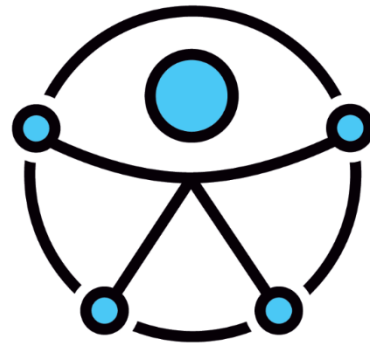
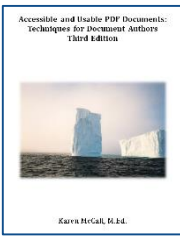


PDF and the User Experience

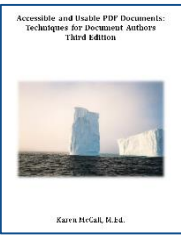


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Karlen Communications
Copyright 2016



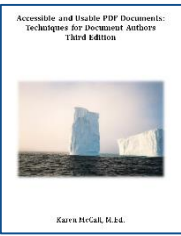
PDF and the User Experience Survey

- Conducted from December 2015 to January 2016.
- 185 total responses.
- 146 completed responses.
- Only completed responses were gathered.
- Will run every November.
- First real data we have on how those of us with disabilities are accessing content in PDF format.
- We “knew” this but didn’t have any research to support our knowledge.



Survey Results Posted

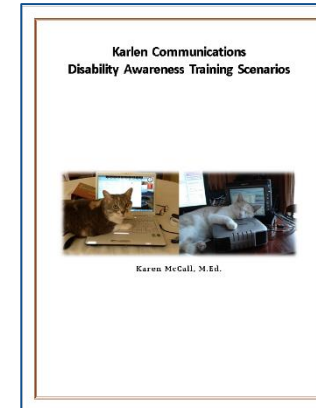
- The survey results are posted in an accessible PDF document with ISBN 978-0-9868085-7-9.
- Resources can be found on the Karlen Communications website, PDF and the User Experience Survey webpage:
 - <http://karlencommunications.com/PDFsurvey.html>
- Note that in this presentation I use the term “those of us with disabilities.”
 - I’ve begun using this term to be more inclusive and to counter the “twitter-fied” dismissiveness of the term I find prevalent in presentations, and online content referring to “us” as “PwD’s.”
 - In my opinion speaking the term “PwD’s” negates the entire person first language we strive toward.



Survey Basics

- Survey Monkey was used as it supported accessibility for those of us who use adaptive technology.
- Survey Monkey allows for the association of contact information with reference numbers so that it is valid research.
- For the published results, only the reference number for a respondent is used.
- Questions were single choice, multiple choice and open ended (in order to gather the experiences of those of us using adaptive technology accessing PDF documents).

Demographics



Who are those of us with disabilities who are accessing PDF documents on a regular basis? How often are we accessing PDF documents?

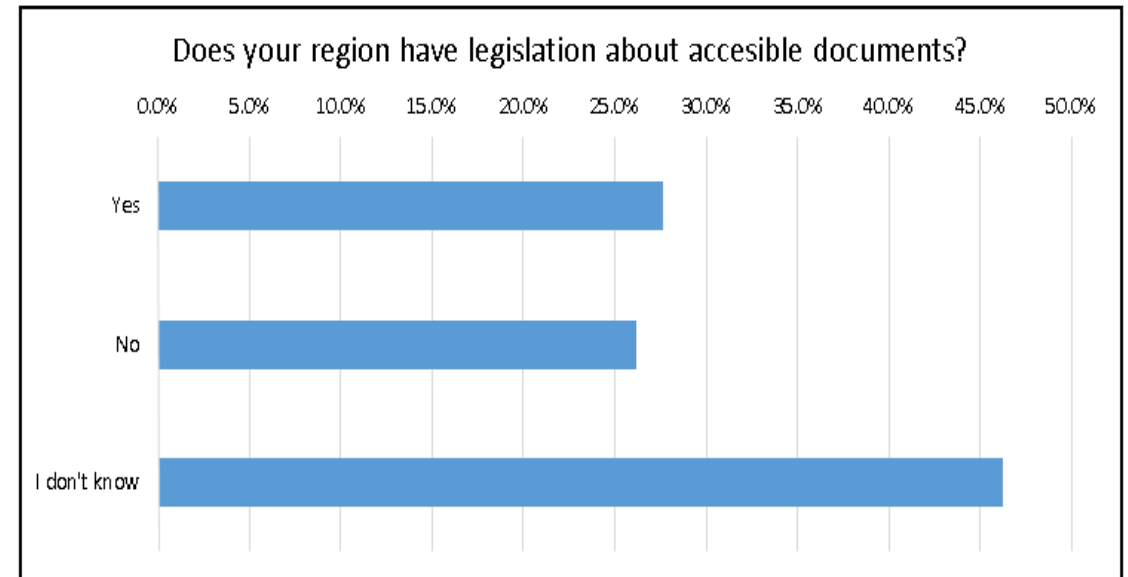
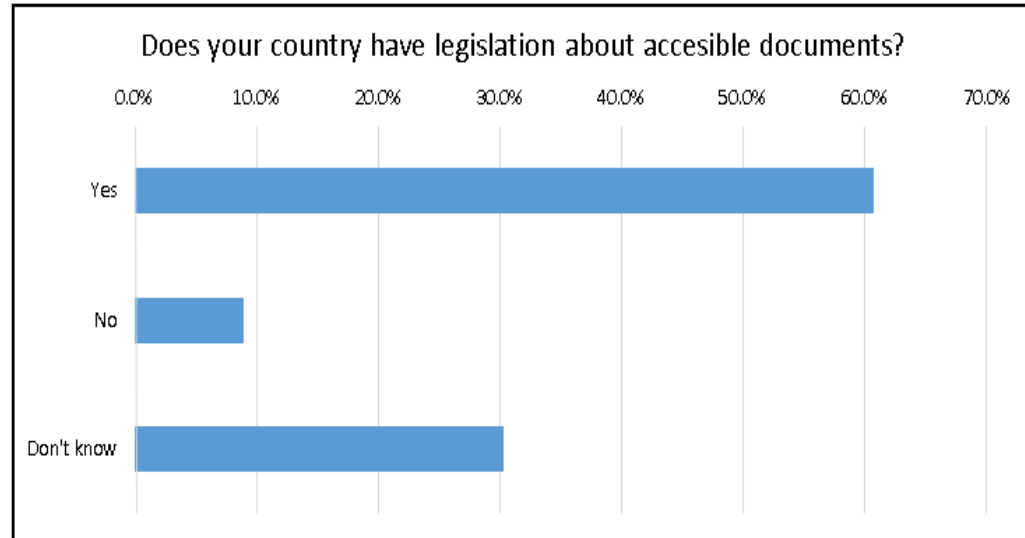


Countries Represented

Country	Total
Australia	5
Belgium	1
Canada	17
France	1
Germany	1
Hungary	1
India	2
Netherlands	3
New Zealand	1
Philippines	4
Spain	1
Sweden	1
United Kingdom	11
United States	96



