5-1-2008

Listen Up: Discovering the Reference and Instructional Applications of Apple's Tunes

Bruce Connolly
Union College

Gail M. Golderman
Union College

Follow this and additional works at: <https://academicworks.cuny.edu/ulj>

Part of the [Library and Information Science Commons](#)

Recommended Citation

Connolly, B., & Golderman, G. M. (2008). Listen Up: Discovering the Reference and Instructional Applications of Apple's Tunes. *Urban Library Journal*, 15 (1). Retrieved from <https://academicworks.cuny.edu/ulj/vol15/iss1/4>

This Article is brought to you for free and open access by CUNY Academic Works. It has been accepted for inclusion in Urban Library Journal by an authorized editor of CUNY Academic Works. For more information, please contact AcademicWorks@cuny.edu.

Listen Up: Discovering the Reference and Instructional Applications of Apple's Tunes

Bruce Connolly and Gail M. Golderman

Gail M. Golderman is Electronic Resources Librarian and Bruce Connolly is Head of Public Services at the Union College Schaffer Library in Schenectady, New York. They have made presentations on music file sharing in academic libraries at the ACRL/NY and Internet Librarian conferences and have written on various aspects of Apple's iTunes software for *Serials Librarian*, *Computers in Libraries*, and *netConnect*, where they write the quarterly "eReviews" column.

Abstract

Apple's iTunes software permits people to import music onto their computer where they can listen, compile personalized playlists, and share their music with others, a practice that is ubiquitous among students on college campuses. This article examines the ongoing exploration of the potential applications of iTunes software at Union College's Schaffer Library, first, as a subtle but pervasive marketing tool used to raise student awareness of new and existing library resources, and second, as a means of reaching out to the campus population in an environment where students already feel at home. The article also discusses the role that iTunes—and specifically the free educational content available from the online iTunes Store—has begun to play in library efforts to respond to a variety of reference and curricular support needs. We describe several strategies for communicating the availability and value of this content to faculty teaching a variety of courses across the curriculum, and (taking advantage of *Urban Library Journal's* online format) we provide examples of tools we have incorporated and tweaked to deliver this content directly and conveniently into the hands of our students. We also discuss the problems and issues we have encountered and describe how we've attempted to contend with them.

Keywords: iTunes, file sharing, reference service, bibliographic instruction, academic libraries

Background

Released at the MacWorld Expo in 2001, Apple's iTunes software was designed to permit people to import and organize digital music from a CD or other source onto their computer's hard drive where they could then listen to it, organize and compile personalized playlists from a number of different source recordings, share their music with others on the same local area or wireless network, and play streaming audio from the Intranet.

While the words "file sharing" are likely to set off the copyright violation warning light in the brains of most librarians, iTunes—unlike the first incarnation of Napster and other peer-to-peer services—is implemented in such a way that concerns about unscheduled visits from federal marshals or the RIAA (Recording Industry Association of America) can be brushed aside. First, only users on the same LAN or subnet are permitted to view and listen to the shared audio files, safely locking out unauthorized, external Internet users from accessing the material. More importantly, files shared via iTunes are streamed for listening only—they are not transferred from one PC to another and so cannot be saved to the listener's hard drive. Consequently they also cannot be burned to a CD, transferred to another device such as a flash drive or an iPod, nor can they be redistributed to another listener.

Because the iTunes software is free, works with both Mac (where it comes pre-installed) and Windows platforms, and requires negligible technical expertise to master, and because its use as a way to share music was already a ubiquitous fact of life on campus, there was a ready-made audience operating out there in student cyberspace for library-branded playlists.

