jamf

Apple for students, teachers and parents with disabilities

There is an increasing global focus on accessibility for students in school, from Australia's recent boost in funding for school accessibility[1] to the World Bank's Inclusive Education Initiative. Similar programs are cropping up around the world.

According to the World Health Organization, Fifteen percent of the worldwide population has some sort of disability[2], which affects educational institutions, employment, and parenting everywhere you go.

That's a lot of people, and Apple is here to serve them.

WHAT IS DISABILITY?

A disability is a physical or mental condition that limits a person's movements, senses, or activities. These can be:

- Auditory
- Cognitive
- Neurological
- Physical
- Speech
- Visual
- Psychological

WHAT IS ACCESSIBILITY?

Accessibility is ensuring that buildings, teaching methods, tools and technologies are designed so that students with disabilities can use them.

1. "More support to make schools inclusive schools in Australia," Disability Insider, May 13, 2021

2. "Disability and health factsheet", WHO, 1 December 2020

APPLE IN EDUCATION FOR MORE THAN 40 YEARS

From the introduction of the Apple II to multiple schools in Minnesota, USA in 1977, Apple products have been synonymous with education. From MacBooks to iPads to iPhones and all things in-between, schools around the globe have found that Apple devices' ease of use, robust design, and thoughtful creative and educational features absolutely essential in the classroom.

When combined with a robust device management system such as Jamf Pro or Jamf School, the sky's the limit.

A LEADER IN ACCESSIBILITY

From the launch of OS X 10.2 Jaguar when Apple introduced Universal Access to today, Apple has made leaps and bounds in the area of accessibility.

According to the American Foundation for the Blind, Apple has a very strong commitment to accessibility.[3]
And that commitment goes straight to the top.

ACCESSIBILITY AND EDUCATION GO HAND-IN-HAND AT APPLE

So what better device as a go-to for accessibility in the classroom for disabled students, disabled teachers, and disabled parents?

3. "Accessworld", June 2016, American Foundation for the Blind.

4. Ibid.

> *People with disabilities often find themselves in a struggle to have their human dignity acknowledged. They frequently are left in the shadows of technological advancements that are a source of empowerment and attainment for others.*
> *As much as Apple's engineers push back against this unacceptable reality, they go to extraordinary lengths to make our products accessible to people with various disabilities from blindness and deafness to various muscular disorders.[4]*
>
> **Tim Cook, CEO of Apple,**
> speech at Auburn University
> 2013

WHO BENEFITS?

While all accessibility features help anyone who is disabled, a few features lend themselves for toward one group than others. Here are a few!
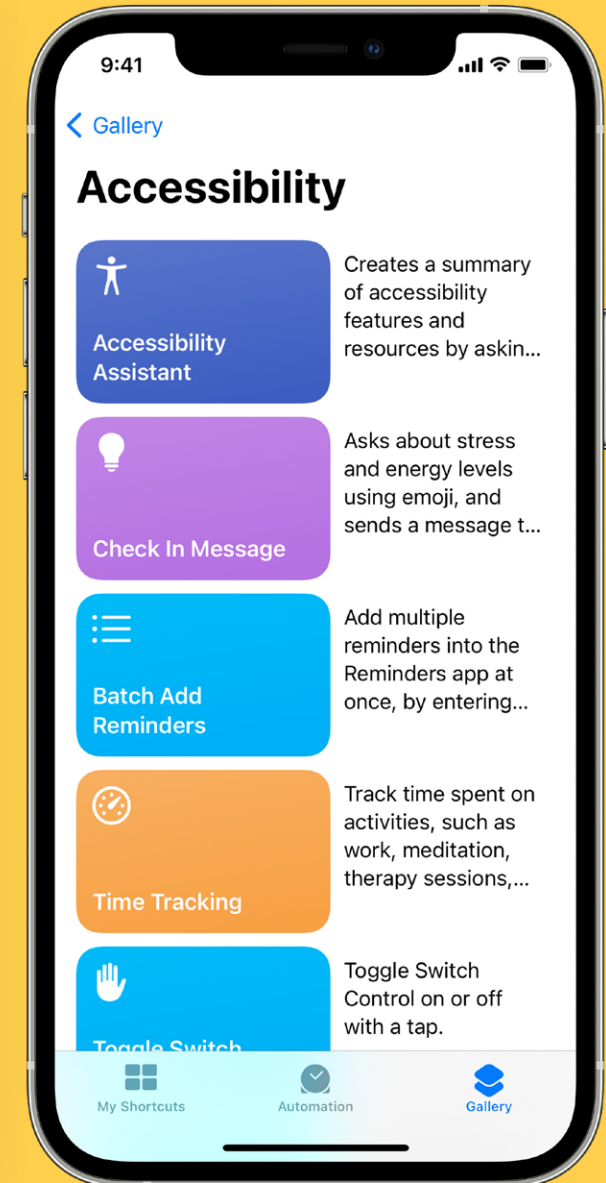
DISABLED STUDENTS