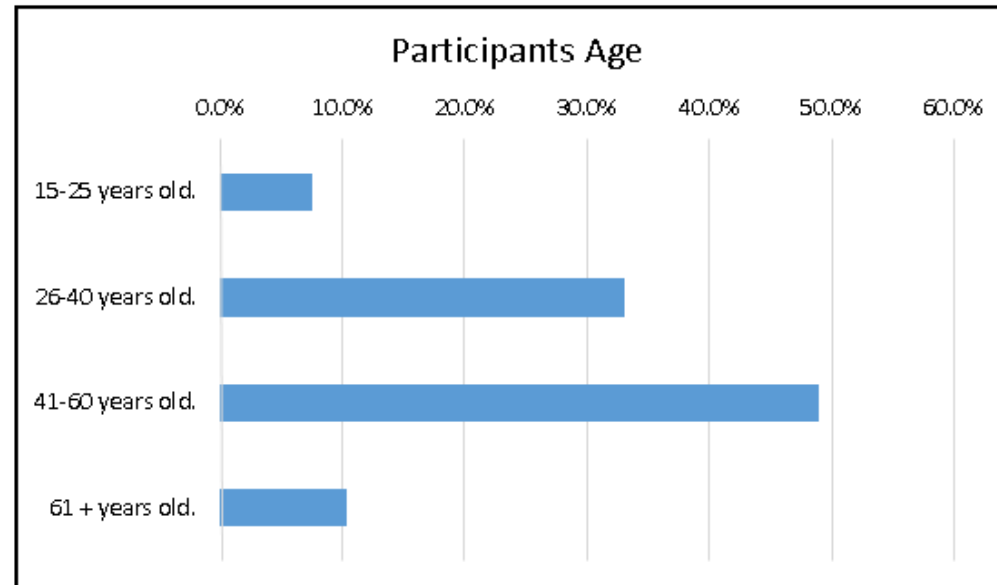
Existing Legislation





Age of Participants

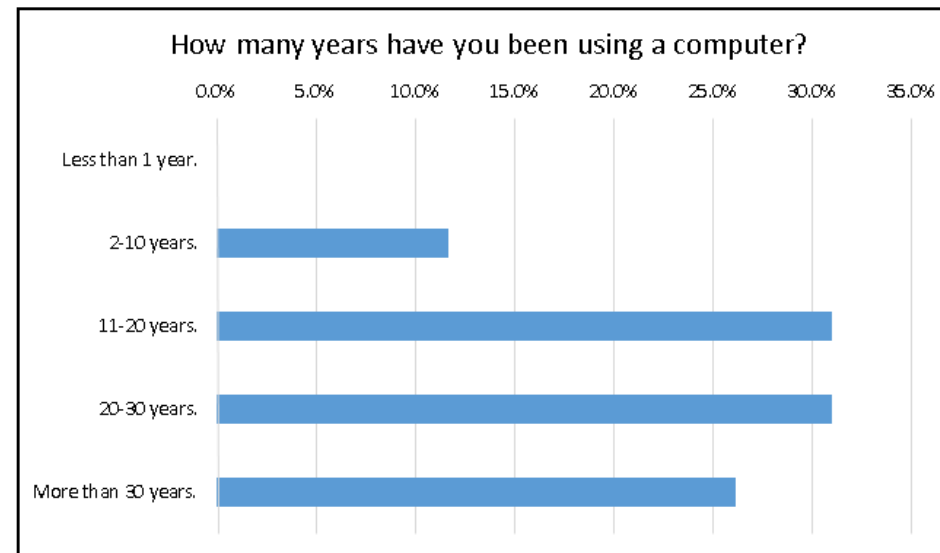
Possible Answers	Total	Percentage
15-20 years old	11	7.6%
26-40 years old	48	33.1%
41-60 years old	71	49.0%
61+ years old	15	10.3%

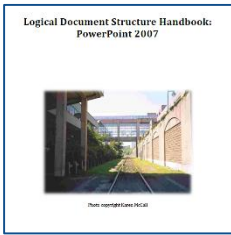




Years of Computer Use

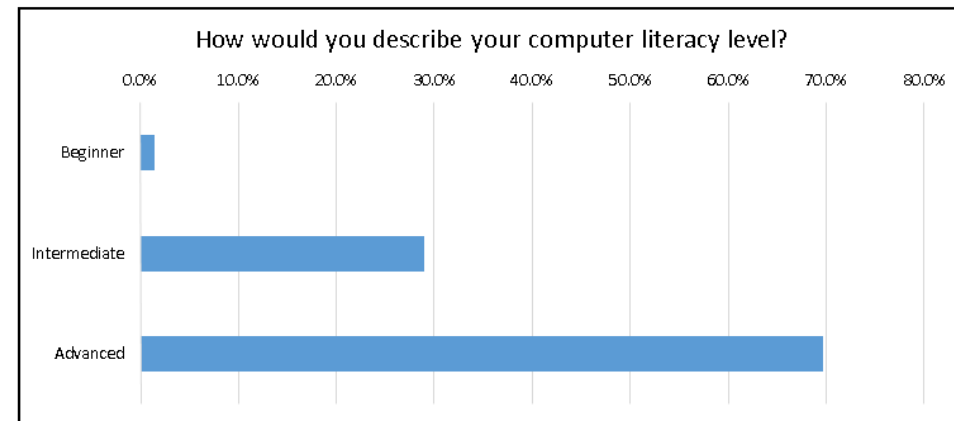
Possible Answers	Total	Percentage
Less than 1 year	0	0.0%
2-10 years	17	11.7%
11-20 years	45	31.0%
20-30 years	45	31.0%
More than 30 years	38	26.2%

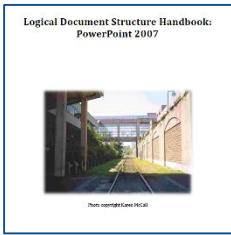




Computer Literacy Level

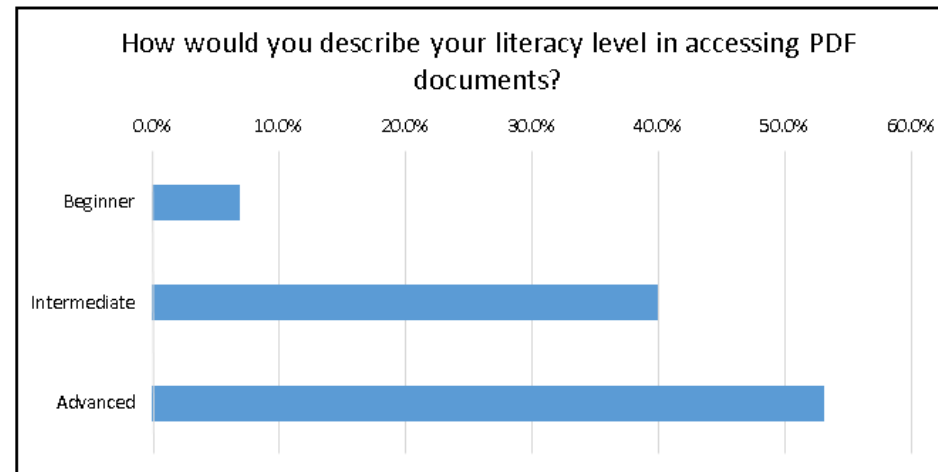
Possible Answers	Total	Percentage
Beginner	2	1.4%
Intermediate	42	29.0%
Advanced	101	69.7%

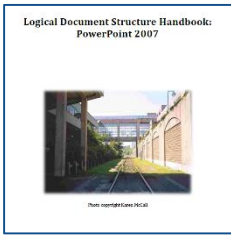




“PDF Document” Literacy

Possible Answers	Total	Percentage
Beginner	10	6.9%
Intermediate	58	40.0%
Advanced	77	53.1%

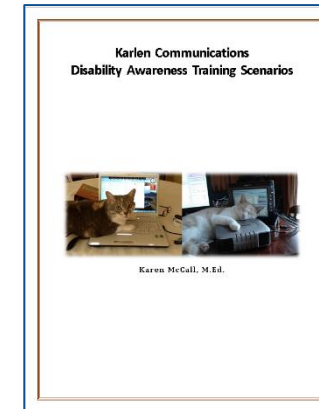




User Experience with Digital Content

- It was important to ask participants what they feel is their level of computer literacy and how many years they have been using computers or digital devices.
- Most respondents identified themselves as being computer literate and knowing how to access PDF documents.
- This means that we have experienced People encountering PDF documents, that the majority are not beginners or novices and most people have several years of experience using computers and digital devices.
- With this demographic information, why are “we” still hearing that PDF documents are so difficult to access?

