# Computer Network Between Fourth Grade Students in the Kibbutz and the City: Contribution to Writing

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#### Abstract

This paper describes a communication project carried out between fourth grade pupils at Kibbutz Ma'agan Michael and Ayalon School in Tel Aviv. Pupils communicated with each other, once a week, via computer on subjects related to their social and personal worlds. Topics included presenting themselves, describing hobbies and collections, composing serial stories, dealing with personal and general conflicts, and exposing to each other different cultural elements, ceremonies and festivals on kibbutz and in the city.

## Keywords

Computer Mediated Communication (CMC), e-mail, social communication, writing.

#### 1 INTRODUCTION

In the last decade communication between people via the medium of computer has resulted increased contact between the various strata of the population. According to Spiegel (1995) the use of the modem and e-mail by both adults and teenagers in Israel is extensive. Communication in this form demands both writing and reading as the principle skills.

Survey of the literature over the last decade reveals three periods of computer communications. The first period, between the years 1980 - 1987 shows enthusiasm for this medium in teaching and learning. Many articles describe the employment of computers in the school system, and present ideas and advantages of various projects and their contribution to the children (Cohen & Miyake 1986; Daiute, 1984). This

period is characterized with few empirical studies (Levin, Riel, Browe & Boruta 1983).

During the second period, from 1987 to 1990, far less literature appear in the article due to waning of the initial enthusiasm. There is a storm claim and search for finding ways in which to use the technology for worthy educational goals. (Lenk 1989).

The third period, in the nineties, is characterized by an increase in quantity of articles and books detailing educational projects. Computers and e-mail become common invention and influence the development of literacy. Empirical studies examine the influence of computer communications on various writing and reading skills. Overall this period emphasizes this medium as a mean to advance literacy. Lately, e-mail is perceived as a significant medium to advance writing as a complex process. (Crook 1994; Bruce & Rubin 1993).

Interestingly implementation of computers in education went through similar periods, in its first phase the initial effect was most central. However today computers are valued as helping tool in learning, and not as a technological goal.

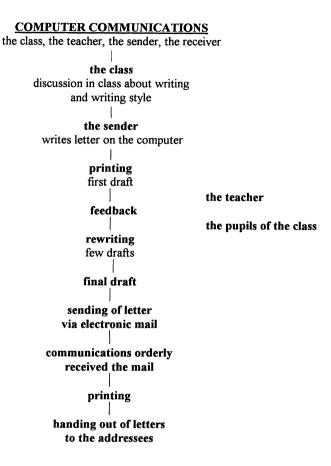
Bruce & Rubin (1990) and Reil (1990) discussed the importance of computer communications in modern society and see the significance of this type of social communication in the era of technology. Thus, the educational-philosophical thought of Dewey as a social-humanist is used as a theoretical framework for the study of CMC.

The contribution of computer communication to elevate students suffering from a fear to write (Mabrito 1991), the influence on the uses for technology for both boys and girls equally (Bresler, 1990) together with work done in a foreign language at school (Sanaoui & Lapkin 1992) exemplify the importance of work in CMC at school and show how such a medium adds to the writing skills and talents of the pupils.

# 2 PROJECT DESCRIPTION

The computer communication project is now running in its second year at the elementary school of Kibbutz Ma'agan Michael and in its third year at the Ayalon School in Tel Aviv. The communication is carried out via the "Kav Manhe Keshev" communication company

In 1995 4th grade, 20 pupils of the kibbutz and 25 of Tel-Aviv participated. The writing topic included personal and social issues. The project began with each pupil composing an 'identity card'. These 'cards' were sent to the other, and each pupil chooses a preferred 'pen-pal'. Some pupils created for themselves an imaginary identity because they new that their pen-pals will not see them anyway.



## 2.1 Subjects

After the initial identity information was complete the following subjects were recommended:

hobbies, extra curricular activities, collections, games such as "if only I were..." (descriptions of characters) to which the receiver must guess who the character is, electronic newspaper on the theme of "Peace", serial stories, accepted norms in children's society, solutions to personal conflicts and problems.

Towards the end of the year a meeting was planned. Prior to this the pupils sent details about themselves and their place of meeting. The meeting itself was planned by the pupils and their teachers.

Subjects which had been discussed through the year were brought up at this face-to-face meeting. At the end of the year a questionnaire specially compiled by one of the authors (irit Bar-Natan) was administered to the pupils from both schools to fill in.

