Library iTour: Introducing the iPod Generation to the Academic Library

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Abstract

PURPOSE: For many years, the Lupton Library offered a traditional library introduction class to first year students participating in the Freshman Seminar Program at the University of Tennessee at Chattanooga. In 2007, the library applied for and received a campus grant to purchase thirty iPod Touches, along with accompanying hardware and software. The goal was to create library instruction content that would be both engaging and challenging to students. METHODOLOGY: As a result, the instruction librarians developed an iPod-based First Year Library Experience program, called the iPod Investigation, designed to familiarize incoming freshmen with the facilities, resources, services and people available to them at the Lupton Library. RESULTS: By incorporating video, music, screen captures, quizzes, and even a bit of gaming, the Lupton Library iPod Investigation transformed the students' initial experience with the academic library. In the first semester, close to 750 incoming freshmen participated in the tour. This article details the program, including: the brainstorming and planning process, the creation of the video, the implementation of the program that meant obtaining buy-in from the Freshman Seminar instructors, and the assessment and evaluation by both students and librarians, with specifics on what we would do differently next time.

PURPOSE
Background: The birth of an idea

In the spring of 2006, a bunch of librarians at UTC were sitting in a Blended Librarian Webcast that dealt with Emerging Positions in Academic Libraries. One of the projects profiled in the webcast was the Duke University iPod Initiative where all incoming freshmen were given iPods and the course lectures were all recorded and loaded onto the iPods for students to listen to on their own schedules. There was a very striking photo of Duke University students walking across campus with their iPods on, engaging with their schoolwork in a way that was convenient and practical for them. Two of the librarians in the room were particularly mesmerized by the photo. They looked at each other and said, out loud (interrupting the webcast) "THAT'S what we need. iPods!" So the idea was born.

Over the next few weeks the reference and instruction librarians had several "hallway conversations" where we started to flesh out an idea for using iPods to deliver some of our most basic freshmen level library instruction to students. Although it was clearly a good idea, the major stumbling block would be cost: iPods are not cheap. Luckily, UTC has several competitive grant funding programs on campus that provide money to interested faculty who wish to pursue new and creative teaching ideas. After consultation with the Library Dean, it was decided that a UC Foundation Student Success Grant Proposal would be the best fit for the scope of this project. Within only a few weeks, we had a draft of a proposal in hand and ready to be submitted. The final dollar amount was nearly $15,000 and included thirty video iPods, a large screen iMac for media creation and editing, assorted peripherals such as digital cameras and tripods as well as protective cases for the iPods so they could be circulated safely. The rationale we used as the basis for our proposal was the idea that the typical Millennial first year student would find the iPod format to be particularly convenient, engaging and appealing as a learning tool.

At the close of 2006, we were gratified to learn that our proposal had been funded and we had until June 2007 to purchase our equipment. Soon after the announcement came about our award, Apple introduced the iPod Touch as its newest product line, so we delayed making our purchase until later in the year than we had originally anticipated in order to be able to purchase the Touch versions. We felt the screens were so much larger that the student experience of media viewing would be much improved on a full screen Touch. Once the iPods and equipment were ordered and received, then we began trying to get our heads around just HOW we would incorporate these iPods in our instruction program and into our library services in general.

USTU101 (The Freshman Seminar) at UTC

UTC offers an introduction to university life, known as USTU101 (University Studies 101), as an elective to incoming freshmen. The class includes a library component, and, according to the collective knowledge of the instruction librarians, the library's involvement in this seminar reaches back at least ten years. The earliest memory involves a walk-through of the library, followed by the creation of a scavenger-hunt type of exercise, known as the "Library Safari." Both versions incorporated a follow-up class session with an instruction librarian. These library visits continued to evolve through the years, integrating more and more hands-on activities.

