

# Usability, Demography, and Directions for W4A

Alan F Newell

University of Dundee  
Scotland

[afn@computing.dundee.ac.uk](mailto:afn@computing.dundee.ac.uk)

## ABSTRACT

W4A has made tremendous strides in increasing the accessibility of web sites, and raising the profile of this activity, by researching into and producing web accessibility technologies and guidelines for this process. To a great extent, the literature has focused on how to ensure that data on web sites, and other aspects of the digital landscape, are accessible people with disabilities - but are there other goals that W4A should be pursuing?

The introduction to this conference reads: "The World Wide Web has changed the way we search, access, consume and produce information". Roberts [4] however, reports that older people's use of the Internet remains lower than that of younger adults (64% of those 65 and older have never used the Internet, and, although the usage by older people is growing, it is at a slow rate). The situation in the USA is not dissimilar. In the UK, and possibly the rest of the world, this lack of usage of the Internet is also the case for those younger people who have few or no educational qualifications. There is also growing evidence that members of these groups are more likely to become "digitally disengaged" as their characteristics and capabilities change with time.

Thus, unless the "us" only refers to conference delegates, the above quote should have read "The World Wide Web has changed the way **some of us** search, access, consume and produce information". This is not an isolated error – the literature is full of "everyone" as a short hand for "the people I know" or "over 50% of the population - probably". What about the others?

The theme of the 2009 W4A in Madrid was Web Accessibility for Older Users. Are We There Yet? Clearly we are not there yet! The web is still not "accessible" to all older and uneducated or technophobic people nor to many people from a different technological generation or different cultures. It was argued in Madrid that these issues should be a greater priority for W4A researchers. Appropriate ways of addressing them, however, were likely to be different from the task of increasing "accessibility" for (young) people with (mainly) sensory and motor disabilities [1].

This is a different war and W4A needs to develop different weapons. We need to investigate why these users are or **choose**, to be digitally excluded? What do they need and want in terms of digital information? That is: how can technology be made which is "acceptable" as well as "accessible"? This leads to questions, including:

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What does the evidence of "accessible" but "unusable" sites tell us about current guidelines and methods? Why do many designers seem to ignore current guidelines? How does this reflect on the acceptability and usability of these guidelines?

Should there be a greater focus on "usability" of information and marginalized users' experience of the technology? How can we facilitate users' "delight"?

Should we focus more on the design of web sites and other sources of digital data, and less on options to cope with inaccessible digital data? Should we be focusing on methods for improving design or coping with bad design?

What are the most effective ways of communicating our research to the mainstream web community? How do we influence content developers or those developing tools for content developers?

How can and should we contribute to the education of software engineers and web developers? How do we make our recommendations seem a challenge rather than a chore?

In 2011, I discussed methodologies for design of artifacts for older and disabled people. These concepts could play a part in assisting this community to address the challenges suggested above. I have also used inter-active live theatre and narrative film techniques to raise awareness of the issues older people can have with new technologies [2 & 3]. This can be an exciting and effective way to communicate important messages about the design of accessible and usable web resources to the wider world of the web.

Everyone is growing older – including delegates at W4A – and, given the rate of change of both people and technology with time, these challenges are unlikely to go away.

## REFERENCES

- [1] Hanson, V.L. (2009) Age and Web Access: The next generation. In *Proceedings of W4A'09*, 7 – 15. ACM Press.
- [2] Newell, A.F. (2011) Design and the Digital Divide: insights from 40 years in Computer Support for Older and Disabled People. Morgan & Claypool
- [3] Newell, A.F., Morgan, M.E., Gibson, L. & Forbes, P. (2011) Experiences with professional theatre for awareness raising. *Interacting with Computers* 23, 594–603. Elsevier.
- [4] Roberts, S. (2010) The Fictions, Facts, and Future of Older People and Technology, International Longevity Centre, U.K.

## VIDEOS

PDFs of the author's recent papers on this topic, and examples of awareness raising narrative videos can be found via the web site.  
<http://www.computing.dundee.ac.uk/staff/afn>