of the publication. Only 3 of the 9 teachers submitted one and so there would be something for the others I wrote them myself from the information in the class surveys at the beginning of the circle. I gave them about two weeks to submit them and sent two reminders. I really didn't expect one from Riyadh or Cairo but the only teacher who offered an explanation as to why I did not get one was Sharon in Texas who had some technical problems about the time that it had to be sent.

Paula in Cairo sent a message about a week and a half ago that she was no longer going to be continuing in the circle. The technical problems were too much for her. It took her so long to establish a link with the main computer and then it took her forever to upload and download data. And she could only do it late at night or early in the morning. I am surprised she hung in there as long as she did. I think some work has to be done to improve the technology overseas if some of these schools are going to be able to participate in the network successfully.

I phoned a secretary at the board office the other day to request that I be included in the agenda of the May 28 board meeting to say thanks to the board for the funding that I received for this project and present them with a copy of our final publication. A couple of days later I received a phone call from Gary Heck informing me that I was not welcome at the board meeting. He said that I should just write a letter of thanks to the board and that they could not waste their meeting time with such items. It felt like a slap in the face.

Also, Ab Paskuski has phoned the Lethbridge Herald a number of times to see if they would be interested in running a story about the network and my involvement in it. They never returned the calls and showed no interest whatsoever. Too bad.

<u>Wednesday May 21</u>

We are just sitting around now waiting for the projects to come in from the other schools in our circle. The communications for our circle ended last Friday and the communications in our core group end this Friday. We have received projects from Texas, Michigan, and Salmon Arm but are still waiting for the rest. I downloaded a final message from Hiller School in Michigan and part of it said "Tom Wilson you are the greatest! Thank you Thank you Thank you" Little messages like that are wonderful to receive. Makes me feel like maybe I did something worthwhile as circle coordinator.

I sure hope the rest of the projects arrive soon. I am really starting to get concerned but I get it is just the slow postal service holding them up. I am really quite excited about putting them together. I think that the final publication will be something for the kids to keep and treasure. I know that I will.

I gave the kids a chance to evaluate the project today with a questionaire. Initial results look fairly positive.

<u>Saturday May 25</u>

This will probably be my last journal entry. It all came to an end yesterday afternoon at about 3:00 p.m. My account was going to be cancelled at 6:00 p.m. so I downloaded for the last time and watched as the computer went through its now very familiar routine of logging on to the AT & T computer and searching for any new messages. I didn't expect that there would be any and watched as the message came on the screen "No messages to download" and logged off the computer. A wonderful, frustrating, challenging, exciting, experience was over. So much has happened since I started on the odyssey over the phone lines.

This past week was very fruitful and satisfying. During this week our circle account was closed but our core account was still open. When I
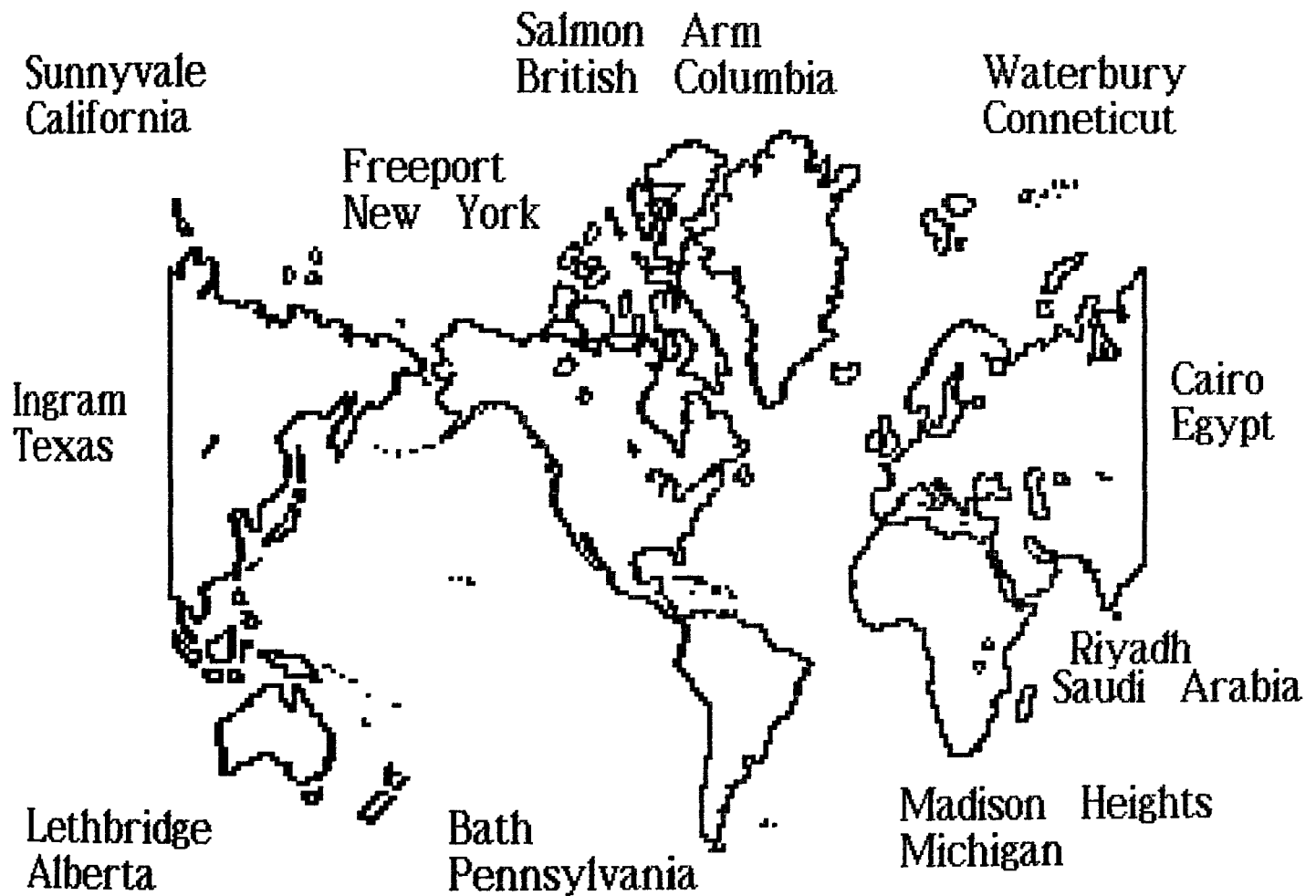
downloaded near the beginning of the week I discovered that George, a circle coordinator from New Jersey and Larry, our mentor coordinator, were exchanging ideas about the network back and forth. I joined in and had a great time reading their ideas and reactions to the things that I had to say. It was a lot of fun and a great way to end the experience. I mentioned my apprehension about getting the publication together because I haven't received the projects from so many classrooms. (still haven't, only received 4 out of nine) Larry told me about the first time he was a coordinator and didn't publish at all. This made me feel a bit better but I still wish that more of the work would arrive so our publication would be complete. It is really frustrating. It makes me feel like those other classrooms have really let my kids down when their work will not be published. I more shows up soon. I plan to have a big publication party in the library when we finally put it all together. I hope most of the work has arrived so we have something to celebrate.

