

BBC Accessibility Settings Kit

Draft presentation for IMS-Global judging: Personalization & Accessibility category

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Disabled people in the UK

11 million adults

- More likely to be older
 - 47% over 65 compared to 20% of general population
- Less likely to be working
 - 43% of disabled people of working age are working compared to 74% of general population
- Heavy media consumers
 - Particularly of TV and radio
- Only half see themselves as 'disabled'
 - This made little difference to attitudes to the media

Internet use in the UK

42%

Of **disabled people** have
used the internet

67%

Of the **general population** have
ever used the internet

Missing disabled internet audience...

58% of 11m =
6.4m

Use of Assistive Technologies is low...

6-8%

Of **web users** use an
Assistive Technology
(screenreader, adapted
mouse or similar)
to access the Internet

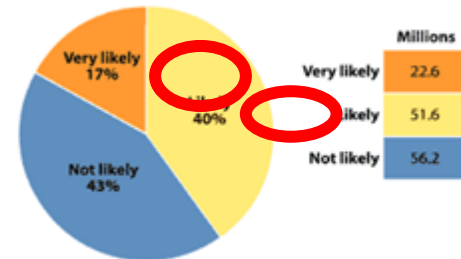
When the benefits should be useful to most users...

57%

Of computer users
(aged 18-64)
are likely or very likely to
benefit from the use of
Assistive Technology



Figure 5: Majority of Computer Users Likely to Benefit from the Use of Accessible Technology



Base: US 18- to 64-year-old computer users

Source: Study commissioned by Microsoft, conducted by Forrester Research, Inc., 2003





**2. How you might achieve that impact
- how accessibility preferences could help...**

Examining our current model - the Inclusion model

- the one-size-fits-all “design for all” approach
- design it for the mainstream, tweak it so disabled people can use Assistive Technologies to make it work for them



Inclusion model problems – diversity of needs

- rarely considers disabled people’s actual needs...
or compares them with non-disabled people’s needs
- different user groups can have conflicting needs
 - BBC iPlayer disability focus group (2009)
 - Vision impaired / dyslexic
 - “I like the black – it’s cool”
 - “I hate it – I find it really tiring”
 - Low literacy
 - “can it just talk or something?”
 - Aging / learning difficulties
 - “it was just too overwhelming”



Inclusion model problems - reductionism

- Inclusion tries to cover all this diversity of needs with one product
- so Inclusion can be reductionist, constraining, lowest common denominator, a compromise
 - e.g. signing on TV
- and it can constrain innovation - new technologies and techniques



Worse... inclusion doesn't work for all our users

- Inclusion expects:
 1. an Assistive Technology to exist to make sites accessible
 2. web users to:
 - a. be aware that an Assistive Technology exists for their need
 - (even with sites like *BBC My Web My Way* to point the way) most are not
 - b. are able to afford that technology
 - most are C2DE so have difficulty affording expensive techs
 - c. are able to work out how to install it
 - most are not technical
 - d. are able to work out how to use it
 - most are unconfident
 - e. are able to use it to access online content
 - thus... most never get this far, even if the site is WCAG AAA



A complementary model: personalization

- cf. web 2.0 personalisation...
 - BBC homepage, iGoogle, MySpace...
- for disabled people:
 - being able to select how they want to view web sites
 - being able to select between levels of interface complexity (available on much software)
- can help all disabled people, but especially users with:
 - Dyslexia, Aspergers, ADHD, poor vision or mild to moderate Learning Difficulties
- advantages:
 - frees designers, product managers from some constraints
 - but requires more work, and testing of multiple paths/interfaces/content
- e.g. iPlayer subtitles





3. How to have a chance of achieving that impact - didn't someone try this before...?

Er, aren't web accessibility preferences for Sissies...?

WebAIM: Blog - Web Accessibility Preferences Are For Sissies? - Microsoft Internet Explorer provided by the BBC

http://webaim.org/blog/web-accessibility-preferences-are-for-sissies/

File Edit View Favorites Tools Help

WebAIM: Blog - Web Accessibility Preferences Are Fo...

WebAIM
Web Accessibility in Mind

Products Services Articles Resources Community

Search

Home > Blog > Web Accessibility Preferences Are For Sissies?

