### Supporting Students with Dyslexia with Microsoft Tools in Every Learning Environment

Rachel Berger Rachel.berger@iamdyslexia.com Twitter: @rachelmberger

# Glosing The Gap

## Supporting Dyslexia in any Environment with FREE Microsoft tools

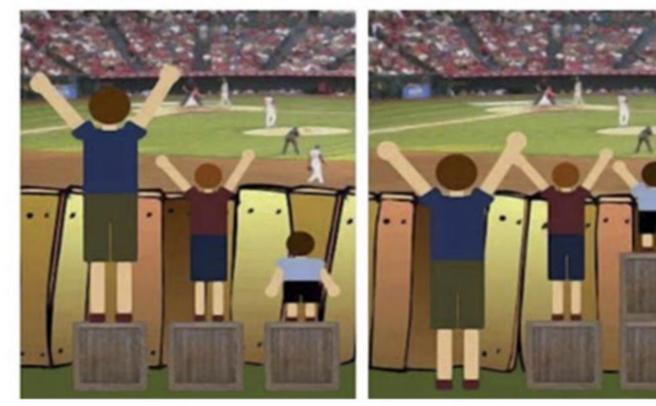


### **Financial Disclosures**

• I am in a consulting role for Microsoft Education



### EQUALITY vs. EQUITY



Equality = Sameness GIVING EVERYONE THE SAME THING  $\longrightarrow$  It only works if everyone starts from the same place

Equity image credit: Please note, this image was adapted from an image adapted by the City of Portland, Oregon, Office of Equity and Human Rights from the original graphic: http://indianfunnypicture.com/img/2013/01/Equality-Doesnt-Means-Justice-Facebook-Pics.jpg



### **Rachel Berger**

- Disability & Accessibility Engagement PM Microsoft
- Education Experience PM Microsoft
- Director Decoding Dyslexia MN, Nonprofit
- Individual with dyslexia



### Building a foundation for future success

Inclusive education tools give more students personalized access to their curriculum, optimize teacher time, and improve learning outcomes.



Students grow their potential and gain independence

Teachers are more empowered to engage every learner

Schools build reputations as positive places that promote equity and inclusion

### Engaging every learner in a diverse classroom

With daily challenges—and limited resources—educators need to be confident they are able to optimize learning for a diverse population, as well as meet professional goals and standards.

73%

of teachers report working in classrooms with student reading levels that span four or more grade levels



of teachers in the US have English as a second language learners in their classrooms

72%

of classrooms have special education students



of instructional time can be lost to managing students' needs, including assistive technology

### 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

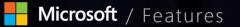
- Autism
  - ADD/ADHA
  - Seizure



Mental Health

- Anxiety
  - Depression
- OCD

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





Microsoft Hackathon 2015 winner extends OneNote to improve learning outcomes for students

### Inclusive Classroom





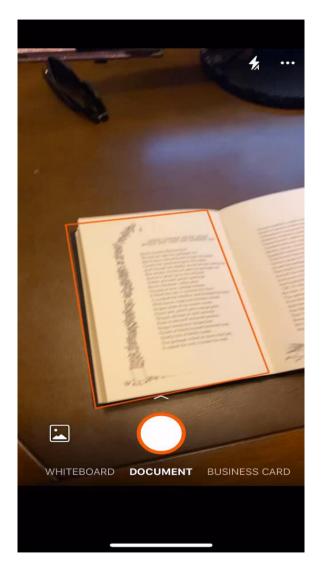
## Reading More Effectively



### Demo



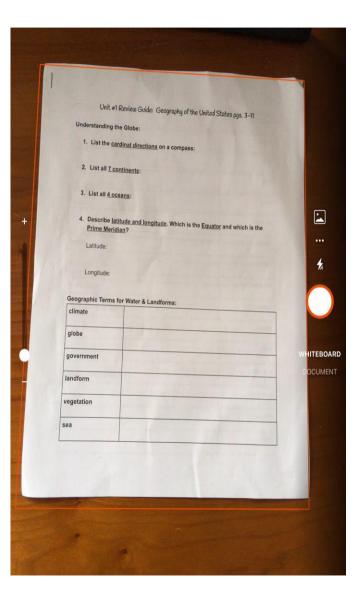
### Microsoft Lens







#### Office Lens







## "Immersive Reader is a game changer in my Special Education Class"

### State Measured Reading Speeds are Increasing



## Leveling the Playing Field with Microsoft Learning Tools

Katherine McKnight, PhD Center for Evaluation & Study of Educational Equity RTI International Learning Tools 3rd party research study – RTI

- 4th grade, 6th-8th, and 10-12th grade students
- Reading Comprehension scores improved
- Writing improved
- Non-cognitive processes improved
- Equal access of materials
- Full Report:

http://aka.ms/LearningToolsStudy

### 10 Point Improvement in 4<sup>th</sup> grade Comprehension Scores



### Study with British Dyslexia Association and Knowl Hill

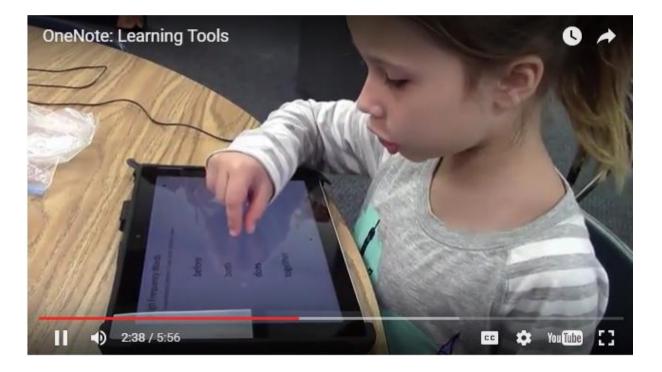
## Trial finds using Microsoft's OneNote software boosts dyslexic children's learning

A trial finds 16 out of 18 children showed improved behaviour and 11 out of 16 saw their reading comprehension get better.

