## **APPENDIX A**

## Section 0. Eligibility

	the following questions	please answer the f	for this survey.	vour eliaibility	rder to establish	In
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Q0.1 Are you a person with low vision? (Low vision is defined as acuity less than 20/60 with best prescribed glasses or contacts or a visual field less than 20 deg in extent. Low vision does not refer to people who can achieve normal vision with the aid of glasses or contacts. Low vision does not refer to people who have normal vision in one eye and reduced
vision in the other eye.)  □ Yes □ No
Q0.2 Has your vision remained fairly stable during the past year?  □ Yes □ No
Q0.3 Do you read visually at least for some purposes?  ☐ Yes ☐ No
Q0.4 Are you 18 years old or older?  □ Yes □ No
Section 1. Demographics
Q1.1 What is your name?
Q1.2 What is today's date?
Q1.3 What is your date of birth? Month: Day (DD): Year (YYYY):

Q1.4 What is your gender?
What is your gender?  □ Male
□ Female
□ I'd prefer not to say
Q1.5
What city, state, and country do you live in?
City:
State: Country:
Q1.6
What is your email address?
Q1.7
What is your highest level of education?
<ul><li>□ Primary School</li><li>□ High School</li></ul>
☐ University/College Degree
□ Advanced Graduate or Professional Degree
Q1.8
What is your employment status?
□ Full time
□ Part time
<ul><li>☐ Unemployed</li><li>☐ Retired</li></ul>
Q1.9 Are you currently a student?
☐ Yes, a full-time student
☐ Yes, a part-time student
□ No, not a student
Section 2: Nature and History of Your Low Vision
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Q2.1 What is the cause(s) of your low vision?
Q2.2 At what age did your low vision begin (age in years; enter 0 if visually impaired
since birth)?

Q2.3 When did you last have an eye exam of any kind?  Within the past month  Within the past year  Within the past 5 years  More than 5 years ago
Q2.4  If you wear reading glasses, when were you last prescribed them?  Within the past month  Within the past year  Within the past 5 years  More than 5 years ago
Q2.5 People with good vision are often said to have 20/20 visual acuity. If you know your visual acuity, please enter it here:
Q2.6 Do you have visual-field loss?  □ Yes □ No
[ Q2.7 should only appear if 'yes' is selected for Q2.6 ]
Q2.7 Is your field loss in Central vision or Peripheral vision?  □ Central vision □ Peripheral vision
Some people with low vision use audio and/or Braille in addition to vision for reading. Thinking about all of your reading, please estimate the percentages of reading you do with vision, with audio and with Braille. For instance, if you read about equal amounts with vision and with audio, but none with Braille, you would enter 50% for Vision, 50% for Audio, and 0 for Braille.
Q2.8 Your percentage of reading by (the total should equal 100%): Vision: Audio: Braille:
Q2.9 Do you have any physical disabilities (such as arthritis or neuropathy of the fingers) that affect your ability to operate mobile reading devices or a computer?  _ Yes _ No

Q2.10 Do you experience nystagmus (rapid, involuntary eye movements) that affects your ability to read?  □ Yes □ No
Q2.11 Do you have a hearing impairment that affects your ability to use audio for reading?  □ Yes □ No
Section 3: Usage of assistive devices/technologies
In this section, we will ask you about the devices you use for reading. Some people use more than one device. Please respond concerning all devices you use. Digital devices refer to smartphones, tablets (such as iPads), electronic books (such as Kindles) and computers. In the following questions that ask about different digital devices, please indicate the model type (e.g., iPhone 5S, Mac Mini, etc.) that you use. Some digital devices can be used for auditory and/or Braille reading, as well as visual reading, but please respond concerning your use of these digital devices for visual reading only.
Q3.1a Do you use a smartphone for visual reading?  □ Yes, please specify below. □ No
Q3.1b If yes, please specify smart phone model:
Q3.2a Do you use a tablet for visual reading?  □ Yes, please specify below. □ No
Q3.2b If yes, please specify tablet model:
Q3.3a Do you use an E-book reader for visual reading?  □ Yes, please specify below. □ No
Q3.3b If yes, please specify E-book reader model:
Q3.4a Do you use a laptop computer for visual reading?  □ Yes, please specify below. □ No

