Greetings everyone. Welcome to the November IBM Accessibility Expert Hour and thank you for joining us. Our topic today is "Low Vision and Aging". We have six experts with us today to answer your questions.

Marc Johlic A topic that I have become all too familiar with first-hand!

From the American Foundation for the Blind (AFB), please welcome:
* Paul W. Schroeder, Vice President, Programs and Policy
* Morgan Blubaugh, National Technology Associate, Low Vision
* Neva Fairchild, National Independent Living Associate
* John Mackin, Media Relations/Social Media Specialist
* Ike Presley, Project Manager, Professional Development

And from IBM Research, Human Ability and Accessibility Center, please welcome:
* Peter Fay, Advocacy and Outreach Program Manager

If this is your first Facebook Expert Hour, here's how it works: To participate in the real-time Q&A session, "Like" IBM Accessibility (the Like button is at the top of the page in the center). Then to ask a question, type it into the box on your screen that says, "Write something..." and press Enter. Our experts will answer your question as a Comment, and it will show up underneath your question.

If you're using a screenreader, we suggest using Facebook's HTML-only mode: http://m.facebook.com/home.php

Gary Morin would that be the same if we're using speech recognition software?

Hi Gary. Yes, it should be the same URL.

Please remember to refresh occasionally -- sometimes Facebook has trouble keeping up with the pace of our Expert Hours.

Okay, let's open the wall for questions. :-)  

Laura Lanham Kelley Hi! Are there any recent statistics that tell us what percentage of the aging population experiences low vision?

I'm also interested to know if any studies have show at what age vision begins to decline :

American Foundation for the Blind (AFB) The leading cause is still macular degeneration. Other significant causes are Glaucoma, Diabetic retinopathy, and also Cataracts.
American Foundation for the Blind (AFB) Apologies - the above response was intended for Fran...

American Foundation for the Blind (AFB) The statistics on vision loss and aging tend to show that vision loss increases with age. Over 80, some estimates suggest 1 in 4 people have vision loss that affects activities, and for those over 65 it is 1 in 7. Other data suggest that around 25 million Americans have vision loss that affects activities. AFB keeps statistics at www.afb.org/stats

Jae Broadhurst I've read, repeatedly, the vision starts to decline after age 40, which is when a lot of people need glasses who didn't before. Even that loss is relevant to what we publish, so is that age correct?
1 person likes this.

Marc Johlic That's when it started for me - and the reading glasses were just to make it more comfortable to read. NOW, just 4 years later and I can't read without them.

Peter Fay Jae/Marc: You describe my situation exactly...as soon as I hit the big "40" I needed reading glasses...followed by distance...and you know the rest :) 
1 person likes this.

Laura Lanham Kelley @ Jae and Marc -- I've always worn glasses or contacts but I've noticed a considerable difference in my vision in last couple years (I turned 40 this year). I sometimes wonder if it's age or simply being a knowledge worker that spends most of my days online :)

Fran DeRespinis What are most common forms of low vision that the aging population suffers from that affects Accessibility?
Patsy Popa likes this.

American Foundation for the Blind (AFB) The leading cause is still macular degeneration. Other significant causes are Glaucoma, Diabetic retinopathy, and also Cataracts.

Jae Broadhurst We need minimize font size standards for the web. Using Cntl+ to enlarge the screen makes part of the screen go beyond the margins of the monitor. So as people try to cram more and more on screens, we're getting down to what looks like 8 pt type. That's a problem for nearly anybody over 40, definitely over 50.
Patsy Popa likes this.

Ike Presley Great point Jae. Small point sizes on web pages can be difficult to read. There is a way that the web designer can make the text reformat when you use the CTRL-scroll wheel to enlarge. I'm not sure of exactly how they do it, but on www.afb.org our web team has it working properly.

Jae Broadhurst Sorry, but I just tried it, Ike, and your site does the same thing. I took a screenshot to send you later. With most sites being designed and maintained by young people who think things look fine and would rather have it look cool, if all of you say here that this is a problem that affects people who are blind, severely visually impaired, or over 67 or 80, we'll have lost an opportunity to educate people about day-to-day reality online for far younger people.