Prevalence of PDF Documents in Daily Activities

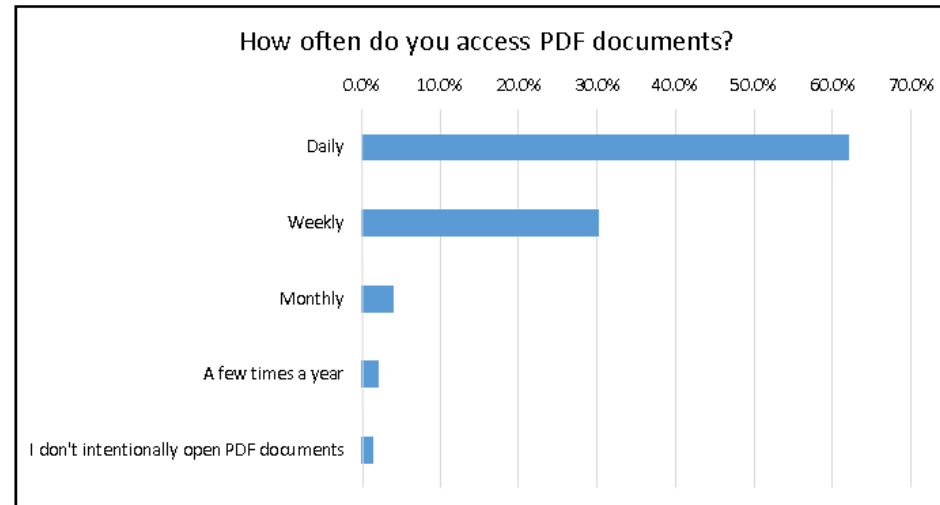


How often do you encounter PDF documents and where are you encountering PDF documents?



Frequency of Accessing PDF

Possible Answers	Total	Percentage
Daily	90	62.1%
Weekly	44	30.3%
Monthly	6	4.1%
A few times a year	3	2.1%
I don't intentionally open PDF documents	2	1.4%





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Where are you Accessing PDF?

Possible Answers	Total	Percentage
Work.(for a company or organization for which I'm paid)	126	86.9%
Volunteer Work	51	35.2%
Home (for example appliance manuals or recipes)	119	82.1%
Education (school, college or university)	67	46.2%
Education (outside of school, college and university) Lifelong Learning	74	51.0%
Leisure	94	64.8%
Other, please specify	12	8.3%



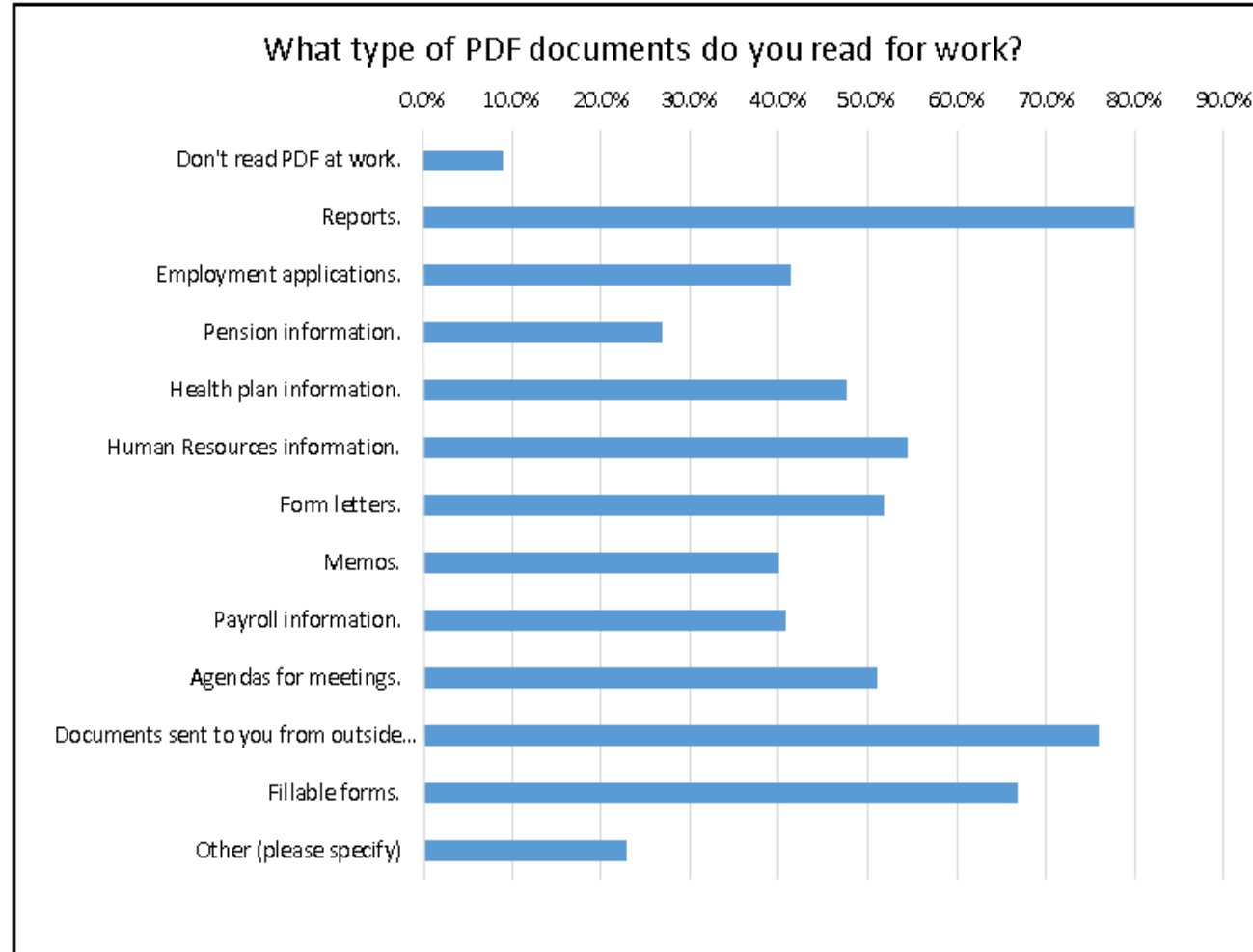
Other Areas PDF are Accessed

- Financial forms.
- Government documents.
- Tax information.
- Legal documents.
- Music sheets.
- Gemological research/family tree.
- Car or life insurance documents.
- From a FAX or Copy machine.