Appendix F Lakeview Sections of Final Publication

AT & T Learning Network

Mind Works Elementary

MWE2 Circle

Salmon Arm
British Columbia

Sunnyvale
California

Waterbury
Conneticut

Freeport
New York

Ingram
Texas

Cairo
Egypt

Riyadh
Saudi Arabia

Lethbridge
Alberta

Bath
Pennsylvania

Madison Heights
Michigan

Final Circle Publication

May 3, 1991

To Our Readers
From Mind Works Elementary 2: Learning Circle

Telecommunications links minds. The teachers and students listed in this Circle Publication worked together in a Learning Circle called MIND WORKS on the AT&T Learning Network. While the participants did not physically meet one another, they worked cooperatively over the past fifteen weeks and shared together in a new form of teamwork. This teamwork was made possible by links between computers and the work of the teachers who helped their students participate in this exciting new form of learning.

Students typed their messages on their classroom computers and then, using modems and telephone lines, sent their messages to all of the other classrooms in the Learning Circle by typing a single command on their computer. Just as easily, they were able to receive messages that were sent from these distant locations and different time zones.

Their first messages were class surveys in which they described themselves, their schools and their communities. Once they learned a bit about one another, they worked together to design Learning Circle Projects. The results of these cooperative projects make up the content of this publication. While this publication marks the end of their time together, for many it also marks the beginning of a new pattern of teamwork over distances. This cooperative work across geographic and cultural boundaries is likely to play an increasingly vital role in all aspects of the future.

We hope you will enjoy reading the work of our students!

Tom Wilson
Mind Works Elementary 2
Learning Circle Coordinator
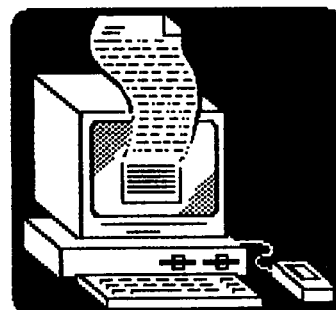
A Special Message from M.C. Hammer!!

Dear Learning Network participants,

Your Spring 1991 Learning Network Session Commencement Speaker was born Stanley Kirk Burrell in Oakland, California in 1963. He grew up poor in a tough urban environment where many of his peers ultimately succumbed to joining gangs and selling drugs. Burrell had two beacons of hope; his love for performing and baseball. He told Richard Harrington in an interview with the 'Washington Post' (July 29, 1990) "I been dancing ever since I was born, I used to perform for my family when I was three years old, doing imitations of James Brown from 'Live at the Apollo.'"

It was his impromptu imitation of James Brown in the parking lot of the Oakland Coliseum that got him noticed by the then owner of the Oakland A's, Charlie Finlay. Finlay was so impressed with the excitement and energy of the performance that he invited the eleven year old Burrell to view the game from the owner's box and even hired him as an errand boy. Within a short time the was made the official batboy for the Oakland A's. Burrell told the 'Washington Post' "That was just an excuse to give me an opportunity to travel with the club. I got to see what life was like outside Oakland."

His association with the Oakland A's is also where he got his name that you now know him by. Stanley Kirk Burrell was nicknamed "Little Hammer" by the players because of his close physical resemblance to "Hammerin' Hank" Aaron.

In 1987 he started his own recording label and his debut single-title recording, "Ring 'Em," was sold out of the trunk of his car. Then in 1988 he was visited while performing at a local nightclub by a talent scout from Capitol Records and shortly signed with the company. In 1989 he released the "Please Hammer Don't Hurt 'Em" album with the megahit single "U Can't Touch This." The record has sold nearly eight million copies making it the most successful rap record ever released.

He has toured 250 sites around the world with 30 band members, singers and dancers. He runs four miles a day, lifts weights and does three hundred sit-ups before each show. His diet consists of chicken and fruit and he is said to drink ten quarts of orange juice a day. He and his wife Stephanie have a daughter Akeiba Monique.