Ike Presley Jae, maybe I didn’t explain it well enough. I'm not a web expert so it may also be somewhat controlled by the screen resolution setting. You can call me later if you'd like at 404-525-
2303 and I'll try to explaining it. I know it works because I was in a web redesign meeting this morning and it was one of the points I made. Our web director noted that it is a web design element that they can control. Maybe one of these days we'll get that feature included on the Web Accessibility guidelines.

Jae Broadhurst Will follow up. Thanks.

Paul Luther Are there any studies that compare low vision features of smart devices?

Gary Morin Paul, have you looked at the new FCC site: http://apps.fcc.gov/accessibilityclearinghouse/

American Foundation for the Blind (AFB) Yes, Paul Schroeder at AFB sees it as a good start. The FCC was required by legislation to produce the clearinghouse. More work is needed though because the data that supplies the mobile phones for the Clearinghouse tends to be flawed. For example, it doesn't really include the kind of specific features that blind people need.

Paul Luther I was specifically looking for a side-by-side comparison table

M-l Hayward Thanks AFB Tech. When it comes to smartphones, are there any devices for persons with low vision that would also serve the needs of persons who are blind. Thx

<Note: The 5 responses after this one have disappeared from Facebook and could not be captured.>

Chad Williams I'll start with this question... what are the rules for fonts, character space and the like when it comes to meeting accessibility standards? For example, is a white background with black characters always the best combination for meeting accessibility standards?

Ike Presley Chad, there are no definite rules about this, but there are some guidelines. In general you want to avoid serif fonts like Times New Roman. San serif fonts like Arial, Verdana, and APHont are much easier to read because they do not have all the embellishments. The issue of light text on a dark background is a personal choice. I personally think it's much easier to see and I do all my PPT presentation that way. There is a difference between paper text and PPT. On paper, it's usually a personal choice although 18 point is considered by most people in the field to be the standard for large print. I can tell you more if you'd like.

Jae Broadhurst Readability studies and books on graphic design always say that reverse type (white on dark background) is a no-no for readability. It can work for very short things, such as the word Highlights.

Jae Broadhurst Thanks for the sans-serif advice. Times New Roman (serif) is the default text style in Word, and most of us were taught that serif type is best to use for text, sans-serif for headings. But those are outdated print conventions.

Ike Presley Jae, those guidelines may be true in general, but they are definitely not acceptable for people with low vision. On paper, dark on light is better, but for a PPT, my opinion is that light on dark is better. Hope this makes sense.
Marc Johlic: Hi Chad - Most of those guidelines fall under the "Distinguishable" principle of WCAG. Our own IBM Web Checklist has some guidance around this in the section 1.4 on this page: http://www-03.ibm.com/able/guidelines/web/accessweb.html

Even more techniques and guidance direct from WCAG can be found at http://www.w3.org/TR/UNDERSTANDING-WCAG20/visual-audio-contrast.html

Sofia Celic-Li: I hear and read much about AFB and lawsuits that involve/benefit persons who are blind but never about low vision. Have you ever had anyone with low vision complain about website (or other IT) access?

American Foundation for the Blind (AFB): Thanks for the question. Actually, AFB has not filed lawsuits, though we sometimes help with complaints on access. We are very interested in ensuring that people with low vision have access, that's one of the reasons we have begun work on accessibility of small visual displays at AFB Tech.

Fran Hayden: Hi! My grandmother is losing her vision to macular degeneration, and her doctor wants her to move to assisted living. Can you recommend ways she could remain in her home as her vision deteriorates?

Ike Presley: There are many products and devices that can help your grandmother around the house. Services from agencies that will teach her new ways to do the things she has used her vision for in the past and groups she can join for support. Visit www.afb.org/seniorsite for access to lots of information.

Fran Hayden: Thanks for this! I appreciate the link to the afb site.

Neva Fairchild: The videos on Senior Site can be especially helpful. Also, you can contact the Center On Vision Loss by phone at 214-352-7222 to ask specific questions.

Tom Hartrick: Thanks for having this session, and I want to extend a "hello" to Paul. Perhaps this has already been covered, but what are some of the primary solutions (e.g. JAWS) that are preferred by users for reading web content and interacting with web applications?

