Microsoft

Accessibility in Office 365: Language and Communication

Andrew Balzer

Education Success Manager

Microsoft

Andrew Balzer

Education Success Manager

Andrew.Balzer@microsoft.com

Twitter.com/AlphaBalzer

Linkedin.com/in/andrew-balzer

Acknowledgement of Country

Microsoft

Session Agenda

- Accessibility at Microsoft
  - Overview of landscape
- Windows – Ease of Access/Accessibility
  - Reading support
  - Writing support
  - Speaking & Listening
- Accessibility Checker
  - How to access and utilize
- Language and Speech
  - Dictation
  - Translation
  - Read aloud
  - Speaker Coach
  - Microsoft Translator
- Resources

"Our mission is to empower every person and every organisation on the planet to achieve more."

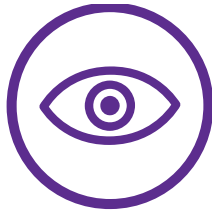
Microsoft

Promoting independent learning

Accessible technologies help students with disabilities unlock their full potential by addressing a diversity of needs:

Learning

- Dyslexia
- Dysgraphia
- Dyscalculia



Visual

- Low vision
- Blind
- Colorblind

Hearing

- Deaf
- Hard of Hearing

Mobility

- Cerebral Palsy
- Muscle Dystrophy
- Amputation

Neurodiversity

- Autism
- ADD/ADHA
- Seizure

Mental Health

- Anxiety
- Depression
- OCD

See Microsoft Accessibility features for every classroom: http://aka.ms/AccessibilitySway

Empowering every student with Microsoft Education

All students can achieve more when they have access to the right tools.

Immersive Reader

Assist with comprehension, fluency, and decoding

Word, OneNote, Outlook Web Access, and Edge

Word Prediction

Save typing time and word input with predictive text in multiple languages

Windows 10

Dictate

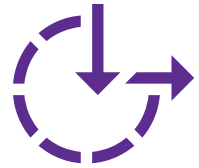
Use voice to dictate directly into documents

Word, Excel, PowerPoint, OneNote, Outlook

Editor

Write easy-to-read documents

Word, Excel, PowerPoint, OneNote, Outlook



Ease of Access

Make accessibility easier to discover, learn, and use

Vision, hearing, mobility, cognition

There are many different types of disabilities—and most are invisible

Per the World Health Organization (WHO):

"Disability results from the interaction between individuals with a health condition [and] personal and environmental factors including negative attitudes, inaccessible transportation… and limited social support."[1]

Some types of disabilities:

Mobility | Vision | Hearing | Neurodiversity

Disability is everywhere, even if not in plain sight

62%

of employees with disabilities in one study classified their disabilities as invisible[2]

>1B

of people today experience some form of disability[3]

10%

of people have access to the assistive devices they need[3]

[1]WHO. "Disability and health." November 24, 2021. [2]Center for Talent Innovation. "Disabilities and Inclusion: US findings." Sherbin, L., Kennedy, J. T., Jain-Link, P., & Ihezie, K. 2017. [3]WHO. "Assistive technology." May 18, 2018.

Microsoft Learning Tools Availability

Read Aloud & word/line highlighting	OneNote Desktop	OneNote Web	OneNote App	OneNote iOS	OneNote Mac	Word Web	Word Desktop	Word Mac	Word iPad	PowerPoint Web	Outlook Web	Outlook Desktop	Teams	Flipgrid Web, iOS, Android	Whiteboard	Forms	OneDrive + SharePoint	MakeCode	Minecraft EDU	Office Lens iOS, Android	Edge browser
Spacing and Font Size	OneNote Desktop	OneNote Web	OneNote App	OneNote iOS	OneNote Mac	Word Web	Word Desktop	Word Mac	Word Ipad	PowerPoint Web	Outlook Web	Teams	Flipgrid Web, iOS, Android	Whiteboard	Forms	OneDrive + SharePoint	MakeCode	Minecraft EDU	Office Lens iOS, Android	Edge browser	
Page Colors	OneNote Desktop	OneNote Web	OneNote App	OneNote iOS	OneNote Mac	Word Web	Word Desktop	Word Mac	PowerPoint Web	Outlook Web	Teams	Flipgrid Web, iOS, Android	Whiteboard	Forms	OneDrive + SharePoint	MakeCode	Minecraft EDU	Office Lens iOS, Android	Edge browser		
Syllables	OneNote Desktop	OneNote Web	OneNote App	OneNote iOS	OneNote Mac	Word Web	Word Desktop	PowerPoint Web	Outlook Web	Teams	Flipgrid Web, iOS, Android	Whiteboard	Forms	OneDrive + SharePoint	MakeCode	Minecraft EDU	Office Lens iOS, Android	Edge browser			
Line Focus	OneNote Desktop	OneNote Web	OneNote App	OneNote iOS	OneNote Mac	Word Web	Word Desktop	PowerPoint web	Outlook web	Teams	Flipgrid Web, iOS, Android	Whiteboard	Forms	OneDrive + SharePoint	MakeCode	Minecraft EDU	Office Lens iOS, Android	Edge browser			
Parts of Speech	OneNote Desktop	OneNote Web	OneNote App	OneNote iOS	OneNote Mac	Word Web	PowerPoint Web	Outlook Web	Teams	Flipgrid Web, iOS, Android	Whiteboard	Forms	OneDrive + SharePoint	MakeCode	Minecraft EDU	Office Lens iOS, Android	Edge browser				
Picture Dictionary	OneNote Desktop	OneNote Web	OneNote App	OneNote iOS	OneNote Mac	Word Web	PowerPoint Web	Outlook Web	Teams	Flipgrid Web, iOS, Android	Whiteboard	Forms	OneDrive + SharePoint	MakeCode	Minecraft EDU	Office Lens iOS, Android	Edge browser				
Translation	OneNote Desktop	OneNote Web	OneNote App	OneNote iOS	OneNote Mac	Word Web	PowerPoint Web	Outlook web	Teams	Flipgrid Web, iOS, Android	Whiteboard	Forms	OneDrive + SharePoint	MakeCode	Minecraft EDU	Office Lens iOS, Android	Edge browser				
Math & Equations	OneNote Web	OneNote App	OneNote iOS	OneNote Mac	Word Web	Word Desktop	PowerPoint Desktop	Forms	Edge browser												
Dictation	OneNote Desktop	OneNote App	OneNote Web	Word Web	Word Desktop	Outlook Desktop	PowerPoint Desktop	PowerPoint Web	Windows 10												