"I'm always looking to improve - musically, performance-wise, rapping-wise," states YOUR Spring 1991 Learning Network Commencement Speaker, M.C. Hammer.

Enjoy YOUR special message from Hammer and have a great summer. All of you graduate from the AT&T Learning Network with top honors and we hope to see you next year!

AT&T Learning Network Team

To all the kids on the AT&T Learning Network:

Congratulations on completing the Spring session with your partners from around the world! You're in the most important place you can be right now - school. Now, some of you are in big city schools and some of you are in small country schools or on military bases but all of you in all of your different environments and countries and cultures have a great opportunity at this point in your lives to learn. To learn from your teachers and your families and, most importantly, from each other. Because learning is necessary to reach your dreams.

And you should have dreams for yourselves. Big dreams and big goals. Learning helps you find ways to make those dreams come true. Each person's dream will look different and that's great, too. That's because each of you is so special and so unique and your goals and your futures will be shaped by what your dreams are today.

Be determined and work hard. Learn how to let people know who you are and how special you are. Learn how to communicate and also learn how to listen because others have wonderful new things to teach us too.

Make the most of your opportunities. Sometimes things will not be easy and it may be hard to see the future but keep trying. Stay in school and get ready for these times. Learn the skills you need to reach the top!

I wish you all happy and exciting lives!

M.C. Hammer

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   Cairo American College, Cairo, Egypt

11. Unsolved Stories
   Saudi Arabian International School, Riyadh, S.A.

INTRODUCING...

Lakeview Elementary School
Lethbridge, Alberta, Canada
Teacher- Tom Wilson

Lakeview Elementary School located in Lethbridge, Alberta, Canada was founded and built in 1960. This school has seven (7) different levels of education (kindergarten-grade six). There are thirteen (13) regular classrooms plus a separate, small building used as a classroom for kindergarten which comes to a total of fourteen (14) regular classrooms. However, there are also resource rooms, a challenge room, janitor's rooms, a music room, an art room, a staff room, a computer room, an auditorium, etc. We are proud to say that our school has many facilities where children and adults are able to play sports and have fun.

Our grade six classroom (managed by Mr. Wilson) has thirty-one (31) children who are respectable individuals.

In closing, we hope that you have enjoyed telecommunicating with our classroom because we enjoyed reading all of the work that we received from all of you.

Bastion Elementary School
Salmon Arm, British Columbia, Canada
Teacher- Peter Kilby

Salmon Arm is the commerical and administrative center of a Municipality of approximately 12,000 people. Farming and forestry are the main commerical pursuits. Located almost exactly between Calgary, Alta. and Vancouver, B.C. on the Trans-Canada Highway, the town enjoys the beautiful rolling scenery found around Shuswap Lake and the lovely climate of the North Okanagan region.

Bastion Elementary School is one of twenty elementary schools in the Shuswap School District. It is located in one of the larger residential areas of the town. The building is a well-constructed and well-maintained brick and concrete structure located in very attractive grounds. School population is 290 children in classes K to 7. There are eleven regular classrooms, a kindergarten room, library, gymnasium and lots of other special use areas. A new, four-room addition is planned for this summer. It will contain a proper computer science room. The school offers many programmes and enjoys a good standard of academic and athletic achievement as well as exhibiting excellent citizenship.

The circle partners this year come from Division Five, Grade Four. The Fabulous Five is made up of 28 students--13 girls and 15 boys. They are a great bunch and they do their best to ensure that their keeper, Mr. Kilby, stays young--at heart.

We have all enjoyed the Network and look forward to being more effective members of a circle in the future. We were a bit disappointed; however, that there were not as many submissions to our project as we had hoped for. We guess that we'll have to think of something more "catchy" next time.

Moore School
Bath, Pennsylvania
Teacher- Dorothy Reimer

Moore School is located in Northampton County about seven miles north of Bath. Moore is one of three elementary schools lying outside of the town of Northampton. There are also three elementary buildings located in the town itself. We are known as the Northampton Area School District. In town there are also located the Junior and Senior High Schools.

Moore School includes approximately 32 classrooms. There are several classrooms for each grade level, from kindergarten to sixth grade. Our class is a fifth grade class; there are three other fifth grade classes in our school. We have an IMC, Artroom, Music room, Gym, two resource rooms, two special classes, a nurses office, and all-purpose room plus the principal's and business offices. Our school is mainly on one floor except for the newest addition which houses the third and fourth grade classes, the resource and special classes and has a basement housing the Music Room, Computer Room, and the gym.

Our class taught by Mrs. Reimer consists of 28 pupils. Three students are resource students and three others spend part of their day in the resource room. The other eleven boys and eleven girls are regular students in the class. We have Mrs. Reimer for our teacher for all classes except for Mathemetics. We are grouped and go to different fifth grade teachers for this subject according to our ability.

We have enjoyed this experience of telecommunicating with school children all over the world. It has made the world seem a smaller and more friendly place. We enjoyed the letters from children in other schools and sharing the projects each school has initiated. It made us realize children are just like us no matter where they live.

Hiller Elementary School
Madison Heights, Michigan
Teacher- Claudine Herrington

Of the four elementary schools in the Lamphere School district, (Madison Heights, Michigan) Hiller Elementary is the largest, most unique and most enthusiastic! We are a happy group of 300 students and 45 staff ranging from kindergarten to fifth grade. The students are able to participate in vocal music, (instrumental for fifth grade) art, science and gym. All this activity goes on in the one story building which houses open classrooms, a sunken library and a small theatre. Each of the twelve classrooms have four IBM computers and one printer.