When most people think about disability and education, their mind goes straight to students. The vast majority of countries worldwide have a mandate to educate all of their children, after all, and the educational system is built for them.

Well, most of them. Countries around the world as still struggling, with limited budgets and high pressure, to ensure that their classrooms are fully accessible and inclusive.

One way to increase your school's odds is to invest in Apple technology, apps, and partners like Jamf.

Here are some of the accessibility features Apple has to offer students, and how they can help all students learn:

9:41

< Gallery

Accessibility

Accessibility Assistant
Creates a summary of accessibility features and resources by askin...

Check In Message
Asks about stress and energy levels using emoji, and sends a message t...

Batch Add Reminders
Add multiple reminders into the Reminders app at once, by entering...

Time Tracking
Track time spent on activities, such as work, meditation, therapy sessions,...

Toggle Switch
Toggle Switch Control on or off with a tap.

My Shortcuts   Automation   Gallery

Guided Access, Jamf Teacher and the Jamf Student app

For students with autism, ADHD and sensory disabilities

Guided Access helps students with autism or other attention and sensory disorders stay on task. A teacher or parent can limit an iOS device to one app by disabling the Home button, and even restrict touch input on certain areas of the screen. That way, wandering taps and gestures won't distract from learning. While this is only available on iOS devices, the Jamf Teacher app, compatible with Jamf Pro or Jamf School, also offers this functionality and is available for iOS devices as well as Mac computers.

The Jamf School Student app, in addition to allowing for communication with teachersand engagement in lessons, offers students restricted permissions over their own devices, allowing them to focus on their education without distractions.
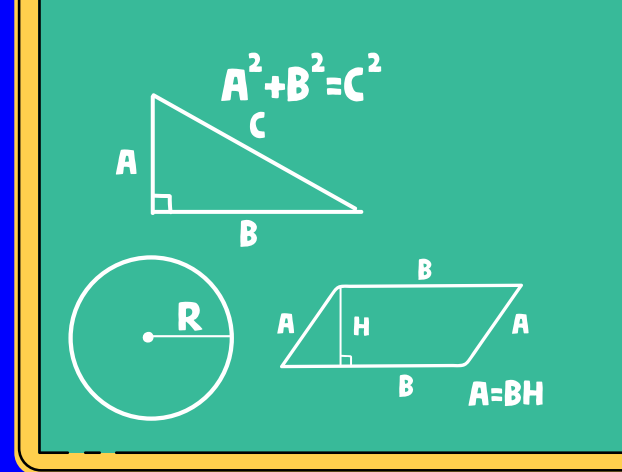
Background Sounds

For students with neurological disabilities that easily feel overwhelmed

Background Sounds, available on iOS as of mid-year 2021, helps minimize distractions and help users focus, stay calm, or rest with balanced, bright or dark noise — as well as ocean, rain, or stream sounds.

Speak Selection

For learning differences and disabilities

Playing aloud how a word is spoken as the student reads it can help with reading comprehension for a wide range of learners. Students can choose to have words highlighted as the device speaks them so they can follow along, and adjust speed and tone. Available in iOS and on macOS.

Dictation

For students with print disabilities like dyslexia or dysgraphia, or fine motor skill issues

Dictation allows students to compose aloud. With Dictation they can reply to an email, make a note, search the web or write a report using just their voices. Available on macOS, iOS and iPadOS.

Word Prediction

For students with dyslexia, dysgraphia, or cognitive disabilities

Word prediction on iOS can help students improve their vocabulary and word-building skills. iOS suggests the correct spelling after just a few letters are typed. With Speak Auto-text enabled, students hear a sound effect and the suggested word spoken.

Safari Reader

For reducing sensory overload.

