New Media Accessibility

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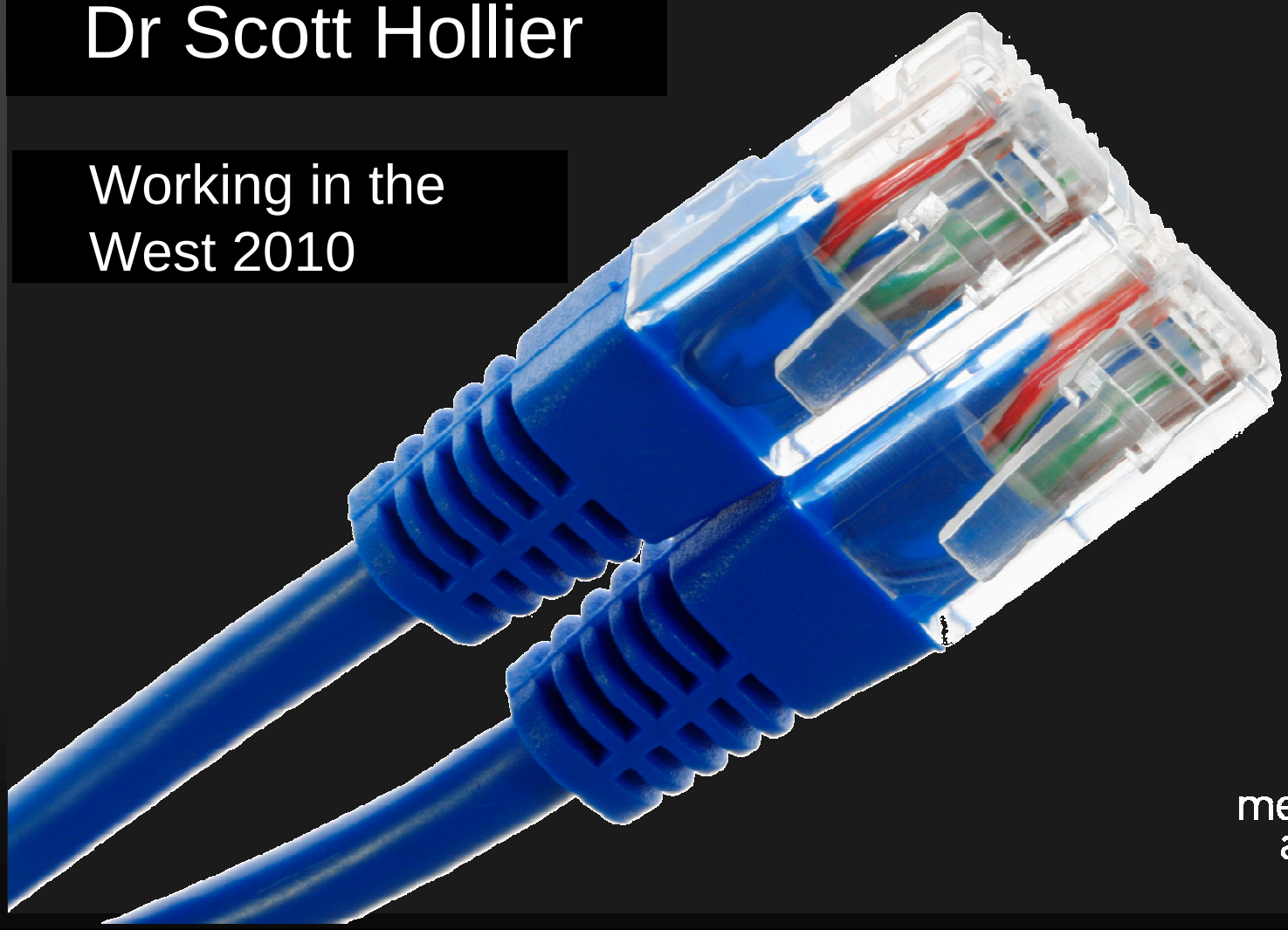
Working in the West 2010



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Who is Media Access Australia

- Not-for-profit organisation addressing access issues in:
  - TV
  - Cinema
  - DVD
  - Education
  - New Media
- Access issues include captioning, audio description, computer-related and Internet-related access issues

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Who am I?

