Constructing Japanese K-12 Network Community: Case Study

Takashi Shintani <shintani@glocom.ac.jp>
Takeshi Uchimura <uchimura1@applelink.apple.com>

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Extended Abstract

Introduction

In October 1994, an educational research project called "MediaKids" was begun to promote inter-school communication in Japan through the utilization of computer network technology. In reviewing this case study, this paper explains how to construct a well-designed K-12 network and foster the development virtual community among the K-12 generation.

An Overview of K-12 Network in Japan

Computer Mediated Communication (CMC) has only recently been introduced to Japanese schools. The Ministry of International Trade and Industry, in cooperation with the Ministry of Education, announced a plan in the summer of 1994 to provided Internet connections for about 100 educational institutions (primary schools, junior and senior high schools) in Japan. This project will involve the installation of work stations and personal computers in these institutions which will then be linked to the Internet. Although this type of project may lead to a further development of Japanese K-12 networking, only a very limited number of institutes have a chance to join. Most schools in Japan still have a difficulty, both technically and financially, in getting a network connection.

A Case Study of "MediaKids" Project

MediaKids is an inter-school network communication project suggested and sponsored by Apple Japan, Inc. in conjunction with the Center for Global Communications (GLOCOM), International University of Japan. Eight model schools from different regions of Japan have participated in this experimental program.

The main objective of MediaKids is to promote "inter-school communication by students themselves." So far, the project has been a great success, yielding lively exchanges of information on the network among many local areas and school districts. MediaKids has constructed a "virtual classroom" on the network system, using electronic mail and electronic forums with a full use of still pictures, video and sounds as well as text.

Designing and Managing K-12 network

Based on experience gained from operating MediaKids, the following are considered important elements in the design and management of a K-12 network:

- easy to use interface and operation dedicated for kids

- simple or easy-to-understand functional layer

- students and teachers have an equal voice in the design and operation of the network

- appropriate size of network and number of participants

- support of both direct dial-up access and IP connection

- chance to access local, national and global network activities and communities

- related off-line activities

- soft moderation by teachers

- support and integration of non textual communication tools

- support from the region and Parent and Teachers Association