

## ИСПОЛЬЗОВАНИЕ IPAD ВО ВСПОМОГАТЕЛЬНЫХ ТЕХНОЛОГИЯХ В США USING THE IPAD AS ASSISTIVE TECHNOLOGIES IN THE USA

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### **Аннотация**

В данной статье автор рассматривает вспомогательные технологии, которые могут быть использованы для поддержки учебного процесса и повышения уровня обучаемости лиц с ограниченными возможностями здоровья. Автор доказывает, что вспомогательные технологии переопределяют возможности людей с ограниченными возможностями здоровья, что позволяет им быть более независимыми, уверенными в себе и продуктивными членами общества.

В этой статье автор выделяет доступные возможности Ipad, которые могут помочь глухим, слабослышащим и лицам с нарушением зрения преодолеть традиционные барьеры к обучению с использованием технологий, которые варьируются от увеличения экрана и контрастности дисплея до уникального чтения с экрана посредством программы VoiceOver. Мощные функции, предназначенные для учащихся с особыми потребностями, внедряются в каждый Ipad. Автор также освещает в статье разнообразные образовательные приложения, которые представляют собой преимущества для студентов с ограниченными возможностями здоровья.

**Ключевые слова:** *лица с ограниченными возможностями здоровья, слабослышащие и глухие дети, слабовидящие дети, дети с особыми потребностями, использование IPad во вспомогательных технологиях.*

**Key words:** *persons with disabilities, hard of hearing and deaf children, visually impaired children, children with special needs, use of IPad in assistive technologies.*

What is Assistive Technology? *Assistive technology (AT) has become a fundamental component of learning for today's students, especially for those who have learning disabilities. Using technology in the classroom enhances student learning and offers differentiated instruction to help meet the needs of each individual.*

Technology has opened many educational doors to students, particularly to students with disabilities. Alternative solutions from the world of technology are accommodating physical, sensory, or cognitive impairments in many ways.

Technology can be a great equalizer for individuals with disabilities that might prevent full participation in school, work, and the community. This is most evident in the case of individuals with mobility, hearing, or vision impairments. «...providing students with assistive technology is like providing them with a 'toolkit' for assistance specific to their needs.»

Ipads as an Assistive Technology are very important. Both the iPad and iPod are extremely useful tools in the classroom. With its multitude of applications (apps), the iPad is not only beneficial for typically functioning students in the classroom, but it can be an invaluable learning tool for students with special needs.

Intuitive by design, iPhone, iPad, and iPod touch also come with a wide range of assistive features that allow people with disabilities to experience the fun and function of iOS. With these innovative technologies built right in, iOS devices become powerful and affordable assistive devices.

### **Benefits**

- Engages students in active learning
- Facilitates all types of learners
- Allows for individualized and customized learning
- Fosters higher-order thinking skills are embedded in 21st century skills

- Provides immediate feedback
- Brings the real world to the classroom
- Promotes collaboration among students
- Makes learning fun and exciting with the «coolness» factor – not «special technology» for exceptional learners – the same type of technology that everyone else uses.
- Supports *equitable* access to technology

Such program as **VoiceOver** is a revolutionary screen reader that lets you know what's happening on your Multi-Touch screen. With VoiceOver, you can draw letters on the screen instead of writing and have them translated to text in Mail, Notes, and other applications. In Maps, VoiceOver will tell you the direction you are traveling as well as your current location and nearby landmarks.

If a student has a hard time reading the text on their device they can use Speak Screen to read their email, iMessages, web pages, and books to them.

Another Apple's intelligent assistant – **Siri** helps you do the things you do every day.

Sometimes due to the time absence and hastening people need other solutions instead of typing words in dictionary apps. For these purpose **Dictation** lets you talk where you would type. Tap the microphone button on the keyboard, say what you want to write, and your iOS device converts your words (and numbers and characters) into text. So it's easy to type an email, note, or URL — without typing at all.

**Zoom** is a built-in magnifier that works wherever you are in iOS, from Mail and Safari to the Home and Lock screens. And it works with all apps from the App Store. When you activate Larger Dynamic Type, the text inside a range of apps in iOS 8 including Calendar, Contacts, Mail, Messages, Music, Notes and Settings, and even some third party apps, is converted to a larger, easier- to- read size. And you can choose bold text to make the text heavier across a range of built- in applications.

For some students, navigating the web can be a sensory overload. **Safari Reader** reduces the visual clutter on a web page by removing distractions. If a higher contrast or a lack of color helps you better see what's on your display, iOS lets you invert the colors or enable grayscale onscreen. Thanks to the modern technologies you can create personalized vibration patterns for incoming messages and **FaceTime** calls. Under any name in your contacts, just tap Edit and then tap Vibration. Having a sign language conversation is easy using a FaceTime video call. To start a FaceTime call, tap the FaceTime button under a name in your contacts or on the screen during a regular call.

Watch movies, TV shows, and podcasts with closed captions. Just look for the CC icon to buy or rent captioned movies from the iTunes Store or find captioned podcasts in iTunes U. Download straight to your iOS device to watch on the go. iOS also supports open captions and subtitles. You can even customize captions with different styles and fonts.

When you're using headphones, you may miss some audio if you're deaf or hard of hearing in one ear. That's because stereo recordings usually have distinct left – and right-channel audio tracks. iOS can help by playing both audio channels in both ears, and letting you adjust the balance for greater volume in either ear, so you won't miss a single note of a concert or word of an audio book. iOS devices are remarkably intuitive and easy to use. And AssistiveTouch lets you adapt the Multi-Touch screen of your iOS device to your unique physical needs.

Assistive technologies for the Deaf and Hearing Impaired **TapTap** When it detects noise, the app will vibrate and flash to alert the user. If the door knocks, or someone is speaking or shouting, the user will know. If the smoke alarm goes off, TapTap will vibrate and flash. As a person is speaking, **Dragon** will transcribe the words for the person who is hard of hearing to read.

Assistive technologies for the visually impaired are also available **BrailleTouch** lets you type using braille right on your iPhone or iPod touch screen. Use a unique split keyboard based on the

traditional six-key Braille keyboard, and type text messages and email more quickly and accurately.

Hear the colors of everything around you with **Color Identifier**. Just point the camera of your iPhone, iPad, or iPod touch, and the app will speak the name of the color it sees, from sky blue to natural gray. Let sound help you see the light. By pointing your iOS device's camera, you can check whether lights are on, whether shades are drawn, or how dark it is outside.

«We can no longer teach today's students with yesterday's tools and expect them to succeed.»