

Accessibility and Computing



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A note from the Editor

Dear SIGACCESS member:

Welcome to the second on-line issue of the SIGACCESS Newsletter. For readers who wish to maintain a hard-copy catalogue of Newsletters, a downloadable PDF version is available ready for printing. An archive of back-copies that is available via the SIGACCESS web-pages (<http://www.acm.org/sigaccess/>).

Note that this issue is something of a special issue in that all but one of the papers originated from an international Symposium held at the IBM Thomas J Watson Research Center in early October 2005. The topic of the Symposium was “Cognitive and Learning Difficulties Affecting the Use of Information Technology (IT) Systems.” 10 invited speakers prepared papers on specific areas of this topic and those papers are included here.

As editor of the Newsletter, I welcome either offers to either guest edit similar special issues or else suggestions of topics that readers would like to see addressed. If you have any suggestions about this, please e-mail me at: editors_SIGACCESS@acm.org

About this issue

The first paper in this issue, “*The Interface Between Cognitive Impairments and Access to Information Technology*” by Wayne Gordon, discusses the symptoms and causes of cognitive impairments from a medical perspective.

This is followed by “*The Impact of Aging on Access to Technology*” by Sara Czaja, which addresses the effect of aging on the process of learning and acquiring new skills – a particularly relevant topic when considering the use of IT.

In his paper “*HCI for People with Cognitive Disabilities*,” Clayton Lewis discusses the level of cognitive demand placed on people by the modern information society and how those with cognitive disabilities should be accommodated by IT systems.

Ray Adams, in “*Cognitive Impairments, Information Technology Systems and the Workplace*” presents a structural cognitive user model and uses this to highlight the different cognitive functions that need support when using IT.

The next paper, “*Cognitive Impairments, Information Technology Systems and the Workplace*” by Cathy Bodine takes a more practitioner-oriented view of how cognitive impairments have a direct impact on the workplace, in particular highlighting the comparatively high proportion of people with such impairments that are unemployed.

Moving beyond the workplace and into the classroom, David Rose focuses on Universal Design in education in “*Cognition and Learning: Meeting the Challenge of Individual Differences*.” His paper describes the process of learning and the challenges of structuring IT to maximize its support of that process.

Michael Pieper also addresses the educational divide, although with more of an emphasis on the social and societal factors that also play a role in a child’s educational development. His paper is entitled “*Bridging the Educational Divide: Tutorial Systems to Introduce Standard Applications to the Learning Disabled*.”

In “*Developing Inclusive e-Learning and e-Entertainment to Effectively Accommodate Learning Difficulties*,” Anthony Savidis and Constantine Stephanidis provide examples of e-Learning tools that have been developed to support users with learning difficulties in acquiring practical skills. Their design philosophy is to structure the learning as a game.

Still on the topic of learning and developmental disabilities, Emily Hacker examines the IT available for adult learning in her paper “*Expanding Technology Access for Adults with Developmental Disabilities at F.E.G.S Health & Human Services Network*.”

The final symposium paper, “*Cognitive Difficulties and Access to Information Systems: An Interaction Design Perspective*” by Peter Gregor and Anna Dickinson, examines how an interaction design process can be modified to be more responsive to the needs of users with cognitive disabilities.

The last paper in this special issue is not from the Symposium. Instead it is a workshop report from the recent *W4A – International Cross-Disciplinary Workshop on Web Accessibility 2005* sponsored by SIGACCESS. The authors are Simon Harper, Yeliz Yesilada, and Carole Goble.

And finally...

Just a reminder that the call for ASSETS 2006 will be available soon. Watch this space!

Simeon Keates

Newsletter Editor