With the acquisition of the iPods, discussion ensued over the appropriate use for them. The instruction program was growing rapidly with no increase in the number of librarians. Using the iPods for a basic

freshman class, such as USTU101, would free up the instruction department from teaching approximately thirty full classes during the fall semester. This would allow us more time to focus on upper-level research classes. The idea of replacing face-to-face contact with an iPod made for some interesting discussions, however.   Would eliminating the USTU101 library class session mean a missed opportunity to put a friendly face on the library, one of the main objectives of USTU101? Also, the backbone of the class, group work – which recent literature says that the Millennials prefer– would be replaced by individual efforts.   It was finally agreed to view the iPod project as an experiment. We could always go back to the previous class structure if the success of the new method was questioned. USTU101 students would still meet a librarian during a fifteen-minute introduction to the activity, and contact would still be made with a majority of the freshmen through their English classes' library instruction sessions.

METHODOLOGY
Selecting the Content

Most of the concepts covered in our prior versions of USTU101 were familiar to us. We knew the general focus was going to be on making students comfortable with the library, orienting them to the physical spaces and introducing them to the staff. As a first step in brainstorming a new iteration, we started looking not at content but at format for the assignment. We set about searching for other examples of freshman library "experience" programs that involved scavenger hunts, mysteries and other games to incorporate student participation. We quickly agreed that some sort of movie was in order, given the large screen on the iPod Touch and the availability of our great new iMac and digital cameras. We spent quite a few meetings sharing video ideas and brainstorming storyboards that we could use to frame a library orientation tour. Our first ideas revolved around some sort of "Mystery in the Library." There are several examples of similar ideas on YouTube so we watched a few and tried to come up with an idea that would be fun but somehow unique to UTC and Chattanooga. We explored the idea of building an assignment around the concept of a popular TV show such as CSI, Law and Order or The Sopranos. Several of our ideas were very creative and would no doubt have been very entertaining to students, but the logistics of filming an actual "movie" with a plot, characters and scenes quickly began to overwhelm us. Since none of us had any actual movie-making experience at this point, we decided that the rational approach would be to undertake a more simplified building tour as our first foray into the movie-making world.

Once we settled on a tour as our format, we then had to return to our content and figure out how to divvy it up and present it in a way that made sense. Since we had quite a history creating assignments for this class, we started off by simply listing on a large whiteboard everything we had covered in the past. Then we started adding ideas for new things we might want to add. We literally covered the entire surface of a fifteen-foot whiteboard with close to a hundred facts, locations, services, policies, resources, people, equipment and concepts that we wanted to consider for inclusion in our movie. Obviously we knew we would have to eliminate some things from the list. What we chose to do was prioritize each item with a 1, 2 or 3. Once we did that it was easy to group the 1s together to see what we felt were the absolute essentials that must be covered. We then sorted through the 2s and 3s and knocked quite a few off the list when we realized our brainstorming efforts had probably led us beyond what the typical incoming freshman would need to know about the library. We had received a comment from the Dean that she would like to make sure the incoming freshmen at least received a basic introduction to the library website so that visiting us online would become a part of their study routine as early as possible in their college career.

So armed with a prioritized list of individual content, we met again to sort out how we would present the information.

Fitting it into a master plan

As mentioned earlier, the decision was made to continue providing a fifteen-minute introduction to the library activity, a holdover from the previous version of the class.   This meant an instruction librarian would visit each section to explain the iPod Investigation – the name of the tour – and to maintain some face-to-face time with the students. The class instructor would schedule this introduction with the Head of Reference and Instruction.   During these fifteen minutes, the librarian would pass around an iPod for the students to play with, along with brightly colored handouts that they needed in order to complete the activity.   The students would be given one week to do the tour and take a quiz.