Learning Tools Flyer for PD: http://aka.ms/LearningToolsFlyer

Accessibility tools improve outcomes

Educators are better able to support academic improvement for all students with tools that enable inclusive teaching.

Microsoft Translator

Get real-time subtitles and translations of text, websites, pictures, and voice

Office Lens

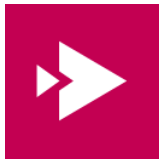
Digitise whiteboard or blackboard notes and convert them to Microsoft Word, PowerPoint, or PDF

Accessibility Checker

Make sure your Word, PowerPoint, and Excel documents are accessible

Automatic alt text

Using AI, Microsoft Translator will automatically provide image descriptions



Microsoft Stream

Get automatic transcriptions of audio or video recordings

Windows accessibility

Inclusively designed for everyone

> A more accessible Windows experience has the power to help tackle the 'disability divide'—to contribute to more education and employment opportunities for people with disabilities across the world.
>
> — Jeff Petty, Windows Accessibility Leader at Microsoft[1]

Microsoft's inclusive design principles

1. **Recognize exclusion**
   Reflect how people really are
2. **Solve for one, extend to many**
   Design to benefit people universally
3. **Learn from diversity**
   Put people in the center from the start

[1]Microsoft. "What's coming in Windows 11 Accessibility." Jeff Petty. July 1, 2021. [2]Microsoft Inclusive Design website.

See the video here

John

Designer, Input and Accessibility

Redesigned for productivity, creativity, and ease—for everyone

People with disabilities were engaged in designing Windows 11 from the start. The resulting operating system aims to **provide a delightful experience for everyone**—with disabilities and without.

Your device, your way
Navigate your computer with keyboard shortcuts, voice, or eye control

Tailor your view
Customize your display to see every detail—or skip the screen entirely