Hiller is offered many extraordinary activities each year. Among them are visits by the Michigan Opera Theatre, Living Sciences (live animals brought to the schools - a boa constrictor, a parrot, a tortoise an opossum and a tucan), childrens' authors and many other speakers and performers. Every class at Hiller is treated to a Parent-Teacher-Organization sponsored field trip. Once a year in June, the local police youth bureau sponsors an all day NO DRUG RALLY at hill in the city park, with entertainers, speakers, guests (like a parachuting Batman) who talk and sing about NO DRUGS. We are all treated to a picnic lunch and a bag of goodies.

This year, Miss Herrington's 17 third graders were very fortunate to be a part of the AT&T Mind Works Circle. What a thrill to receive messages from all over the World! Computers and telecommunicating have opened up a whole new world to the students and the teachers alike! Thank you all for sharing in this wonderful experience with us.

Cairo American College
Cairo, Egypt
Teacher- Paula C. Frease

The Cairo American College has an enrolement of 1326 students, 505 of which are in the elementary section. There are 33 classes from kindergarten through fifth grade. The school is 45 years old and resembles a four story apartment building. The school emblem is an eagle and the colors are red and white. It is located in Ma'adi, Digla, seven miles south of downtown Cairo.

Our class is in fifth grade. Although we had a lot of technical difficulties and couldn't participate as much as we wanted, we enjoyed very much being part of the learning circle.

Saudi Arabian International School
Riyadh, Saudi Arabia
Teacher- Todd Frimoth

Our school was founded in 1964 and has 72 classrooms in elementary and junior high school. Our normal enrolement is about 1300 students in elementary school. Our school colors and blue and gold and our mascot is an eagle. Our school week goes from Saturday until Wednesday with Thursday and Friday off. Our class is in the third grade. We have students in our school from fifty different nationalities.

Atkinson School
Freeport, New York
Teacher- Margaret Taboada

We have 17 classes of sixth grade students participating in the learning circle. We have 900 students in our school in grades five and six with about 34 homeroom classes. We have an additional 20 classes for music lessons, science lab, computer labs, gyms, project challenge, resource etc. Our school is made of red brick. The school emblem is the devil and the colors are red and white.

We have an enrichment program every Wednesday afternoon. All studetns are given the opportunity to choose three selections from an extensive list of course offerings. The course offerings can range from rug hooking to orienteering. All teachers pick something they would like to share with students. Each course lasts ten weeks and then students can switch...so can teachers. Some sample courses are: Mayan math, chess, aerobics, yoga, crosword puzzle making, Italian, ecology, cooking, etc.

The Freeport schools have an extensive computer program. Grades five and six have two computer labs. The Apple lab offers word processing, critical thinking skills instruction, hypermedia, and instruction in other computer applications.

Ingram Elementary
Ingram, Texas
Teacher- Sharon Kubenka

Our class for the learning circle is part of the school's BEYOND program(gifted and talented) and includes students from grades three to six. We have 607 students in our school in grades pre-school through six. Our school is constructed with large stones and wood in the oldest parts, and most of our buildings are portables. Our school's mighty mascot is a brave, young warrior, and our school's colors are red, black and white.

There are a lot of special things about our school. Some of these include: Our gifted and talented program, field trips, our Parent Teacher Organization, plays produced by each grade level,

child care facility for teacher's children, and an after school program for latch-key children, and, of course, the best students and teachers IN THE WORLD!

Lakewood School
Sunnyvale, California
Teacher- Roy Bowman

We are in fifth grade with 30 students in our class. There are 840 in our school in 29 classes. The school is 33 years old. Our mascot is a lion and our colors are blue and gold.

Our community is one hour south of San Francisco. We are near the San Andreas fault. Last October we had a large earthquake(7.1). We all survived. We call ourselves the Sunnyvale Earthquake Kids!!

Locally we have Apple Computer, Hewlett Packard, Computer Chip Electronics and many other electronic firms. Stanford University is only a few miles away. People come here to visit NASA. We are near the Great American Amusement Park and San Francisco Bay.

Rotella Elementary School
Waterbury, Conneticut
Teacher- Janice Looney

Ours is a third grade class in a school with 376 students from kindergarten to fifth grade. Rotella School is in its nineteenth year of existence. It is a one story structure made with portable classrooms in the shape of an "H". We attend school 180 days each year.

For the past three years our students, grades 2-5, have written and published their own books. All books are bound and stamped with the publishing date. Then we have a publishing party in May. We invite a local author of children's books or a story teller and our mayor. These people try to autograph as many books as possible. Musical instruments are taken once a week by any student who shows an interest. Drug Awareness Week is done yearly in our school.

Waterbury is located about 30 miles west of Hartford, our capital. New York City is approximately 100 miles from Conneticut. Waterbury sits down in a valley surrounded by hills. Its rocky ground is not good for farming. Many Victorian mansions still stand in the Renaissance City.

Incredibly Interesting Incidents!
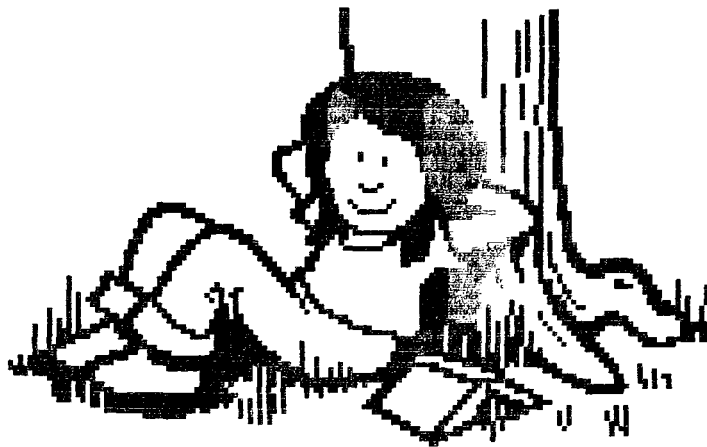
The Big Croc

It all started off when I was in Darwin, Australia. My family and I were at a pond and suddenly we heard the water move. We thought it was only a fish. We heard the water move again. This time we saw it. It was a crocodile! We ran to the car. We were scared!