We envisioned students coming individually to the library to check out an iPod and take the tour. They would bring their handouts with them. The handouts came in four different colors– red, green, yellow, and blue, and provided instructions on taking the tour, just in case the students forgot the directions given by the librarian. During the planning phase of this project, we worried about students cheating – not taking the tour, just taking the quiz – and wanted to devise an activity that ensured participation. Each colored handout would have a question or statement that the students needed to answer. They would collect letters, or "clues," throughout the library that were the same color as their handout, and would later unscramble these clues to answer their question. So, not only did they have to take the tour to find the clues and unscramble the answer, there would be four different versions of the handout, with different questions and clues, in an attempt to reduce dishonesty.   The questions or statements would all be related to Chattanooga. For instance, the green handout had the following statement "It's *March of the Penguins* when you visit this spot in Chattanooga." The students with this handout collected clues that spelled out Aquarium, a popular Chattanooga attraction (that indeed houses penguins).   Also, laminated pink signs were placed throughout the library that said "Stop Here" - some at the clue locations, others just at locations pointed out by the video, in hope of keeping the students on track.

Around eight hundred copies of the handouts (two hundred red, two hundred green, etc.) were printed for all of the students in USTU101.   This was obviously not the most cost effective or "green" solution, although most of the handouts were returned and recycled.   Pre-prepared packets for each section of USTU101 (counted for the number of students in each section with a proportionate amount of each color) were placed in a convenient location for all of the instruction librarians. So, when a librarian taught a fifteen-minute introduction for a particular section, she simply had to find the packet for that section.

The students would turn their handouts in at the Reference desk as "proof" that they had completed the activity, where their answers would be checked by a librarian before receiving their prize of a key chain/bottle opener and Library of Congress Classification System bookmark. They would also be given printed instructions on completing the quiz on Blackboard, and the librarian would remind them to return the iPod.

Like the fifteen-minute introduction, the quiz was retained from the earlier version of the class.   The quiz comprises twenty questions that tests what the students learned about the library during the

introduction. It is used as a form of assessment, to measure whether the students are "getting it." The plan was to switch from using Blackboard, which requires activating quizzes for each section of the class, as well as a complicated process of assessing the grades, to an online quiz for the new iPod tour. Unfortunately, technical issues and the lack of time prevented this change. Consequently, the students continued to login to their Blackboard accounts after completing the tour in order the take the assessment.   Instructions for accessing the quiz along with print copies of the quiz, in case Blackboard acted up, were created.

Lastly, an outline was developed so all of the instruction librarians would cover the same points during the fifteen-minute introduction. Instructions were also placed at the Reference desk for the librarians who encountered students completing the tour as well. Two boxes under the desk held the prizes, instructions for the quiz, along with a place to store the turned-in handouts.

Creating the Multimedia Components:

Filming and editing the video

The first step in constructing the tour was to film the video, targeting what we wanted students to know about the library.   After filming the three floors, the video was downloaded onto the new iMac and edited using iMovie software.   Special effects available on iMovie, along with music found through the Creative Commons website, helped to transform the video into what we thought was an engaging introduction to the library.

The Screencast

Once the movie was created, we turned our attention to the Dean's request that we introduce the library's website within the new version of USTU101. We decided to create a screencast that highlighted our most frequently used online resources and services. One librarian was assigned to create the screencast using Camtasia Studio. The screencast moved through basic overviews of each section of the website including brief facts about each link to assure that students knew the basics of what could be found there.

The screencast was designed to be fast-paced and upbeat and included music to give it a more entertaining feel. The idea was to feature our website as user-friendly and information-packed. The screencast was posted to the library website itself and at the end of the iPod movie, students were directed to visit a library PC, logon with their ID and password, locate the tutorial on the website and then view it. The final clue needed to answer their question was included at the end of the screencast. This provided some insurance that students would actually watch the screencast and (hopefully) learn a few things that they could use when the time came to visit the library website for other class assignments.

Preparing for the launch:

Getting the iPods ready

Once we had all this great multimedia created and ready to go, we needed to get it all loaded onto the thirty iPods. We had an iMac that we outfitted with seven USB hubs in a daisy chain to give us the ports we needed to sync all thirty iPods at the same time. The iMac was mounted on top of a laptop cart and the cart was wired to include thirty syncing cables, all numbered so we would know where each iPod would reside for charging and syncing. When we ordered the iPods we had them all engraved with numbers so it is very easy to keep them organized in the cart. Each iPod was then configured to sync with our iMac. Once all the iPods were properly configured on the iMac, we then transferred the movie to the iTunes Library on the central iMac using a USB drive so it could in turn be copied to the synced iPods.

