Road Blocks and On Ramps to Universal Design of the WWW

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The WWW is rapidly becoming the medium of choice for communication in the new international economic, social and educational revolution the world is facing at the start of the next millennium. WWW based technologies are changing the way people communicate throughout the world, and the ability to use WWW based technologies is becoming an important literacy skill. People with the ability use WWW technologies and participate in the transformation and creation of new WWW information are going to have many more opportunities in this emerging society than people who do not. Universal design must be a part of these new technologies if people with a wide range of capabilities are going to have an equal opportunity to participate. People with permanent disabilities, people who are older, and people with temporary disabilities and people using technology that "impairs" them need to be considered if there is going to be equal access for all.

The issues related to universal design are not just technical in nature, but require an analysis of the economic, educational, social and political constraints and opportunities for changing the way developers of WWW technologies and content adopt the concept of universal design. The technical aspects of accessibility are formidable and are being addressed by the Web Accessibility Initiative of the World Wide Web Consortium (W3C). The W3C is an international organization for setting WWW standards like HTML, CSS and other common WWW markup languages and protocols. The Web Accessibility Initiative is developing and promoting universal design guidelines for Web Content, User Agents and Authoring Tools. This set of guidelines provides the technical base of information to guide developers in creating accessible materials and technologies.

The availability of technical guidelines does not automatically lead to the transformation of the WWW into a more accessible place. Developers need to be motivated to change their way of thinking about product design and their use of universal design principles. This change of thinking can only be done through a combination of consumer advocacy, enlightened education, prudent legislation and marketing plans that look at universal design as an opportunity rather than a problem. It is critical that people with disabilities and other functional limitations express their desire for equal access to the WWW. Mainstream educators and educational materials, especially for WWW content, need to integrate universal design principles and relevant examples into their curriculums, and extol the commercial benefits of universal design philosophy. Governments need to see WWW accessibility in the same way they see accessibility to printed materials and telecommunications, and set legislative standards to reflect the right of all people to have equal access to the WWW. Developers need to understand how universal design helps support the use of their information by people with a range of capabilities, including able- bodied people using technology that functionally impairs them, especially mobile computing devices.

The critical factor for removing the accessibility road blocks from the WWW and having electronic cub cuts become part of the design, is to create an environment in which both consumers and developers see a benefit in moving their attention and resources to the concept of universal design.