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PDF in the Workplace





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PDF at Home

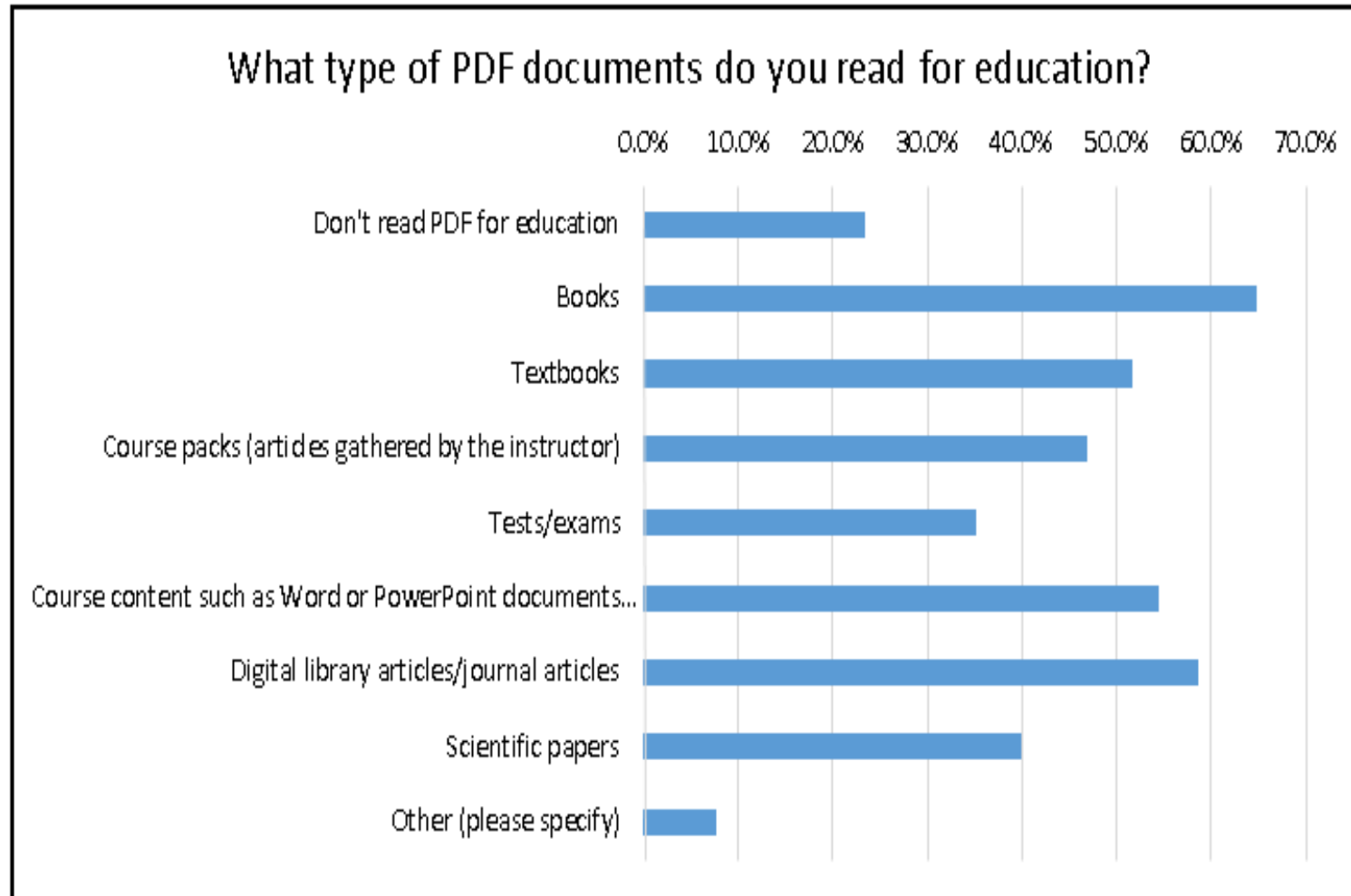
What type of PDF documents do you read at home?





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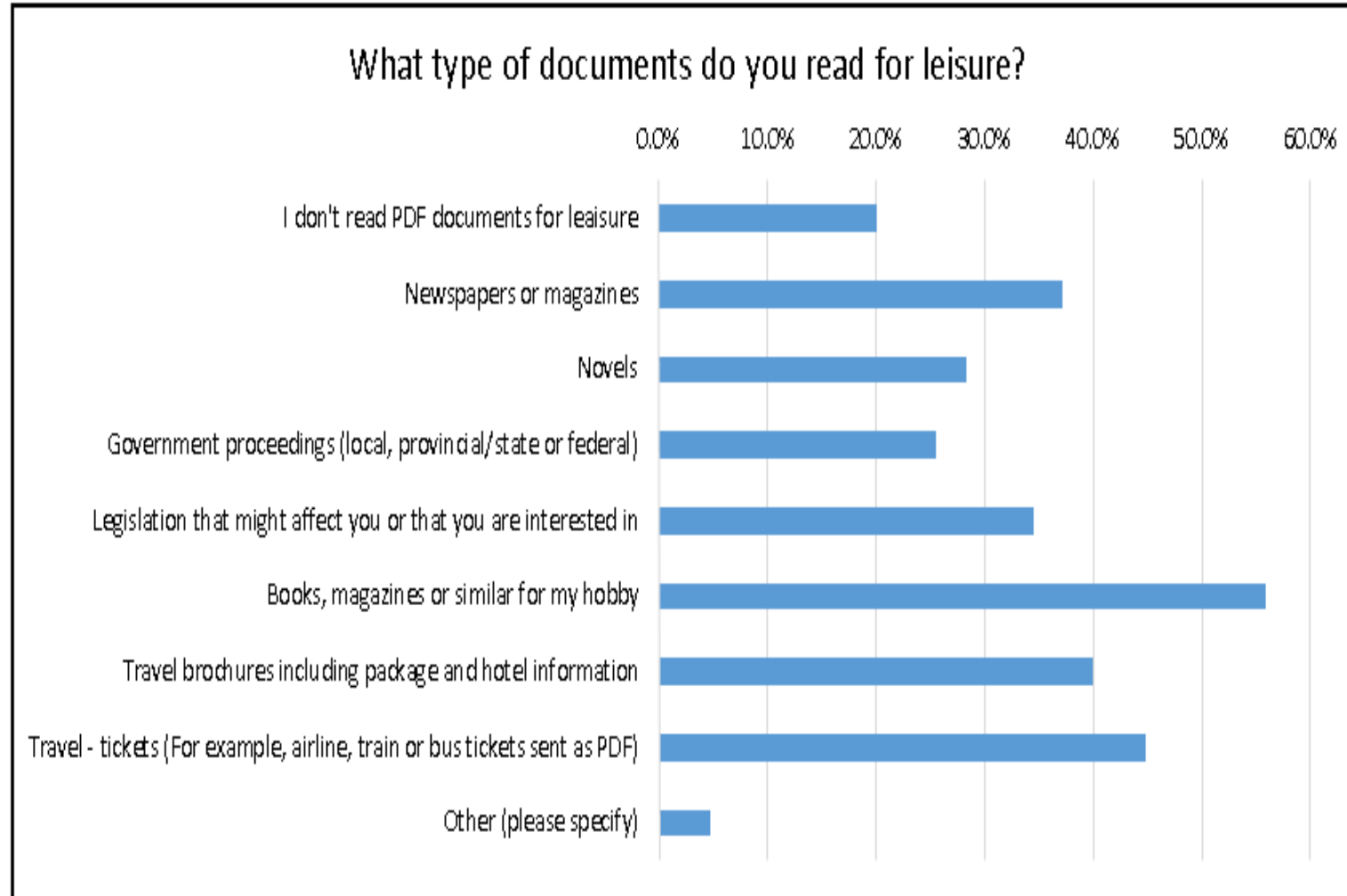
PDF in Education