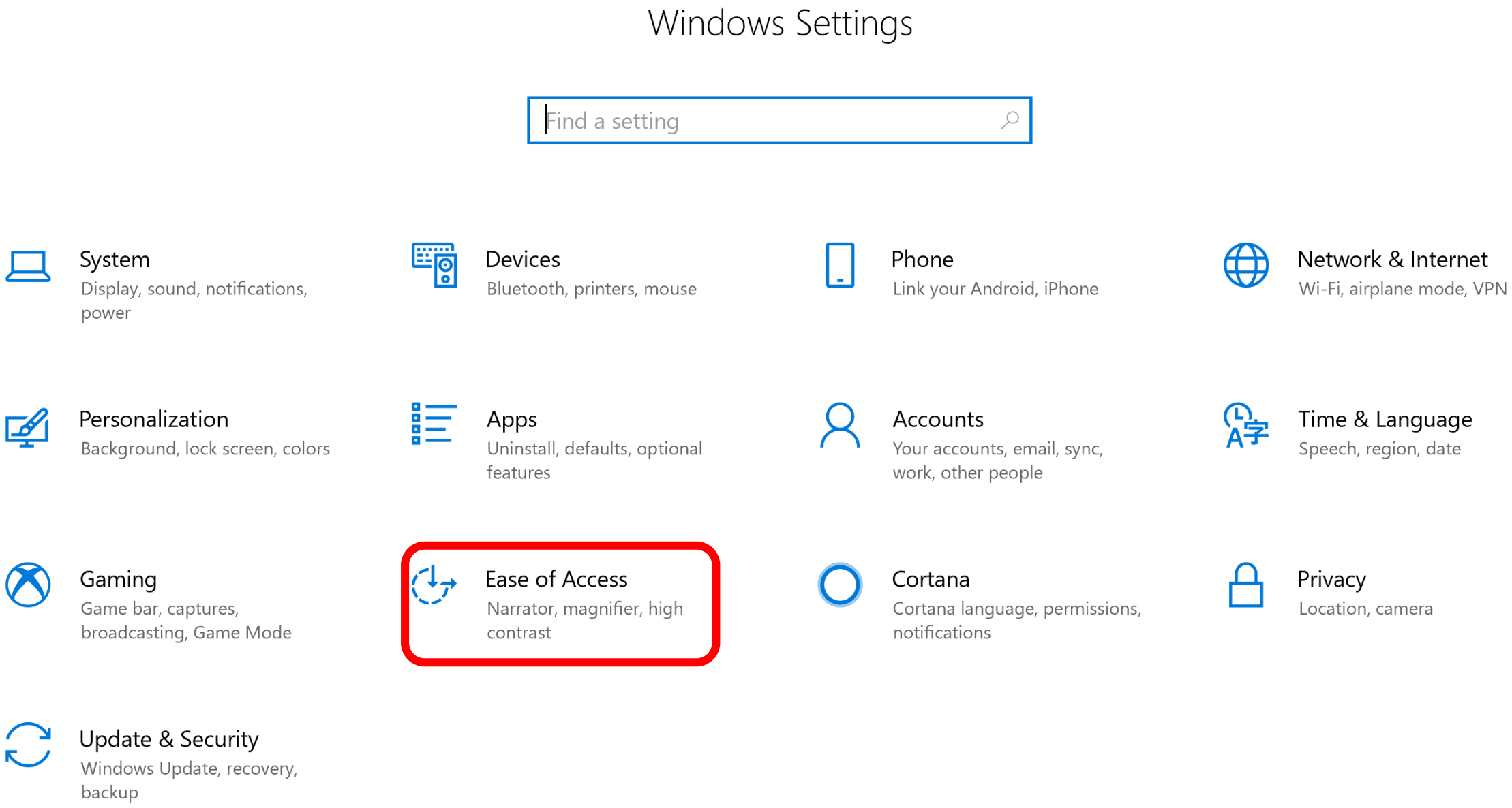
Catch every word
Experience full-spectrum sounds or use captions instead

Get in the zone
Cut down on distractions and focus on the task at hand

At its core, Windows 11 provides

- Best productivity and collaboration experiences
- Industry-leading security from chip to cloud
- Simplicity and lowest total cost of ownership

Make your PC easier to use - Windows 10 Ease of Access



Windows 11 builds on the strengths of Windows 10

Mobility

Vision

Hearing

Neurodiversity

Maintain current Windows 10 capabilities

- Touch gestures for Windows
- On-Screen Keyboard
- Speech recognition commands
- Voice recognition
- Windows Hello
- Improve usability of mouse, keyboard, and other input devices
- Touch keyboard
- Eye control

- Support for third-party screen readers
- Adjust screen display size and color
- Make the mouse pointer more visible
- Color filters
- Magnifier
- Keyboard shortcuts in Windows and across apps

- Hear all sounds in one channel
- Display audio alerts visually
- Extend notifications on screen

- Enable text suggestions in Windows
- Turn off animations, background images, and more
- Make notifications stick around longer
- Modify notification settings with Focus assist
- Snap, order, and create multiple desktops

Improve on Windows 10 capabilities

- **Voice Typing**

- **Narrator**
- **Use a new, more attractive set of contrast themes**

- **Live captions**
- **Change Closed Caption themes**
- **Use text or other alternative to sound**

- **Simplify the Start menu**
- **Read with fewer distractions**
- **Choose which apps display notifications**
- **Task bar personalization**

[1]Use Windows DVD player app with Narrator is a retired Windows 10 feature. [2]Basic tasks with news and interests is a retired Windows 10 feature. Visit the Accessibility support for Windows support page for a full list of accessibility features across Windows versions.

Reimagined Accessibility Settings

- Easily identify the newly renamed Accessibility Settings (formerly “Ease of Access”)
- Personalize your Windows 11 experience for vision, hearing, and interaction method from just one menu

The redesigned settings illustrate our overall approach to accessibility in Windows 11. It’s easier to find and control, incorporates feedback from users of various backgrounds and abilities, and, ultimately, celebrates the fullness of human ability.

= Feature improved for Windows 11

Microsoft

Live Demo

Learn more about Windows 11 accessibility

Websites

Windows 11 accessibility homepage
microsoft.com/accessibility/windows

Accessibility support for Windows
aka.ms/Windows/AccessibilitySupport

Accessibility information for IT Professionals
aka.ms/AccessibilityAdminGuide-Windows

Blogs

New accessibility features coming to Windows 11
aka.ms/Windows/A11yBlog05-2022

Making Windows 11 the most inclusively designed version of Windows yet
aka.ms/Windows/A11yBlog10-2021

Video

Designing an inclusive Windows 11 for a hybrid world
aka.ms/Windows/Accessibility-Ignite2021 or watch on next slide

Creating Accessible Content

Accessibility Checker

STEP 1: READ (3 Points)

- ❑ CLICK HERE to open three different examples (or mentor texts) of 100 word memoirs. Read through all three. Pick the 100 word memoir you like the best and copy and paste it in the box below.

