Multicultural Issues in the Design, Evaluation and Dissemination of CSCL Systems

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ABSTRACT
This paper describes an overview of a panel that will be held as an interactive event in CSCL2002. Multicultural issues in design, evaluations and dissemination of CSCL systems are discussed. Four outstanding panelists will share their rich experiences, and propose how multicultural issues should be considered and examined in the context of system design and development and practice in school education, what problems should be dealt with, and how information technologies can contribute to promoting multicultural learning. Discussions are not limited to the panelists: active participation from the audience will be welcomed.

Keywords
Learning in multicultural situations, collaborative learning, information technologies

INTRODUCTION
This paper describes an overview of an interactive penal to be held at CSCL2002. Multicultural issues are critical in today's internationalized and networked society, and should be deeply considered in CSCL research since one of the theoretical backgrounds of CSCL is mutual learning among people of different knowledge and backgrounds. Heterogeneity can be an opportunity for promoting collaborative learning, and CSCL systems should support people in overcoming their cultural differences and establishing mutual understanding.

Recent development of information technologies (Internet, WWW etc.) seems to give us ideal opportunities for applying CSCL in multicultural situations. However, it is not easy in practice. We face some serious problems, such as the "digital divide" comprised of disparities in access not only to computers, but also to well-trained teachers and useful digital resources. Another problem is how to construct mutual respect among people of different cultures and communities. For successful mutual learning, a critical precondition is to recognize differences among individuals, allow them to equally participate in a learning situation, and construct mutual understanding through interacting with each other.

We believe that emerging technologies should be useful tools for dealing with multicultural issues in CSCL. Therefore, we need to investigate (1) how we should use technologies to enhance mutual learning in multicultural situations, (2) what kinds of learning resources are necessary for establishing mutual respect, (3) whether we can create models of collaborative processes among different communities/cultures, and (4) how computational systems can play a role in supporting these processes.

ORGANIZATION OF THE PANEL
In this panel, four panelists who have been actively working in their own fields will discuss multicultural issues for design, evaluations and dissemination of CSCL systems through their rich experiences and perspectives. The panelists will show several interesting findings. One example is that cultural identities of individuals make them aware of their own uniqueness and differences, and this enhances mutual respect of different cultures. This example gives us a hint for content design of multicultural CSCL systems. Another example is that different communities and generations should not have excessive expectations of each other at the beginning of collaboration processes, but should work to establish expectations. The panelists have so far put their ideas into practice in various situations such as primary schools, local communities, and office environments. Based on these realistic and well-grounded experiences as well as those of audience members who have engaged in CSCL/multicultural activities, we will share lessons learned, and explore new possibilities and approaches for design, evaluation and dissemination of multicultural CSCL systems.

Each panelist will talk about their activities and demonstrate their own system in an interactive manner. Each presentation will be followed by a discussion period. As this panel is one of the interactive events, active participation from the audience will be welcomed.

The panelists have different backgrounds, cultures and knowledge. Their approaches and objectives are not the same. Therefore, multicultural issues will be investigated from different perspectives in this panel. Experiences shown by the

panelists will make discussions realistic and well grounded. Through interactive demos and audience participation, active discussions and mutual understanding not only among panelists but also the audience will be pursued.

The panel will be beneficial for people who are interested in human-computer interaction, computer supported collaborative learning, computer supported cooperative work, and multicultural education. Topics discussed will range from system design and evaluations to practice in real settings, so researchers, system developers, business persons, and school teachers will be able to participate from their own standpoints.

BIOGRAPHIES OF THE PANELISTS (ALPHABETICAL ORDER)

Ms. Bonnie Bracey is a Lucas Fellow, and was a member of the National Information Infrastructure Advisory Council appointed by President Clinton working with Vice President Gore and the Department of Commerce in helping to frame the documents that provided the national visions for the use of technology. She is an outspoken advocate for teacher involvement in the exploration and visioning of the use of technology as a tool. She has been helping teachers all over the world in national and global outreach on special initiatives. She has been working on issues of digital equity, digital divide, and digital bridges that are inclusive of multicultural issues. She won the *Top25 Women on the Net 2001*.

Dr. Amy S. Bruckman is an assistant professor at college of computing, Georgia Institute of Technology. Her work is generally on constructionist learning online. In one of her projects “Palaver Tree Online”, kids interview elders to learn about history from people who have lived it (for example, learning about civil rights from older African-Americans). Through several pilot studies, she found some interesting themes: how to find ethnic diversity online, differences between elders’ perspectives and teachers’ expectations, and so forth. They are key themes for designing and evaluating multicultural CSCL systems.

Dr. Shigeru Miyagawa is a professor in the Department of Linguistics and Philosophy and also in the Department of Foreign Languages and Literatures, both at the Massachusetts Institute of Technology. He has been working for "Star Festival", a learning support system about the quest for one’s identity in a multi-ethnic and multi-cultural society. This system is now used in elementary schools in Boston and Hawai`i, and other school districts are considering adoption, in order to encourage young people to explore their own cultural identity while learning about Japanese culture and history. His works are not only related to design and evaluation issues of multicultural learning support systems, but also strategies for their dissemination.

Dr. Kumiyo Nakakoji is an associate professor at Graduate School of Information Science, Nara Institute of Science and Technology, Japan, and a senior researcher at a Japanese software industry. One of the key ideas of her work is “Three C’s (Culture, Communication and Creativity)”, as applied to software development, multimedia authoring, and design. She has especially been interested in open source software development processes and collective creativity: how computational systems support interaction with people of different backgrounds, bridging between communities of different cultures and promoting mutual understanding.