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PDF for Leisure





Number of PDF that are Scanned

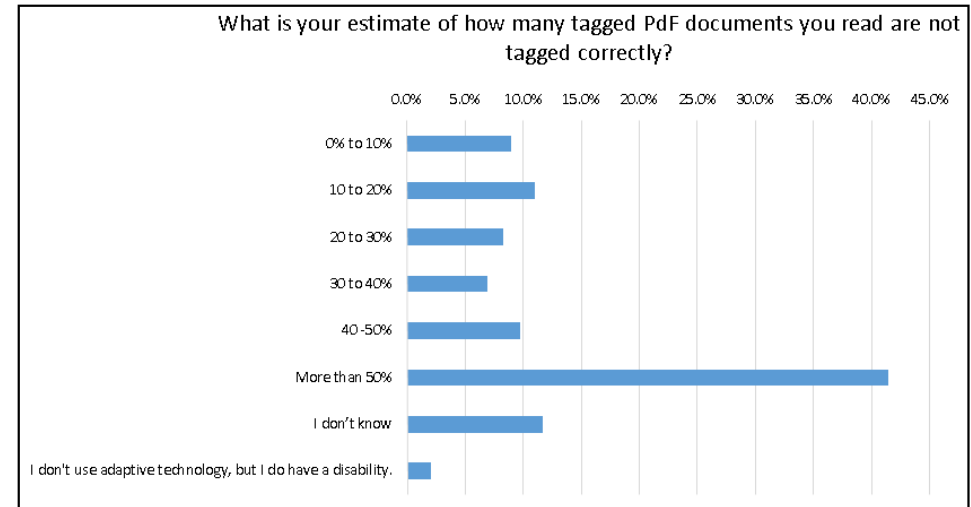
Possible Answers	Total	Percentage
10 to 20%	41	28.3%
20 to 30%	30	20.7%
30 to 40%	20	13.8%
40 to 50%	18	12.4%
More than 50%	56	17.9%
I don't know	10	6.9%



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Number of Incorrectly Tagged PDF

Possible Answers	Total	Percentage
0% to 10%	13	9.0%
10 to 20%	16	11.0%
20 to 30%	12	8.3%
30 to 40%	13	6.9%
40 to 50%	14	9.7%
More than 50%	60	41.4%
I don't know	17	11.7%
I don't use adaptive technology, but I do have a disability.	3	2.1%





Summary of Encounters with PDF

- Those of us with disabilities are encountering PDF documents everywhere in our daily lives. There isn't an aspect of our daily lives where we do not find PDF documents.
- Access to PDF content is essential for:
 - Employment.
 - Education.
 - Home – appliance manuals, financial/billing information and correspondence.
 - Leisure.

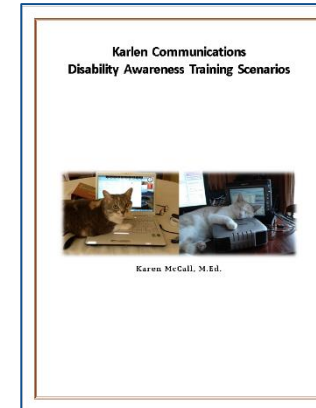


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Choice!

- Survey Author Comment:
 - Those of us who work in the field of accessible content design CANNOT perpetuate the concept that one specific file format “is best” for those of us with disabilities.
- Document authors and publishers have the right to publish in a format of their choosing.
 - Our responsibility is to ensure that the content is accessible.
 - Working on standards or legislative committees.
 - Providing educating and training.
- Even with “traditional books” you can get EPUB, PDF, audio, print, large print and so forth.
 - Amazon has a functionality where you can read print and pick the book up in audio format on the same or different devices.

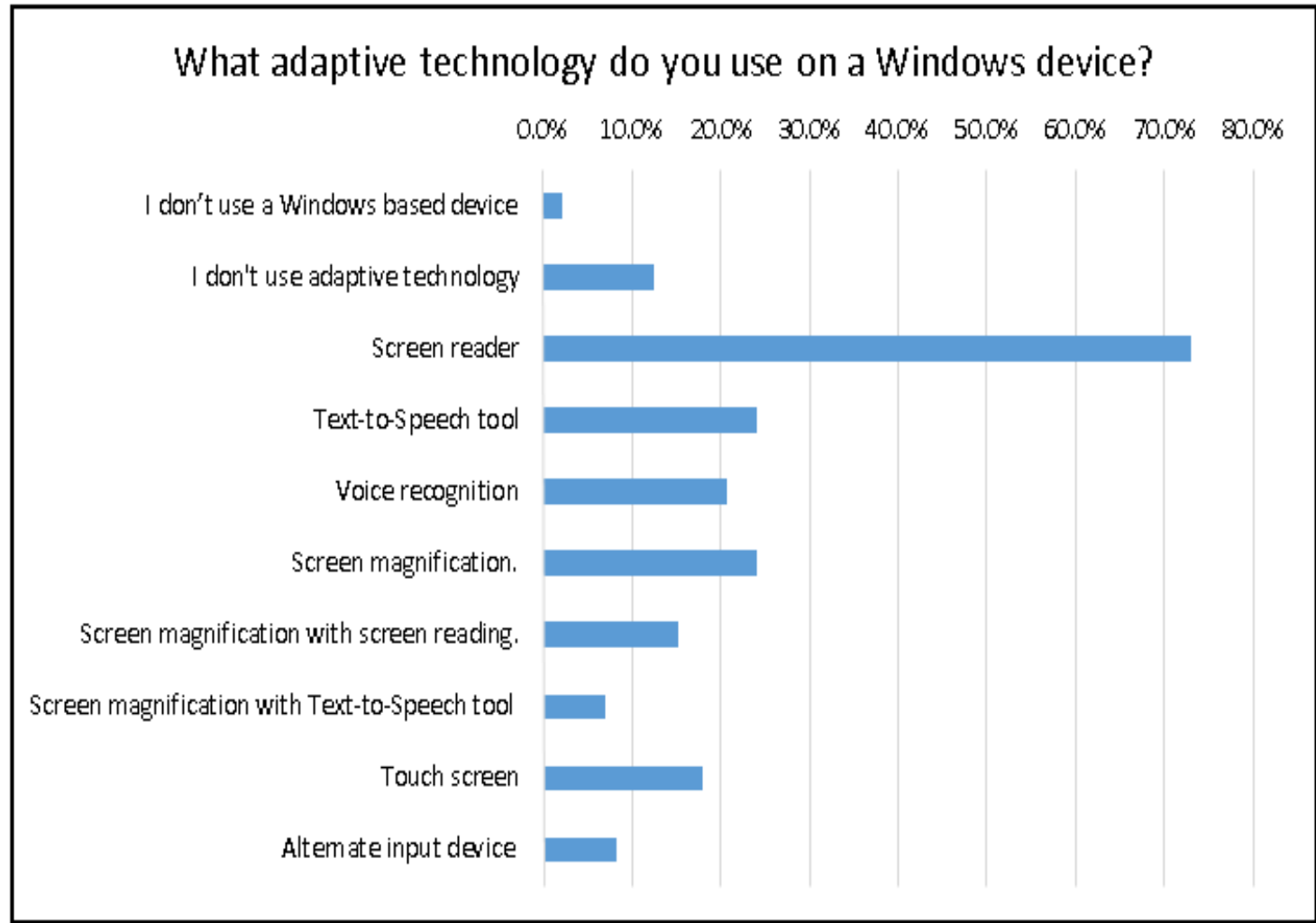
Types of Adaptive Technology Used



What types of adaptive technology do respondents use on a variety of devices and operating systems?