Safari Reader reduces the visual clutter on a web page by removing ads, buttons and navigation bars and other distractions, allowing students to focus on just the content. Safari Reader works with Speak Selection and VoiceOver, so students with print disabilities can get auditory feedback as well.
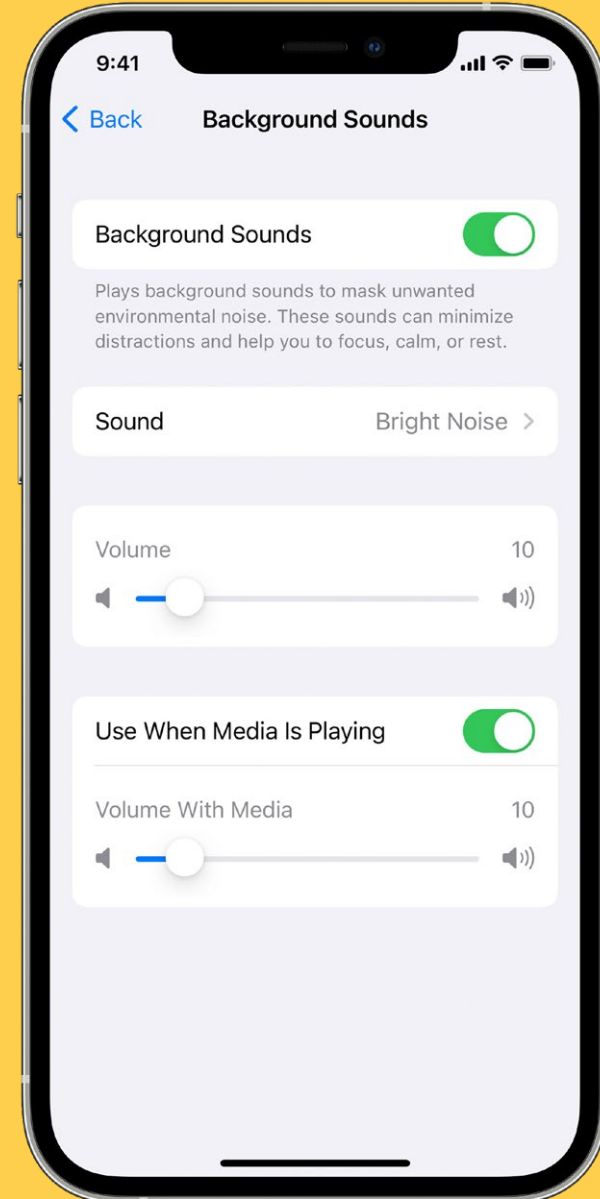
VoiceOver

For visually impaired students

VoiceOver is a gesture-based screen reader that lets students know what's happening on their screen, and helps them navigate it. Available on macOS and iOS.

Mono Audio

For deaf and hard-of-hearing students

Students who are deaf or hard of hearing in one ear may miss some of the audio contained in a stereo recording. Mono Audio, available on macOS and iOS, plays both audio channels in both ears, and lets students adjust the balance for greater volume in either ear.

9:41

‹ Back   **Background Sounds**

Background Sounds   ⬤

Plays background sounds to mask unwanted environmental noise. These sounds can minimize distractions and help you to focus, calm, or rest.

Sound   Bright Noise ›

Volume   10
🔈 ▬▬●▬▬▬▬▬▬▬ 🔊

Use When Media Is Playing   ⬤

Volume With Media   10
🔈 ▬▬●▬▬▬▬▬▬▬ 🔊

AssistiveTouch

For students with physical disabilities

AssistiveTouch allows students with limited motor capabilities to adapt their iPad screen to their needs. Complicated multi-touch gestures, like a pinch or multi-finger swipe, are accessible with just the tap of a finger or customized gestures. For students who use assistive devices such as joysticks, iOS devices also support a number of third-party options.

MFi hearing devices program

For deaf and hard-of-hearing students

Apple is adding support for new bi-directional hearing aids. The microphones in these new hearing aids enable those who are deaf or hard of hearing to have hands-free phone and FaceTime conversations.

Jamf Assessment

For students unable to test in traditional settings

Until quite recently, high-stakes timed testing such as ACT and SAT tests had to be taken in-person, at school. Thanks to Jamf Assessment, students with disabilities or chronic conditions that require them to stay at home can take these tests with a proctor. The proctor can see the student and their screen at all times.

Closed Captions

For visual learners and deaf/hard-of-hearing students and teachers

Captions appear on screen in easy-to-read white type on a black background. Apple supports closed captioning — as well as open captions and subtitles — across a wealth of educational materials. Available on iOS and macOS.

