Insight

Microsoft

Microsoft Accessibility:

Leveling the field for pupils of all abilities

Helping pupils of all abilities to thrive

Meeting the needs of all of today's diverse pupils and helping them build life skills has never been more important. But with the need for educational support for pupils with activity limitations or participation restrictions now higher than ever, funding shortfalls have strained resources in UK schools, putting progress at risk.

Special education needs coordinators (SENCOs) need support from school leaders and peers to introduce and normalise assistive technology for pupils of all abilities, helping to foster a stronger sense of inclusivity across the cohort.

Microsoft's accessibility solutions are built-in to the Surface devices and Microsoft 365 apps that are already used by educators, pupils and their parents, though many may not realise that these tools are proven and readily available.

Because these tools are designed to help everyone to improve their productivity and reach their full potential, encouraging their use among all pupils will help bring them into the mainstream.

The end result: enabling all pupils to benefit without isolating those who have specific needs.

In this eBook, we'll cover four simple steps to improve inclusivity in the classroom:

1 Elevate

Elevating awareness around the importance of technology that's inclusive by design, to create more equitable learning environments.

2 Evaluate

Evaluating your current tech stack to ensure it provides all students with the tools they need to learn in the ways that best suits their needs.

3 Enable

Enabling teachers, administrators and students to achieve more with some of our most powerful accessibility features.

4 Empower

Empowering every student to reach their potential by equipping your school with assistive tech that enhance learning outcomes for all.

1 Elevate

Improving inclusivity for pupils of all abilities requires a shift in focus.

The entire school community needs to elevate its awareness and understanding of inclusive technology and the vital role it can play in consolidating spend, and enhancing outcomes for all—not just those with limitations or participation restrictions.

The way students absorb and express information is as different and nuanced as their fingerprints. While educators have long realised that standard "one-size-fits-all" learning models have limitations, schools have typically lacked the resources and technology to accommodate individual differences and learning preferences at scale.[1]

Multiple pressures, such as learning delays due to remote learning caused by the pandemic, and increasing diversity in the classroom, means there's a greater need than ever to consider all abilities.

It's clear that more pupils need help. Yet although SENCOs may be the most obvious champions of inclusivity, the challenges they face are formidable, and the expectation for them to bear the bulk of the load in dealing with them is untenable.

The effects of remote, hybrid, and blended learning have highlighted the urgent need to transform the way learning is designed, delivered, and experienced, to increase accessibility and equity in education.

In order to raise the bar for all pupils, help is needed to share the load currently straining well-intentioned but overly-stretched SENCOs.

12.6%

of all pupils in England have limitations or participation restrictions (1,373,800 children).[2]

Pupils with English as an additional language now comprise nearly

21%

of the primary school population in England and over

17%

of the secondary population.[3]

72%

of UK classrooms have pupils with individual educational needs.[4]

50%

of UK teaching staff feel that driving inclusive activities in schools should bethoughtfully included in resources, topics and materials currently taught in schools.[5]

1] Creating an inclusive classroom: A guide for education leaders, Microsoft, 2022
2] Special educational needs in England (Academic Year 2021/22), UK Government, 16 June, 2022
3] Understanding the language and literacy needs of EAL learners, National Literacy Trust, 20 Sept, 2021
4] Unlock your students' potential with accessibility tools that support diverse learners Microsoft, April 2021
5] Diversity and inclusion in schools Report, Pearson, 1 March, 2021

1 Elevate

A school-wide effort is needed to elevate awareness—ensuring all school staff are better informed about the solutions available to support them in enabling learners of all abilities to increase their productivity and achieve their potential.

Importantly, assistive tech benefits all pupils—not just those with activity limitations or participation restrictions. Research indicates there is a boost of up to 40% in reading and writing performance when the technology is scaled to all pupils, compared with a 20% uplift when offered only to certain pupils.[7]

SENCOs and school leadership teams (SLTs) can normalise assistive tech in schools, and improve learning outcomes for more pupils, by educating all teaching staff to think of it as something that can lift the bar for everyone.

