iTunes U and Accessibility

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Since 1985, Apple has been committed to helping people with disabilities access their computers. Apple is also changing the ways people interact with technology through innovative products such as the iPhone that introduce new possibilities for making user interfaces accessible to users with disabilities. We invite you to visit www.apple.com/accessibility to learn more about our past and present support for accessibility.

In the field of education, Apple is committed to helping all learners reach their full potential. For instance, beginning with Mac OS X v10.4 Tiger, Apple has built screen-access technology into the Mac OS X operating system so that every Mac includes a screen reader for the blind.

Because Mac OS X is accessible to the blind by design, a Mac computer can be set up, configured, and the operating system completely installed and restored by a blind user—an industry first. In Mac OS X v10.5 Leopard, Apple again demonstrated its commitment to accessibility by delivering the first plug-and-play experience for refreshable Braille displays and an onscreen Braille translation panel that displays the English translation so instructors can see what a blind student is reading. In addition to the accessible applications included with Mac OS X, Apple also enhanced iTunes and Front Row in 2007 to make them more accessible to the blind.

To address those with hearing disabilities, Apple is leading the way by adding closed-captioning support to iPhone, iPod, QuickTime for Mac and Windows, iTunes for Mac and Windows, and Apple TV. Apple is also providing captioned movies that can be purchased or rented from the iTunes Store. These are just a few of the many recent innovations Apple has made in the area of accessibility.

iTunes and iTunes U

Delivering an accessible experience for blind and low-vision users of iTunes and iTunes U requires three specific areas of focus, all of which have and will continue to receive Apple's focused attention:

- iTunes application
- iTunes U interface
- Content

As previously demonstrated, Apple has made progress in each of these areas.

iTunes application

With the release of iTunes 7.1 for Mac in March 2007, VoiceOver compatibility was added, making it accessible from within Mac OS X. Windows users can access iTunes using a screen reader and existing scripts.

Windows by itself is not accessible to the blind; therefore, accessibility solutions for Windows

require the purchase and installation of a coordinated suite of products. For example, a Windows solution for the blind typically requires Windows XP or Windows Vista, a screen reader, supported applications from third-party vendors, and in some cases, additional scripts.

By building VoiceOver, Apple's screen-reading technology, into Mac OS X, Apple has taken an approach to accessibility on the Mac that dramatically reduces the complexity, number of vendors, and products required to deliver a solution. This approach lowers costs while increasing compatibility and reliability for the user. It is our goal, however, to provide solutions for iTunes that work equally well for both Mac and Windows. Apple is working to make it easier for Windows screen-reader vendors to support iTunes by improving support for the Microsoft Active Accessibility API (MSAA).

iTunes U interface

While iTunes U browsing is not currently accessible, iTunes 7.1 and later versions enable users to find and play content on iTunes U by searching iTunes U or the iTunes Store. Searching is often the fastest and preferred way to locate content within iTunes U, even for sighted users.

Many educational institutions also choose to make their iTunes U content available in additional ways, including web pages and RSS feeds, one or more of which can provide suitable accessible alternatives. RSS, for example, can be used to distribute content from iTunes U. If a site administrator enables podcasting for an iTunes U site, each Course page produces an industry-standard RSS 2.0 feed that users can access via the Subscribe button. A site administrator or course manager can copy the RSS 2.0 feed URL from that button and paste it into an accessible web page, which can then be accessed using a web browser or RSS reader application.

One organization that is already making its content available in multiple locations—giving their users choice and flexibility—is ResearchChannel. Its content is available at www.researchchannel.org as well as on iTunes U. ResearchChannel is publishing its content via RSS on its website and then using those same RSS feeds to populate its corresponding iTunes U Course pages. This is another alternative to using RSS feeds with iTunes U, but the result is the same, providing all users with options to access the same content.

Looking forward, Apple is committed to improving the accessibility of iTunes and iTunes U and is already conducting technical investigations to determine how to deliver improved accessibility as soon as possible.

Content

One of the most common requests to improved accessibility is for closed captioned content. For iTunes U, this is the responsibility of the content creator, but Apple helps to facilitate the use of closed captioning in distribution and playback technologies and creation tools.

For example, in 2007 Apple added support for closed captioning in QuickTime 7.1.6 (Windows and Mac), iPod, and iPhone, and in early 2008 added support in Apple TV and iTunes (Windows and Mac). Apple even posted the first closed-captioned movies on the iTunes Store. Also in 2007, Apple updated Final Cut Studio 2 to give Compressor (an application included in the software suite) the ability to add closed captions to video as a part of the workflow. These solutions provide a cost-effective, ubiquitous platform for authoring, distributing, and playing back closed-captioned content.

Some institutions are already distributing closed-captioned content with iTunes U. To view an example, download a video and play it back with closed captioning using one of these devices. Also try downloading content from ResearchChannel, which includes a closed-captioning track that can be viewed within iTunes (see http://deimos3.apple.com/WebObjects/Core.woa/Browse/researchchannel.org.1418444915.01418444922.1421550615?i=1648795936).

In some cases, it may not be cost-effective or feasible to caption video content. In those instances, a university may choose to distribute a transcript of the content in an accessible PDF file, which iTunes U can distribute along with the audio or video. Arizona State University, for example, is using this option (see http://deimos3.apple.com/WebObjects/Core.woa/Browse/asu.edu.1231717005.01231717016).

Moving forward

Apple strongly believes that its products should empower learning in the mode that suits the learner best. Therefore, we take our commitment to accessibility seriously and are continually striving to innovate and develop approaches that allow all users to learn and grow in the 21st-century educational environment.

Feedback and comments about accessibility are welcome. Send email to Apple at accessibility@apple.com.