WebAIM Blog

Web Accessibility Preferences Are For Sissies?

March 2, 2010

by Jared Smith

29 Comments

Several years ago I read an article by [Garrett Dimon](#) titled "User preferences are for sissies" ([available at archive.org](#), also [see this 37signals article](#)). The general idea is that when you present preferences to the end user it typically indicates that you screwed up or are a sissy - either you are forcing the user to account for a poor design or usability decision, or you are too indecisive to make the decision to begin with and thus place the burden to decide upon the user.

In general, I believe that web accessibility preferences are no different.

Important Clarification

I've found that some have misinterpreted the message of this post to suggest that those who implement web accessibility preferences, or even web accessibility at all, are literally sissies. This is not at all what I am suggesting - I would not have devoted my life's work to this effort if I viewed implementers of web accessibility this way. Such preferences obviously have their place, particularly on sites that target people with disabilities (see the comments below). However, implementing them as a method of avoiding native accessibility in content is not acceptable and certainly a cop-out approach to

Maybe... if you don't do your research...

- BBC comparative testing on BBC and other sites' tools
 - 14 BBC and non-BBC customisation tools (mostly site-based) tested
- with a group of 15 people with:
 - Dyslexia,
 - Aspergers,
 - ADHD,
 - Poor Vision
 - Mild to moderate Learning Difficulties
- research was conducted externally and participants were not told until the end it was commissioned by the BBC

Research results...

- most users had never used customisation before
- none knew what “AAA” was



- many initially didn't see the point... some initial reluctance to try something new...
- however all said the sites they viewed were better once they had customised them

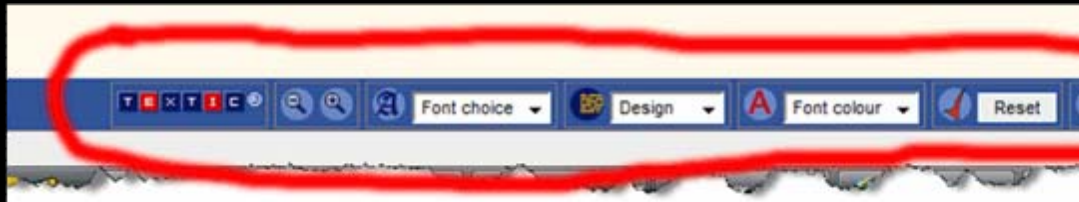
“If all the web were like this, I'd use it...”

User with ADHD

- Requirement 1: make the idea simple to identify, and motivate people to use it, or else they won't get the benefit...

Research results...

- some of the tools were confusing at first to use
 - too many choices were displayed simultaneously...
 - ... or the tools were too complicated or took too long to use
 - ... or they didn't include the preference which would have helped



- Requirement 2: make the tool as simple as possible... and able to get users to their required preferences within the minimum of clicks...

Research results...

- there was some missing functionality that the users wanted
 - they wanted a quick way to turn preferences off, if they shared a computer, or were embarrassed for others to see their preferences
 - **people wanted to take their preferences with them across all their computers... the whole web... and ideally across devices...**



- Requirement 3: allow users to feel completely in control... and use their preferences everywhere...



**4. Creating something that might achieve that impact
- development & user-testing of BBC ASK**

BBC ASK at a glance

- a way of letting people know why they should want...
- to use an engaging way of setting and storing their accessibility preferences...
- and getting sites to respond to them
- ... which works consistently across BBC Online...
- ... and ideally cross-platform to mobile + IPTV
- ... and ideally across the rest of the web
 - ... providing common tools for sites to respond to those preferences
 - ... and a common model for existing tools to use to find a user's preferences
- **opening up BBC content, and the rest of the web, to underserved audiences**



BBC ASK: Our Journey So Far



Usability Testing
of existing
personalisation
Solutions
(on bbc.co.uk
and other UK
websites)



Depth
interviewing
and creation
of Personas
for primary
audiences



Specification,
supplier
search &
development
of four
prototypes

1x Display
Preferences
3x Voicing



Usability
Testing of
Prototypes
and existing
solutions on
bbc.co.uk



Specification
&
development
of BBC ASK
Release 1
(incl. more
user testing)



Launch of
BBC ASK
Preferences
Release 1

BBC ASK Release 1 includes...