For example, by simply demonstrating an accessibility tool such as Immersive Reader to the whole class, rather than singling out certain students, anyone who needs it can use it, boosting its adoption and removing the stigma associated with assistive tech. Immersive

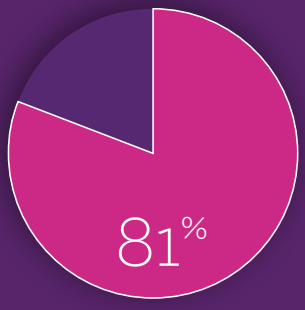
Reader can help with improving reading and writing skills, comprehension, grammar, focus and concentration.

Teachers can also use a variety of features to track their pupils' performance and provide feedback and encouragement.

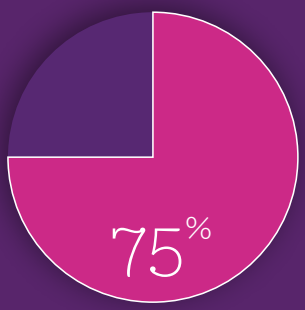
Action item

Extend the SENCOs reach and help more pupils by elevating awareness: ensuring all teaching staff familiarise themselves with digital accessibility tools.

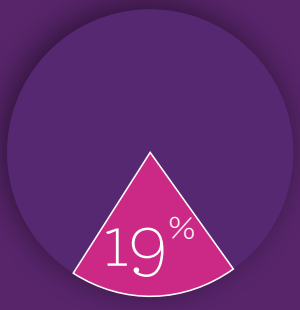
According to a recent National SENCO Workforce Survey, SENCO's report feeling isolated and misunderstood:



of SENCOs lack sufficient time to offer necessary support (71% for EHCPs).[6]



of SENCOs say the role is not manageable for one person.[6]



of secondary school SENCOs feel their colleagues understood the role.[6]

6] SENCO workload: Identifying barriers and finding solutions, SecEd, 30 August, 2021
7] Microsoft Accessibility and Assistive Technologies for Education, Forrester Total Economic Impact™ (TEI) study commissioned by Microsoft, February 2019

Get help from our team of specialists →

2 Evaluate

Are your current classrooms truly inclusive? See how Microsoft's accessibility tools help learners of all abilities thrive.

Inclusive classrooms are the foundation for equity.

Research has shown that pupils who have a 'sense of belonging' in schools tend to perform better academically, as well as being happier and more confident.[8]

This is true of both students who qualify for an Education, Health and Care (EHC) plan, as well as students with temporary, non-pervasive injuries like a broken arm, or who have been away for an extended period (due to Covid or other illnesses, for example) and can catch up with the right support.

This means that at any given moment, SENCOs and teachers across the UK are called on to support over a million students with a wide variety of accessibility needs, the most common of which are in the areas of autism, speech, language and communication.[9]

It's therefore crucial to remove barriers for students with both permanent and short-term requirements (many of which are shared across different diagnoses) to learn with their classmates, using non-stigmatising tools that help all learners achieve more.

Microsoft breaks down barriers to learning with assistive tech tools that are already built-in to both software and hardware.

An accessibility solution is not merely a nice-to-have option, and there's more to it than buying a laptop and adopting a curriculum. It must involve careful consideration of the right device, the right tools, and the right outcomes to help all learners—whether pupils, educators, or administrators.

Microsoft can help democratise assistive tech so everyone can use it, as the accessibility solutions are already built into Microsoft 365 and Surface devices. This helps SENCOs by spreading the load to other teachers without overwhelming them, since they are already familiar with Microsoft and using it in their day-to-day work.

Also, using a single platform with builtin accessibility, rather than a variety of different tools and extensions from multiple vendors, benefits schools in several key ways:

- Improves learning outcomes.
- Minimises distractions and removes barriers.
- Reduces IT spend.
- Frees up teaching time.