- ❑ Read the memoir again. What do you like about it? Highlight a line or two that you think is exceptionally interesting.
- ❑ Each mentor text has a "So What?" ending that tells the reader why the moment matters to the author. In a different color, highlight the "So what?" ending.

STEP 2: CHOOSE (2 Points)

- ❑ In Step 3, you will be writing your own 100 word memoir. In this step, you will pick one moment from your life and write about it. In your JOURNAL this week you brainstormed and created lists about memories you have associated with being 12, your hands, a space in your home, or scars you have on your body. Review your journal entries.

- ❑ Pick one memory to write about (it can be from your journal or a different moment from your life) and write a brief description of it in the box below.

https://sway.office.com/ApPG9XAOyZZos9mR

Sway

Play Share

Storyline Design

My Sways

Create new

Duplicate this Sway

Save as Template

Print

Export

Settings for this Sway

Accessibility Checker

Accessibility View

Help

Ashley Kozak
AshleyK@M365EDU475640.OnMicr

Sign out

Activity

Chat

Teams

Assignments

Calendar

Calls

Files

...

Apps

All teams

Physical Science

Home page

Class Notebook

Assignments

Grades

Reflect

Channels

General

1 - Oceans Unit

2 - Astronomy Unit

3 - Physics Unit

Group A

Group B

Class Notebook

File Home Insert Draw View Help Tell me what you want to do Open in Browser Editing

Immersive Reader Zoom 100% Zoom to 100% Page Color Rule Lines Page Versions Show Authors

Oceans

Wednesday, September 28, 2022 7:17 AM

An ocean is a body of saline water that composes much of a planet's hydrosphere. On Earth, an ocean is one of the major conventional divisions of the World Ocean. These are, in descending order by area, the Pacific, Atlantic, Indian, Southern, and Arctic Oceans. The word sea is often used interchangeably with "ocean" in American English but, strictly speaking, a sea is a body of saline water partly or fully enclosed by land.

The mid-ocean ridges of the world are connected and form a single global mid-oceanic ridge system that is part of every ocean and the longest mountain range in the world. The continuous mountain range is 65,000 km long.

Accessibility

Check Accessibility

Live Captions Add-in

Live Captions

AutoSave On | Animal Kingdom | Saved | Search (Alt+Q) | Ashley Kozak

File Home Insert Draw Design Transitions Animations Slide Show Record Review View Help Shape Format Accessibility | Record | Present in Teams | Share

Check Accessibility (Review)
Font Color | Text Highlight Color | Shape Fill | Shape Outline (Color & Contrast)
Spelling | Slide Title | Reading Order Pane | Alt Text | Group | Link Text (Screen Reader)
Always Use Subtitles | Subtitle Settings | Insert Captions (Captions & Subtitles)
Accessibility Help (Resources)

1
2 **The life of a fox**
- Foxes are small to medium-sized, omnivorous mammals belonging to several genera of the family Canidae. They have a flattened skull, upright triangular ears, a pointed, slightly upturned snout, and a long bushy tail (or brush).

3

An ocean is a body of saline water that makes up much of a planet's mass. The ocean is one of the major conventional divisions of the planet. These are, in descending order by area, the Pacific, Atlantic, Indian, Southern, and Arctic Oceans. The word sea is often used with "ocean" in American English but a sea is a body of saline water partly or fully enclosed by land. (Ocean, n.d.)

How do oceans work?

Click to add notes

Accessibility

Inspection Results

Errors
- Missing alternative text (5)
- Missing slide title
  - Slide 1
  - Slide 3

Warnings
- Check reading order
  - Slide 1

Keep accessibility checker running while I work

Additional Information

Why Fix?
Slide titles are used for navigation and selection by those who are not able to view the slide.

Steps To Fix:
Choose the Slide Title command from the Accessibility ribbon tab to set the selected object as the title. If you don't want to set one of the objects on the slide as the title, choose Add Slide Title or Add Hidden Slide Title from the dropdown and type a unique description for the slide.

Tip: you can verify that the slide has a title by looking for the bold text

Read more about making documents accessible

Student can turn on “Rehearsal mode” with the microphone

Receive on-screen guidance about:

- Pacing: when user talks too fast or too slow
- Disfluency: when user is speaking with filler words such as “um”, “ah”, “basically”, etc.
- Sensitive/inclusive phrases: insensitive phrases that are biased toward people with different gender, disability, race
- Narration: detecting when user is just reading off the slide

At the end of each rehearsal session, the presenter receives a detailed report with metrics for additional practice