CC

Switch Control

For students with significant mobility or motor skill impairments

Switch Control for iOS allows students to add an external switch to control their iPads. Coming in late 2021, switch control will have the option of replacing physical buttons and switches with mouth sounds such as a click, pop, or "ee" sound — for users who are non-speaking and have limited mobility.
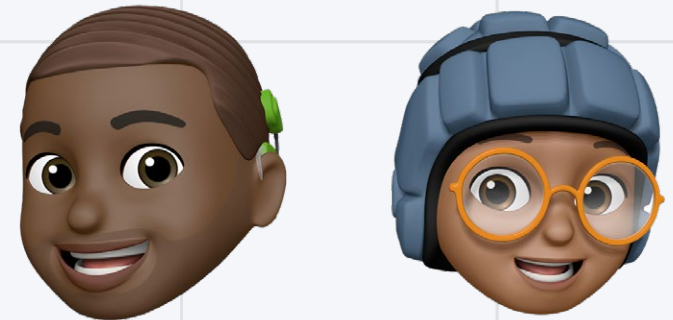
Eye-Tracking Support for iPad

For students with significant mobility or motor skill impairments

Toward the end of 2021, iPadOS will support third-party eye-tracking devices, making it possible for people to control iPad using just their eyes. Compatible devices will track where a person is looking onscreen and the pointer will move to follow the person's gaze, while extended eye contact performs an action, like a tap.

DISABLED PARENTS

Disabled parents face many challenges. Some of them, according to a recent Israeli study,[5] include transportation difficulties and a lack of ability to take children to activities.

This can prevent attendance at parent-teacher conferences and other school meetings, and cause communications problems between parents and teachers.

Apple and Jamf have many built-in features that can help disabled parents interface with schools:

5. "The Challenges and Rewards of Parenthood: Experiences of Disabled Parents in Israel," *Disabilities Studies Quarterly*, Carolyn Gutman, Tel Hai Academic College, Israel.

FaceTime

For parents with mobility or autoimmune impairments

With FaceTime, parents can easily make video calls to teachers on Apple devices, allowing them to safely connect with their children's' school. FaceTime can be a window into the classroom as well, letting parents engage with open houses and other school visits in addition to parent/teacher conferences and other meetings.