American Foundation for the Blind (AFB): Thanks Tom, good to hear from an old classmate. Basically, following the Web Accessibility Initiative guidelines is the best start. They are at the web consortium at www.w3c.org/wai. And, IBM has done some great work on web 2.0 with its ARIA work.

Peter Fay: Also, check out the article on WAI-ARIA on our website: http://bit.ly/hVEfNR

Peter Fay: Tom: If you really want to geek out...check out the whole spec at: http://www.w3.org/TR/wai-aria/

Tom Hartrick: Paul and Peter, thanks much for the web references. The IBM developerWorks site that my team works on uses a combination of JAWS and Rational Performance Tester (RPT) tools for validation (among a variety of other development, web browser constructs and checklists to
prepare). We found WebKing to be useful historically. We are also beginning to utilize more of the ARIA work.

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Janet Ross Willis Which Web assessment tools/screen readers, etc. are the most reliable for testing and finding accessibility issues? What are your recommendations?

Peter Fay Janet: Check out IBM's Rational Policy Tester tool, that's what we use internally:
1 person likes this.

Janet Ross Willis Yep. Using it! Thanks, Peter.

American Foundation for the Blind (AFB) The other thing to remember for testing is that it is best to work with someone who actually uses assistive technology tools like screen readers to be sure that accessibility and usability issues are caught. There are other automated tools, but we can't really speak to those.

Andi Snow-Weaver @AFB (is that you Paul?), some large IT companies have LOTS and LOTS of products and many of them are intended for technical audiences such as software developers or database administrators. How can they find pools of AT users with the technical skills of the target user population to help test the products?
2 people like this.

Andi Snow-Weaver Hi M-I. Great question! The Department of Justice has long indicated that the ADA requires that web services provided by ADA-covered entities must be accessible to people with disabilities.

American Foundation for the Blind (AFB) The Americans with Disabilities Act does apply to websites, but the government agency that sets guidelines has not yet clearly stated what accessibility should be required. So, we tell people to explain to companies that they have a requirement to ensure that they effectively communicate with people with disabilities. And, point them to the web accessibility guidelines.

Andi Snow-Weaver And DoJ is in the process of rulemaking to clarify the obligation. They have issued an Advanced Notice of Proposed Rulemaking seeking input on what accessibility standards they should require.

Andi Snow-Weaver In addition, where the services are provided by telecommunications service providers, there might be obligations under Section 255 of the Communications Act.
1 person likes this.
Andi Snow-Weaver To add to what AFB posted... Specifically the W3C Web Content Accessibility Guidelines version 2.0 are the preferred Web accessibility standards as they are applicable to both static and dynamic web content and applications.

Jim Tobias I'll echo Andi's comment about Section 255 -- it applies to customer support, billing, etc. for the telecom companies. Visit [http://www.fcc.gov/guides/disabled-persons-telecommunications-access-section-255](http://www.fcc.gov/guides/disabled-persons-telecommunications-access-section-255)

M-l Hayward Anybody have a sense as to how accessible the websites of such providers actually are? Are they making headway?

M-l Hayward BTW...thanks for your answers above. Quite helpful!!

Jim Tobias I think the major carriers pay some attention to the accessibility of their websites. One of the problems is really organizational -- so many people contribute to a corporate website (marketing, product management, etc.) and the pace of content change is so rapid, that accessibility may be up one day and down the next, unexpectedly. Modern corporate communications is less like a well-rehearsed choir and more like chatter at a cocktail party!

1 person likes this.

Andi Snow-Weaver Jim, I like your analogy. It really explains the problem well. Everybody creates content now.

Andi Snow-Weaver explains "the" problem well

Jae Broadhurst Is there anything likely to be available within the next five years that is less irritating to listen to (and slow) than the current screen-reader software? What has to happen to make that happen (tech advancements)?

IBM Accessibility Jae, could you elaborate on your question some?

American Foundation for the Blind (AFB) Not sure what you mean by this. Most screen reader users crank up the speed pretty fast, but maybe you mean something else. We are certainly hoping for more built in accessibility like Apple has done.