# 2.2 Findings

#### What do children write about?

The children wrote an average of 12 letters to their e-mail pen-pal. The letters were usually between a half to a full page of print, in length. The first letters included personal information, identification, family, hobbies. 90% of the letters dealt with the social world of the pupils showing love and friendship as their most important concerns. Family problems, in particular of children in one-parent families, or where there is illness, were also prominent. Sport was a popular topic. Learning about each other's worlds (kibbutz and city) the kibbutz children heard about the following: the introduction of "pogim"; bus journeys to school; recess at city schools. The city children asked for explanations of concepts such as 'going to the dining room to eat', "moadon dalet-vav" (the home class for forth through 6th graders), "personal assignments" done by each pupil every year, "chevrat hayeladim"; why the kibbutz group was called "Manor". The city pupils decided after this that they would call themselves "Pogim".

#### What we learned from the feedback questionnaire

Towards the end of our project the pupils (both classes = 45 pupils) were asked to answer the questionnaire which notes their opinions with respect to computer communication. In the table below are the results which were based on these questionnaires (N=45).

Computer communication offers more advantages	<b>Question No</b> 1	<u><b>No</b></u> 10%	<u>Yes</u> 90%
	Question No	<u>No</u>	Yes
Writing without meeting face-to-face	2 & 12	15%	85%
Intimacy	2 & 5	75%	25%
Knowledge about way of life of others	3	85%	15%
Personal conflicts	4	75%	25%
Negative aspects /personally offended	6	10%	90%
Rewriting and editing	7	80%	20%
Short, dull communication	8	25%	75%
Improvement in writing skills	9 & 10	80%	20%

#### 3 DEVELOPMENT OF THE WRITING PROCESS

At the end of the year most of the pupils felt they had improved both in writing skills and ability to work on the computer. Comparison of the writing done at the beginning of the year with that at the end showed the development of skills. The pupils reported using the word processor for other school projects and valued their new abilities to rewrite and edit (80%).

#### 3.1 Social skills

The pupils think it better to write to their colleagues for the whole year before meeting them face to face. It was noted that a large number of pupils developed a close relationship with their writing partner (85%).

#### 3.2 Cultural skills

Most of the pupils reported learning about a different population living not so far from themselves. They were exposed to different norms at school, varied ways of celebrating the festivals, leisure hour activities and in general a different way of life. (85%).

### 3.3 Interpersonal social skills

A large proportion of the pupils emphasized that advantages of computer communication outweighed that of face-to-face dialogue (85%). The majority of the class did not receive any hurtful comments (90%) in the correspondence. The few that did receive such messages questioned their colleague and got an explanation in return stating that no insult was intended (10%). A large number of pupils did receive a letter or two which were short and dull (70%).

## 4 DISCUSSION

This project improved writing and reading through a new technological medium -computer communication. It is important to say that neither educational achievement of the pupils nor analysis of the components of skills within a text has been thoroughly examined. Pupils experimented with various writing styles according to the "learning program" which the teachers and pupils designed when the first stage of sender-receiver was established.

From the table and examination of the pupils' writing it seems that motivation to use e-mail develops. A holistic investigation of the pupils' letters shows the seriousness in which the pupils accept the comments of their colleagues. As in Riel (1990) the children seem to accept criticism from their computer pen-pal easier than from their teacher or peers in their own class.

Personal and social subjects arose in nearly all the letters thus showing the need for children to express themselves as described by Bresler (1990). Interpersonal

communication allowed pupils to find a place to express feelings which do not usually have a place in school.

Similarly, from the findings of Schwartz (1990) who studied the contribution of communications via the computer to development of knowledge about differences in society, the kibbutz and city pupils learned about different cultures which they would not have done without such a medium.

The excitement when the letters arrived and the resulting motivation as discussed in Bruce and Rubin (Bruce & Rubin 1993) caused the whole class to work seriously on their writing and on the word processor as a means to carrying out their work.

The teachers involved in the project, Efrat from Ma'agan Michael and Sarah from Tel-Aviv who were a little apprehensive about the whole process at the beginning of the year were very happy at the end. The teachers were most satisfied with the following results: the behavior of the pupils in these lessons, the use of the word processor as a means of communicating, motivation to improve expressive, intimacy, social problems discussed

The project is theoretical but it gives information as to the power of computer communication; an approach to writing and development of a skilled writer. The schools which carried out this project will continue to use them as part of their syllabus. There is a need for closer research in the future in order to examine the influence of communication via computer in terms of inclusion of social and academic variables.

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