- Preference themes for people with:
 - Limited vision
 - Aspergers
 - ADHD
 - Dyslexia
 - Low-literacy
- Ability to create your own custom theme including:
 - Setting text size, spacing, font & style
 - Layout: multi-column or single linear column
 - Changing colour of links (only)
 - Setting background and text colours
 - Displaying text & picture, or replacing pictures with text
- Ability to take your preferences with you between PCs
- Works over all of BBC Online's > 3 million pages



Two clicks to preview a change...

The sequence of screenshots illustrates the process of previewing a change on the BBC Learning Zone website:

- Screenshot 1:** The main page of the BBC Learning Zone. A blue arrow points from the top-left corner towards the 'Choose a group' dialog box.
- Screenshot 2:** A dialog box titled 'Choose a group' is open. It contains several theme options: 'Limited vision', 'Asperger's', 'ADHD', 'Dyslexia', 'Easier to read', and 'BBC default'. A blue arrow points from the 'Asperger's' option towards the third screenshot.
- Screenshot 3:** A dialog box titled 'Click to choose a theme' is open. It shows a preview of the selected theme (Asperger's) and a 'Save' button. A blue arrow points from the 'Save' button towards the final screenshot.
- Screenshot 4:** The final previewed state of the website, showing the 'Asperger's' theme applied to the page layout.

Three more clicks to tweak and save...

Click to choose a theme
Select a theme to preview it.
Click 'Save' to save it.

Blue Green
Yellow Red

Click to choose a theme
Select a theme to preview it.
Click 'Save' to save it.

Blue Green
Yellow Red

Your theme has been saved
We hope you enjoy your new desktop options.
You can customise your theme details, including text and layout.
You can store this theme in a BBC account to access from any other computer.
Sign in... or Register

Feedback
Tell us what you think of this system.
Start again

Finish! Customise theme >

BBC Test site | Help Search Explore the BBC

Comment on this page

Science
Bang Goes The Theory makes science come alive with fun and fascinating experiments.
Come along to a roadshow near you to meet the presenters and release your inner scientist!

Class Clips
More than 8,000 video clips from BBC programmes on Learning Zone Broadband ready to play in your classroom.
Enter a subject, a topic or a keyword

Choose one
Adult learners Languages, computers, spelling, maths and more
Parents Help your children at home and at school
Teachers Resources to use in the classroom
School students

And the rest of BBC Online uses your preferences...

BBC Home | Help | Search | Explore the BBC

KS2 Bitesize

Home > Maths > Shape, space & Measures > Shapes

Number
Shapes, space and measures
Handling data

Page: 1 2 3 4 5 6 7 8 9

Shapes

Introduction

You need to know the properties of the triangle and square. Circles always have diameter, and a circumference. You also about other polygons such as hexagons.

The perimeter is the length of the sides. The area is the surface area that it covers. You know how to work out how many times a shape fits.

3D shapes have faces (sides), edges and (corners). A net is what a 3D shape was opened out flat.

This section includes:

- Triangles
- Quadrilaterals
- Circles
- Polygons
- Perimeter and area
- Symmetry
- 3D shapes
- Nets of 3D shapes

Page: 1 2 3 4 5 6 7 8 9

More from Bitesize:

Teachers
Lesson plans and more to help with KS2 teaching.

KS2 Bitesize
Shape up and be ready for challenge in KS2 Bitesize.

BBC Home | Help | Search | Explore the BBC

iPlayer

Home | TV Channels | Radio Stations | Categories | A to Z

Catch up on the last 7 days of BBC TV & R

TV HIGHLIGHTS

10:00pm **News**

10:30pm **West End Story**

11:00pm **Headline News**

11:30pm **Topical of the Week**

12:00am **News**

Most Popular TV Shows

1. Doctor Who Series 5

2. The Saturday Show

3. The Graham Norton Show

4. The Big Bang Theory

5. Alan Partridge

6. Micaela Martinez Live and Laughing

7. News

8. The X Factor Series 14

9. Soho House

10. The 100 Series 1

TV Schedule

Time	Program
8:00 am	News
9:00 am	News
10:00 am	News
11:00 am	News
12:00 pm	News
1:00 pm	News
2:00 pm	News
3:00 pm	News
4:00 pm	News
5:00 pm	News
6:00 pm	News
7:00 pm	News
8:00 pm	News
9:00 pm	News
10:00 pm	News
11:00 pm	News
12:00 am	News
1:00 am	News
2:00 am	News
3:00 am	News
4:00 am	News
5:00 am	News
6:00 am	News