Presenter Coach will be available on PowerPoint on the web

Microsoft

Live Demo Part 2

Language and Speech

Language and speech Content

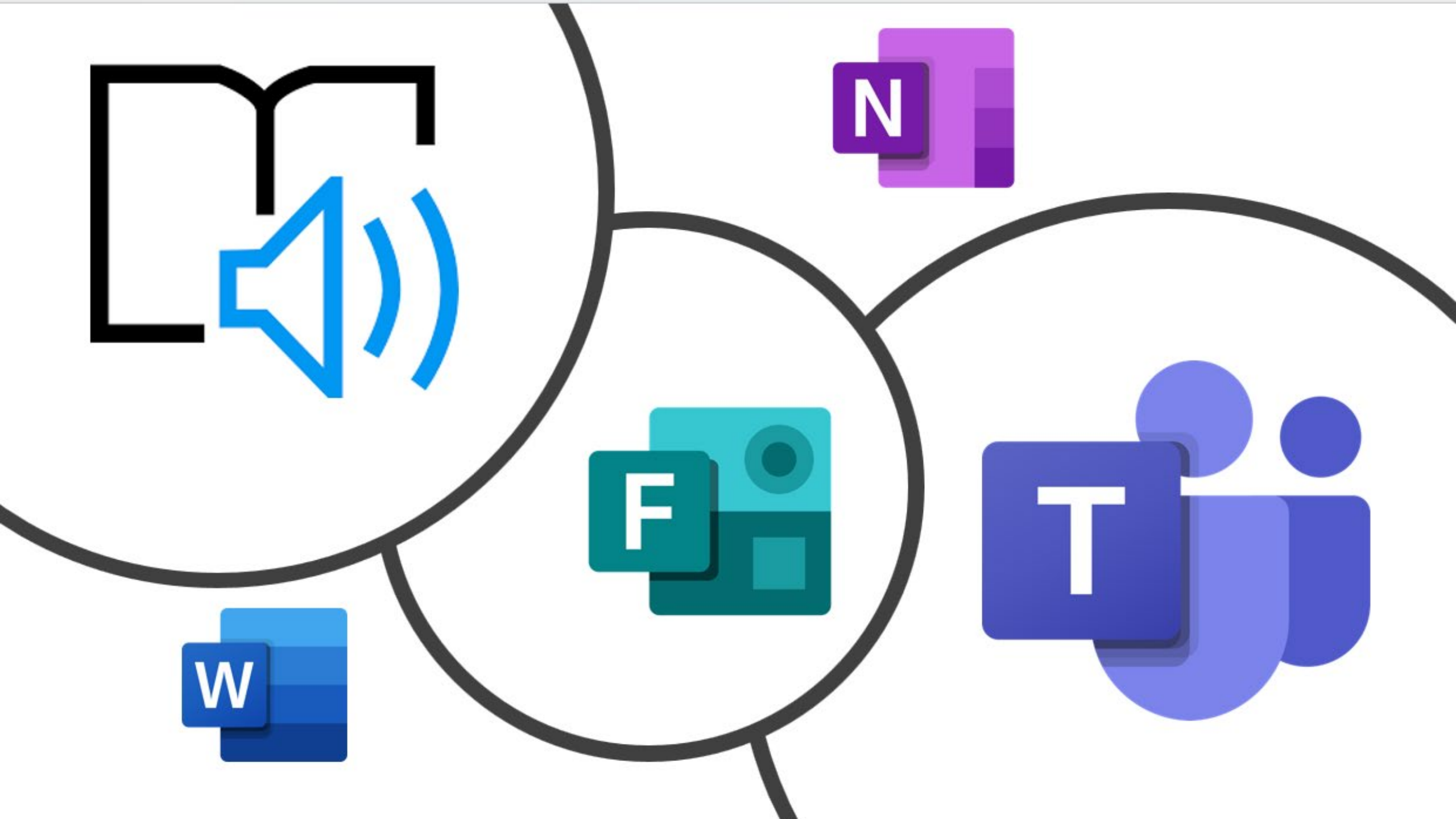
AI has incredible potential to improve the lives of people with disabilities

Quotes from Aditi, data scientist at Microsoft who uses a screen reader

Intro

Jupyter & Azure ML notebooks

Trying new things


N
F
T
W

even enthusiasm over 2 lessons (about 1hr 30mins of actual writing time).

Tommy McAcid Pants

1956

At nuclear ~~acid~~ power plant fell into waste + transformed.

He can eat everything apart from stuff — what he eats helps him grow. Clean stuff shrinks him

(scientist)

This is a story planning sheet for a 9 year old boy who is dyslexic

Beginning:

When

known

who

Where

End:

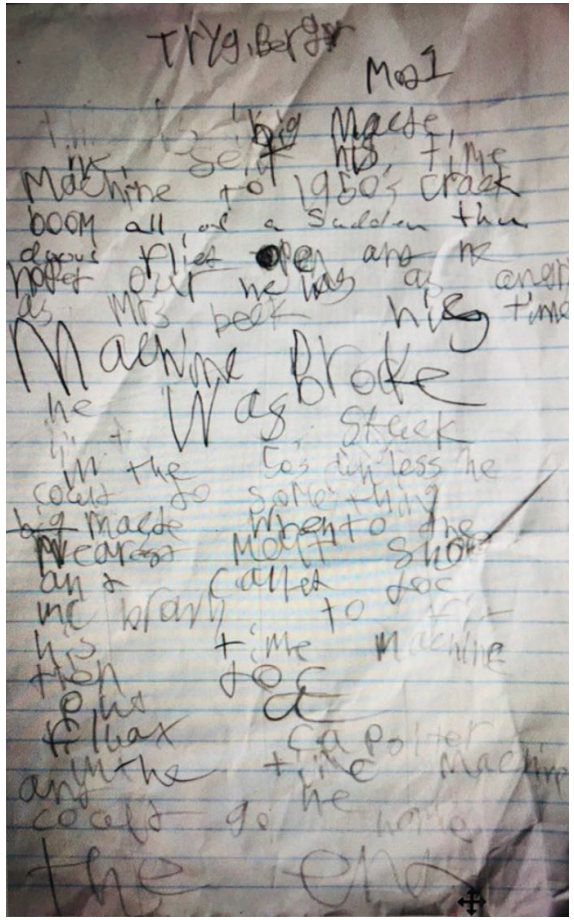
Clean cup of water thrown on him + he dissolves — shrinl to normal size

The same child then wrote this story based on the plan, completely independently, on OneNote.

Crazy Creatures

One day around 1956 a scientist was working around the radioactive waste at the nuclear plant where he worked. Then the alarm went off and he fell into the radioactive waste. Suddenly he turned into a body of acid! Everyone ran and screamed, "Monster run!" Suddenly the acid monster rose up and ate the whole nuclear plant. He grew to the height of a skyscraper suddenly the fire department accidentally sprayed the monster with clean water. Then he shrank and the government got every fire truck in America to spray him until he was very small. They locked him away

7th Grader Before and After with Dictate



Tryg Berger Mod 1.

Big Macky D the alien time traveler set his time machine to 1878 just before the Minneapolis Minnesota Washburn, A mill flour explosion. Crack, boom, bang, he arrived and all of a sudden, then is door flew open. He hopped out into a 1950's malt shop. Chubby checker was playing on the juke box in the corner. He was as angry as Mrs. Beck. He realized that his time machine had broken and he was stuck in the 1950's unless he could do something to fix it.

Big Macky D went to the nearest phone booth and called Doc Brown To help fix The Time Machine. He ate a burger and malt while he waited for Doc to arrive from the year 2018.

Microsoft

Live Demo Part 3

Achieving more with accessibility – Inclusion in Action series

Andrew, a young boy who read for the first time with Learning Tools.

Justin, a young man who uses Office 365 to communicate with the world.

Veronica, a student with low vision who created a perfect Sway.

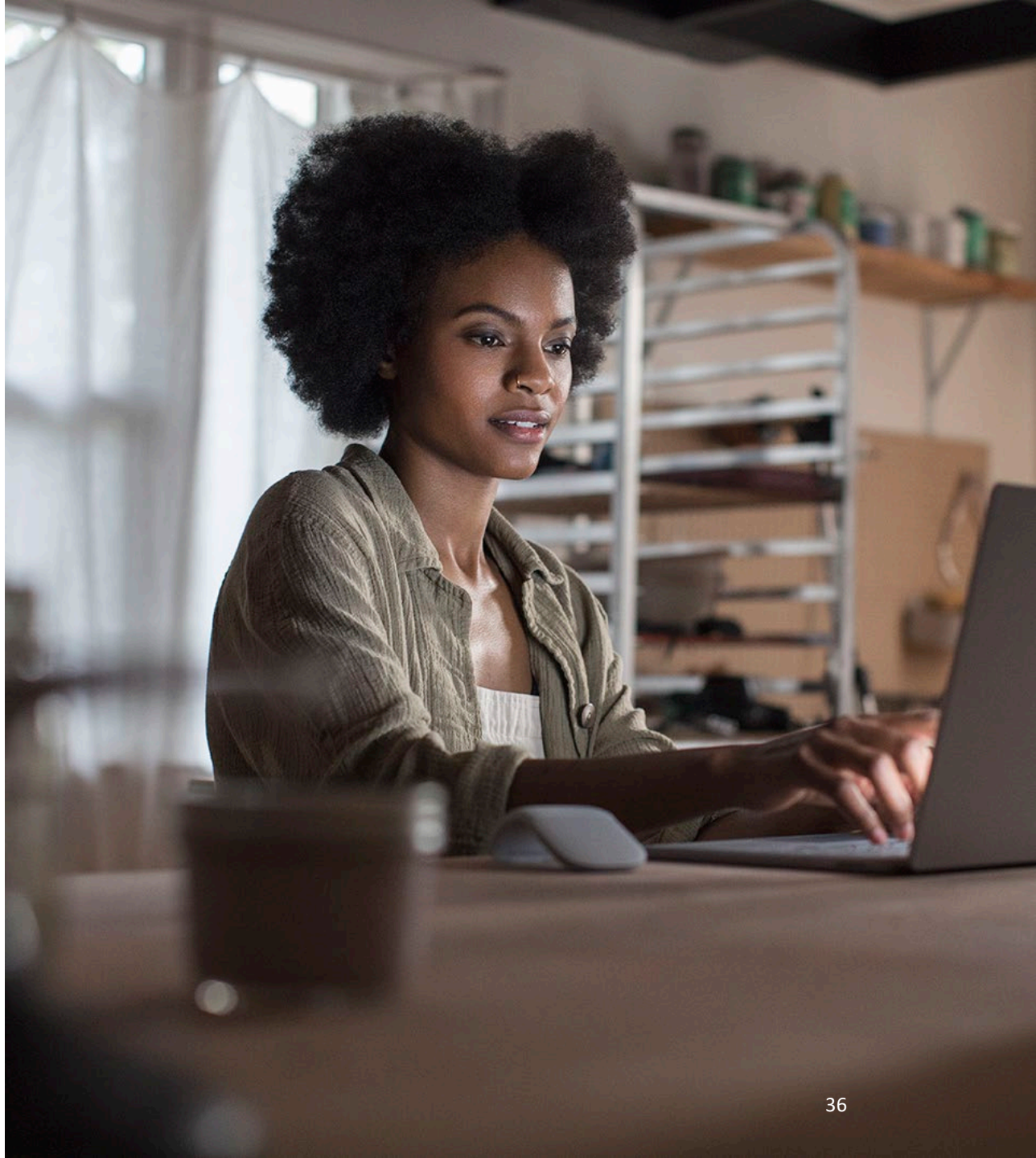
Cameron, a university lecturer who believes it is an exciting time to be a blind person with Seeing AI.