Almost **one in three pupils** with an Education, Health and Care (EHC) Plan are identified with a primary need of Autism Spectrum Disorder (103,400 pupils).[10]

The most common types of need among pupils with SEN support are:

262,400
Speech, language and communication needs (262,400 pupils).[10]

208,900
Social, emotional and mental health needs (208,900 pupils).[10]

197,400
Moderate learning difficulty (197,400 pupils).[10]

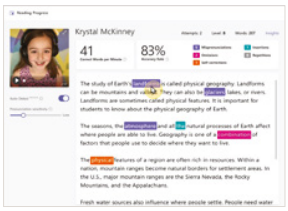
20%
of students are impacted by dyslexia.[11]

8] Place and Belonging in Schools: Why it matters today, The Art of Possibilities and UCL Institute of Education, March 2020
9] Special educational needs in England (Academic Year 2021/22), UK government, 16 June, 2022
10] Special educational needs in England (Academic Year 2021/22), UK Government, 16 June, 2022
11] Unlock your students' potential with accessibility tools that support diverse learners Microsoft, April 2021

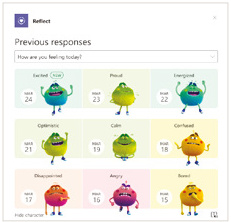
2 Evaluate

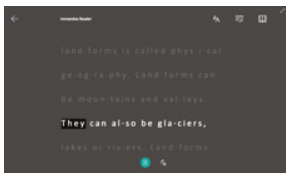
Surface devices are inclusive by design, to unlock the potential of diverse learners.

Surface devices are designed to provide the optimal Windows and productivity experience for pupils of all abilities, so that they can make the most of accessibility features. This includes features like voice typing, facial recognition, adaptive kits, accessories and more.



Vision	Hearing	Neurodiversity
Accessibility tools can enable effective learning for pupils who are blind, colour blind, or have low vision. Windows 11 can be customised to fit each pupil's vision by using colour filters, changing colour contrast, magnifying things on the screen, listening instead of watching, using a screen reader, seeing AI narration, converting text to speech, and more.	Pupils who are deaf, have hearing loss, learn better visually, or are learning a new language can take advantage of specialised tools that remove barriers and boost independence while learning,. This includes features like closed captioning, mono sound, translation and live call transcription.	Students who live with ADHD, dyslexia, seizures, autism, or other cognitive differences can take advantage of innovative tools—such as Immersive Reader, Reading Progress and live translations—and a variety of Windows settings designed to help them eliminate distractions, stay focused and organised, and improve reading, writing and comprehension.





Mental Health	Learning	Mobility
Features like Microsoft Reflect and The Feelings Monster can help pupils living with mental health challenges. These tools can optimise the learning process to improve emotional wellbeing and academic performance.	Tools like Immersive Reader can help pupils with cognitive and learning difficulties by improving their reading and writing skills, comprehension, grammar, focus and concentration. Teachers can also use a variety of features to track their pupils' performance and provide feedback and encouragement.	Windows 11 Mobility features empower students living with arthritis, quadriplegia, spinal cord injuries, and other barriers to mobility (including temporary ones, like a broken arm) to interact with their PC in the ways that best fit their needs. Quality microphones in Surface devices allow users to use speech recognition, type with their voice, and use voice commands.

Get help from our team of specialists →

2 Evaluate

Action item

Assess your school's accessibility priorities to create a more inclusive learning environment.

Improving inclusivity for students should start with evaluating your school's ability to offer support to all learners regardless of native language, ability, or needs.

Use these **Useful Resources** to assess your school's accessibility readiness:

- Accelerating Learning toolkits
- Immersive Reader
- Brochure: Unlock student potential with accessibility tools that support diverse learners
- Microsoft Reflect
- Reading Progress on Teams

Microsoft is committed to empowering every pupil on the planet to achieve more. Microsoft's efforts to promote digital inclusivity in education extend through all aspects of the accessibility solutions they offer, from product design to customer support.

Their goal is to enable every pupil to fully participate in learning and in life, and to empower every teacher to connect with each of their pupils, wherever they are.[12]

Here are just some of the ways Microsoft are working to achieve digital inclusivity:				
Microsoft continually invest in driving innovation in assistive tech using AI, contextual reminders and new features designed in collaboration with people with activity limitations and/or participation restrictions. Microsoft then scale new accessibility tools by building them into our software and hardware to maximise the benefit to everyone.	Microsoft work with educators across the globe and have developed Microsoft Learn—an extensive collection of training and resources to support staff and administrators with their accessibility efforts.	Microsoft have partnerships with experts in SEND and Inclusion organisations such as nasen, British Dyslexia Association and Made by Dyslexia.	Microsoft work with people with disabilities through initiatives like our state of the art, Inclusive Tech Lab.	Microsoft continue to build a deep pool of resources and expertise around assistive tech, like our Accessibility website, Educator Centre, and Accessibility Champions Tips & Tricks.