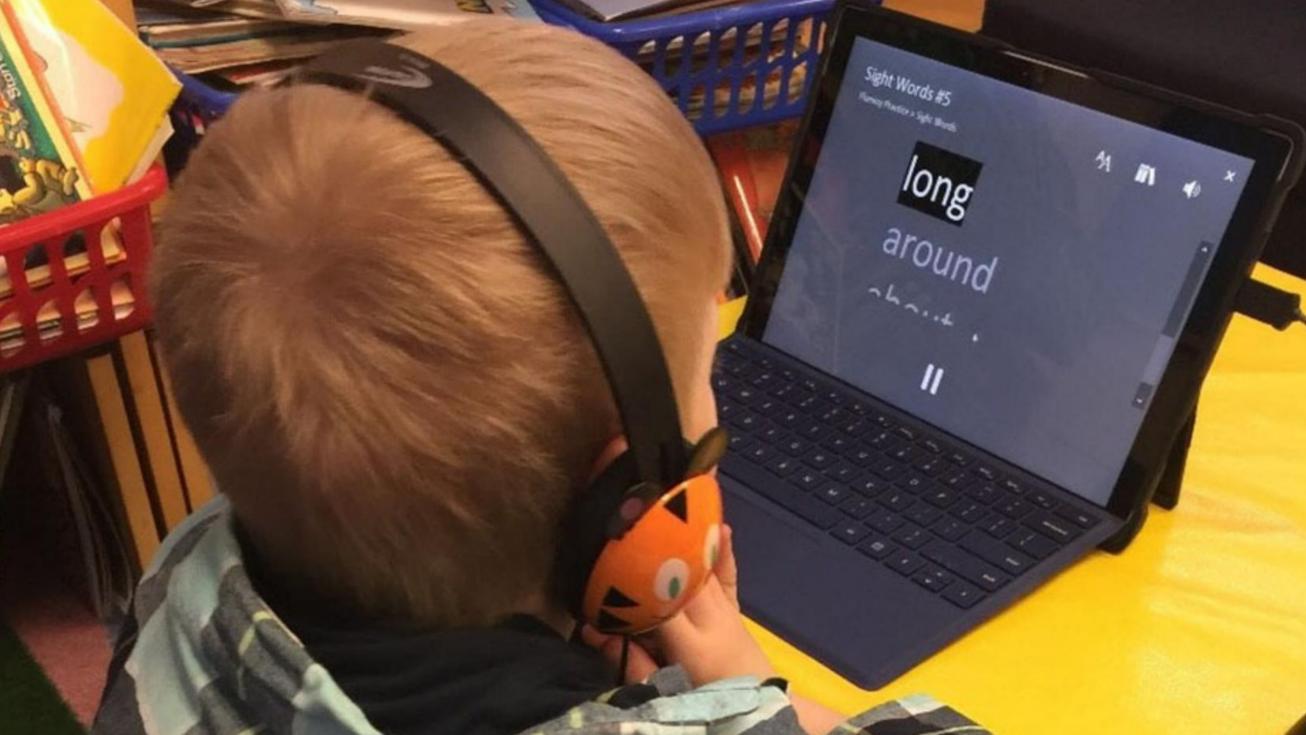
11:21, UK, Friday 10 February 2017

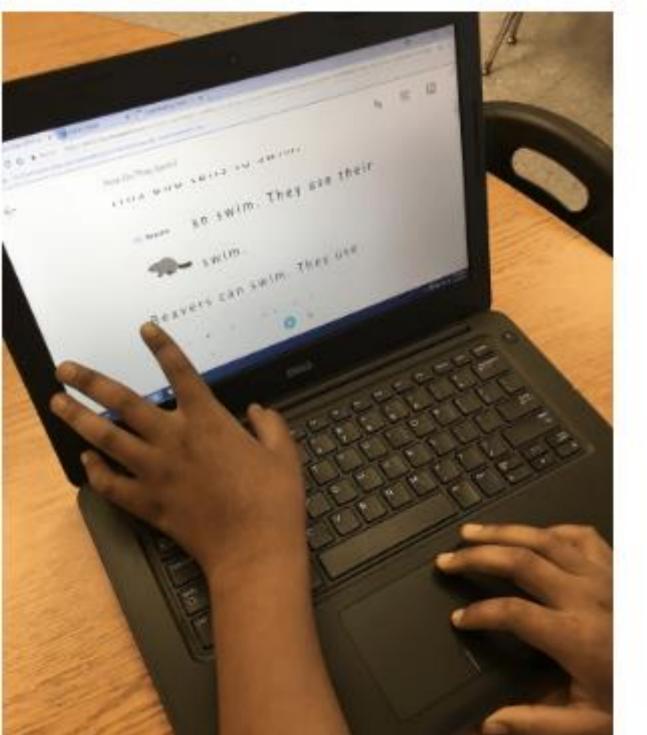


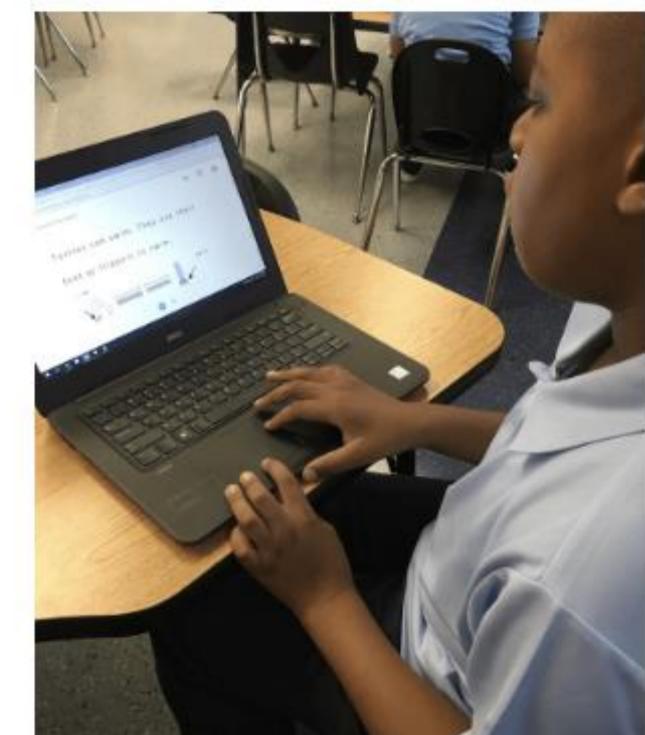
### 1<sup>st</sup> Grade Emerging Readers Using Immersive Reader