Q3.4b If yes, please specify laptop computer model:
Q3.5a  Do you use a desktop computer for visual reading?  □ Yes, please specify below. □ No
Q3.5b  If yes, please specify desktop computer model:
Video Magnifiers This category of reading aid refers to closed-circuit television (CCTV) magnifiers, portable handheld electronic magnifiers, screen-magnification software (such as ZoomText or Magic) and magnifying apps on smartphones or tablets. In the following questions please indicate which of the following types of video magnification you use fo visual reading:
Q3.6a Do you use a closed-circuit TV?  Yes, please specify below.  No
Q3.6b If yes, please specify closed-circuit TV model:
Q3.7a Do you use a portable electronic handheld magnifier?  Yes, please specify below.  No
Q3.7b If yes, please specify portable electronic handheld magnifier model:
Q3.8a Do you use computer screen magnifying software?  ☐ Yes, please specify below. ☐ No
Q3.8b If yes, please specify computer screen magnifying software type:
Q3.9a Do you use any smartphone or tablet apps for magnification?  Yes, please specify below.

Q3.9b If yes, please name the app(s):
Please indicate which of the following types of optical magnifiers you use:
Q3.10a Do you use a handheld optical magnifier?  ☐ Yes, please specify below. ☐ No
Q3.10b  If yes, please specify power or magnification:
Q3.11a Do you use a stand magnifier?  Yes, please specify below.  No
Q3.11b  If yes, please specify power or magnification:
Q3.12a Do you use a magnifier mounted on glasses?  Yes, please specify below.  No
Q3.12b If yes, please specify power or magnification:
Q3.13a  Do you use a telescope for reading street signs or other types of distant text?  Yes, please specify below.  No
Q3.13b If yes, please specify power or magnification:
Unaided Reading
Q3.14  Please indicate if you use any of the following methods to read without any reading aids:  Select all that apply.  Regular reading glasses without additional magnifier.  Strong reading glasses that require text to be positioned close to the eyes.  Reading with unaided vision by positioning text very close to the eyes.  Reading large print materials.

Q3.15 If you use a visual reading method not captured by the list above, please describe it in a few words below: Q3.16 Do you require a bright source of light for reading hard-copy text such as a lamp, flash light or other source of bright light? □ Yes □ No Q3.17 Please briefly describe the source of illumination you prefer to use: Q3.18 Do you prefer reading text composed of: □ black letters on a white background □ white letters on a black background □ no preference Q3.19 If you have one or more preferred fonts, please list them in order of your preference. Otherwise, please enter "No Preference":

Section 4. Assessment of Magnification:

A short sample of text from *Alice In Wonderland* is included on the next page. If you use a digital device (such as an iPad or computer) or video magnifier for reading, we would like to know how you would configure your display for reading this sample. If possible, please adjust your display for your best reading of this sample and answer the questions that follow. If your preference is to read with a video magnifier, you will need to print the sample before answering the questions.

Text Sample:

Alice was beginning to get very tired of sitting by her sister on the bank, and of having nothing to do: once or twice she had peeped into the book her sister was reading, but it had no pictures or conversations in it, 'and what is the use of a book,' thought Alice 'without pictures or conversation?' So she was considering in her own mind (as well as she could, for the hot day made her feel

very sleepy and stupid), whether the pleasure of making a daisy-chain would be worth the trouble of getting up and picking the daisies, when suddenly a White Rabbit with pink eyes ran close by her. There was nothing so very remarkable in that; nor did Alice think it so very much out of the way to hear the Rabbit say to itself, 'Oh dear! Oh dear! I shall be late!' (When she thought it over afterwards, it occurred to her that she ought to have wondered at this, but at the time it all seemed quite natural); but when the Rabbit actually took a watch out of its waistcoat-pocket, and looked at it, and then hurried on, Alice started to her feet, for it flashed across her mind that she had never before seen a rabbit with either a waistcoat-pocket, or a watch to take out of it, and burning with curiosity, she ran across the field after it, and fortunately was just in time to see it pop down a large rabbit-hole under the hedge.