3 Enable

Level the learning-field for learners of all abilities with accessibility that's built into both software and hardware.

Microsoft's wide range of accessibility tools are available across Windows 11, Microsoft 365 apps and Surface devices, and designed to enhance learning environments for all pupils regardless of ability, providing multiple ways for them to create, engage and collaborate.

Here are just a few examples of how the assistive tech built-in to both Microsoft's software and hardware can help pupils and teachers overcome learning and teaching challenges in the areas of vision, hearing, mobility, learning, neurodiversity and mental health.

Vision

Students who are blind or have low vision can use Windows Speech Recognition and a variety of Text-tospeech (TTS) features to help them navigate their Surface device and Microsoft 365 apps.

Pupils can personalise display and vision accessibility settings by adjusting preferences like text size and fonts, screen brightness and contrast (useful for those who are sensitive to light or work long hours in front of a screen), colour filters (great for those who are colour blind), cursor size, mouse actions, and more – and then zoom in on words and images with Magnifier.

Pupils can also use the tactile tools available in Surface Adaptive Kit* to make their devices more accessible, like bump labels that come in various shapes and colours to help identify features like buttons, keys on their keyboard, and ports.

A range of tools in Immersive Reader can help vision-impaired pupils improve reading, writing and comprehension: These pupils can use the Read Aloud function to read by listening to text, and the Narrator screen-reader to navigate their PC without a mouse, including reading and writing email, browsing the internet, and working with documents and apps. Translation is also provided for many languages, over 60 of which can be read aloud.

Pupils can also use the Seeing AI app to narrate the world around them, or the Microsoft Lens app to digitise information in documents, whiteboards, homework assignments, handwritten memos, or anything else containing text and have it read out loud and even translated if needed.

*Sold separately from devices

Hearing

Windows 11 Mono Audio allows students to combine the left and right stereo audio channels into single-channel audio to hear everything in a way that works for them.

Pupils who are deaf or with loss of hearing can use Live Captions to understand audio thanks to automatic transcription. They can read captions while working in Microsoft 365 apps even when disconnected from the internet, personalise how captions are displayed, and include microphone audio to make in-person conversations easier.

In Teams meetings, Teams can detect what is being said and present real-time captions, and even attribution so that pupils can see who is saying what. By default, live captions are displayed in the language that's spoken during the meeting, but with live translated captions, pupils can see captions translated into the language they're most comfortable with.*

Teachers can also add closed captions or subtitles to videos and audio files in PowerPoint presentations to make them accessible to pupils with hearing disabilities and those who speak languages other than the one used in the video.

*Available as an add-on license as part of the preview release of Teams Premium.

3 Enable

Neurodiversity

Pupils with dyslexia, seizures, autism, ADHD, or other cognitive disabilities can build healthy digital habits and improve their focus and productivity by personalising their Windows settings.

They can simplify the Start menu, clean up taskbar clutter, activate Do Not Disturb in Windows 11 focus sessions to minimise distractions, and set the clock to launch a timer that reminds them to take breaks.

It's also possible for pupils to improve reading comprehension and writing skills by enabling text suggestions, downloading fluent fonts for easy reading, customising text spacing, and using Microsoft Editor to check grammar and more.

They can also use a variety of tools to help them stay focused and organised, like reducing background noise in Teams meetings, using Immersive Reader to have words read aloud with simultaneous highlighting, using Reading Progress to improve online reading fluency and comprehension, and using Microsoft Lens to capture and digitise images containing text that can then be uploaded to a variety of apps and read out loud.

Mental Health

The wellbeing of all pupils is an important issue in schools, so tools that can provide regular opportunities for them to share and be heard are especially valuable. Microsoft Reflect, for example, is a check-in tool that can support pupils in articulating their emotions and sharing their personal experiences with their teachers using Feelings Monster and a variety of emojis.