### Immersive Reader Feedback

### "

"I just wanted to let you known that today a mom spoke to me and she started crying. Her son was finally able to read on his own thanks to the Immersive Reader. I am currently changing the lives of so many children"

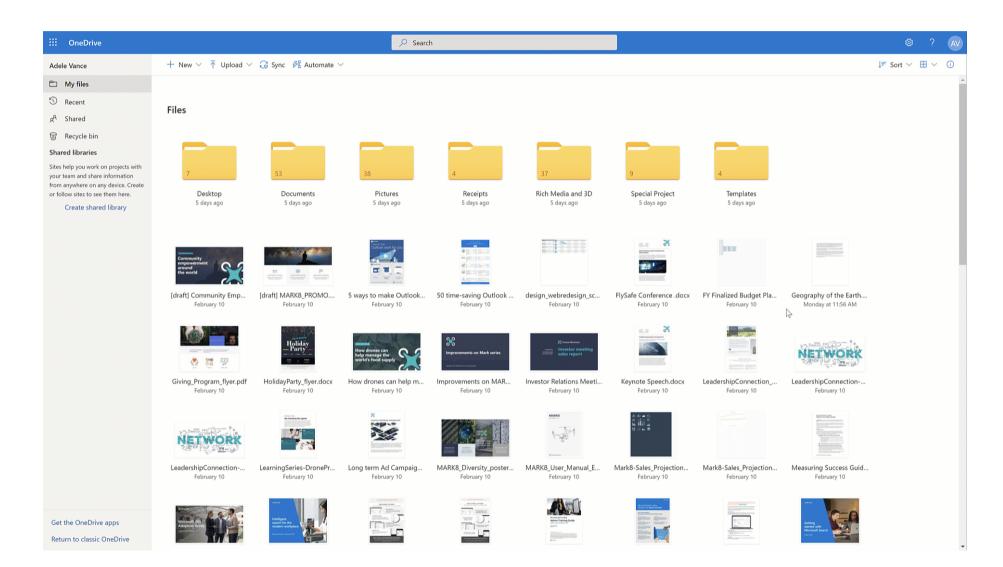
"

Jennifer Verschoor, Educator from Argentina

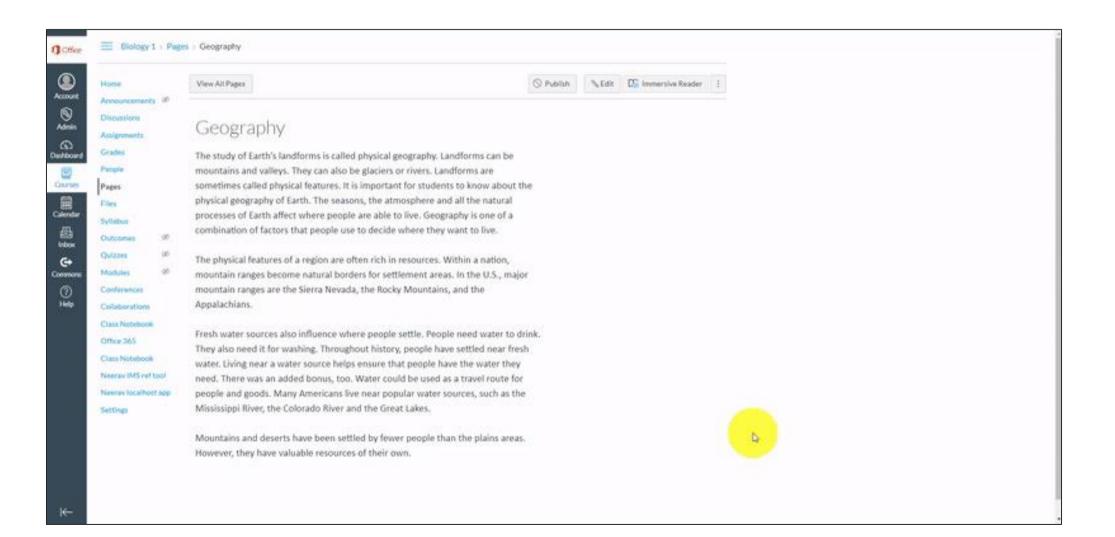
### Forms Immersive Reader

Reading Assignment
Geography The study of Earth's landforms is called physical geography. Landforms can be mountains and valleys. They can also be glaciers, lakes or rivers. Landforms are sometimes called physical features. It is important for students to know about the
physical geography of Earth. The seasons, the atmosphere and all the natural processes of Earth affect where people are able to live. Geography is one of a combination of factors that people use to decide where they want to live. The physical features of a region are often rich in resources. Within a nation, mountain ranges become natural borders for settlement areas. In the U.S., major mountain ranges are the Sierra Nevada, the Rocky Mountains, and the
Appalachians. 1. What are "landforms"?
Valleys
C Lakes Rivers
<ul> <li>All of the above</li> </ul>
Back Submit
This content is created by the owner of the form. The data you submit will be sent to the form owner. Never give out your password. Powered by Microsoft Forms   Privacy and cookies   Terms of use

