

## ■ Frederic Andres

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[TITLE]

### **Communicating with children around the world through a topic map**

[MAIN BODY]

My specialty is databases, but I'm currently working on research related to multimedia data management integrated with still images, sound, and moving pictures and on semantics (assigning meaning to data). One specific research area is related to a technical standard for advanced semantic indexing called a "topic map." Using a topic map, it is possible to classify automatically words based on related topics.

### **Developing learning materials for junior/senior high school students**

One of the projects, in which I use a topic map, involves developing learning materials for junior and senior high school students. It is part of a larger project called "Memory with the Past". For this project, my team developed a system that lets students get detailed information (by writing stories) and investigate related topics (learning by searching) by selecting a topic related to history. This topic map uses lots of photos and video in addition to text, which makes the information it provides vivid and easy to grasp.

Say you select one symbol engraved on the wall of an old church and decide you want to find out more about it. You can probe all the details of that symbol, including its history and the reasons it was engraved on that particular wall. The more you explore, the more you want to know. Your interest grows when you present and discuss your findings. In this way, students learn how to analyze and classify information on their own and develop the capacity to think deeper.

### **A tool for children around the world**

The system includes more than 40 languages. While doing research on a selected topic,

students can communicate with other students in different countries through the Internet. A Memory with the Past contest is planned, and contest organizers plan to invite 1,000 junior and senior high schools from Central and South Asia to participate.

The Internet is a tool, and I'd like to see more people utilize this tool. To make this possible, we need to make sure children are familiar with how to use the Internet. But children who are fortunate enough to be in an Internet-connected environment still represent a small fraction of the world's children. WODE (The World Organization for Digital Equality), an NGO dedicated to promote digital equality, was established in January 2006 in Geneva. In addition to my own research, I'm dedicated to activities which contribute socially.

(Interviewed and summarized by Asako Murakami)