With the opening of the online iTunes Music Store in 2003, iTunes software could also be employed to purchase individual songs, complete albums, and even extensive (and exclusive to iTunes) digital music collections online. Within two years of opening, the iTunes Store also began offering free audio and video podcasts, many of which are of considerable educational value and reflect the high technical and broadcasting standards of the entities that produce them, including such cultural heavyweights as National Public Radio, Public Broadcasting Service, and American Public Media, not to mention over 40 universities. Most of this content currently resides within two areas of the iTunes Store—Podcasts and iTunes U—and among the items collected there are:

- course lectures from MIT and Stanford,
- video reporting on Middle Eastern politics from Link TV's *Mosaic Intelligence Report*,
- primary source material such as original tapes of the John Lennon *Rolling Stone* interviews and the Oval Office phone conversations of Lyndon Johnson,
- Krista Tippet's insightful examination of the life and thought of Charles Darwin and Albert Einstein for American Public Media,
- complete segments of *Bill Moyers' Journal* and *The Onion Radio News*,
- live concerts from NPR's *All Songs Considered* and The US Holocaust

Museum's recordings of Aleksander Kulisiewicz's ballads from the Sachsenhausen concentration camp in Poland,

- audio tours of the Brooklyn Museum collections and videos on the actor's craft from American Theatre Wing, and
- the Teacher's Domain from WGBH with educational media adapted from PBS shows such as *Frontline*, *NOVA*, and *American Experience*.

Teachers looking for material that might supplement course content, students trying to enhance in-class presentations with professional audio and video media, researchers trying to uncover primary source material on their topics, and anyone with even a modest degree of intellectual curiosity will find a wealth of information aggregated here—all of it available as free and legal downloads that are compatible with the iTunes software.

Literature Review

Schaffer Library's initial foray into the realm of music file sharing (Connolly, 2005) resulted from the accidental discovery of other people's music on the computer at the reference desk. After realizing that this was not a hostile attack but rather the same sort of innocuous activity that takes place in thousands of dorm rooms on campuses all over the nation, we recognized that what we had in our hands seemed like an ideal solution to promoting the library's extensive CD collection to listeners all over campus. CD circulation figures, in fact, blipped upwards for a few months but then settled back down, despite evidence that the library-branded playlists we had created were seeing steady use.

It occurred to us (Golderman & Connolly, 2007) that students have access to more music than they could possibly have time to listen to, and that the initial objective of increasing CD circulation was a little prosaic. We re-cast the library's file sharing initiative in terms of our trying to make a more subtle connection with our students in an environment where they are perfectly at home but where they would also still have the opportunity to experience the richness and variety of our music collection. From our perspective, the fact that this experience was cybercultural in nature and that it defied the niceties of conventional bibliometrics only enhanced its appeal.

While as far as we are able to determine, Schaffer Library is the first institution to share audio files via iTunes, other libraries have reported on the analogous practice of creating electronic reserves that stream material from their music libraries. Anderies (2005) describes the homegrown audio streaming program at Haverford College that was integrated into the password-protected Blackboard courseware management system. He also presents an overview of various subscription-based online music resources including three Alexander Street products (Classical Music Library, Smithsonian Global Sound, and African American Song), Naxos Music Library, and Database of Recorded American Music,

which represents a partnership between New York University and New World Records. While the Alexander Street and Naxos products do permit the creation of playlists, users are obviously limited to recordings represented in these commercial collections.

Phinney (2005) determined conclusively that students—including those who have encountered technical problems—overwhelmingly prefer to access audio reserve material electronically, given the much greater flexibility enabled by this approach. His literature review also nicely summarizes the issues, problems, and circumstances associated with this type of effort in other music libraries. For the most part, however, most of these implementations do not really relate very closely to the audio file sharing initiative we've attempted with iTunes.

First, Schaffer Library is not a music library, and the iTunes project is not critical to our mission. Technically, the PCs chosen as servers are general-purpose computers, which can and do support other routine office and reference work while simultaneously hosting the shared files. The process of importing of a full-length CD, including the automated downloading of the recording's discographic information from the Gracenote CDDb, takes only about ten minutes. It requires no monitoring and no post-processing other than the occasional editing of the Gracenotes information. Finally, and significantly, the budget for this project is zero.

Exploring the Resource

Needless to say, no one at Schaffer Library had anything to do with the development of the iTunes software, the iTunes Store, iTunes U, or podcasting. For us, iTunes is, in effect, a "found" technology, *i.e.*, a technology that came into being with no thought whatsoever for its potential library applications but whose value within the sphere of library service was immediately obvious, at least to us, and whose varying applications continue to morph into new and exciting areas for pedagogical use.

