Marcia Zeng
Professor, School of Library and Information Science, Kent State University, USA

The Challenge of the Electronic Environment to the Organization of
Knowledge - Second International Seminar on Subject Access to Information, Helsinki,
Finland, 29-30 November 2007

10.45-12.00 Classifications and Thesauri: local needs – global reach
[After Prof. Douglas Tudhope's presentation on Problems of interoperability]

Problems of multilingual and multicultural contexts

Questions of semantic interoperability that relate to multilingual and multicultural contexts can be addressed from two major points of view. First: how to ensure a good (or less-biased) KOS structure in terms of its coverage, term selections, term annotations, and relationships' establishment. Second: how to ensure that, in an online environment, a shareable KOS will be able to correctly facilitate data, information, and knowledge communication (in the form of transfer, exchange, transformation, mediation, migration, integration, etc.) among different agents, services, and applications. Within all perspectives about interoperability, semantic interoperability lies at the heart of all matters. It deals with the language and vocabulary used in communication (human and machine) and maximizes information retrieval and resource sharing by users through whatever language or vocabulary they choose to use (often across language and cultural barriers). It should be noted that the primary emphasis of KOS developers has been on ensuring bias-free structure. In a networked environment, however, KOS' share-ability and semantic interoperability become more and more critical. Prof. Tudhope has presented state-of-the-art research and development related to semantic services. Later there will be a number of other presentations that will introduce more research projects. This discussion will review the major challenges and existing approaches to ensure KOS interoperability in the networked environment.