Enehana Kamepiula - Computer Telecommunication for a Hawaiian Speaking Generation

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Extended Abstract

A Brief Introduction to Hawaiian Language Immersion

The past decade has seen tremendous change to the world of Hawaiian language speakers. ʻOlelo Hawaiʻi, as it is known, was perilously close to becoming extinct. Studies in the early 1980ʻs determined that there were less than fifty speakers of ʻOlelo Hawaiʻi under the age of twenty, and that the vast majority of native speakers were elderly people, who did not pass on their native tongue to their children as it was deemed dangerous to their development as Americans.

In 1984 an immersion preschool program called Punana Leo brought our native tongue back to the young. Preschoolers between the ages of three and five were raised in the language, hearing nothing but ʻOlelo Hawaiʻi through their entire school day. As this first Hawaiian language immersion class moved on to elementary school, an immersion elementary school program was begun, entitled "Kula Kaiapuni." Here also children receive their education completely through the medium of Hawaiian language. Currently there are close to 1,000 children enrolled in Kula Kaiapuni programs at eight sites on five of the major Hawaiian Islands, attending grades kindergarten through eight grade. Approximately 240 preschool children currently attend the Punana Leo Preschools.

Technology and ʻOlelo Hawaiʻi

One of the most basic problems that the Kula Kaiapuni program faced was how to address the issue of technology. The goal of the program is to provide as complete an education as possible in Hawaiian, but this was impossible in computer education as there were no programs that supported diacritical markings that are unique to Hawaiian language, and no programs that the children could use that were in Hawaiian as well. Also, there was a lack of vocabulary to address all of the new terminology that is used in describing technology.

Hale Kuamoʻo has worked very diligently to overcome these problems. We now have fonts, word processors, drawing programs, and telecommunications programs which support Hawaiian. Not only do they allow the children to properly use the language on the computer, but all interaction between child and machine (menus, dialog boxes, etc.) is in Hawaiian as well.

Hale Kuamoʻo also directs a committee known as the Komike Hua ʻOlelo - The Hawaiian Language Lexicon committee. This is made up of Hawaiian language instructors and experts from around the state, who meet several times a year to coin new terminology to address shortcomings in the language, such as in the area of technology. The Hale Kuamoʻo publishes a dictionary that includes these terms, as well as most of the Hawaiian langauge vocabulary that has been in use for centuries.

Telecommunications

In April of 1994, Hale Kuamoʻo established Leoki, a FirstClass (Macintosh) based telecommunication system that was entirely in Hawaiian. It allows for private email, public discussion areas, file transfers, real-time chats, database access - all through the medium of Hawaiian. FirstClass uses a very intuitive Graphical User Interface that is very much like the Macintosh finder. Leoki was accessible at this time through Hawaiʻi FYI, a state funded X.25 network that provided for access to Leoki to all schools with a local call on each island. As interisland phone rates in Hawaiʻi are higher than calling rates to the US mainland, this type of access was essential.

Leoki has been moved from Maui to Hilo, and is currently being reconfigured to allow access both through Hawaiʻi FYI, and directly through the Internet, using FirstClass' new TCP/IP support.

In the Fall of 1994, Hale Kuamoʻo established Kualono, a World Wide Web server, using MacHTTP server sofware (http//:www.olelo.hawaii.edu). Kualono supports Hawaiian language diacriticals exactly as Leoki does, and fonts that allow for proper display of these diacriticals are avaible for download on the system.

Focus/Programs

A. Leoki

Leoki is designed as a dynamic communication and interaction system.

1. Curriculum Development

Teachers in the Kula Kaiapuni program are responsible for much of the curriculum development in the program. Leoki will allow for much quicker development, proofing, production, and distribution of materials.

2. Increasing the pool of Hawaiian language speakers

The Kula Kaipuni sites are relatively small, with 100 to 150 immersion students per site. By using email conferencing and chat capabilities of Leoki, children in the program are exposed to more Hawaiian language speakers than they normally would have access to.

3. High School and University

Students are enrolling in Hawaiian language classes in record numbers. There are approximately 2,000 students enrolled in various levels of classes atuniversities, community colleges, and high schools throughout the state, and teachers are very anxious to begin using Leoki as a language tool in the classroom.

4. Technology Education

Computer skills are an essential need for today's students. As the goal of the Kaiapuni program is complete Hawaiian language immersion, Leoki allows our children to stay current with computer and telecommunications technology, without compromising the very precepts of the program.

B. Kualono

Kualono is designed much more as a language resouce than an communications system.. It caters to both Hawaiian langauge speakers, as well as students, while use of Leoki is restricted to those students and individuals whose language skill allow for them to remain and communicate in a completely Hawaiian environment.

1. Resources completely in Hawaiian online (or under development include:

- back issues of Na Maka o Kana, a childrens' newspaper published by the Hale Kuamoʻo.

- books with picture, sound, and hyperlinks.

- a monolingual Hawaiian language dictionary (the first of it's kind, in print or on line), which includes picture, sound, and quicktime movies as well.

- articles from Hawaiian language newspapers printed in the previous century (there were over a hundred Hawaiian language newspapers in print during the mid-1800s, many are still available to researchers on microfilm).

2. Resources for Hawaiian language students include:

- A Hawaiian > English and English > Hawaiian dictionary.

- a catalog of materials available for purchase.

- news of the language, class availability, etc.

- all new terminology that has been coined to address computers, technology, and telecommunications.

3. Online language classes

Kualono has only been online for a few months, but we have been inundated by requests, from Hawaiian people currently living in the continental US and in other areas of the world, to conduct a class via Kualono and the Internet. We are currently working on a curriculum using the same text as is used at most universities and community colleges in Hawaiʻi, but in Hypertext format. There are many decisions to be made as to the format of the class, but we hope to begin doing instruction in this manner by the summer of 1995.

Conclusion

Telecommunications and the Internet is beginning to play a major roll in the future of the Hawaiian language. Through the work of Hale Kuamoʻo people no longer have to abandon ʻolelo Hawaiʻi when they sit in front of a computer to correspond with other speakers of the langauge.