Jack, a teacher who shows students what is possible with Office 365 and Narrator.

Steve, who navigated a medical crisis with OneNote to access printed documents.

Accessibility Learning Webinar Series

- Interactive online event where anyone can learn about the latest Microsoft accessibility features, productivity tips for school and work, or technology that enables a more independent and full life.
- Sign up for webinars: Accessibility Learning Webinars
- Watch completed webinars on YouTube



Do-it-yourself accessibility

- A series of videos from Microsoft Customer Support covering eye control, text size, screen reader use, assistive technology, and more.
- Accessibility videos playlist

Chitra with the Microsoft Accessibility team.

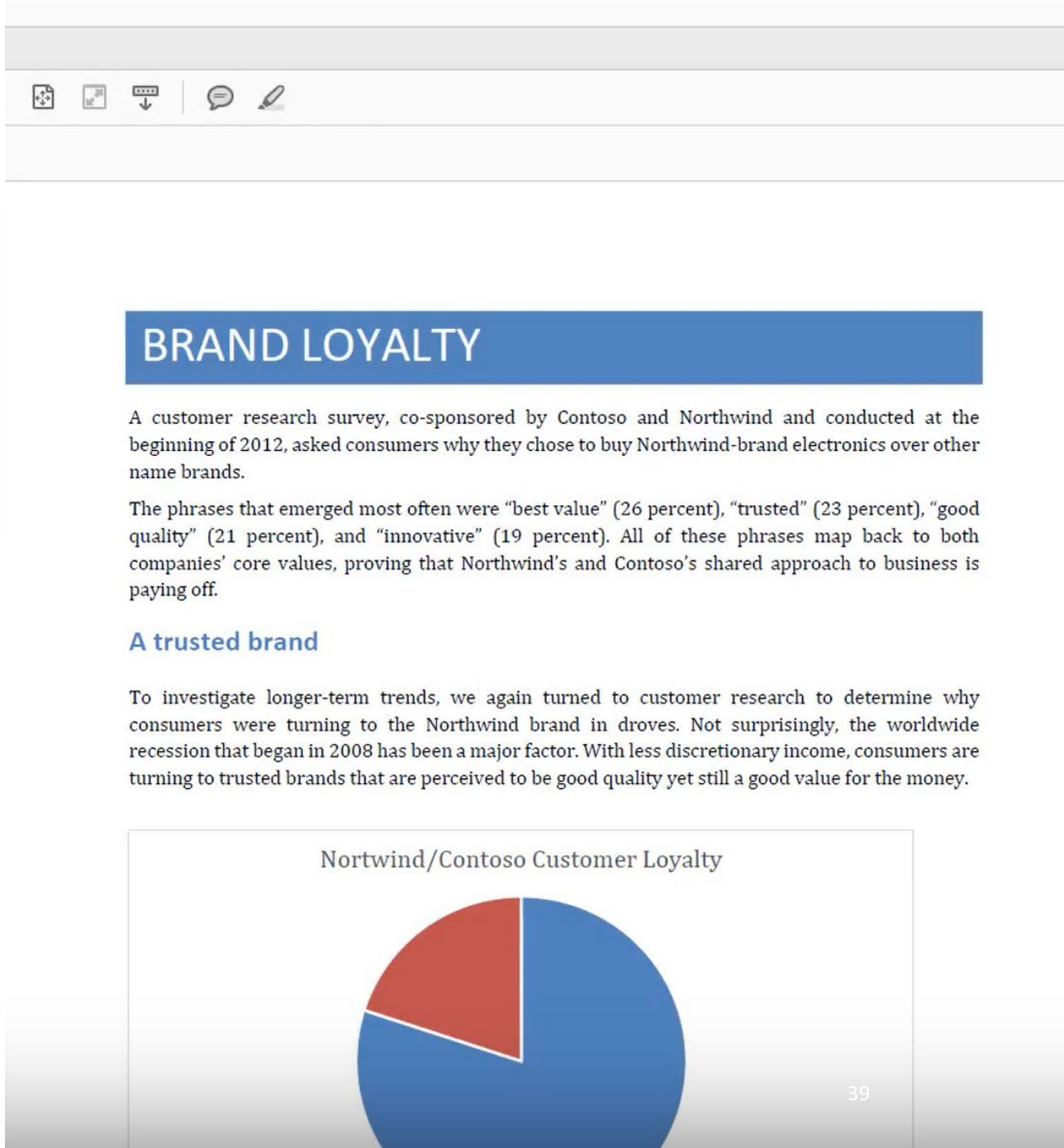
Accessibility At-A-Glance series

- Accessibility at a Glance is a series of short videos built to help you learn how to create an inclusive digital experience for people with disabilities.
- Watch Accessibility At-A-Glance videos

An animated Guy Barker is among Microsoft employees featured in the Accessibility At-A-Glance series.

PDF Accessibility Training

- Learn how to create accessible PDF documents in this series.
- Watch the PDF Accessibility Training videos



BRAND LOYALTY

A customer research survey, co-sponsored by Contoso and Northwind and conducted at the beginning of 2012, asked consumers why they chose to buy Northwind-brand electronics over other name brands.

The phrases that emerged most often were "best value" (26 percent), "trusted" (23 percent), "good quality" (21 percent), and "innovative" (19 percent). All of these phrases map back to both companies' core values, proving that Northwind's and Contoso's shared approach to business is paying off.

A trusted brand

To investigate longer-term trends, we again turned to customer research to determine why consumers were turning to the Northwind brand in droves. Not surprisingly, the worldwide recession that began in 2008 has been a major factor. With less discretionary income, consumers are turning to trusted brands that are perceived to be good quality yet still a good value for the money.

Nortwind/Contoso Customer Loyalty

Office Accessibility

- Find resources for people with disabilities and how to make content accessible for everyone at the Office Accessibility Center