If you prefer reading text with a CCTV or portable electronic magnifier, please print this page and use it to answer the questions on the following screens.

Please answer the following questions about the conditions you use for reading the sample of text from *Alice in Wonderland*. The sample of text is displayed again below:

Alice was beginning to get very tired of sitting by her sister on the bank, and of having nothing to do: once or twice she had peeped into the book her sister was reading, but it had no pictures or conversations in it, 'and what is the use of a book,' thought Alice 'without pictures or conversation?' So she was considering in her own mind (as well as she could, for the hot day made her feel

very sleepy and stupid), whether the pleasure of making a daisy-chain would be worth the trouble of getting up and picking the daisies, when suddenly a White Rabbit with pink eyes ran close by her. There was nothing so very remarkable in that; nor did Alice think it so very much out of the way to hear the Rabbit say to itself, 'Oh dear! Oh dear! I shall be late!' (When she thought it over afterwards, it occurred to her that she ought to have wondered at this, but at the time it all seemed quite natural); but when the Rabbit actually took a watch out of its waistcoat-pocket, and looked at it, and then hurried on, Alice started to her feet, for it flashed across her mind that she had never before seen a rabbit with either a waistcoat-pocket, or a watch to take out of it, and burning with curiosity, she ran across the field after it, and fortunately was just in time to see it pop down a large rabbit-hole under the hedge.

Q4.1
What device are you using to read this text?
Q4.2 If you are using a mobile device, please indicate whether you are reading in:  Landscape mode Portrait mode
Q4.3a What is your approximate viewing distance from the display screen? Please select the unit of measurement you would like to use:  inches centimeters
Q4.3b Please estimate the distance:
Q4.4a What is the size of the screen you are using? Please select the unit of measurement you would like to use:  inches centimeters

Q4.4b  Please estimate (or measure) the size of the screen by including its width and height dimensions. (You can skip this step if you have listed a device and model number above because we can look up the screen dimensions.)  Width:  Height:
Now we would like to know how many characters appear in a line of text from the Alice in Wonderland passage, from the left edge to the right edge on your display. Many people with low vision adjust magnification so that their display shows only a portion of each line at one time. Please count the number of characters visible on a line of the passage on your display including all letters, punctuations, and spaces. If your viewing conditions permit you to view the full width of the passage at one time, please enter "All".
Q4.5 How many characters are there in a line of text, from the left edge to the right edge on your display, including spaces? (The number of characters may vary slightly from line to line, so a typical value is fine.)  Number of characters per line:
Here is the sample of Alice in Wonderland text again. Please answer the question below.
Alice was beginning to get very tired of sitting by her sister on the bank, and of having nothing to do: once or twice she had peeped into the book her sister was reading, but it had no pictures or conversations in it, 'and what is the use of a book,' thought Alice 'without pictures or conversation?' So she was considering in her own mind (as well as she could, for the hot day made her feel
very sleepy and stupid), whether the pleasure of making a daisy-chain would be worth the trouble of getting up and picking the daisies, when suddenly a White Rabbit with pink eyes ran close by her. There was nothing so very remarkable in that; nor did Alice think it so very much out of the way to hear the Rabbit say to itself, 'Oh dear! Oh dear! I shall be late!' (When she thought it over afterwards, it occurred to her that she ought to have wondered at this, but at the time it all seemed quite natural); but when the Rabbit actually took a watch out of its waistcoat-pocket, and looked at it, and then hurried on, Alice started to her feet, for it flashed across her mind that she had never before seen a rabbit with either a waistcoat-pocket, or a watch to take out of it, and burning with curiosity, she ran across the field after it, and fortunately was just in time to see it pop down a large rabbit-hole under the hedge.
Please click "Next" to review the Alice in Wonderland sample of text again and answer the question.
Q4.6 How many lines of text are displayed on the screen at one time, when the screen is filled with text?  Number of lines on the display:

Q4.7 Are you using black letters on a white background or white letters on a black background?  □ Black letters □ White letters
If you configure your display to use a color other than white for background or text, please indicate here:  Text color:  Background color:  Q4.10  If you know the font used for displaying this text sample, please indicate it here:  Section 5: Past and current reading habits
Q5.1 Did you learn to read before the onset of your low vision?  □ Yes □ No
[If participants respond Yes in Q5.1, they will continue to answer questions to Q5.2. If they respond No, to this part will be skipped and they will go directly to Q5.13.
Q5.2 Before the onset of your low vision, were you diagnosed with any form of reading or learning disability?    Yes  No
Q5.3 If yes, please describe briefly:
For the year before the onset of your low vision, please rate the amount of visual reading you did in the following activities, using a scale from 1 to 5 as follows:  1 - Rarely or never.  2 - Occasionally, once a week or less.  3 - Frequently, at least a few days per week.  4 - Almost every day, at least once.  5 - Daily heavy use.
Q5.4 Work or educational reading from hard-copy text.  1 2 3 4 5

Q5.5 Work (	or educational reading from computer or other digital device.  1 2 3 4 5
Q5.7 News	
	networking (email communication, social media, etc.).  1 2 3 4 5
Q5.9 Pleasu 	are reading of books or articles from hard copy.  1 2 3 4 5
Q5.10 Pleasu 	are reading of books or articles from computer or digital device.  1 2 3 4

Q5.11 Brief information look-up from hard copy (recipes, food labels, restaurant menus, phone numbers, TV listings, etc).  □ 1 □ 2 □ 3 □ 4 □ 5
Q5.12 Brief information look-up from computer or digital devices (recipes, food labels, restaurant menus, phone numbers, TV listings, etc).  □ 1 □ 2 □ 3 □ 4 □ 5
[ If Q5.1's answer is No, then skip to Q5.13]  Current Reading Habits  For the past year, please rate the amount of visual reading you did in the following activities, using a scale from 1 to 5 as follows:  1 - Rarely or never.  2 - Occasionally, once a week or less.  3 - Frequently, at least a few days per week.  4 - Almost every day, at least once.  5 - Daily heavy use.
Q5.13 Work or educational reading from hard-copy text.  □ 1 □ 2 □ 3 □ 4 □ 5
Q5.14 Work or educational reading from computer or other digital device.  □ 1 □ 2 □ 3 □ 4 □ 5
Q5.15  Newspaper reading from hard copy.  □ 1 □ 2 □ 3 □ 4 □ 5

Q5.16  News reading on computer or digital device.  □ 1 □ 2 □ 3 □ 4 □ 5
Q5.17 Social networking (email communication, social media, etc.).  □ 1 □ 2 □ 3 □ 4 □ 5
Q5.18 Pleasure reading of books or articles from hard copy.  □ 1 □ 2 □ 3 □ 4 □ 5
Q5.19 Pleasure reading of books or articles from computer or digital device.  □ 1 □ 2 □ 3 □ 4 □ 5
Q5.20 Brief information look-up from hard copy (recipes, food labels, restaurant menus, phone numbers, TV listings, etc).  □ 1 □ 2 □ 3 □ 4 □ 5
Q5.21 Brief information look-up from computer or digital devices (recipes, food labels, restaurant menus, phone numbers, TV listings, etc).  □ 1 □ 2 □ 3 □ 4 □ 5

[End of the survey]