- Professional:
  - Project Manager for MAA
  - W3C Advisory Committee representative
- Academic: PhD thesis examined ways to make computers and the Internet more accessible to people with disabilities
- Personal: Legally blind, first-hand knowledge of access issues

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Introduction

- Brief history of access: benefits and barriers
- Mainstream technology inclusion: what you need to know
- User perspective: mainstream accessibility
- Developer perspective: the importance of the WCAG 2.0 government announcement
- MAA research project: employment transition

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Cases for accessibility

- Moral/Social: care for others in society, good thing to do
- Education and employment: better access means better learning, better employment, less poverty
- Legal: danger of being sued if accessibility not considered

  (SOCOG, Target USA, HSBC)

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Brief history of access

- As the Internet emerged in the workplace, it was viewed primarily as an information and communication resource
- For people with disabilities, the Internet was viewed as a gateway to independence and employment

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Where we are

- Today, both mainstream and people with disabilities view the Internet as an essential to employment due to:
  - Choice of media type: text, audio and video on demand
  - Real-time information delivery: Internet TV and radio
  - Real-time AV communication: Skype
  - Collaboration: Cloud computing and social media

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Access issues

- Usage: people with disabilities 18% less likely to have access to the Internet in their home
- Broadband: 70% of the population have broadband, but only 30% of people with core disabilities
- Website accessibility: web and social media issues particularly significant to employment

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Access issues

- Limited captioning, though much improved (Google/YouTube automation)
- Audio description: very little online
- Cloud computing: some good hardware options (netbooks/iPhone) but still access issues with phones/PDAs/ online applications and OS

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Why your work is important

- Initial premise of PhD study: people with disabilities are not using the Internet as much as the able-bodied population because they try to access computers and the Internet, but give up after running into barriers.
  - Was this true?

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Why your work is important

No!

- People surveyed were aware of importance of ICT and highly knowledgeable
- Although there were barriers, they don’t give up and continue to fight for access
- How to resolve: if we get accessibility right, education and employment opportunities increase dramatically

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User experience

- People with disabilities generally use assistive technologies to help use a computer
- Assistive Technology is the practical implementation of technology to support and help people with disabilities
- OS contains many tools, but additional products often required for full featured access
- Specialist AT software: $1000-$2000

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What’s changing?

- Expensive assistive technologies used to be the only option
- Today most computer OS, mobile phones, tablets include accessibility as a built-in, out of the box experience
- Other low-cost or free open-source programs also available

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What this means

- In many cases, expensive AT is no longer required: built-in or free open source products are now viable
- If free alternative is not as good as AT, it may still be useful as a stop-gap measure while other technology solutions are found

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Windows XP/Vista/7 features

- Change the icon and text size
- Adjust cursor width and blink rate
- Toggle Keys
- Mouse pointer size and movement
- Mouse Lock and Toggle Keys
- Change the colour scheme to high contrast
- Show Sounds
- On-screen keyboard (predictive text in 7)
- Magnifier (full-screen in 7)
- Narrator

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AT software for Windows

Free:

- NVDA screen reader: free JAWS alternative
- WebAnywhere web reader (wa.cs.washington.edu)

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Mac features

Improvements over Windows XP/Vista/7:

- Fully-featured screen reader VoiceOver
- Braille display support

However…

- VoiceOver doesn't work with the Office suite (only works with Cocoa apps)
- Hit-and-miss with Safari

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Mobile access

- iPhone, iPod Touch and iPad:
  - Great access: VoiceOver, zoom, captioned video support, colour changes.
  - Not all apps support features
- Google Android: limited, but evolving

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Demonstration

- Windows 7 Zoom

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The future

- Mainstream options reducing need for expensive AT
- Workplace may already have all the assistive technologies required
- Hardware trends:
  - Cheaper tablets ($130 Gooblet)
  - Netbook/tablet hybrids
  - Smartbooks

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The future

- Mobile broadband replacing fixed as a viable alternative (Vivid)
- Social media and the cloud

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Issues with mainstream solutions

- Awareness: most people don’t know that the tools are there
- Tradition: JAWS and Windows have worked well for 15 years, why change now?
- Training: existing AT well supported, no training for built-in or free
- Quality

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Web accessibility

- WCAG 2.0 released in December 2008
- Federal government: ‘A’ by 2012, ‘AA’ by 2015, States committed to ‘A’
- As a result, all government employment resources will become more accessible
- Are you WCAG 2.0 compliant?

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MAA projects

- MAA is working on an employment transition research
- Aim: to provide free resources about mainstream access to disability employment agencies, employers, job seekers, service providers
- Please let me know your views

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Further information

- Large collection of web resources: www.mediaaccess.org.au/newmedia
- Advice is free
- E-mail: scott.hollier@mediaaccess.org.au
- Phone: (08) 9311 8230

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