### **Coming Soon: Immersive Reader in OneDrive**



### **Immersive Reader for 3rd Parties - Canvas**

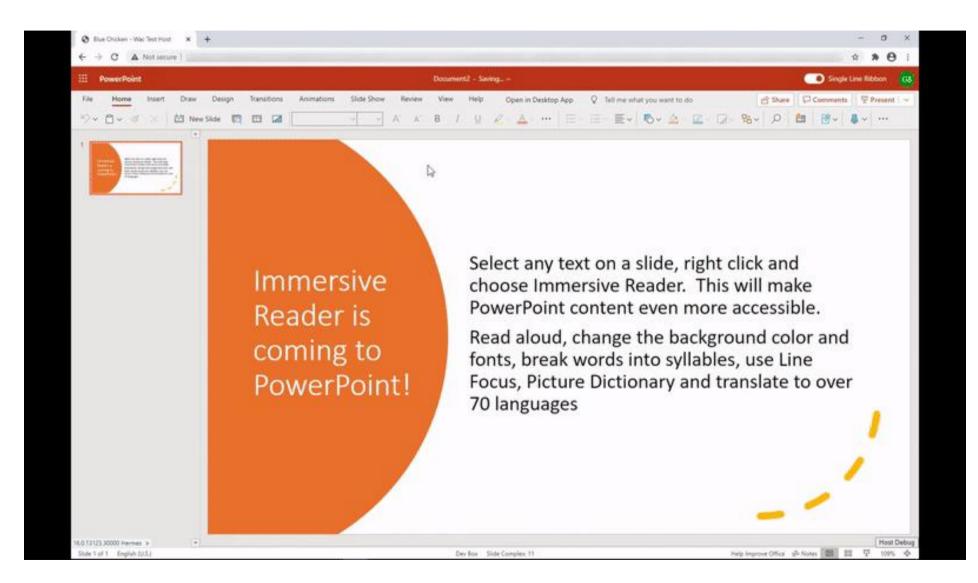


### Tell your favorite EdTech app or publisher!

http://aka.ms/ImmersiveReaderCS



### **Coming Soon: Immersive Reader in PowerPoint**



# All About Immersive Rader – MEC Page <a href="https://aka.ms/AllAboutImmersiveReader">https://aka.ms/AllAboutImmersiveReader</a>



#### What is the Immersive Reader?

The Microsoft Immersive Reader is a free tool, built into Word, OneNote, Outlook, Office Lens, Microsoft Teams, Forms, Flipgrid, Minecraft Education Edition and the Edge browser, that implement proven techniques to improve reading and writing for people regardless of their age or ability. On the right is a 15 minute comprehensive demo of the tool, and below is a short 90 second YouCan video.

Get this page as a PDF: http://aka.ms/ImmersiveReaderFlyer



#### Building a foundation for future success

5

Inclusive education tools give more students personalized access to their curriculum, optimize teacher time, and improve learning outcomes.

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### **Dyslexia Awareness Curriculum – Parts 1 and 2**

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http://aka.ms/MECMadebyDyslexia

#### < Back to overview

Dyslexia Awareness Part 2, in partnership with Made By Dyslexia Module 6: Default Title 1



#### http://aka.ms/MECMadebyDyslexia2

### 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	Outlook Web	Outlook Desktop	Teams	Flipgrid	Flipgrid iOS	Flipgrid Android	White board	Forms	Minecraft Edu	Office Lens	Edge browser
Spacing and Font Size	OneNote Desktop	OneNote Web	OneNote App	OneNote iOS	OneNote Mac	Word Web	Word Desktop	Word Mac	Word Ipad	Outlook Web	Outlook Desktop	Teams	Flipgrid	Flipgrid iOS	Flipgrid Android	White board	Forms	Minecraft Edu	Office Lens	Edge browser
Page Colors	OneNote Desktop	OneNote Web	OneNote App	OneNote iOS	OneNote Mac	Word Web	Word Desktop	Word Mac	Word iPad	Outlook Web	Teams	Flipgrid	Flipgrid iOS	Flipgrid Android	White board	Forms	Minecraft Edu		Edge Browser	
Syllables	OneNote Desktop	OneNote Web	OneNote App	OneNote iOS	OneNote Mac	Word Web	Word Desktop	Outlook Web	Teams	Flipgrid	Flipgrid iOS	Flipgrid Android	White board	Forms	Minecraft Edu	Office Lens	Edge Browser			
Line Focus	OneNote Desktop	OneNote Web	OneNote App	OneNote iOS	OneNote Mac	Word Web	Word Desktop	Outlook Web	Teams	Flipgrid	Flipgrid iOS	Flipgrid Android	White board	Forms	Minecraft Edu	Office Lens	Edge Browser			
Parts of Speech	OneNote Desktop	OneNote Web	OneNote App	OneNote iOS	OneNote Mac	Word Web	Outlook Web	Teams	Flipgrid	Flipgrid iOS	Flipgrid Android	White board	Forms	Minecraft Edu	Office Lens	Edge Browser				
Picture Dictionary	OneNote Desktop	OneNote Web	OneNote App	OneNote iOS	OneNote Mac	Word Web	Outlook Web	Teams	Flipgrid	Flipgrid iOS	Flipgrid Android	White board	Forms	Minecraft Edu	Office Lens					
Translation	OneNote Web	OneNote App	OneNote iOS	OneNote Mac	Word Web	Outlook Web	Teams	Flipgrid	Flipgrid iOS	Flipgrid Android	White board	Forms	Minecraft Edu	Office Lens						
Dictation	OneNote Desktop	OneNote App	OneNote Web	Word Web	Word Desktop	Outlook Desktop	PPT Desktop	PPT Web	Windows 10											
Math & Equations	OneNote Web	OneNote App	OneNote iOS	OneNote Mac	Word Web	Word Desktop	PPT Desktop	Forms												

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



### Writing efficiently with Dictation, Editor, and Word Prediction



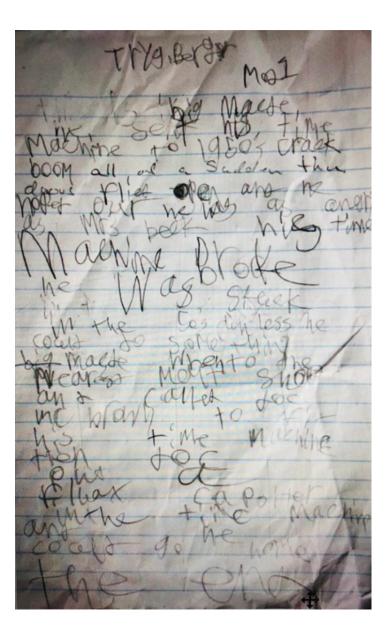
"Our pupils all pretty much without exception hate writing. The learning tools transformed writing for our pupils." - Jan Lusty, Head of School at Knowl Hill

even entrastasm over 2 lessons land He can eat everyburg apart min cue Inr 30 none of actual writing times stuff - what he eats Tommy McAcid Pants helps him grow. Clean (scientist) staff shrinks him ten This is a story planning sheet for a 9 year At nuclear acid plant old boy who is dyslexic. fell into waste + transformed. when Beginning: End: who Clean cup of water thrown as him t he dissolves I shrink to normal size

One day at school Powerbody hit his head on the door and electrocuted himself. It sent Roy & Kate to sleep and they flew home into bed ... Powerbody's work was done here. He had some other work to do so the next day Powerbody ducked down in a doorway. He bumped his head again but he felt sleepy. He automatically transported himself to the zoo without knowing it. The animals glared at him and went crazy. Powerbody electrocuted the animals and they went to sleep. Suddenly, he vanished in a puff of smoke.