Nikki Callaway
Saudi Arabian International School
Riyadh, Saudi Arabia

Flying Ace Goes Crashing to the Ground

On March 31, 1991 my dad and I went out to fly a balsa wood war plane we had just finished building. When I flew it there was a little bug on it. The plane went heading towards a tree really fast. Just then it hit the tree. The wing broke off and the rest of the plane went crashing down. I went to pick up the wing. When I picked it up the bug was there but it was dead. It looked like it was going to parachute out.

Kevin Dart
Saudi Arabian International School
Riyadh, Saudi Arabia

One day my friend asked me to go to the mall. It was on school vacation last year. Well, we went to Roosevelt Field and my friend said she had seen a girl who looked just like me. I didn't believe her. I went over to the girl and tapped her on her shoulder. She turned around and sure enough, she looked just like me! Her name was Heristota. She is Cherokee Indian, just like me. She actually was more surprised than I was. Heristota was there with her mother. Heristota talked a little different. Soon she had to go. We agreed to come back to Roosevelt Field on the same day next year to see if we still looked alike. I knew she had to be really nice because she gave me a hug when she said goodbye. We went our separate ways. I have never failed to believe my friend again. Maybe everyone has a twin somewhere.

Maroya Gilchrist, Room 211
Atkinson School

One day my parents rearranged the furniture in my room. That night I decided to sneak out of my room and watch TV near my parents' room. I heard my mom coming up the stairs. I ran and jumped toward where my bed had been. I forgot that my parents had rearranged the room. I landed on the rug on the floor. The next day I had a big rug burn on my nose.

Brian Muncaster, Room 108
Atkinson School

One day I went with my dad to Great Adventure (a huge amusement park). I was in line to go on a ride when my dad just disappeared. I got out of the line and started looking for him. I didn't see him anywhere. All of a sudden, there he was with cotton candy in his hands. I asked him where he went. He said he only wanted to get some cotton candy. I told him that I was scared to death and I only wanted to go home. He said he was sorry and we left.

Ambiores Ramos, Room 209
Atkinson School

One Christmas Eve I planned on going into my basement to make some decorations. My mother, who was making dinner at the time, told me that I absolutely could not go down to the basement. When I asked why she said that my father was working downstairs. I knew I wouldn't get in the way, so I went down anyway. My father wasn't down there at all. She had lied to me. Soon I saw why. A sleek black and white cat crawled from underneath the table. I loved him at first sight. This was the first time I got to know my cat, Nicholas.

Maryvonne Neptune, 205
Atkinson School

It was sometime in August when I was six years old. My dad took me to buy a bike. We went all over looking for one. Finally, I found one. It was a Kent BMX.
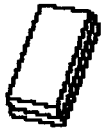
When we got home, the first thing I wanted to do was to give it a test ride. I went up and down the street. Then Ralph (the dog) got out. The first thing he wanted to do was to give me a flying lesson and that's what he did. He went right for me while I was riding the bike. I hit him and was the first person ever to fly naturally.

A few hours later I was feeling better. So, I tried to ride the "bike from hell" again. I went around the block a couple of times and my sister got jealous. She pushed me and I fell into a thorn bush. When I got up, I was covered with thorns. That night I decided I would stay away from Ralph and my sister when I rode my bike and believe me, I did.

Christopher Hirsch, 111
Atkinson School

One night I was reading, "The Lion, the Witch and the Wardrobe." I had a shelf full of books above my headboard. Wedged tightly between two books was an old copy of the book I was reading. Suddenly, the old copy fell right into my lap for no reason! I was so scared, that I screamed as loudly as I could. I wouldn't go into my room for a week and had to sleep in my sister's room.

Elizabeth Farley, 206
Atkinson School

Coincidental Dream

A few months ago, I had a dream that recently came true, I think. This dream was about a red car that was chasing my friends and I in a green car. THEN... I awoke.

About two weeks ago, I was playing in my little dribblers basketball game. Little dribblers is an extra curricular activity that helps prepare elementary students for junior high basketball. You see, in my dream all of my friends that were in the car, happen to be my teammates. Our team shirts are green, and the team we played had red t-shirts. I think our team was supposed to resemble the green car that was being chased by the red car which was resembling the team we were playing. Isn't this a weird coincidence?

Samantha Martinez
Ingram Elementary
Ingram, Texas

Most Embarrassing Moment

I am telling you the most embarrassing moment in my life. This happened approximately two months ago when my family and I ate out at a Mexican food restaurant. There is an abundance of Mexican restaurants in our area. My little nephew who was 7 months old had a stomach that was not fully developed yet. He was sitting in my lap and I gave him a drink and he threw up ALL over my meal, my drink and me. It was very embarrassing having this occur in a public restaurant.

Toni Henry
Ingram Elem.
Ingram TX

On my eighth birthday I got such a terrific headache I could hardly move because if I did it hurt even more. No one knew what had happened so I had to go into the hospital. Even the doctors there didn't know what was wrong.

The next day I had to go to my family doctor and ever since that time I have sinus headaches.