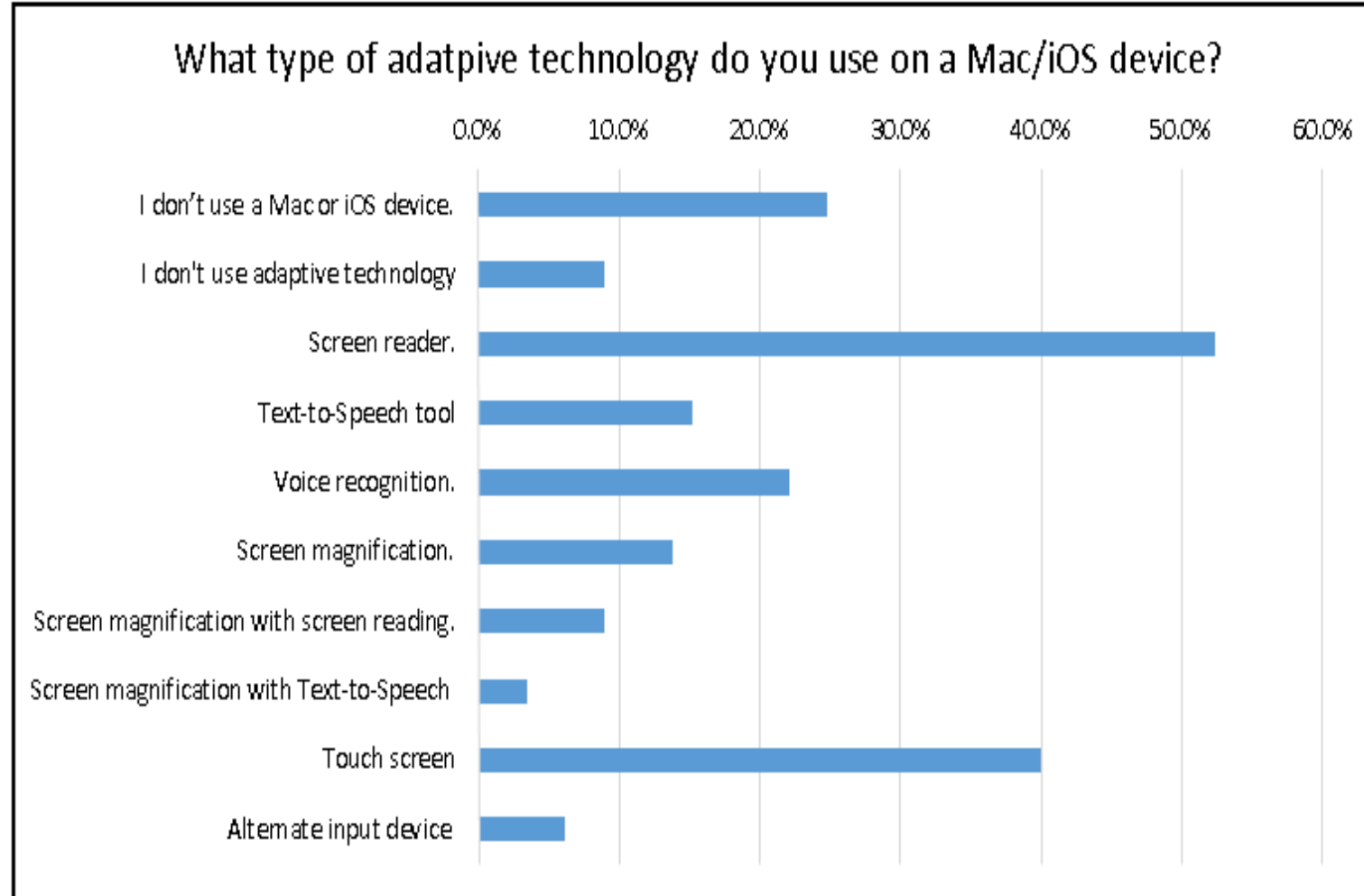


Adaptive Technology and Windows

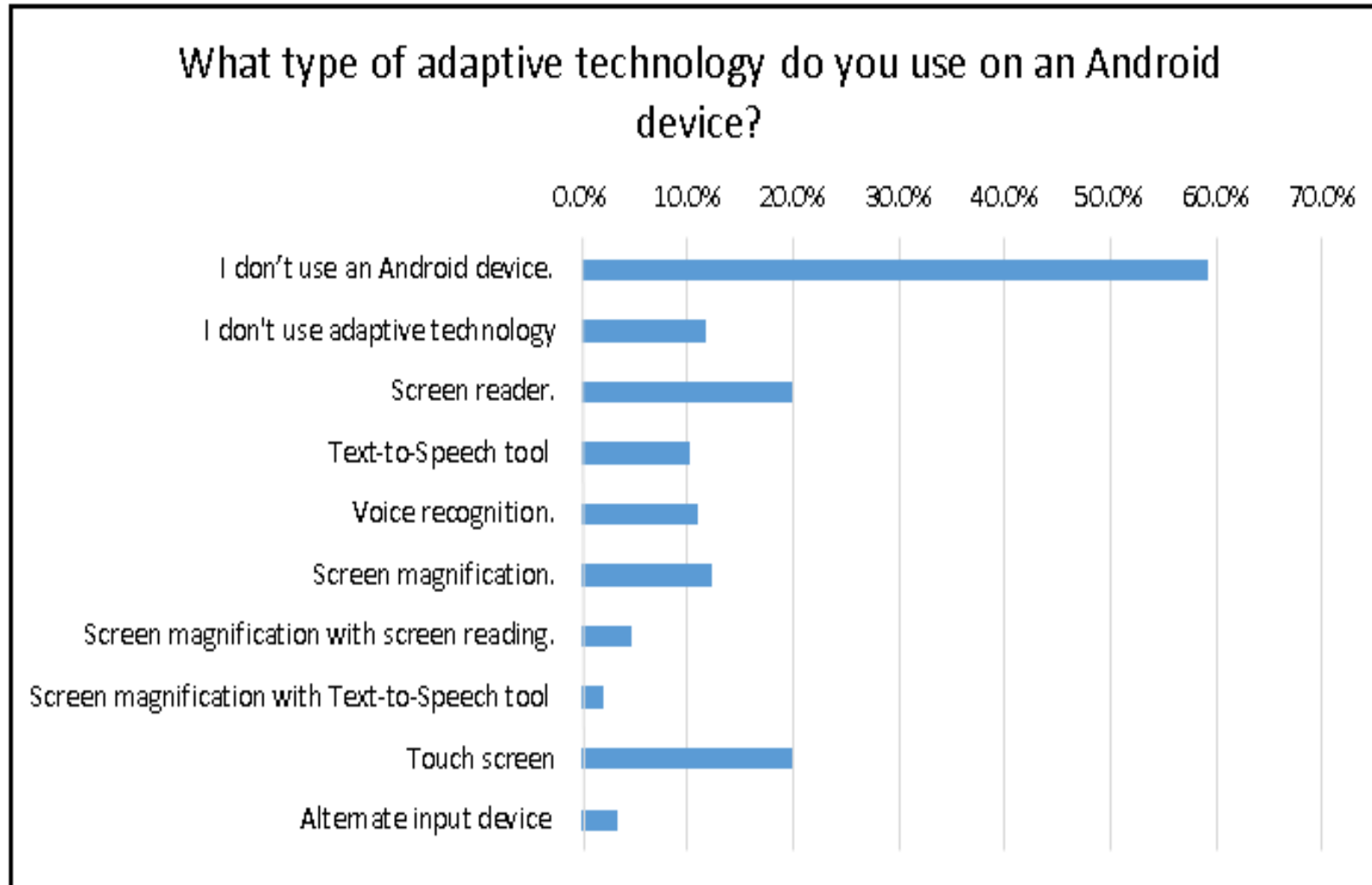




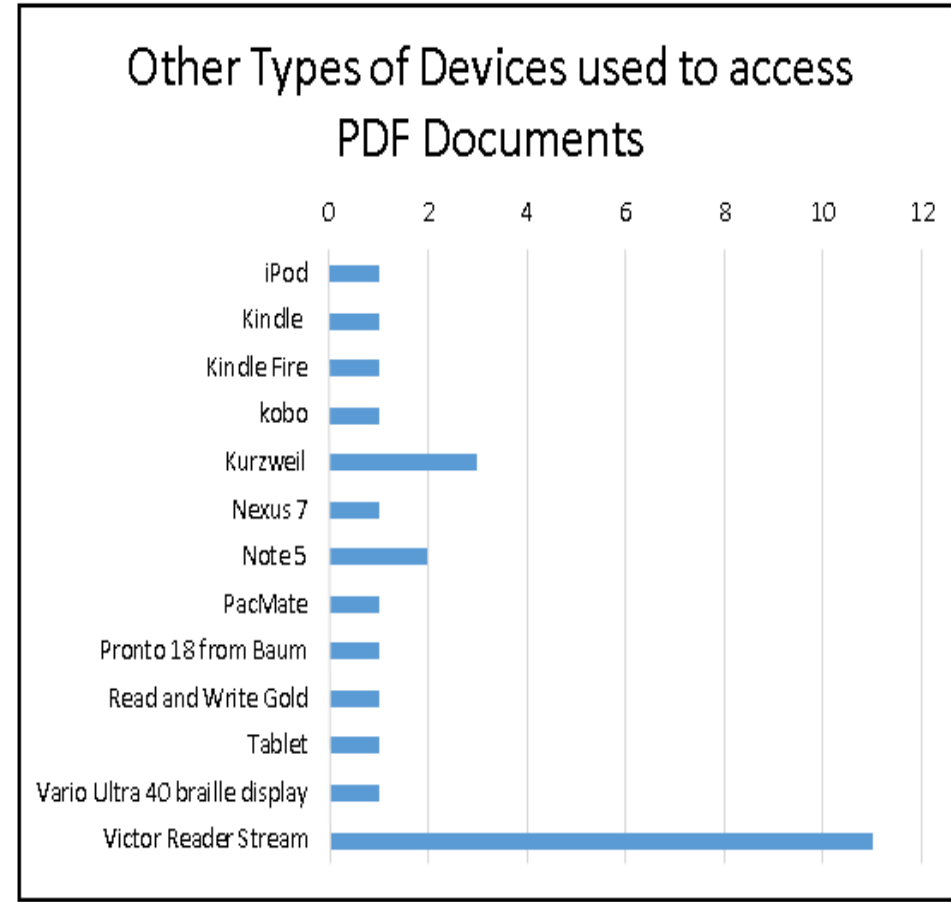
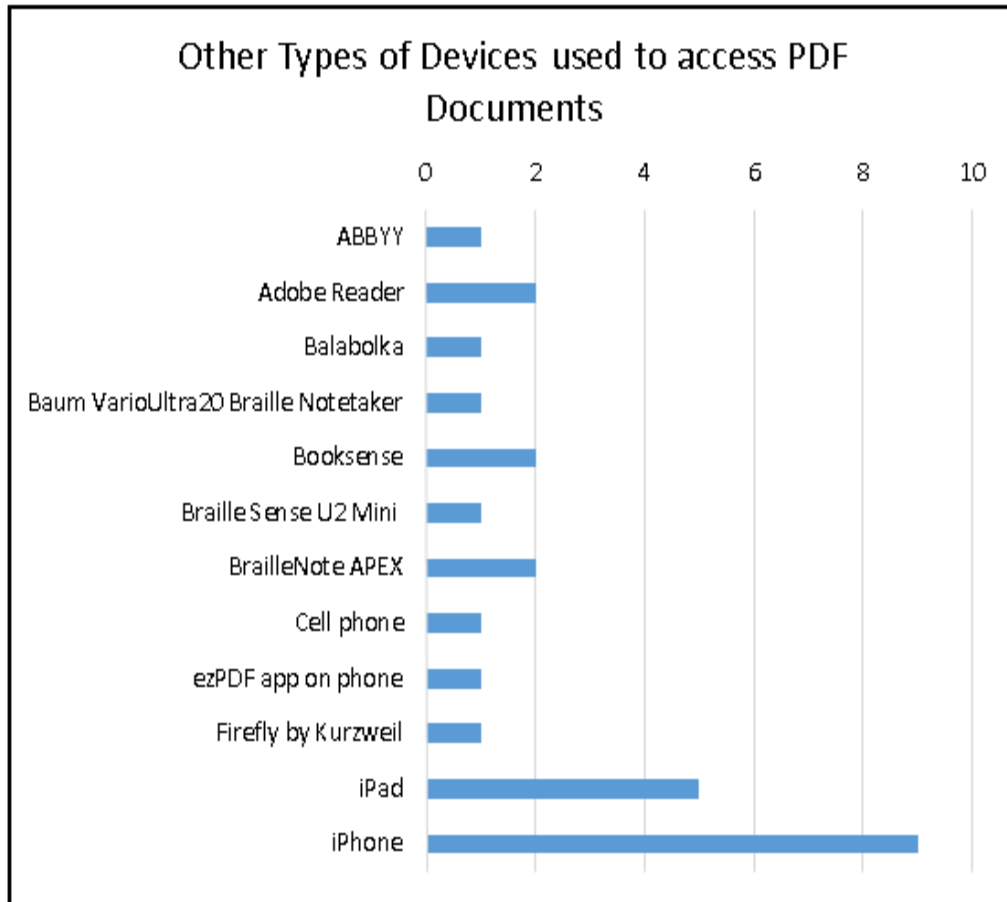
Adaptive Technology on Mac or iOS

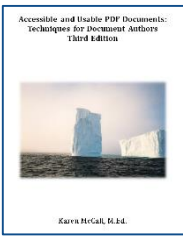


Adaptive Technology and Android



Other Devices PDF are Accessed on

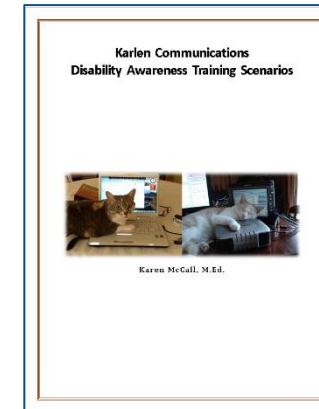




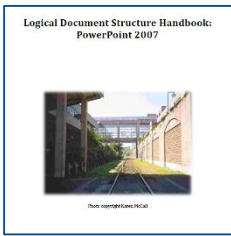
Other Applications PDF are Accessed in

- This question clearly identified the fact that those of us with disabilities use a number of other applications to access PDF documents.
 - Applications other than the “standard” Adobe tools.
- One respondent stated that they convert the PDF to text.
- Others converted the PDF to Word or used applications such as Voice Dream Reader or Balabalka which provide an entirely different user interface to read PDF content through.
- There were so many different applications used that I couldn’t create a chart to illustrate them and the table is too large for a slide.

What is the User Experience?

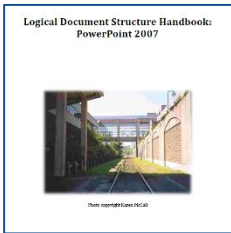


Given the demographics and the prevalence of PDF documents, what is the experience of those of us with disabilities who are encountering and accessing PDF documents?