This is what she then produced on OneNote

#### 7<sup>th</sup> 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.

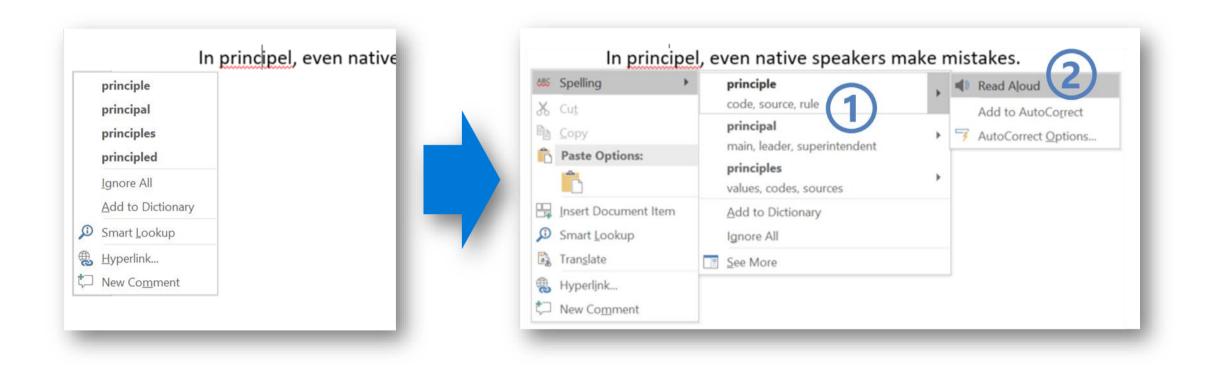
Big Macky D went to the nearest phone booth and called Doc Brown To help fix The Time Machine. He ate a burger and malt while he waited for Doc to arrive from the year 2018.



### Demo

#MicrosoftEDU

#### Improved Spell Checker - Inclusive design to benefit everyone

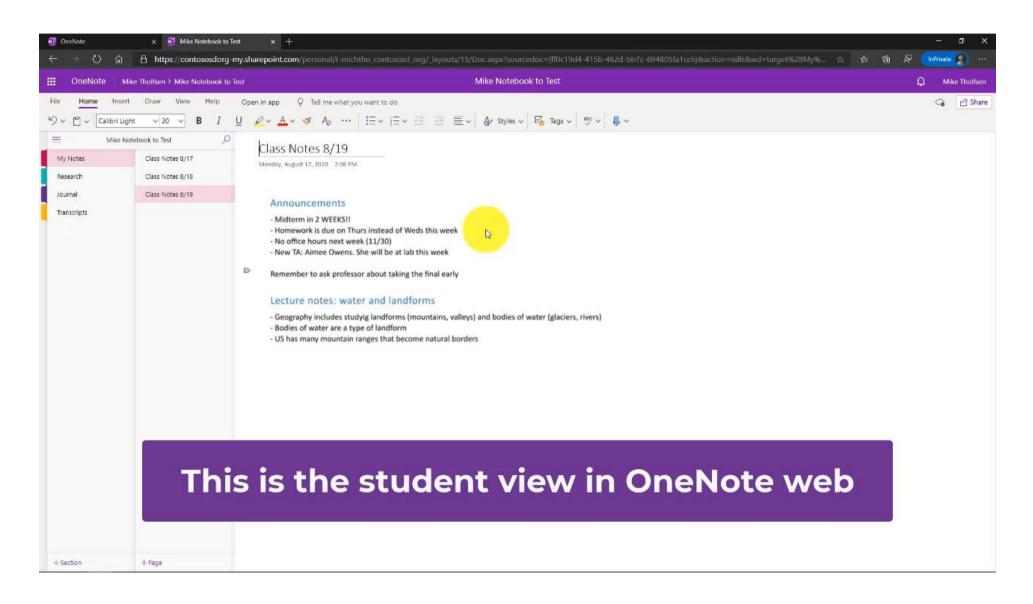


## Word Prediction, Windows 10 October 2018 Update

Settings		E I Document5 docx × + ×	- 0 ×
		$\leftrightarrow$ $\rightarrow$ O $\wp$ word	
价 Home	Typing	Word Online         Jake Cohen + Documents         Document5 - Saved	Share Jake Cohen
Find a setting		FILE     HOME     INSERT     PAGE LAYOUT     REVIEW     VIEW     Q     Tell me what you want to do     EDIT IN WORD       Image: Solution of the second secon	L land l
		AaBbCc AaBl	bCc AaBbCc AaBbCc , Prind ading Heading 1 Heading 2 Heading 3 \$2 prind \$2
Devices	Hardware keyboard	Undo Clipboard Fort Paragraph Fa	Styles 15 Editing
Bluetooth & other devices	Text suggestions for hardware keyboards are only available in English (United States)	African elephants are the largest land animals on Earth. They are slight their Asian cousins and can be identified by their larger ears that look s the continent of Africa. (Asian elephants have smaller, rounded ears.)	
A Drintors & scappors	Show text suggestions as I type	Trunks and Tusks	
<ul> <li>ᢙ Home</li> <li>Find a setting</li> <li>Pevices</li> </ul>	On	Elephant ears radiate heat to help keep these large animals cool, but so	
() Mouse	Autocorrect misspelled words I type	African heat is too much. Elephan protective protection protect sucking water into their trunks and spraying it an over memserves, sub often spray their skin with a protec	ing by erwards, they
Touchpad	Off Off		
Typing	Multilingual text prediction		
Pen & Windows Ink	Show text predictions based on the recognized languages you're typing in		
AutoPlay     AutoPlay	● Off		
🖞 USB			
	More keyboard settings		
	Advanced keyboard settings		
		An elephant's trunk is actually a long nose used for smelling, breathing drinking, and also for grabbing things—especially a potential meal. The	
		urmong, and also to graving units' especially a potential meat. In	

