Make The News Accessible

Reporting on and designing for people with disabilities

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Make The News Accessible

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Disability $\neq$ Personal health condition

Disability $\equiv$ Mismatched human interactions
Exclusion

Permanent
Temporary
Situational
Over 1 billion people with disabilities.
In it for the long game

From accessibility to inclusion
Let’s face it

We build content experiences based on what we know.

But here’s the problem: If we use our own abilities as a baseline, we make things that are easy for some people to use, but difficult for everyone else.

Accessible design starts with seeing human diversity as a resource for better designs.
There’s no such thing as ‘normal’

If we use our own abilities and biases as a starting point, we end up with products designed for a limited subset of people – people like us.

Designing for inclusivity not only opens up our products and experiences to more people with a wider range of abilities. It also reflects how people really are.
Inclusive and accessible

**Inclusive design**: A method

A design methodology that enables and draws on the full range of human diversity.

**Accessibility**: An attribute

The qualities that make an experience open to all.
Inclusive design principles

Recognize exclusion
It happens when we solve problems using our own biases

Learn from diversity
Human beings are the real experts in adapting

Solve for one, extend to many
Focus on what's universally important to all humans
Inclusive design resources

- Design principles
- Toolkit for designing for inclusion
- Videos on inclusive design in action

microsoft.com/design/inclusive

inclusivethefilm.com
Inclusion is more than just great design

Lessons from Microsoft’s inclusive hiring initiative
“There’s an incredible pool of skilled and talented people who also happen to have autism.”
Many people on the autism spectrum have cognitive attributes that combined are different than the “allistic”.

Creative, counterintuitive approach
Trustworthy and reliable
High integrity
Little or no prejudice
Committed workers
Strong focus
Attention to detail
Unblocking hiring

Microsoft learned that its grueling interviews unintentionally excluded some people who process information in unique ways.

Seeking a job at Microsoft typically involves meeting with multiple managers in back-to-back interviews that can take a full day, a process that can be very stressful.

Interviews replaced by multiple-day hands on academy that focuses on workability, team projects and skills assessment.

Hired candidates receive as much or little support as they want, including workshops with their new team, training for manager, community mentor.

This represents one of the ways we are evolving our approach to increasing the diversity of Microsoft’s workforce.
Inclusion in newsrooms = new ideas in journalism

Different styles of reporting
Deep focus in editing
Fresh ideas for products
Internal resource for, you said it, inclusion

October is National Disability Employment Awareness Month
Inclusive Hiring Virtual Career Fair for People with Disabilities

October 19 | 1-3PM (PDT)

Online Recruiting Event: October 19th | 1-3pm PDT

Virtual Event open to people with disabilities across the United States

https://aka.ms/virtualfair

AT&T
Boeing
Expedia
Fidelity Investments
JPMC
LinkedIn
Merck
Microsoft
Nordstrom
PwC
Starbucks
T-Mobile
Voya
Every person. Empowered. In every context.
Accessibility as an everyday strategy

Heather Billings, 18F, GSA
My journey

[insert images of map with Sim Daltonism applied]
Challenging some assumptions

Being accessible means it works on a screenreader
...but it’s so much more than that.
Challenging assumptions

Examples of other users to consider when assessing accessibility:

- Users with fine motor control impairments
  - Problem areas: Small touch targets, timed experiences

- Users with cognitive or learning disabilities
  - Problem areas: Font choices, autoplay audio, distracting colors or moving images that cannot be stopped

- Users with hearing impairments
  - Problem areas: Lack of audio transcription

- Users with visual impairments other than blindness
  - Problem areas: Contrast for text, enlarging text breaks things
Accessibility is an approach
It is a technical implementation
It is a content strategy
It is a design strategy
It is a business priority
Accessibility is a technical implementation

- WCAG 2.0
- ARIA
- Semantic HTML/CSS/JS
- Testing (with tools and manually)
WCAG WTF BBQ

WCAG: Web Content Accessibility Guidelines
We’re on version 2.0, released in 2008
Developed by the W3C -- you may know their previous hit standards, like CSS and XML
WCAGWTBBQ

“WCAG 2.0 success criteria are written as testable statements that are not technology-specific.” — (WCAG 2.0 recommendation, (emphasis mine)

WCAG consists of the following:
- Four principles: perceivable, operable, understandable, and robust
- Guidelines derived from those principles
- Success criteria to determine if the guidelines have been met
- Examples demostrating a few of the techniques that satisfy the above for a given scenario.
Examples of WCAG guidelines

Guideline 1.1 Text Alternatives

Sensory: If non-text content is primarily intended to create a specific sensory experience, then text alternatives at least provide descriptive identification of the non-text content.

Guideline 1.3 Adaptable

1.3.2 Meaningful Sequence: When the sequence in which content is presented affects its meaning, a correct reading sequence can be programmatically determined. (Level A)

Guideline 1.4 Distinguishable

1.4.2 Audio Control: If any audio on a Web page plays automatically for more than 3 seconds, either a mechanism is available to pause or stop the audio, or a mechanism is available to control audio volume independently from the overall system volume level. (Level A)
But really...
RTFWCAG
ARIA

Also created by the W3C
"Accessible Rich Internet Applications"

- Roles describe structure
- Attributes describe state, properties, and relationships
ARIA roles

Overrides an HTML element’s native role (or interaction a screen reader would normally determine possible)

Landmark roles define sections of a page
ARIA attributes

Describe the state and relationship of a given element
- Whether a box is checked or not
- Which form label corresponds to which form input
- Whether something is currently “visible” or not
HTML considerations

Semantic HTML is a must
Use HTML5 elements like nav, header, aside
Use header elements (h1, h2, h3, etc) in order of importance, NOT based on style or size!
Make sure elements like forms and tables use the right markup
tabindex
CSS considerations

Be cautious about psuedoselectors
Apply styles conditional to ARIA rules
JavaScript considerations

Dynamic content can be tricky to do right
Make sure elements created have the proper ARIA roles/attributes
Define live regions on pages (areas of the page that are likely to be dynamically updated) and give them the proper tabindex
Accessibility is a content strategy

Is your writing concise and clear?
Are you only surfacing the information that’s necessary?
Are your links descriptive?
Are there multiple ways to tell this story?
Accessibility is a design strategy

Font weights + sizes
Color contrast
Text over images
Transparencies
Predictable layouts
A practical example

<Insert images of CALC’s error table>
Test your work

Manual testing with a keyboard
Learn to use your operating system’s built-in screen reader
Use color contrast checkers and HTML tools to check your design and code
Accessibility is a business priority

Most media outlets don’t prioritize user control of their experiences.
- Popups that hijack the reading experience
- Autoplay audio and video without accessible controls
- Ads that autorefresh
Resources

WebAIM
Google Udacity course
WCAG 2.0 official site:
  https://www.w3.org/TR/WCAG20/
A WCAG checklist (one of many unofficial ones):
  https://www.wuhcag.com/wcag-checklist/
Paciello Group blog:
  https://developer.paciellogroup.com/blog/