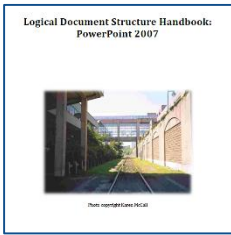
“I Love/Hate PDF”

- Some respondents stated that they always take a PDF document and convert it to text.
- Some stated that if the PDF document was tagged correctly, It was “a pleasure to read.”
- Most respondents did take the time to provide long thoughtful answers which was the intent of the questions around what is frustrating and what works well.



PDF Forms

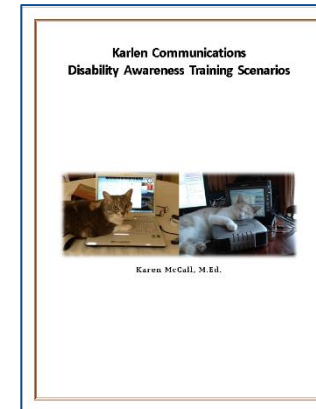
- The correct tagging and access to PDF forms was a recurring problem.
- Many respondents were “OK” with PDF forms but only if they were tagged correctly and they could actually fill them out.
- There were also comments on the ability of the adaptive technology used to provide consistent information about where someone is in a PDF document as they move through it.



Frustrations

- Most respondents are frustrated with PDF documents.
 - Primarily at the inconsistency of access.
 - Ability to use their adaptive technology is another recurring theme in the responses.
 - The fact that PDF are not portable is another recurring theme as a problem with PDF content.
- Overall, the responses were insightful and will be valuable to developers as well as legislators.
- For me the “surprise” and most interesting aspect of the responses is the number of other applications and devices that PDF are accessed on, whether in PDF format or in a converted format.
 - Those of us with disabilities have become inventive in accessing the content we need.

PDF/UA or ISO 14289



International standard to define what an accessible PDF document is. Included in the Refresh of Section 508 and we need to advocate for its inclusion in the AODA.



Survey Results for PDF/UA

- Some people know about PDF/UA or ISO 14289 – 1.
- Many don't know exactly what it is or how it will benefit them.
- Those of us working on the ISO (International Standards Organization) international standard **MUST** begin making the connection.
 - Reaching out to the community of those of us with disabilities who are accessing PDF documents to gain their support in adopting and implementing the standard globally.
- Without the support of those of us with disabilities who encounter and access PDF documents, our efforts to create, establish and continue to work on this standard will not result in any improvement in access to PDF documents.



Overview of PDF/UA

- Will provide a consistency to navigation and tagging (or identification of content) in PDF documents.
 - Paragraphs will have paragraph Tags, tables will be tagged correctly, lists will be tagged correction.
 - ...And we will know what “correctly” means.
- Headings will provide reliable navigation through the content.
- Three parts to PDF/UA:
 - The conforming document specifications.
 - The conforming viewer/reader specifications.
 - The conforming adaptive technology specifications.
 - For example NVDA.



Moving forward

- Invariably the question arises:
 - We've known how to make PDF accessible since Acrobat 5.
 - The PDF/UA international standard was established in 2012.
 - Why does it seem like no progress has been made in making more PDF documents PDF/UA compliant?
- Lack of tools.
- Complicated processes for correct tagging.
- Awful and horrid PDF.
- Lack of education and training.
- How do we move adoption and implementation of PDF/UA forward?

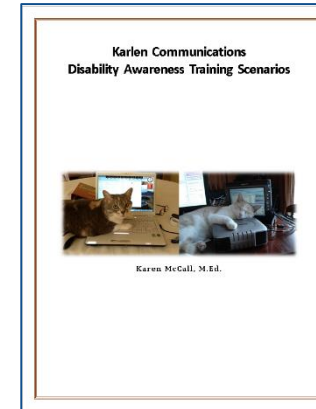


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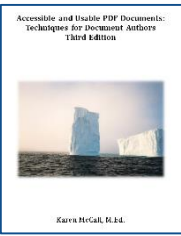
Global Inclusive Education Standard

- One of my goals is to gather leaders in the international community to move forward on creating a global inclusive education standard.
 - A baseline for moving forward on article 24 of the UN Convention on the Rights of Person's with Disabilities (along with the entire CRPD which Canada ratified in 2010).
 - A baseline for fulfilling the 2030 Sustainable Development Goals (SDG's), goal 4.5.
- David Lepofsky and others are advocating for an education standard as part of the AODA.
- Ontario can provide a leadership role. BUT there must be enforcement/compliance.
- It will mean education reform provincially, nationally and internationally.
- Considering the vast and various ways that not only PDF content touches our lives, we must begin working toward an inclusive community rather than perpetuating "segregated inclusion" models.

PDF/UA Resources

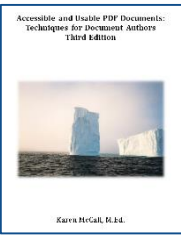


Where can I find more information on how to ensure that my documents are PDF/UA compliant?



Free Validation Tools!

- The Acrobat Accessibility Full Check is free and is in the Accessibility tools in the Tools Task Pane.
- The PAC or PDF Accessibility Checker from xyMedia is free.
 - <http://access-for-all.ch/en/pdf-lab/pdf-accessibility-checker-pac.html>
- CommonLook PDF Validator is free:
 - http://commonlook.com/accessibility-software/commonlook-pdf-validator/?mkt_tok=3RkMMJWWfF9wsRonv6%2FJZKXonjHpfsX56%2BQsW6axlMI%2F0ER3fOvrPUfGjI4AScNil%2BSLDwEYGJlv6SgFTrnGMaR42bgOXxc%3D



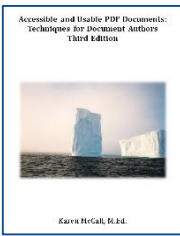
PDF Remediation Tools

- CommonLook PDF Global Access:
 - <http://commonlook.com/accessibility-software/commonlook-pdf/>
 - Add-in for Adobe Acrobat.
- CommonLook Office Global Access:
 - <http://commonlook.com/accessibility-software/commonlook-office-global-access/>
 - Add-in for Microsoft Office.
- axesPDF:
 - <https://www.axes4.com/>
 - Manual is currently not available in English and I don't know of anyone who does training.
 - This tool is an add-in to Microsoft Word.



PDF/UA Resource Documents

- PDF/UA Technical Implementation Guide (AIIM):
 - <http://www.aiim.org/Research-and-Publications/Standards/Committees/PDFUA/Technical-Implementation-Guide>
- The Matterhorn Protocol (PDF Association):
 - <http://www.pdfa.org/publication/the-matterhorn-protocol-1/>
- PDF/UA Competence Centre (PDF Association):
 - <http://www.pdfa.org/competence-centers/pdfua-competence-center/>
- PDF/UA in a Nutshell:
 - <http://www.pdfa.org/2013/06/pdfua-in-a-nutshell/>
- The Structure Elements Best Practice Guide from PDF Association:
 - <http://www.pdfa.org/2015/12/announcing-the-structure-elements-best-practice-guide-0-1/>
- Developers and software vendors will need to purchase the entire ISO standard to implement under the hood specifications.



Jonathan Metz YouTube PDF/UA Videos!

- Accessiblemetz YouTube Channel:
 - <https://www.youtube.com/watch?v=BeFt-Qa3mjM&feature=youtu.be&list=PLmfVOnJxeSEXsEKv2i20nYMHYuFEcl4fO>
- First video starts with a Word document and walks through making it accessible for conversion to Pdf/UA conforming PDF.
- There are 4 videos in the series so far.
- Subscribe!



Contact!

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@KarlenInfo

Accessible document design consulting and training (Word, PowerPoint and PDF).

**Accessible and Usable PDF Documents:
Techniques for Document Authors
Third Edition**



Karen McCall, M.Ed.