Starting in the summer of 2005, Schaffer Library began exploring options for raising awareness of its extensive CD collection. Using the file sharing capabilities of Apple's iTunes software as a promotional and marketing tool, we created library-branded playlists of newly acquired music and made them available for our users to discover over the campus network.

We quickly realized, as we became increasingly excited by iTunes potential and more deeply immersed in this technology, that ideas on how it could be put to use started bubbling into our consciousness faster than they could be acted upon. The narrow focus of our original aim—increased CD circulation—soon became secondary to several themes that we viewed as being much more substantial both pedagogically and in terms of community building. These include: fostering increased engagement with students with the hope that they might come to view the library as a diverse, valuable, and engaging resource; demonstrating support for

Connolly & Golderman/Listen Up: Discovering the Reference and Instructional Applications of Apple's iTunes

Union's commitment to multiculturalism and diversity; and contributing to the educational mission of the college. And although our CD statistics have actually decreased over the past few years—not surprisingly as access to digital music is readily available from a multitude of sources and listening styles have radically changed—we couldn't be more energized as to our new discoveries and applications.

The Playlist as New Acquisitions List/Themed Discography

As noted above, the first use of the iTunes file sharing capabilities was the creation of online playlists that could serve a number of purposes—to advertise new acquisitions, to promote events on campus such as concerts, and to draw attention to social and cultural events and interests generally. These playlists were made available over the campus LAN, and they possessed one distinct advantage over conventional discographies: namely, one could listen to them. We branded each list so listeners could easily identify the theme and the source and added library call numbers to the Comments field in iTunes so students could easily track down the source recording in the library if they wished to do so.

The new acquisitions lists evolved into a series of themed playlists—"Black History Month," "Hispanic Heritage Month," "Protest Music @ your library," and "LGBT-friendly Music @ your library"—associated with various social and cultural events and other interests on campus.

"LGBT-friendly Music @ your library" with CD Call Numbers in the Comment field

Into the Classroom

With the creation of a playlist entitled “The Beats @ your library” in the Winter Term of 2007, we took the practice a step further by employing the iTunes file sharing functionality as a way of supplementing the course content for one of the college’s Sophomore Research Seminars. From the soulless drone of William S. Burroughs to the bleary-eyed musical narratives of Tom Waits, “The Beats and Contemporary Culture” was one course that seemed particularly well suited to the use of audio material. We approached the professor with the idea of exposing students to the rich content from our collection by putting spoken word and musical recordings online, and he turned out to be very receptive to the idea of experimenting with the pedagogical aspect of iTunes in this manner.

Providing course content via iTunes file sharing has one significant drawback, however. Presumably as a nod to digital rights, the iTunes software imposes a limit of just five listeners per day. In order to make the playlist accessible to those in the class (while simultaneously restricting access by those not enrolled in the class), we created and distributed a password for the playlist. While the Apple documentation is noncommittal on this practice, password access appears to permit unlimited access to the playlists. While imposing any type of obstacle in the way of using library materials strikes us as less than ideal, all the source recordings (in the original CD format) remained available to any student who wanted to listen to them, and the professor had the option of putting required recordings on reserve if he chose to do that. It also followed a similar practice of restricting access to course material through the college’s Blackboard course management system. One of the interesting outcomes of this initiative was that the professor told us that, had he realized how rich our audio holdings in this area were, he would have approached the class in a completely different way.

Cover flow of “The Beats @ your library”

An English Department seminar on Bob Dylan provided the impetus for the next step in the evolving use of iTunes—the acquisition of *Bob Dylan: The Collection*, a born digital release that represented our first major and comprehensive iTunes Store acquisition. The collection consisted of 773 songs

Connolly & Golderman/Listen Up: Discovering the Reference and Instructional Applications of Apple's iTunes

(including several dozen that had not been previously released), a 139-page book in PDF format, original liner notes, and full discographical information. We printed the book on a color laser printer and put it on the professor's course reserve in a binder. We acquired an iPod (which was also put on the professor's course reserve), to hold the collection. The acquisition of this collection, in addition to giving us the complete works of one of popular music's most influential artists, also gave us the ability to generate CDs for the collection on an "as-needed" basis.