Fran DeRespinis Can you elaborate a bit on Apple does?

American Foundation for the Blind (AFB) Yes, Apple has done a great job incorporating accessibility into its products. The Mac OS has included excellent screen access support for several years. The iPhone and other iOS products also include voiceover and Zoom which are excellent.

1 person likes this.

Fran DeRespinis Thanks!

Garry Greenspan I have to agree with AFB, Apple is head and shoulders above Microsoft OS's with built in accessibility. Linux even has a ok screen reader. I wish Microsoft would do a better job with their products - even android OS lacks any decent accessibility even they are open source.
Jae Broadhurst What I meant was the zombie voice and halting delivery -- at least the last time I tried the Windows reader.

IBM Accessibility What would you suggest for a movie lover who can no longer see the screen as well as he used to and can't follow the action?

Neva Fairchild There are movie theaters with descriptive video equipment, where a narrator describes the action between dialogue through a set of headphones. You can also purchase DVD’s with DVS for viewing at home. Visit www.mopix.org for more info.

American Foundation for the Blind (AFB) The other thing to know is that still relatively few theaters have the capability and things are getting better with DVDs. The Department Of Justice is planning to require movie theaters to make description and captions available, but nothing currently requires Hollywood to add description or captions to movies, though many do.

Jim Tobias Pause ... Rewind ... Play

Chip Sturdevant The rerelease of all 6 Star Wars movies on blue ray now have DVS!
1 person likes this.

Estefania Martin How to teach HCI with visual user interfaces to blind people? I would like to know suggestions about this subject. Thanks in advance!

Ike Presley Hi Estefania, I'm not sure I understand your question, but I think you're talking about visual/graphical user interfaces like Windows and the Mac OS. It varies a little bit depending on if the user has some usable vision or no usable vision. In either case the best thing to do is to learn to use keyboard commands. Does this answer your question or am I not understanding?

Andi Snow-Weaver Great question Estefania. Another related issue is how do you do HCI studies with blind and low vision participants? I'm thinking of low fidelity prototypes and design techniques like card sorting.

Andi Snow-Weaver By "low fidelity prototypes", I mean things like paper prototyping.

American Foundation for the Blind (AFB) We're just in the process of doing our own web redesign and I know we tackled card sort. I'm sure we'd be happy to discuss if you want. I can be reached at <pschroeder@afb.net>

Gary Morin Do the questions and respective discussions in this conversation get summarised or even just compiled into a cleaner text file afterwards?

IBM Accessibility Hi Gary. Please send an email to acweb@us.ibm.com and we'll send you a PDF of the transcript of the session early next week.

Gary Morin wicked - thanks,
1 person likes this.
IBM Accessibility http://www-03.ibm.com/able/education/index.html has the transcripts from all our Expert Hour sessions :-(

Peter Fay Hey FB fans: Don't forget to check out this month's feature article on "Small Visual Displays..." on the IBM Human Ability and Accessibility website: http://www-03preview.ibm.com/able/news/AFB_smallscreen.html

Gary Morin seems to be something wrong with that link - could you verify?

IBM Accessibility Sorry, that was my mistake. Here's the correct link: http://www-03.ibm.com/able/news/AFB_smallscreen.html

M-I Hayward Before this session closes, I just want thank everyone and say how valuable these sessions are. 9 people like this.

IBM Accessibility Thanks for the feedback, M-I. :-)

American Foundation for the Blind (AFB) Thanks IBM for the opportunity. We are certainly very interested in feedback on our work on vision loss and accessibility. I invite people to contact me or any of us involved in this discussion. My email is <pschroeder@afb.net>. Paul Schroeder

Dagon Macready likes this.

Neva Fairchild For answers to specific questions about living independently with vision loss, call AFB Center on Vision Loss staff at 214-352-7222. 2 people like this.

IBM Accessibility We are now at the end of our time. What a great session -- thanks for joining us today. :-) Dagon Macready likes this.

IBM Accessibility The session will remain on the Facebook wall, but if you'd like a transcript, please send an email to acweb@us.ibm.com, and we'll send you a copy.

IBM Accessibility Have a wonderful day/evening! :-)

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