Pupils who have a mental health condition such as bipolar disorder, anxiety, PTSD, or depression can use a variety of tools to help with focus, reading, and attention. Students can use Focus assist to minimise distractions by blocking alerts and notifications. They can also enable text suggestions in Windows to complete complex words and continue working efficiently.

Learning

Surface devices include a range of features that can help enhance learning for all pupils, regardless of their physical or cognitive abilities. Many have 10-point touchscreens that support both touch and inking, accommodating different learning styles and information types to encourage creativity and expression. Most also have a 3:2 aspect ratio, which is similar to a piece of paper, making writing more natural.

Pupils can also use the Surface Pen to write and draw on screen, so that they're not limited to a keyboard and mouse, making it easier to take notes, sketch ideas, and more.

Pupils can use OneNote – a digital note-taking app – to organise, print and share their notes and sketches, and learn how to solve math equations with Math Assistant. For assistance with writing, they can use tools like Researcher and Editor to research information more effectively or get real-time feedback on spelling, grammar, and writing clarity.

Speaker coach in PowerPoint can help pupils rehearse their slide shows in private to give more effective presentations. They can also use Reading Progress in Teams to improve their reading skills. In Insights, teachers can then track their students' reading fluency to assess their reading successes and difficulties.

Emerging readers and English language learners (and their parents) can use live captioning in Microsoft Translator to build confidence as they learn to read at higher levels. Teachers can use it to create inclusive presentations using PowerPoint by translating text, pictures (and more) into 60+ languages, and adding subtitles that appear as they speak.

Teachers can run the Accessibility Checker on content they create in Microsoft apps before sharing it with pupils to optimise their accessibility.

3 Enable

Mobility

The Surface range includes clamshell laptops, as well as flexible 2-in-1 devices that can transition between modes, allowing students to use their device in the way that works best for them. Laptop mode can be used for typing, while in tablet mode makes it easier for devices to be held, carried, perched on a desk, or laid flat.

Pupils can set up Windows to suit their mobility needs, including making their mouse, keyboard, and other input devices easier to use. They can use Sticky Keys to be able to press commands that use multiple keys one key at a time as well as Filter Keys to set the sensitivity of the keyboard.

Pupils with loss of mobility such as ALS and quadriplegia can use eye tracking technology to control Windows and apps with their eyes. They can control their mouse pointer with the numeric keypad, or type without a physical keyboard by using the on-screen keyboard to browse the web, read and send emails, use shape writing, and communicate with people by having the computer to talk for them using the text-to-speech (TTS) feature.

Pupils with limited reach, strength, or dexterity can use built-in speech recognition in Windows 11 for voice typing, to convert spoken words into text anywhere on their PC. They can also use Dictation to write documents, emails, notes, presentations, and more.

Action item

Enable an inclusive learning experience for pupils of all abilities.

Learn what is possible with accessibility solutions that are built in to both software and hardware. Discover Windows accessibility features.