Jamf Parent app

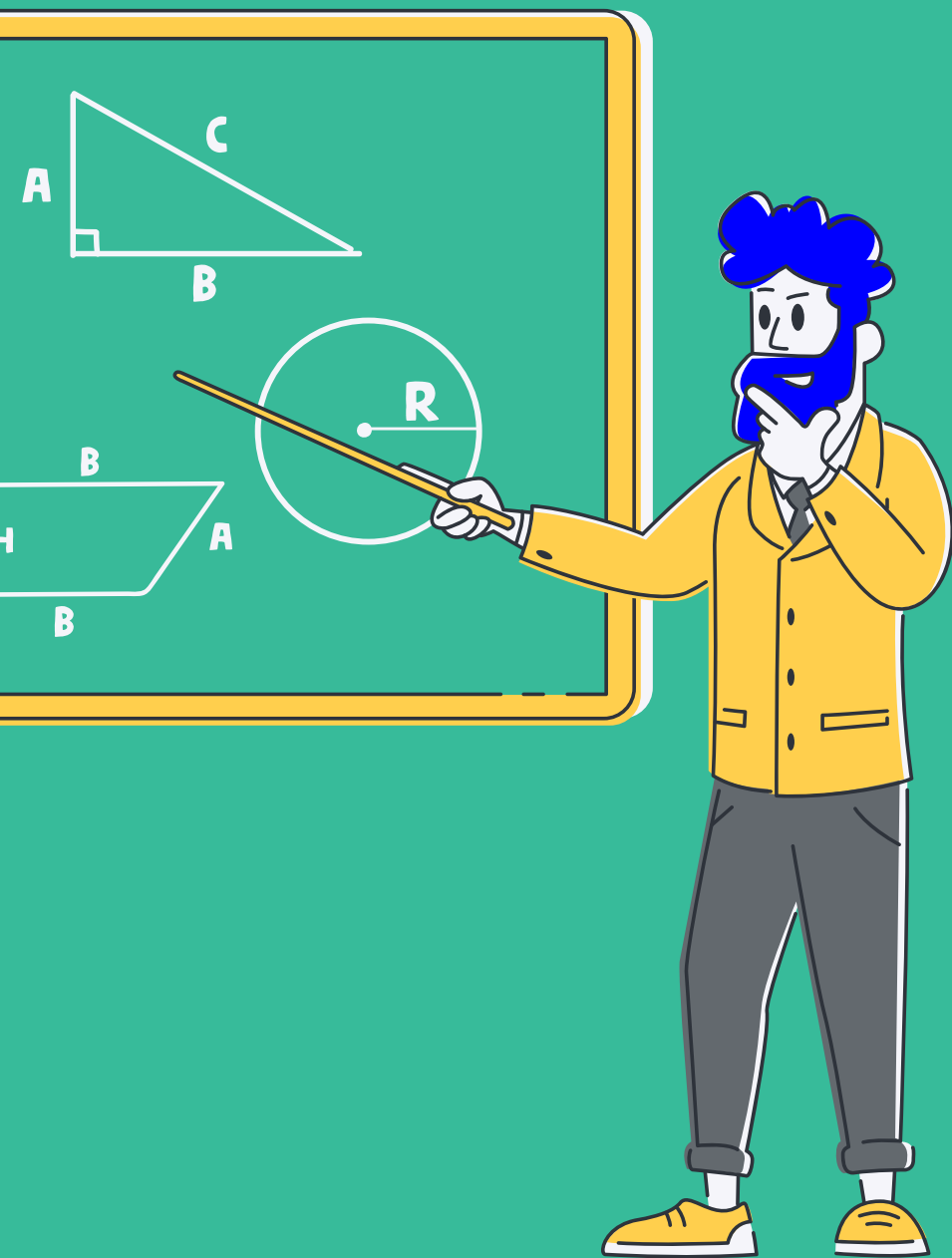For parents with mobility issues

The Jamf Parent app, available to all schools using Jamf School or Jamf Pro to manage their devices, allows parents to prevent distractions from devices as their children are traveling to school and to know when their student has arrived safely at school. It's easy to add multiple profiles to a parent's interface, so they can keep tabs on several kids at once.

VoiceOver

For visually-impaired parents, teachers and students

VoiceOver can allow parents to appreciate school photos, read electronic report cards and navigate on iOS devices with visual descriptions of what is on their screen.

AssistiveTouch and Jamf Parent for Apple Watch

For parents with limb differences or fine motor skill impairments

AssistiveTouch for watchOS allows users to use Apple Watch without ever having to touch the display or controls. Using built-in motion sensors like the gyroscope and accelerometer, along with the optical heart rate sensor and on-device machine learning, Apple Watch can detect subtle differences in muscle movement and tendon activity, which lets users navigate a cursor on the display through a series of hand gestures. Combined with the Apple Watch version of Jamf Parent, disabled parents can access management of their children's devices without touching their Apple Watch.

DISABLED TEACHERS

While most of the scholarship on educational accessibility is focused on student needs, it's also important to note that some teachers themselves are disabled, and face barriers to employment and retention.

For instance, a recent Cambridge study on the work lives of disabled teachers[6] showed that disabled teachers face employment discrimination in English schools despite the fact that "not only are disabled teachers excellent role models, they also often bring additional qualities and strengths into classrooms."[7] (For instance, the study found that disabled teachers are better able to differentiate instruction for students with varying educational needs than their non-disabled counterparts.)

In addition, according to England's 2016 census, while disabled adults make up 16% of England's working-aged population they only make up 5% of the nation's teachers. The statistics look similar in other nations, as well, as do the difficulties disabled teachers face.[8]

Both studies suggest that disabled teachers face discrimination because of the general pressure on schools created by performance targets and tight budgets, which makes it difficult for schools to accommodate disabled staff.

This is why creating an infrastructure with already existing accessibility tools is so important for students, parents, and teachers.

And the organization that offers such an infrastructure, increasingly, is Apple.