Kelly Landis
Moore School

One day while my mother and I were grocery shopping I saw the kind of potato chips that I wanted. The only problem was they were in the next aisle. I decided to go and get them but I told my mom to stay right where she was. When I got back she was gone. I looked and looked and finally found her four aisles away. I was really mad but she promised she would never do that again, and I'm glad.

Lindsay Kline
Moore School

When I was about six years old I really hurt myself very badly.

It was a really hot day and my mom was babysitting some kids. We decided to go into the pool because it was so hot. I was playing with a tube but suddenly the tube fell out of the pool and I went to go and get it. (the pool is surrounded by sharp stones) As I climbed up the ladder after I had gotten the tube, all the other children started to splash and I lost my balance and fell on the sharp rocks. I fractured my collarbone.

Amy Klingenbeck
Moore School

One very important thing that happened to me was that I was adopted! I was only five years old when I came to this country. I came from Colombia, South America. I have a sister named Sandra who lived with me in an orphanage. My parents didn't have enough money to adopt both of us, so they adopted only me. Sandra is only a year older than me. Ever since I left Sandra, we have been writing to each other. Whenever she writes, the letters are in Spanish and my mother has to take the letters to work so that someone can translate them. Sandra sends pictures of herself. At Christmas and on her birthday we send her a box of presents with money, cookies, and clothes.

Ivonne LaRocca, 104
Atkinson

One day my cousin, sister and I were walking home from school when we came to this driveway where this dog was. We looked into the driveway to see if the dog was tied up. When we saw that he wasn't tied up, we all panicked. We told each other not to run past the dog, but my brother started to run as he went past the dog. The dog started to run after us. We all yelled and ran as fast as we could. My brother and sister hid behind parked cars, but my cousin doesn't run that fast. The dog almost caught her. Luckily, the dog only ran up to the corner of the block and we were all saved.

Michele Ramos, 208
Atkinson

An interesting moment I had was when I won first place in an art contest. I was thrilled when they called my name! I was invited to a luncheon at the Yacht Club. I drew a picture of a snowy day and all of the things that were happening on that day. I was really excited!

Denise Spyratos, 109
Atkinson

The worst weekend I ever had was when I went on a Girl Scout camping trip. We left on Saturday morning. We were driven to the campsite by my friend's mother who was going to stay all weekend with us. When we left, it was sort of cold. By the time we got there, it was freezing. It stayed that way all weekend. We got there in time for dinner. It was the WORST dinner I ever had in my life. We slept in tents that were totally disgusting. By our second day, we were totally fed up with the camp. My friend's mother was also disgusted. She drove us home a day early (thank goodness!). It was a horrible weekend.

Rose Yndigoyen, 211
Atkinson

One time, when I was three, I was in the hospital for hurting my head on a table at nursery school. When I went to the hospital, it took the doctor about a half an hour to get to me. I needed about 50 stitches over my left eyebrow. Now I have a one inch white line over my eye. I stayed home for the next two weeks with my mom. Now my mom always calls me "Bump" because of my head.

Matthew Yatsyla, 205
Atkinson

Three summers ago I went to New Orleans by train. On our way there, the train ran over a man who was very drunk and unsure of what he was doing. We were delayed for about an hour but I met a girl who was the daughter of my father's friend from about 20 years ago. The hour went by quickly. The train company gave free food and drinks to everyone. It turned out not to be so bad after all for me.

Marguerite Lanaux, 205
Atkinson

A couple of weeks ago on a Saturday I had to go to the hospital because my grandmother had an asthma attack. Later that day, I left. The next day about three o'clock in the morning my aunt called from the hospital and said that my Grandma had just died! I was so upset, I cried for almost an hour.

Lori Astor, 211
Atkinson

One Monday in February, I was riding my bike home from a friend's house. As I came to a corner, I saw a car coming down the street I was going to cross. At first, I slowed down but then I saw that he or she had a stop sign and I didn't, so I kept going. I thought he would slow down but he didn't. That's when I made a split decision to turn. He kept right on coming though. I came about an inch away from scraping sides with this car. Finally, I stopped and he just left without stopping. I went home walking my bike the rest of the way. To this day, I am still careful about crossing that street.

Scott Pomerico, 106
Atkinson

A few weeks ago, I had gym class and we had to play volleyball. It was my turn to serve and I didn't know how. Anyway, I hit the ball and it hit the wall and bounced off the gym teacher's head. The teacher looked around and asked who did it. Everyone pointed to me and I thought I was in big trouble. All the teacher said was, "I think you need to practice your serve."

Tamara Rosario, 111
Atkinson

One day in the summer, I was riding my horse and he got in a fight. He is a big black gelding, but unfortunately the other horse was three times his size. I was so scared! I was hanging on to his neck. Everyone was very surprised that no one got hurt. That is something I don't want to go through again.

Beth Dina, 110
Atkinson

This might sound dumb, but please bear with me. One day I was walking through the park and I climbed up this hill. I saw a baseball bat and picked it up and swung it. At that moment, I felt like I was in the major leagues. That bat seemed to have some kind of mystical power. I took the bat and went to the ballfield and hit five homers that day.

Caprice Grose, 210
Atkinson

One dark, stormy night, I was reading a book in my Grandma's living room. My mother said that she was going out and would be back in about 30 minutes. I was soon home alone with nobody to talk to. All of a sudden, my dog ran up to the door barking. So, I ran to the door and looked out of the peep hole. I saw a mysterious figure walking past the house in a strange manner holding something in his hand. I ran upstairs and got the keys. I ran down again and locked the door. After I did that, I hid behind the couch. After about fifteen minutes, my mom came home and I came out from my hiding spot. I told my mom everything except about the figure. If I had told her, she'd be hysterical for the rest of her life.