3 Enable

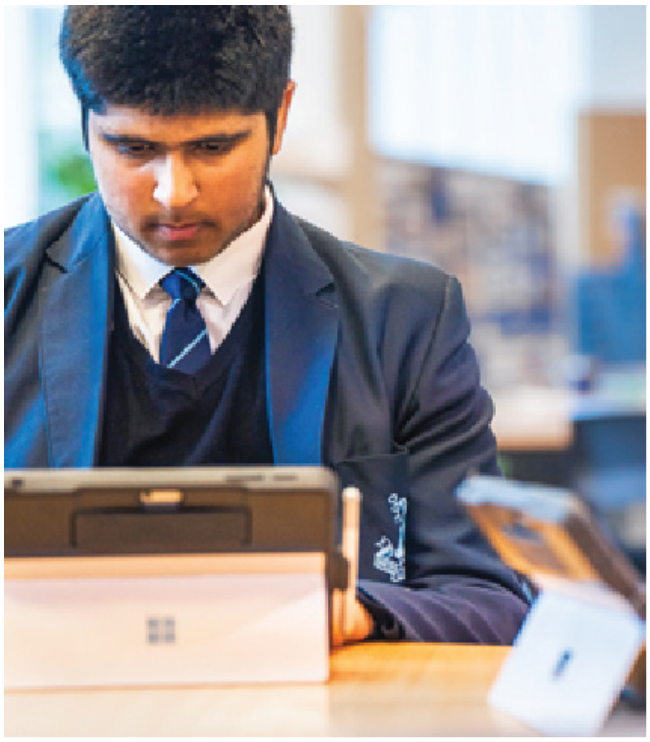
USER Review

The profound impact of Immersive Reader

"It can be literally transformative," says Natasha Epton, Digital Curriculum Manager for Greenwood Academies Trust (GAT), which operates 36 academies across England. "The impact can be instant."[13]

At GAT, where the percentage of English as a Second Language (ESL) students is as high as 75% at some academies, Immersive Reader is a key tool, because it provides a range of functions to support reading and comprehension, including dictation, a built-in picture dictionary for comprehension and the ability to translate text into 70 different languages.

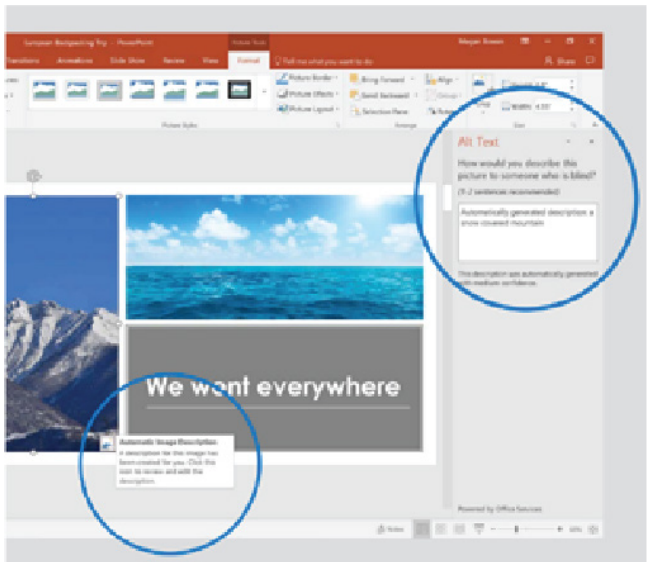
For ESL pupils, this means that "straight from them joining a school with no English, they're able to access simple instructions," says Epton. For others, it can mean tasks being read aloud by the device, rather than support staff next to them, freeing up hands in the classroom and removing any lingering stigma around those who may need extra support.



Live captions and subtitles in PowerPoint and Teams

"Another Microsoft tool growing in popularity across educators is the capacity to add live captions or subtitles in both PowerPoint and Microsoft Teams," says Arran Smith, UK dyslexia and SEND consultant for Microsoft.[14]

"For me, as a severely dyslexic person, if you'd asked me even four years ago if I would put captions on PowerPoint, I would have flatly refused," he says. "But now I use them on calls because it helps me process the information." And they can perform the same role for students.



4 Empower

Microsoft solutions lift the bar on accessibility for everyone, supporting schools to help learners do more.

Technology can be an incredibly powerful tool when it comes to creating inclusive classrooms for pupils with activity limitations or participation restrictions, but the usefulness of Microsoft's assistive technologies isn't limited to SEND students alone.

Other students can also use them to improve their learning, such as English language learners (ELLs), students with temporary mobility disabilities, and all students who want to improve their learning productivity.

With remote and hybrid learning now a lasting part of the education landscape, schools must also strive to deliver inclusive education no matter where pupils are, which means it's crucial for pupils of all abilities to have devices that meet their individual needs.

Microsoft has an outstanding offering for inclusive classrooms across Windows and Microsoft 365, and the best way to empower all learners is to experience those accessibility features on Surface devices.

Our accessibility solutions also help remove the stigma that can be associated with SEND students having to learn differently, improve mainstreaming and inclusivity initiatives, and support the social and emotional well-being of all learners.

Enabling Microsoft's accessibility tools in your school will not only unlock new possibilities for pupils in a more equitable learning environment, but also help school leaders, SENCOs, teachers and IT staff to enhance classroom efficiencies, achieve goals, save time and reduce IT costs and effort.

Action item

Empower your school to build a foundation for future success.