Bob Dylan: The Collection, a digital-only iTunes collection

Ready Reference and On-Demand Collection Development

Another iTunes Store purchase came in response to a reference question: a history professor needed a copy of Bruce Springsteen's "Sinaloa Cowboys" to reinforce a point in her class. The problem? *The Ghost of Tom Joad* did not show up in the library's catalog. The reference response? We made a snap decision to go to the college bookstore, purchase an iTunes gift card, and buy a replacement for the CD from the online iTunes Store. We burned a copy to disc and delivered it to the class in time for the lesson. Elapsed time? About 20 minutes from question to CD delivery.

The iTunes Store is a "long tail" type venture, something we have since taken advantage of in doing niche collection development for a couple of courses. For a class on "The Cuban Revolution" we acquired a number of recordings in the post-Revolutionary *nueva trova* style, and for a seminar on "The Beatles" we were able to locate several early recordings—*In the Beginning* with the members of the Beatles (including Pete Best) playing back-up for Tony Sheridan and *The Lost Decca Tapes* from their legendary failed 1962 audition—particularly useful finds given the

instructor's insistence that the students follow the band's development chronologically. In fact, iTunes is ideally suited as a collection-building source for any musical genre that resides somewhat outside the mainstream—classic alt-Country or LGBT music, for example—and response time (whenever that becomes a critical factor) can be almost immediate.

The Early Beatles

Podcasts as Courseware

With Bob Dylan in our consciousness and The Beatles on our radar, we have also discovered the great number of documentaries and primary source documents such as interviews and personal reminiscences available for free as podcasts. We have added the Sony BMG Legacy Recordings podcast on Bob Dylan, narrated by Patti Smith, to the iPod containing the Dylan digital collection and have created a directory of Beatles-related podcasts—the John Lennon interview from *Rolling Stone*, the lost Lennon tapes, a documentary featuring the photographer who was responsible for many of the classic early Beatles images, and the reminiscences of George Harrison's sister—for use with that course. (See Appendix I)

We also had a nice breakthrough when one professor asked the library to acquire the DVD set of a six-part PBS series called *E²* for a first-year honors seminar on “Energy and Transportation.” Shortly after purchasing the set, we discovered that PBS was offering free video podcasts that supplemented the *E²* broadcasts with interviews and additional footage. This meant that while the library would have an “archival” copy of the series in DVD format, the professor and

Connolly & Golderman/Listen Up: Discovering the Reference and Instructional Applications of Apple's iTunes

students could download the supplementary content via the iTunes Store, which they could then work with outside the constraints of library hours or competition at the reserve desk for access to the same material. In fact, we have also experimented with linking to podcasts from certain catalog records as a means of complementing the bibliographic information with actual audio samples or related video material.

Enhanced catalog record

DYI Opac Content Enhancement

In addition to offering 30-second samples of each track on a CD, the iTunes Store also contains a wealth of biographical information (provided by the authoritative All Music Guide website) on artists and groups. As we did with the course-related podcasts, we have incorporated links from our opac records to the iTunes Store, turning the catalog into a front end for the reference information on the iTunes site.

Taking advantage of iTunes Link Maker, a simple web interface that automatically generates html code, we create links that come in handy for direct access to content, not only from our bibliographic records, but also from class handouts and web pages.

The screenshot shows the iTunes Store interface for Richard Thompson's album "Live from Austin, Texas". The page includes a navigation bar at the top with "Music > Pop > Richard Thompson > Live from Austin, Texas". The main content area features the album cover, a "BUY ALBUM" button for \$9.99, and a "Gift This Music" link. To the right, there are links for "SEE ALL ALBUMS", "CONCERT TICKETS", "ALERT ME", and "TELL A FRIEND". Below these are sections for "TOP SONGS" and "TOP RINGTONES". The "TOP SONGS" section lists "Coyotes", "Persuasion", "1952 Vincent Black Lightning", "Dimming of the Day", and "1952 Vincent Black Lightning". The "TOP RINGTONES" section lists "Turning of the Tide", "I Feel So Good", "1952 Vincent Black Lightning", "Keep Your Distance", and "Mystery Wind". At the bottom, there is a table of tracks with columns for Name, Time, Artist, Album, Price, and Popularity.