Supports 75 languages with the October 2018 Update

### **OneNote Live Captions (Beta)**



## Educator Needs - Teaching students to Write

- Fixing everything is not productive... encourage students to choose what's most important
- Tackling everything at once can be overwhelming
- ✓ Want tools to let students selfassess their writing... clearly see what to work on



## Writing Feedback

#### "

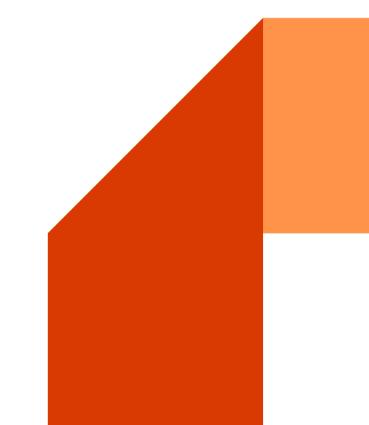
"I have a student who was only writing 3-4 sentences before I learned about these tools. He's now writing 2.5 pages independently with Editor and Dictation. This is changing lives!"

"

Educator from St. Louis, Missouri



## Student and Parent Communication



#MicrosoftEDU

#### Build Communication Skills with **Presenter Coach** in PowerPoint

Presenting in front of others is a vital life-skill that teachers are eager to cultivate in their students.

Based on best practices and academic research, we've integrated common tips and tricks into Presenter Coach to help teachers and students give more effective presentations.





## Student can turn on "Rehearsal mode" with the microphone

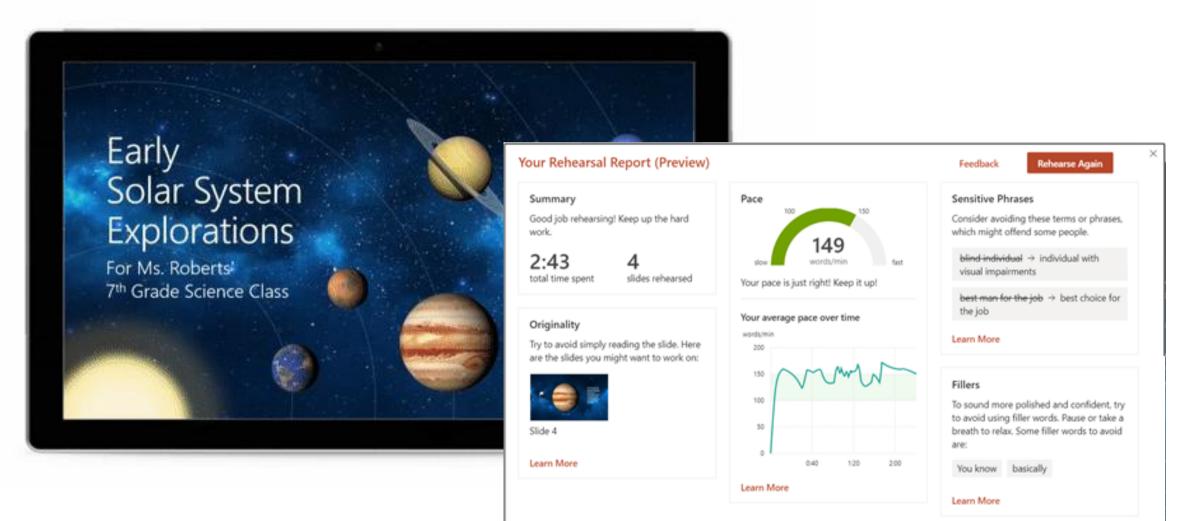
#### Receive on-screen guidance about

- **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 is available on PowerPoint on the web now!

#### **Presenter Coach**



## Presenter Coach Feedback

#### "

"I'm 12 years old and I'm doing a project for school. This was very useful for me to prepare for my presentation. I'm hoping I will get an A and it helped me because I have dyslexia."

"

-12 year old student

#### **PowerPoint Live – Starting a session is easy**

- Under the Slide Show tab, the presenter clicks **Present Live**
- Anyone can join a public session via QR code or short link
- Audience members can join on any device – the experience is optimized for each type of device
- As the presenter moves through the slides it is **synchronized** across all audience member's devices



#### **PowerPoint Live – Captions and Subtitles**

- Audience members can **send live reactions** like heart, applause or questioning emojis
- Each audience member can choose from **over 60 languages** to have personal subtitles throughout the presentation
- Audience members can navigate on their own – they even see the transcription on previous slides
- Audience members can zoom in on slides or even shift their orientation on a phone for different viewing options



## Microsoft Translator

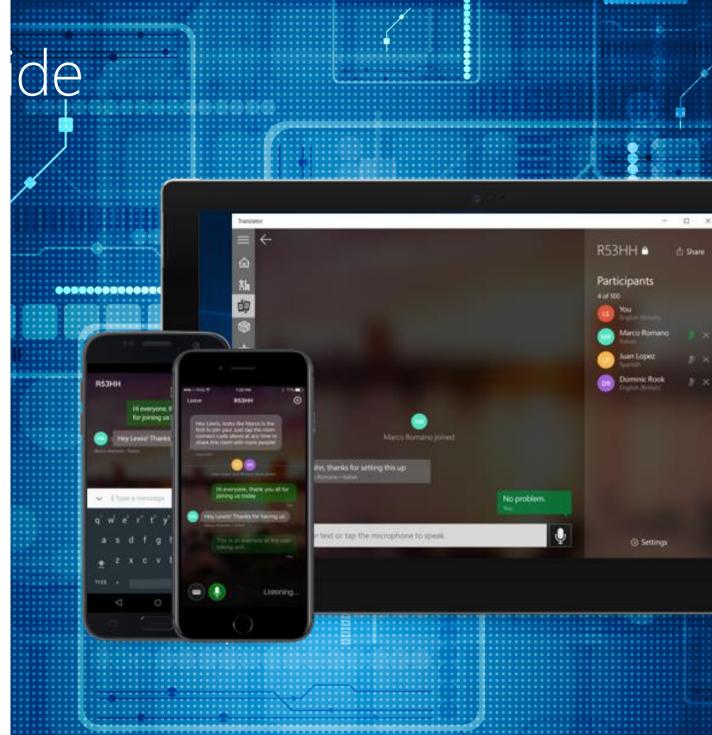
Smartphone apps for in-person, multi-device translation for two or more participants, speech or text

10 speech languages and 63 text languages

Up to 100 participants at the same time

Free Apps on iOS, Android, Windows UWP, PowerPoint and web.

https://translator.microsoft.com/help/education/



## Microsoft Translator in the Classroom - DHH

Hey, is there anybody over here who has a copy of o you're all doing it an individual project.