Here are a few accessibility features sure to support disabled teachers as well as their students:

6. "The work lives of disabled teachers: revisiting inclusive education in English schools," Hannah Ware, Nidhi Singal & Nora Groce, 23 Feb 2021.
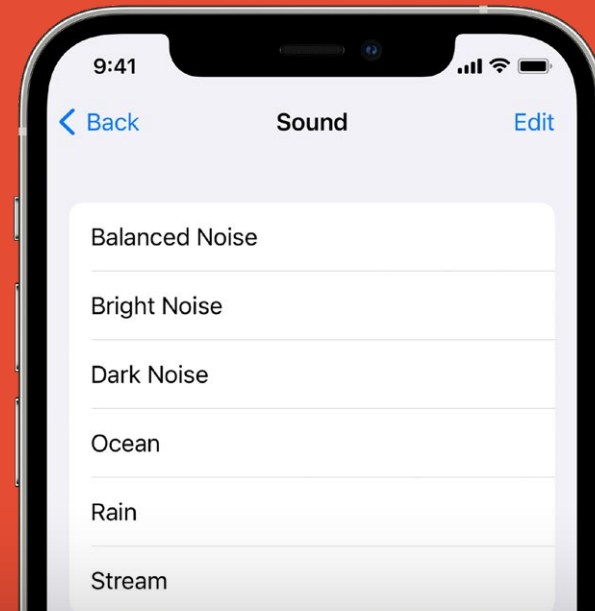
7. Ibid.

8. "Teachers with Disabilities: Their Challenges and Their Needs," Disabled Teacher's Network, 2018.

Siri

For teachers with typing or executive function difficulties

For those with limb differences, fine motor skills deficits or learning disabilities Siri can assist in classroom planning — just by asking. A teacher can say "Remind me to grade history assignments on Friday" or "Text Sveta's mother to ask if she's feeling better." Siri can help teachers who struggle with organization by scheduling activities and setting reminders. And Siri is integrated with VoiceOver — an advanced screen reader — so blind and vision-impaired teachers can ask where the nearest music shop is and hear the answer read out loud.

Jamf School's configuration profile settings can create the exact setup teachers (or students, of course) need remotely with no need for IT to access the device:
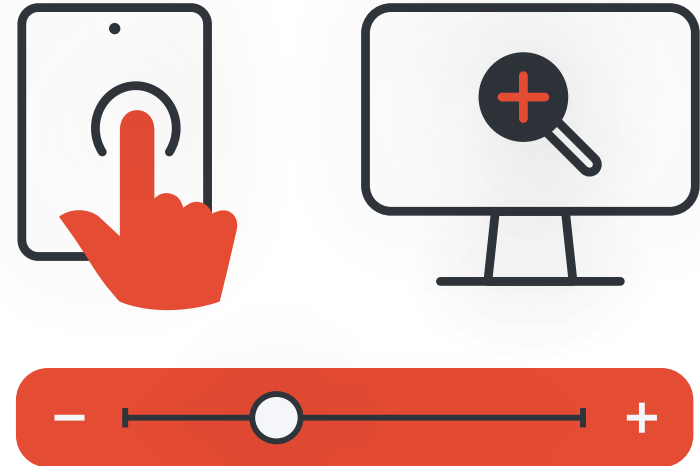
9:41

‹ Back   Sound   Edit

Balanced Noise

Bright Noise

Dark Noise

Ocean

Rain

Stream

☑ Allow Siri

  ☑ Allow Siri while locked

  ☑ Allow user-generated content in Siri   (Supervised only)

  ☐ Enable Siri profanity filter   (Supervised only)

  ☑ Allow server-side Siri logging   (iOS 12.2 or later)

Jamf School configuration profile settings

Zoom

For low-vision teachers and students

Zoom is a built-in screen magnifier that works anywhere in iOS, so teachers and students with low vision can better read an essay, view an assignment or get details on a map. Zoom works with VoiceOver, so teachers can better see — and hear — what's happening on the screen. (On a Mac, Hover Text will enlarge the words, and is customizable within the settings.)

iPhone, iPad, and iPod touch braille displays

For blind and visually impaired teachers and students

Teachers and students can use VoiceOver on their iPhone, iPad or iPod touch combined with a Bluetooth-enabled braille display to read and navigate. Apple supports a wide variety of braille displays.

DISABLED IT STAFF

SignTime

For deaf and hard-of-hearing Mac admins
Sign Time links Apple Support customers with
on-demand sign language interpreters when admins have
questions or need assistance.

If you'd like to explore in more depth, visit Apple's website to see
all of their accessibility features in action.

If you'd like to learn how Apple and Jamf can support and empower disabled users in your school, reach out to your regional Jamf expert, or drop us a note to request more information.

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signtime.apple

Welcome to your SignTime session.

One-on-one sign language interpreting for shopping and support sessions.

Here's how it works

Connect with ASL interpreter