Name	Time	Artist	Album	Price	Popularity
1 Cooks Ferry Queen	3:36	Richard Thompson...	Live from Austin, Te...	\$0.99	BUY SONG
2 Uninhabited Man	5:50	Richard Thompson...	Live from Austin, Te...	\$0.99	BUY SONG
3 Walking the Long Miles Home	4:01	Richard Thompson...	Live from Austin, Te...	\$0.99	BUY SONG
4 Al Bowlly's In Heaven	5:28	Richard Thompson...	Live from Austin, Te...	\$0.99	BUY SONG

The screenshot shows the All Music Guide biography page for Richard Thompson. The page includes a navigation bar at the top with "Music > Folk > Richard Thompson > Biography". The main content area features a photo of Richard Thompson, a "SEE ALL RICHARD THOMPSON" link, "CONCERT TICKETS", "ALERT ME", and "TELL A FRIEND" links. Below these are sections for "INFLUENCERS" and "FOLLOWERS". The "INFLUENCERS" section lists "Bob Dylan", "Michael Bloomfield", "The Byrds", "James Burton", and "Charlie Christian". The "FOLLOWERS" section lists "Florida" and "Bob Mould". The biography text describes Thompson's career, mentioning his time with the Fairport Convention and his solo work.

Richard Thompson

BORN: April 03, 1949 in London, England

GENRES: Folk, Singer/Songwriter, Folk-Rock, Adult Alternative, Traditional Folk, Contemporary Folk, Soundtrack, Traditional Pop

YEARS ACTIVE: '60s, '70s, '80s, '90s, '00s

Biography

For years, Richard Thompson resided in relative obscurity, while at the same time garnering vast critical praise for his magnificent guitar work and the dark wit and richness of his extraordinary songwriting. A founding member of the seminal British folk-rock group Fairport Convention, he remained with the band for five studio albums — Fairport Convention (1968), What We Did on Our Holiday (released as Fairport Convention in the U.S.) (1968), Unhalfbricking (1969), Liege and Lief (1969), and Full House (1970) — and

Biographical content from All Music Guide added to bibliographic records and course pages

Strategies

We have taken advantage of a variety of strategies for communicating the availability and value of this content to faculty teaching courses across the curriculum including through our library instruction program, where we integrate techniques for discovering more traditional resources, along with how to find audio and video material from the library's collection and relevant course-related podcasts from the iTunes Store. (See Appendix II) We use existing tools to deliver this content directly and conveniently into the hands of our students, including creating iMix playlists, published and available in the iTunes Store that are incorporated in the library blog and course web pages. We have used iTunes's "Tell a Friend" feature to email selected content to a professor, who in turn can forward it to the entire class.

Tell a Friend feature in iTunes

Issues/Problems

We have discovered, in the course of experimenting with iTunes for the past two-and-a-half years, that there are real, and in some cases unanticipated, limits that have kept the experience from being a completely smooth one. The first issue that we encountered was the quota of five visits per day that the iTunes software imposed on our listeners. We have discovered that creating a password enables us to circumvent this limit, but the use of a password, obviously, imposes limits of its own.

Not long after we began file sharing, the campus network was reconfigured. The machines that we use are on the academic area of the campus network, which means faculty and administrators in their offices and electronic classrooms can

listen to and view the shared library files, but students on the residential area of the network cannot. Most Union students have laptops, though, and most of the laptops are wireless. Students with wireless access can listen, but as we've discovered, this is the case only if they are physically located in the same wireless zone as the library. Access to playlists, in other words, has been considerably less universal than we thought it would be when we got started.

We also discovered what happens when students attempt to do a classroom presentation using shared iTunes files when the machine holding the music they want to use had been inadvertently powered off. Nothing; followed by panicked phone calls and a lot of running around until it dawned on someone what the problem was. Librarians who want to share music should probably post a note on the Mac or PC they are using to the effect that the machine needs to be powered on and iTunes needs to be running. We have configured our machines to launch iTunes on start-up, which minimizes potential problems to a considerable extent.