#### Microsoft Teams – Real-time meeting captioning



## **Accessibility in Teams**

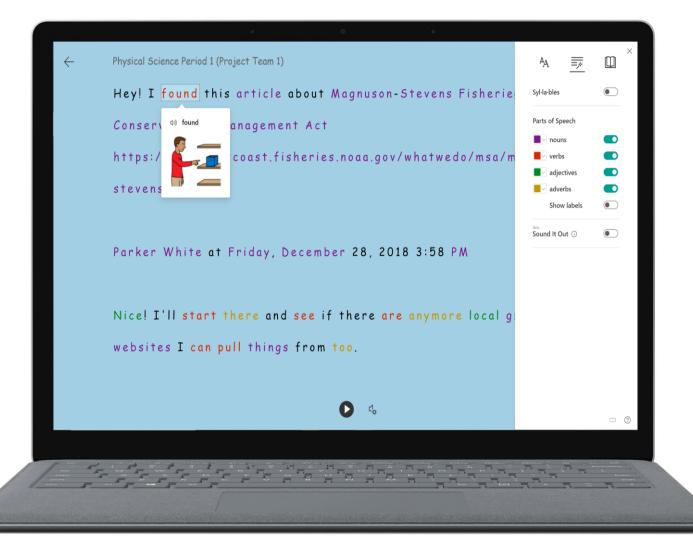


"Students would rather go without than stand out. We need to move from assuming access to ensuring access in classrooms."

-Robin Lowell, Special Education Teacher

Teams is equipped with various tools to make learning inclusive, safe, and fun.

Immersive reader In-line translation Live captions in meetings Accessibility checker Inclusive math Transcript generator



#### PowerPoint Captions – Desktop, Web and Mac

# Present more inclusively with live captions & subtitles in PowerPoint

By the PowerPoint team, on December 3, 2018

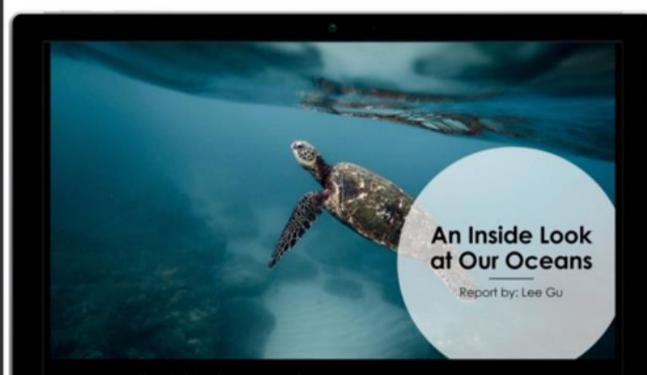
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Live presentations can be thought-provoking, inspirational, and powerful. A great presentation can inspire us to think about something in an entirely different way or bring a group together around a common idea or project. But not everyone experiences presentations in the same way. We may speak a different language from the presenter, or be a native speaker in another language, and some of us are deaf and hard of hearing. So, what if speakers could make their presentations better understood by everyone in the room? Now they can with live captions & subtitles in <u>PowerPoint</u>.

In honor of the <u>United Nations International Day of Persons with Disabilities</u>, we're announcing this new feature—powered by artificial intelligence (AI)—which provides captions and subtitles for presentations in real-time. Live captions & subtitles in PowerPoint supports the deaf and hard of bearing community by giving them the ability to read what is being spoken in real-

## PowerPoint Captions – Desktop, Web and Mac

or even translating your speech from one language to another



Una mirada interior a nuestros océanos.

## Translator Feedback

#### "

"I severely underestimated the impact that the Translator app would have on district leaders, newcomer students and their parents in one short year, and how it would charge up our plans for family engagement in the upcoming year"

"

Sam Sakai-Nelson District Leader from San Diego, California



#### Math

#### Challenges for Students:

- Dyslexia reading story problems, visual crowding
- $\cdot$  ADHD focus and attention
- Dyscalculia
- Mobility impairments

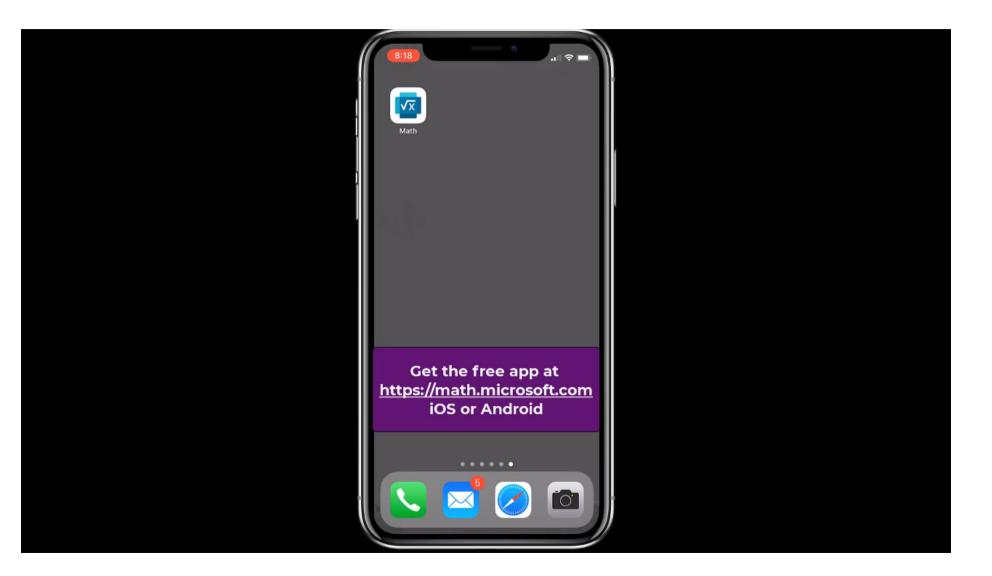


#### ← School ø 95082 .. Home Insert Draw View. H V V V V V V V + No Shapes G Ink to Shape G Ink to Text ⊘ Ruler ‡ Math O Pa ÷ P School $\langle$ Worksheet English Order of operations Tuesday, July 3 3:27 PM Math Solving Linear Equations History. Word problem $X^{2} + 4X + 3 = 0$ Science Worksheet. Distance between points Geography Factoring Exponents 3 all the second second and the second