Alan Gittens, 111, Atkinson

This incident happened to me about 5 or 6 years ago. It was a late Friday night when my mom and I were at Toys R Us. When my mom was ready to leave, she went to the cash register to pay. I ran off. It was time for me to have some fun. I started running around opening toys and playing with them, for example, the He-Man and Thunder Cats. After what seemed like a long time of playing, I felt hungry so I swiped a soda. My mom doesn't know this to this day. After that I got tired and fell asleep in what seemed to be a gigantic teddy bear. After about an hour, my mom came back hollering and screaming. When she put me in the car, I told her the whole story, except the part about the soda.
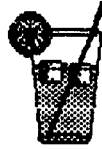
Abass Perez, 211
Atkinson

Last year, when I was ten years old, I had to get 80 stitches in my left leg. It happened about 8:45 p.m. My brother was taking out the garbage, but he dropped the bag a couple of times and a glass jar broke. He asked me to help him carry the bag because it was so heavy. A piece of glass was sticking out of the bag and cut my leg. I ran into the house and yelled, "Mom, I got cut." My father just happened to be walking by and said to get to the kitchen and put my leg up on the chair. Both my mother and father came into the kitchen, but my mother had to leave because she thought it was too disgusting for her. My father told my mother to call an ambulance. The ambulance came and put bandages on the cut. My parents and I didn't go to the hospital by ambulance because it was the only one on the schedule that night.

My mother and father drove me to the hospital going through every red light and over the speed limit. We arrived at the hospital about 9:45 and had to wait about 45 minutes to get the stitches. The doctor gave me 8 needles and then started sewing. It didn't hurt at all. I got them out several days later. I was glad I could take a shower without a plastic bag around my leg.

Lauren Sperber, 205
Atkinson

My most incredibly interesting incident in all my life, was when I fell off the diving board. Most people think that I mean that I fell into the water, but I didn't. I fell on to the cement.

I was in grade three and I was nine years old. My friend Sara - Beth Leavitt was having a sleep over party and I really wanted to go. We were also going swimming. Well I went to the party on Feb. 4th. We played some games and then we decided to go swimming. We piled into the car. After about five minutes, that seemed like five hours, we arrived. We went swimming at Stan Siwik. I didn't really want to go on the big diving board, but I did.

I went up the diving board about ten times and then on the eleventh time, I was climbing up the ladder and I was about ten feet high, when suddenly my hands slipped and I fell. I almost fell on Lily Wright. I didn't know what was happening as soon as my hands slipped because I was in shock. An ambulance came to the swimming pool and took me to the hospital, then they called my parents.

That night I didn't have to stay at the hospital, but on Sunday I had to go back into the hospital and stay until Tuesday.

I did not break anything, I only had a bruise on my head and some scrapes on my shoulder.

I was lucky because I got a lot of gifts and Sara - Beth Leavitt even came and had her party at my house on Saturday.

Tammy Jubber
Lakeview Elementary

The most incredibly interesting incident was when I fell off my bike. It was when I lived in Taber. I was 7 years old and had a blue sports bike.

It was summer and it was hot. I was riding my bike on the pavement and going too fast. Then my mom said something to me and I fell off my bike. I was crying and I looked down at my legs. There was a big cut on one of my legs and on the other there was just a scrape. After that I learned not to go so fast on my bike.

By Bri Meheden
Lakeview Elementary

Airport Encounter

My incredible, interesting, incident, happened last spring when I was in the Salt Lake City airport. My family and I were walking in the airport when I said "Mom. Look, there's Wayne Gretzky."

And she said, "No that isn't him. "

And I said, "Yes it is I know it is."

And then she took a closer look and said, "Oh my gosh it is him. Well, you'd better go get his autograph. "

And I said, "Alright!"

He was in the ice cream shop with the rest of the L.A. Kings when I got his autograph. I went and asked him for his autograph and said I was from Edmonton, and that we missed him.

He signed on my hat, my shoe, and my paper pad.

Mark Kilam.
Lakeview School.

Once I went to my Grandma's house and my cousin was there. He asked me to play ball with him. My cousin threw a pitch with a hard ball. That ball came at me so fast that it hit me right in the eye. My mom said, I take the phrase, "Keep your eye on the ball" too seriously.

Michael Hedges
Rotella School

On April 7, 1991, I went to Sleepy Giant with my dad to go on the trails. When we got there I was so excited that I said, "I can go on these trails by myself." I said, "Don't worry, Dad, I won't get lost." So, my dad believed me and let me go alone. Do you know what happened next? I got lost!!!!! I started to yell, "DAD, DAD." When he found me he said, "I'm never going to let you go on any trails by yourself again!"

Justin Primus
Rotella School

When I was much younger my mom said, "Cris, I just washed the floor so don't dance on it, okay?" I replied, "Okay, Mom." But, I didn't seem to listen. I danced on the wet floor and fell down and a tooth that wasn't even loose fell out.

Cristina Ward
Rotella School

Once my father, brother, and I went to Spring Field Pond. My brother and I saw a lot of big rocks in the pond so we started to jump from one rock to the other. We decided to have a race on the rocks, but I was going so fast that I fell into the water. My pants got all soaked and my dad was really mad. I got the inside of my dad's car all wet and I smelled like 200 fish and frogs. That was the most humiliating day of my life. It was so embarrassing because a lot of parents were there with their kids.

