Contextual Web Accessibility - Maximizing the Benefit of Accessibility Guidelines

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http://www.ukoln.ac.uk/web-focus/events/conferences/w4a-2006/
W4A 2005: Reprise

At W4A 2005 we presented “Forcing Standardization or Accommodating Diversity…”:

- The practical difficulties of using a “standard” to encapsulate design requirements to accommodate a diverse set of needs under a diverse set of circumstances
- The achievements and limitations of WCAG in supporting this
- The resultant difficulties (and absurdities) from legislation and policy – that makes inappropriate reference to WCAG
- Using the example of the e-learning sector we pointed the way to a more holistic view of Web accessibility

We received many positive comments on the ideas we presented
One Year On – Where are We?

• WCAG 2.0 is ever closer
• The “baseline” concept introduced with WCAG 2.0 is an excellent development

• But – are we still trying to promote a “universally accessible Web” at the expense of “optimally accessible information, communication, education, entertainment, services…”?
Limitations of the WAI Model

- WAI model relies on conformant Web sites, conformant authoring tools, conformant user agents
- …and conformant users!
- A common complaint of “standardistas” – “the user needs to take responsibility…”
- There is value in this argument – but there are practical shortcomings
- And user technophobia/laziness/lethargy is only one obstacle
  - How many users know they are “disabled”?
The Importance of Context

• We argue Web accessibility is about supporting users achieve real world goals
• From Beyer & Holzblatt (1998) – the more you know about your target audience the more you can design to support them
• So the goal of “universal accessibility” has changed to supporting a defined set of users in the best possible way…
• How can we use WCAG to achieve this?
The Challenges

To summarise:

• WAI has been a great political success
• The underlying principles are widely accepted

However

• The WAI model has its limitations
• Accessibility of digital resources can be provided in a variety of ways
• Blended approaches may be relevant in some areas
• Other areas may have differing views and definitions of "accessibility" and disability (cf IMS AccessForAll)

The challenges:

• Do we ignore such complexities?
• Do we abandon the WAI approach and look for alternatives?
• Do we look for an approach which can leverage WAI's successes whilst allowing for a diversity of solutions?
Holistic Approach

Kelly, Phipps & Swift developed a blended approach to e-learning accessibility

This approach:
- Focuses on the needs of the learner
- Requires accessible learning outcomes, not necessarily e-learning resources

This approach reflects emphasis in UK on *blended learning* (rather than e-learning)

Follow-up work awarded prize for Best Research Paper at ALT-C 2005 E-learning conference
**Accessibility in Context**

**External factors:** Institutional issues (funds, expertise, policies, security...)

**Digital Library Programme**

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| Compliance | External | Self-assessment | Penalties | Learning | Broken |
|------------|----------|-----------------|-----------|----------|

**External factors:** Legal issues; cultural factors; …

A framework has been developed which places accessibility & usability within a wider context:
- The context
- A range of policies
- A compliance regime

Accessibility guidelines should be usable in wider context

This approach embraces *relativism* and *context* rather than the current *absolute* approach.
Articulating the Approach

The "Tangram Metaphor" developed to avoid checklist / automated approach:

- W3C model has limitations
- Jigsaw model implies single solution
- Tangram model seeks to avoid such problems

This approach:

- Encourages developers to think about a diversity of solutions
- Focus on 'pleasure' it provides to user
Tangram Model

Model allows us to:

- Focuses on end solution rather than individual components
- Provided solutions tailored for end user
- Doesn't limit scope (can you do better than WAI AAA?)
- Make use of automated checking – but ensures emphasis is on user satisfaction

Guidelines/standards for/from:
- WAI
- Usability
- Organisational
- Dyslexic
- Learning difficulties
- Legal
- Management (resources, …)
- Interoperability
- Accessibility metadata
- Mobile Web
- …
"WCAG 2.0 success criteria are written as testable statements …" (nb. automated & human testing 😊)

Issues:

• What about WCAG principles that don't have defined success criteria (e.g. "content must be understandable")?
• What about 'baselines' – context only known locally
• What about differing models or / definitions of 'accessibility'?

Note vendors of accessibility testing services will market WCAG tools e.g. see posting on BSI PAS 78

Tangram model can be used within WCAG

• Distinguish between testable (ALT tags) and subjective (content understandable)
• Supports baselines
The Cathedral & The Bazaar

WAI Approach:
- Large-scale and ambitious—but slow-moving
- External dependencies (e.g. on legal systems)
- Based on single approach ("you must …")
- Web-centric approach
- Cathedral approach to development

Holistic Approach:
- Modular & can be more rapid-moving & responsive
- Based on diversity of approaches - "seek to …"
  "I don't claim people should do 100% of what I say“  J Neilson
- Covers Web, other IT and real-world accessibility
- Bazaar approach to development

WCAG 2.0’s ‘baseline’ seems to recognise a contextual view 😊
The Legal Framework

This approach is well-suited for the UK legal framework:
SENDA/DDA legislation requires "organisations to take reasonable measures to ensure people with disabilities are not discriminated against unfairly"

Note that the legislation is:

- Technologically neutral
- Backwards and forwards compatible
- Avoids version control complexities
- ...

The legislation also covers usability, as well as accessibility
Conclusions

To conclude:

• WAI has provided a valuable starting point
• Need to develop a richer underlying model
• Need for Web accessibility to be placed in wider content
• Contextual approach & tangram metaphor aim to help inform such developments
• Should the WAI approach be more open about contextualisation or should this be applied externally?
• There's a need to an evidence-based approach and less ideology
Questions

Questions are welcome

Note resources cited in the talk are bookmarked in del.icio.us using tag "w4a-2006-sloan-kelly"