As we were working on this piece, we learned about a free utility from [Simplify Media](http://www.simplifymedia.com/) (<http://www.simplifymedia.com/>) that permits sharing back-and-forth among up to 30 invited "friends" beyond the local area network using a simple registration process. We've been puzzled with some aspects of the setup process and have had trouble modifying selections made about which playlists to share. We do, however, have enough experience with Simplify Media to be able to say that it does permit us to reliably increase the number of listeners who can access a playlist and lets us stretch the physical boundaries where listening is permitted, a capability that presents enticing possibilities for distance learning situations. While we have some reservations about asking students to install software (that is currently not supported by our IT department) on their personal machines, we are still eager to try this out in a real class setting.

Setting up the Simplify Media file sharing utility

The Creative Process

The atmosphere in the library is, in all likelihood, the factor most responsible for getting the iTunes file sharing project off the ground. Union College's Schaffer Library is a place where supervisors and administrators rarely (bordering on never) place obstacles in the way of librarians who want to pursue ideas having to do with innovations in service. It's also a place where finding collaborators is not likely to be a problem.

A second factor that kept this project interesting was that it had no budget. Consequently, when we encountered a problem, we had to think (or guess or experiment or stumble) our way around it because throwing money at it was not an option.

In terms of the "creativity" that spawned the project, it is the embarrassing kind—something that everyone else knows about and everyone else uses and everyone else understands falls into your lap and after staring blankly at it for a while, it dawns on you that this just might be the solution to a problem you did not know you had. After that, because the problem is intrinsically interesting and fun to think about (at least to the participants) and because there is a receptive audience for the outcome, whatever that might be, ideas tend to drift around in the subconscious until some minor event sparks the next small breakthrough.

Summary

Although there is nothing inherently innovative about legally sharing music files over a campus network—virtually every college student with a personal computer was doing this already thanks to Apple's iTunes software—Schaffer Library, as far as we can tell, was the first college library to recognize the wide-range capacity of iTunes file sharing to raise student awareness of its resources, to meet the student population on their own terms in an environment where today's student already feels completely comfortable, and to provide educational content directly and conveniently to students in a growing range of classes.

While it is possible to get some idea whether students are connected to the shared music files for their classes, the chief gauge of our success comes in the form of faculty comments, which have all been positive. This is a new pedagogical technique for them, and the initiative so far has come entirely from the library. The fact that we have put thought, time, effort, and resources into their teaching, has not gone unnoticed or unappreciated.

We have found iTunes to be a particularly stimulating and provocative product in terms of generating ideas among library staff on how to weave it into a variety of library initiatives, and we are now beginning to see students and faculty discover their own innovative applications of iTunes in their courses and assignments.

APPENDICES
(Click on the link to view.)

[Appendix I](#)

English Senior Seminar: The Beatles — Podcast Directory

http://www.union.edu/PUBLIC/LIBRARY/research/subject_eng_srs_beatles.htm

[Appendix II](#)

Sophomore Research Seminar: African-American Social Movements

- Finding Audio and Video Materials in the Schaffer Library Collection
- Finding Podcasts on the iTunes Store Website
- African-American Social Movements Podcast Directory

<http://www.union.edu/PUBLIC/LIBRARY/srs/aapm/SocialMovementspodcasts.pdf>

References

- Anderies, J. (2005, June 1). The Promise of Online Music. *Library Journal*, pp, 44-46.
- Connolly, B. (2005, November/December). Promoting the Library's CD Collection via iTunes File Sharing. *Computers in Libraries*, pp. 6-8, 53-56.
- Golderman, G.M., & Connolly, B. (2007). Infiltrating NetGen CyberCulture: Strategies for Engaging Students on Their Own Terms. *The Serials Librarian*, 53(3), 165-182.
- Phinney, Scott. (2005). Can't I Just Listen to that Online? Evaluating Electronic Access to Audio for Music Libraries. *Music Reference Services Quarterly*, 9(2), pp. 1-33.