Jessica Colon
Rotella School

One day my Uncle Tony came to my house and took my brother and I in his Chevrolet pick-up truck to this building that had Indian things like tools, bunkbeds that were covered with fake animal skins, and different things that Indians used. After a while, we went out of the building and went on several different trails in the woods. We went up about ten trails before we went down this trail where we saw tree tee-pees and a garden. When we started up a different trail we found a little swamp. My uncle and I went on some rocks so my brother did too. He slipped into the swampy water and lost one of his shoes. We never found it!! We went back to the building and bought some stuff. And, we ended the day with ice cream.

Lisa Stamidis
Rotella School

A REALLY Incredible Story

Once in the forest there was a slimy swamp with hungry crocodiles and deadly pirahnas. There was a guy named Tim

sailing on a windsurfer coming down the slimy swamp.

All of a sudden, a crocodile jumped up and choped off Tim's leg with his sharp, pointy, shiny teeth. Tim was bleeding badly and when he got up on the river bank he ripped part of his shorts off and tried to stop the bleeding! He yelled for help.

Suddenly, a fat man and a skinny man came to help him. They took him to a hospital where he finally got a new leg.

About one year later he decided to swim the swampy river again. This time he had to swim for his life! The river was running fast and there were humongous waves flowing over big rocks. Tim hit a rock and he began seriously bleeding! He was rushed to the hospital where he had a special treatment that saved his life.

Beside him in the emergency room there was a cute girl. They both had a lot in common and started talking. Tim told her all about his adventure in the slimy swamp. She said she thought they should become friends and Tim said that would be okay. A couple of years later they got married on Tim's birthday.

I wonder what the moral is to this story?

Tyler Magnusson
Bastian Elementary

A TERRIBLE ACCIDENT

Hi!
My name is Cindy Ayles. I'm here to talk about a little incident that goes back about 4 years ago. This happened to me in kindergarten--if I recall.

It was our family day. We had gone to the Revelstoke A&W for a picnic lunch. While we were waiting for lunch to be ready, my friend and I went off to find a mud puddle to bathe her dog in. At last we found one. It was the perfect size and shape for her dog. So we got ready to give it a bath, but before we could do that, we had to check it for sharp objects on the bottom.

While we were bending over doing this, the car that was parked behind the puddle started up. The driver backed up without looking and hit my friend and I! I got tossed into the gravel-filled puddle. I couldn't breath for about five minutes and then the car stopped pushing and went back into the normal spot it was in.

When I came out from under the car, I was screaming and crying because of the pain in my right cheek. I had been cut quite badly. Everybody got busy and soon I was on my way to the hospital. In the time that it took to get there (which wasn't very long) blood was gushing out of my face like a waterfall. I was really frightened!

When we got to the hospital, the people held a soapy wash cloth to my face. It stung for a while but the pain went away. The next day my dad went to A&W and came home with a big A&W teddy bear with a get well card from the people there.

After that we had to go to the hospital in Kelowna which is a bigger city. That was where a plastic surgeon gave me a special treatment on my face. He poured on some kind of liquid that fizzed and bubbled like lava. It was hot and it stung a lot, but otherwise it was fine.

After that treatment my eye was glued shut for about two weeks. It wasn't a very nice experience, but at least I don't have any scars and know better than to play behind parked cars now.

Your friend,
Cindy Ayles
Bastian Elementary

Incredible Interesting Story !!! This is a true story .

Once I was playing in the river near Enderby. Enderby is a small town about 20 Km east of Salmon Arm. I was playing on the beach when I saw a frog in the water. I grabbed the frog and got it on shore.

My cousin and I played with it for a while and then I threw it back into the water. I went after him again. I swam out to him but when I tried to walk on the sand in the river bottom the water was too deep.

I found myself in a current and I was drowning. I was panicking! I tried to swim for my life but the current was too strong for me to swim ahead. I went under the water and tried to swim but the current was under the water too! I was in real trouble.

Then a big fat guy with a HUGE inner tube came out and put me on the tube . He took me to shallow water. My uncle came

and got me and he thanked the man. I did too!

I had to sit on the beach for the rest of the day because I had been so scared that I couldn't go back into the water. I'm over my fear now, but I won't go back to the Enderby River until I'm older and a better swimmer.

Your friend,
Tim Jagt
Bastian Elementary

My incredible incident was when I was six . It was a normal summer day and the drive to Calgary was warm . We got on the plane and went roaring into the wild blue yonder. The fight was weird to us for it was the first time my brother had been on a plane alone. The food was like most airplane food, rubber! We landed in Montreal to refuel. The stewardess tried get rid of us in Montreal but my bother (who was eight) knew that we had to get off at Halifax.

TREVOR HATFIELD.
LAKEVIEW SCHOOL

Hi, my name is Bryan McIntyre. I live in Lethbridge and I go to Lakeview School and I have one really incredibly interesting incident.

The year was sometime in the eighties. I was at my cousins ranch fishing. All of a sudden something started to tug on my line. By the way it was tuging, I thought this must have been at least 15 pounds. This fish was so strong it pulled me into the water. The fish started to give up so I had a better chance of reeling him in, but when I got to the end of the line all I could find was a boot and boy was I mad.

Bryan McIntyre
Lakeview School

When I went skiing for my first time at Fernie something really funny happened. I was riding the T-bar and when I was getting off and my coat got caught on the left side. There I was hanging by my back. Another skiier pushed the emergency button and I fell flat on my face! And to add to that I was going down the hill too fast when I saw a sign that said: end of ski area. Of course, I tried to stop and nearly killed myself in the process! There I was laying on the ground with one ski off. Since there was so much snow on my boots I couldn't get my ski back on. So I walked to the bottom of the hill with one ski on.

By John Brooks
Lakeview School