## $X^{2} + 3X + 2 = 0$

#### Math Solver Immersive Reader





### Demo

#MicrosoftEDU

## Short and sweet interactive guides

- ✓ Inclusive Reading: <u>https://aka.ms/InclusiveReadingDemo</u>
- ✓ Inclusive Writing: <u>https://aka.ms/InclusiveWritingDemo</u>
- ✓ Inclusive Math: <u>https://aka.ms/InclusiveMathDemo</u>
- ✓ Inclusive Communication: <u>https://aka.ms/InclusiveCommunicati</u> <u>onDemo</u>



#### https://www.microsoft.com/en-us/education/interactive-demos

Microsoft

#### **Microsoft Education Demo Tours**

Get firsthand experience and training with Microsoft Education tools in these interactive demos. Help drive the transition to inclusive online learning, build confidence with remote learning tools, and maintain student engagement.



See how Microsoft Teams can work in your classroom

With Microsoft Education, students and educators can transition quickly to an inclusive online classroom, as well as work successfully in a hybrid-blended model.

Audience: IT Pros, School Leaders, and Educators Topics Covered: Microsoft Teams, Posts, Meetings, Assignments, OneNote Class Notebook, Grades,



Learn how to support your student's learning in Microsoft Teams

As schools around the world look to distance and hybrid education, parents and guardians play an essential role by helping students navigate new technologies.

Audience: Parents, Guardians, and Students

Topics Covered: Microsoft Teams, Posts Meetings Assignments



#### Engage your students in collaboration and creativity

Learn how Microsoft tools help facilitate student engagement anywhere with immersive experiences that empower learning, imagination, and communication. Stay connected as a class working together, and as an educator seeking insight into how your students are doing and feeling.

Audience: Educators, School Leaders,



#### Set up your school with easy-to-manage technology

Deploy and manage classroom technology smoothly and efficiently with a range of timesaving services. Explore the intelligent security features that help keep your school's devices, users, and data safe.

Audience: IT Pros Topics Covered: Office 365 Admin

## Inclusive Classroom playlist and more

Quick tip videos: <u>https://www.youtube.com/miketholfsen</u>

Inclusive Classroom	=	SORT BY	0 0
► PLAY ALL	=	Special education and accessibility resources for remote learning with Microsoft Education Mike Tholfsen	0 0 0
Accessibility 34 videos • 2,178 views • Updated 6 days ago Public	=	How to use the Microsoft Immersive Reader - making reading more accessible Mike Tholfsen	0 0 0
These videos focus on the inclusive classroom and accessibility for all students. Inclusive reading, writing, math and communication and how to ensure students of all abilities are included. Many of the Microosft Learning Tools are covered here.		Lower Children Werter       Marrier Children Werter	0 0 0
		Dictation in Word, OneNote and PowerPoint. Free speech-to-text in Office 365 and Windows 10 Mike Tholfsen	0 0 0
Learn more at https://www.microsoft.com/learningtools		Immersive Reader in Microsoft Teams - Assignments, Posts and Chat Mike Tholfsen	0 0 0
Mike Tholfsen	=	Immersive Reader in the Microsoft Edge browser Mike Tholfsen	0 0 0

## **MEC Accessibility**

https://aka.ms/MECAccessibility



Providing support for teachers, students, and parents

The diversity of learning needs demands school systems provide inclusive, accessible learning environments that inspire confidence and encourage independence differently for each student. Learn about how to create a personalized and engaging remote learning experience for all of your students through the resources provided in the sections below.

These resources are intended for all educators, but will be especially helpful for educators and support staff who work in the following areas: special education, assistive technology, blind and visually impaired, deaf and hard of hearing, occupational therapy, physical therapy, speech language pathology, early childhood special education, behavior, counseling, school psychology, language interpretation, literacy, autism, and many other areas that assist students who need specially designed instruction.

Check back frequently for new updates

Accessible technologies to help students with disabilities unlock their full potential by addressing the diversity of needs.



e Lans - Original - Or



Reading, writing, math

 Advances definicions with Internet Risks Found Adds, Found Mode and Reading year Wilding anAlteren with Learning Tarty, Ward Perdiction, and Detarton Stop organization large To Do on any device Stop organization and the Tarty of Tarty and Tarty Complete south advantisity using Toppila Uniting Thomp Reader Science Records, Witholsand Model and Science Records, Witholsand

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## **Dyslexia Awareness Month**

https://aka.ms/dyslexiadecodEd



## Dyslexia DecodEd

Three-part digital event October 14, 20 and 27





Shawn Anthony Robinson, Ph.D. Co-founder, Doctor Dyslexia Dude & Reading Faculty, Madison College

Featuring:



Kate Griggs Founder, Made by Dyslexia



Michelle Perry Special Education Advocate & Regional Leader, Decoding Dyslexia California



Dean Bragioner Founder & Executive Dyslexic, NoticeAbility Inc.

#### "No one should have to ask for access, it should just be there."

Marlee Matlin Academy Award Winning Actress Outside In Talk at Microsoft December 2016



# Glosing The Gap

## Supporting Students with Dyslexia with Microsoft Tools in Every Learning Environment

Rachel Berger Rachel.berger@iamdyslexia.com Twitter: @rachelmberger



## Thank you.

#MicrosoftEDU