BBC Home | Help | Search | Explore the BBC

BBC NEWS CHANNEL

Page last updated at 12:02 GMT, Monday, 5 April 2010 12:02

News Front Page

Home

Latest: **A man who was seriously injured in a fall from a chicken coop while in Edinburg jail**

NI increase 'will not cost jobs'

Chancellor Alistair Darling denies that Labour's planned rise in National Insurance would lead to job losses.

OTHER TOP STORIES

- Discovery Space off New Frontiers mission gets 'big' vote
- Eds test new funding challenge
- Ten cancer drug firms disputed
- Swiss saved from Chinese takeover
- Spain line of 30,000 on death row

Attack on Pakistan ISI commander

Historians attack the US centenary in Pakistan hours after another attack in north-west Pakistan kills 43 at a political rally

Parade 'to fly' in honor of woman who helped average Brit

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BBC Home | Help | Search | Explore the BBC

WILDLIFE WIND-UPS

wildlife videos | Collection | wildlife wind-ups

INTRODUCTION TO THIS COLLECTION

It's not only humans that like a good job. Animals give all kinds of tricks as one another in their attempts to gain an advantage. Based around the April Fool tradition, the collection of videos features the wondrous side of nature where it's not always easy to tell what's real and what's not. Each animal gets an animal video on each other and on us, and not least of all some that jump from the animal where we've tried to fool you in a world where that's often stranger than fiction.

ELSEWHERE...

- Wikipedia: April Fools' origins and history
- Pakistan of History: Top 100 April Fools

ANIMALS IN THIS COLLECTION

- Skink**
These lizards are found in the mountains of the Himalayas. Skinks are found in the mountains of the Himalayas.
- Stinky wolf**
It's in the mountains of the Himalayas. It's in the mountains of the Himalayas.
- Chocolate dolphin**
A new fish species found in the mountains of the Himalayas.
- Checkmate**
Can a lionfish be a chess piece? Watch how it can be used to defend itself!
- Great cuttlefish**
The South-western great cuttlefish is the largest of the world's cuttlefish at 30 cm long.
- Barrow's frog**
Barrow's frog have a highly unusual method of breeding and raising their young.
- Rabbit**
Rabbits came originally from south-west Europe and north-west Africa.
- Flying squirrel**
Flying squirrels are a very recent addition to the squirrel family in evolutionary terms.
- Sheep**
Sheep have been domesticated for thousands of years.

Or maybe you want...



Hi-viz theme for limited vision



4 Aspergers themes



A simple change of font for readability



Or the whole page linearised so you don't have to read across columns

What our audience say...

"it's more visual,
more fun and
funky."

"I'm going home
and have a shot,
that was fun."

"it makes people
feel their uniqueness
is being taken into
consideration."

Felt 'excited' when
she saw her
disability as one of
the themes

Initial indications of potential impact from user-testing

A display tool like this would encourage you to use the internet more often.



A voice tool like these would encourage you to use the internet more often





5. How to actually achieve the impact users want - making this available everywhere...

BBC ASK roadmap

- working with standards bodies in ensuring BBC ASK fits in with, and helps set, international standards for specification of Accessibility Preferences

- working with initial non-BBC adoption partners...
 - have 5 signed-up for a feasibility pilot
 - have interest from many, many more



BBC ASK: Next steps



Establishing brand and icon for BBC ASK (with guidance from users and partners), promoting this via UK Media Literacy channels and BBC media



BBC ASK Voicing pilot on BBC Online
Review of feedback of this and Preferences Release 1 into roadmap



Pilot of sharing BBC ASK Preferences with non-BBC sites



BBC ASK Preferences ongoing roadmap & BBC ASK Voicing full release and ongoing roadmap



Full release of BBC ASK for use on non-BBC sites



BBC Ask releases on mobile, IPTV etc.

Questions...



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