Microsoft is committed to the ongoing development of assistive tech that helps pupils of all abilities thrive.

See how our accessibility solutions can:

- Enable pupils to grow their potential and gain independence.
- Empower teachers to engage every learner.
- Build your school's reputation as a positive place that promotes equity and inclusion.

Learn more about the possibilities for your school with Microsoft Accessibility.

4 Empower

Microsoft's accessibility tools are more accessible than you might think.

Meeting the needs of today's diverse learners and helping them build life skills has never been more important. But as more pupils with different needs enter mainstream schools, funding shortfalls have strained resources, impacting SEN care.

SENCOs need more help from SLTs and the wider teaching community to provide better learning outcomes for all pupils Educating all teaching staff so that they are better informed about the solutions available to them, can enable them to help more learners of all abilities.

A forward-thinking approach to accessibility also creates a positive impression of your school—showing parents and carers that your school is enabling all students to thrive.

Microsoft have a deep understanding of the challenges that can arise from using assistive tech that isn't universally accessible to all who need it.

Notably, when access to the assistive tech is limited, those who can access it are reluctant to, for fear they might be viewed as different.

Microsoft's accessibility solutions are more inclusive because they're built-in to the Surface devices and software apps that are already used by both students and teachers.

Also, every Surface delivers robust security with layers of extensive protection measures built-in, giving both teachers and pupils the peace of mind to focus on what matters to them.

Get help from our team of specialists →

Surface Accessories: inclusive by design

Microsoft believe accessibility is a responsibility, opportunity and a priority.

Microsoft accessibility features are built-in, not bolt-on, and Microsoft continually seek guidance and input from people with disabilities. By integrating our Surface devices with a range of accessible accessories, Microsoft also open up new learning opportunities for all.

This includes a mouse you can customise, and an adaptable hub that augments traditional keyboards. Unique mouse attachments and inputs also let pupils create a system that truly works for their individual needs.

The Surface Adaptive Kit makes it easier for pupils to use their Surface by adding a choice of labels, port indicators and openers that help pupils identify critical keys, match ports and cables, and open their devices.

Mouse tails and button toppers can also be replaced with a choice of 3D printed designs, through Shapeways.*

*Available 3D printed designs from Shapeways may vary from image shown and over time. See Get Started with 3D Printing for the latest offerings.

Summary Table

Accessibility tools built-in to Surface, Windows 11 & Microsoft 365	
Vision	Narrator, Magnifier, colour filters, and other sight-related tools to best suit your vision
Hearing	Live captions Mono audio
Neurodiversity	Customise and simplify Windows experience Text suggestions Fluent fonts for easy reading Translator Microsoft Editor OneNote learning tools Immersive Reader Teams Background noise reduction Learning
Learning	Microsoft Editor – check grammar, spelling etc in Word Voice to type Immersive Reader Reading Progress tool – monitor progress, insights to support Narrator – hear text read aloud OneNote Math Assistant Inclusive communication with Reflect in Microsoft Teams Live captions and real time translations (CART) on Teams Capture screens and white boards with Microsoft Lens (turn to type) Microsoft Translator
Mobility	Adaptive Kit & Accessories Voice navigation and typing Eye Control Keyboard shortcuts Microsoft Search (Office, Windows) – get to what you need quickly Windows Hello
For Others	Focus Assist Simplify and personalise start menu/ taskbar Read with fewer distractions with Immersive Reader Manage tasks in OneNote/ Teams/ Outlook Build positive work habits with Viva Insights Accessibility Checker – makes content accessible to all/ flags concerns

Improving learning outcomes with innovative, affordable and flexible technology.

We believe IT in education is more than just a collection of hardware and software, but powerful tools in the hands of our talented and hardworking teachers and leaders. This enables them to innovate; whether it's preparing students for the jobs of tomorrow or leveling the playing field, so that everyone, no matter their economic or social background, can have the same opportunities.

We have two specialist teams focused on helping either higher and further education institutions, and schools with their digital transformation journeys.

Faster deployments, better learning outcomes.

With autopilot provisioning services, designed specifically to support schools, you can offer your classrooms ready-to-use devices, straight to your students.

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