- Office 365 provides best-in-class apps and powerful cloud services with accessibility built-in. Learn about accessibility capabilities in Office 365
- Get accessible templates for Office
- Office accessibility video training

Windows 10

Get Windows 10 accessibility help

- Learn about Ease of Access features
- Complete guide to Narrator
- Color filters
- Resources for low vision
- Closed caption settings

AI for Accessibility

AI for Accessibility is a $25 million, 5-year program to accelerate the development of accessible and intelligent AI solutions to benefit persons around the world with disabilities.

- AI for Accessibility website
- Check out how our grantees are using AI powered technology to make the world more inclusive. Accessibility Projects

Feature Availability

	OneNote				Word				PPT	Outlook		Other					
	Online	Desktop	Windows 10	iPad	Online	Office 365	Mac	iPad	Web	Online	Office 365	Teams	Edge	Forms	Flipgrid	Minecraft	Office Lens
Read Aloud	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Spacing and Font Size	√	√	√	√	√	√	√	√	√	√		√	√	√	√	√	√
Syllables	√	√	√	√	√	√	√		√	√		√	√	√	√	√	√
Parts of Speech	√	√	√	√	√				√	√		√	√	√	√	√	√
Dictate	√	√	√		√	√			√		√						
Line Focus	√	√	√	√	√				√	√		√	√	√	√	√	√
Picture Dictionary	√	√	√	√	√				√	√		√	√	√	√	√	√
Translation	√		√	√	√				√	√		√	√	√	√	√	√
Math Equation support	√	√	√		√	√											

Learning Tools Flyer – aka.ms/learningtoolsflyer

Special Education and Accessibility Resources for Remote Learning

31 videos • 16 views • Updated 6 days ago

Microsoft Education

SUBSCRIBED

1

You Can Improve Reading Skills With Microsoft Learning Tools
Microsoft Education

2

What is the Immersive Reader?
Microsoft Education

3

You Can Use Immersive Reader In Minecraft: Education Edition
Microsoft Education

4

You Can Use Immersive Reader In Microsoft Teams
Microsoft Education

5

You Can Use Office Lens With Immersive Reader
Microsoft Education

6

You Can Use Immersive Reader In ALL These Places!
Microsoft Education

7

District Spotlight | Accessibility at Scale with Microsoft Learning Tools
Microsoft Education

8

How to have a multilingual parent-teacher conference using Microsoft Translator
Mike Tholfsen

Learning Tools – Accessibility Playlist

Thank you!

Education Success Manager

Andrew.Balzer@microsoft.com

Twitter.com/AlphaBalzer

Linkedin.com/in/andrew-balzer