We knew we would need to circulate the iPods with the movie loaded on them, but we had not nailed down the specifics until we actually got the cart set up. The Head of Reference and Instruction met with the Head of Access and they agreed on the standard three-hour checkout time that is used for all circulating technology from laptops to cameras to digital voice recorders. Although it was clear that students would not need three hours to complete the assigned tour, the standardization of loan period seemed the simplest and easiest thing to do. So a new item class was created and the iPods were entered into our OPAC.

Introducing the concept to faculty

Each year, the staff who teach USTU101 meet to have an informational and planning meeting before school begins. The year we made the transition to the iPods, two librarians visited the planning meeting and brought along an iPod and a handout created just for this meeting that explained how USTU101 was changing from a class that meets in the library to an independently conducted interactive library tour. The librarians also brought samples of the handout that students receive during the introduction. There were several instructors who seemed resistant to losing the formal face-to-face scheduled class meeting in the library. It was already built into their syllabus and switching to the independent iPod tour required some reworking on their part. The Head of Reference and Instruction set aside time after the meeting to contact those instructors and explain in more detail the advantages of the new program and to reinforce the importance of requiring the students to do the work on their own time. Once the staff had a chance to adjust to the idea, the program ran very smoothly over the course of the semester.

RESULTS
Assessment

Because of the extraordinary change made to the USTU101 classes, assessment proved vital in determining if the students were learning as much as they did in the previous, more traditional library introduction. And, just as important, how many students were actually doing the tour on their own, without being forced to attend a library class? As much data as possible was collected from the iPod tour in order to make these judgments.

A comparison between the iPod tour and the traditional library instruction is forthcoming. However, we have examined how the students performed on the quiz after completing the new tour.   Blackboard provides the capability of examining each question within the quiz for percentages of right and wrong responses.   There was a combination of twenty multiple-choice and true/false questions scored at five points each. Blackboard randomized the order of the questions for each quiz.   Below are the results for fall 2008.

Question and Correct Answer	Average score
1. How much money do you get on your MOCS card for printing each semester? Answer: $10	4.76
2. Which floor houses the DVD collection? Answer: 1st	4.74
3. Where do you go to check out a laptop in the library? Answer: Circulation Desk	4.84
4. The circulating book collection is located on which floor? Answer: 3rd	2.65
5. Where do you pay for and pick up your computer print-outs on the 1st floor? Answer: GoPrint/MocsPrint stations	4.17
6. Who is the best person to ask if you need professional help finding articles for a research paper? Answer: A librarian at the Reference desk	4.73
7. Rare books and manuscripts are found where? Answer: In Special Collections	3.98
8. What system does Lupton Library use to help you find a book? Answer: Library of Congress Classification System	4.04
9. Which link on the library website takes you to the chat window where you can ask the librarian a question online in real time? Answer: Ask A Librarian	4.69
10. What do you need in order to check out a book? Answer: MOCS card	4.96
11. Computers with scanners for reading, printing and saving documents from microfilm are found: Answer: One the 2nd floor	4.18
12. The most recent issues of print magazines and journals are arranged: Answer: Alphabetically by title	4.27
13. Which link on the Library Website do you use to check to see if the Lupton Library has a particular book? Answer: Books	4.22
14. What subject was covered by the books you found at the HV5035 call number location, both on the 3rd and 1st floor? Answer: Alcoholism (this was a good way to determine if	4.92

students had actually completed the tour)	
15. Food and Drink are NOT allowed in the Lupton Library. Answer: False	4.81
16. All group study room must be reserved in advance at the Circulation desk. Answer: False	3.62
17. I can renew my books online through the Library Website. Answer: True	4.58
18. I can check out a digital camera from the Lupton Library. Answer: True	3.69
19. Reference books are located on the 2nd floor of Lupton Library. Answer: False	3.54
20. The Lupton Library offers access to both print and online items that some of your professors may have placed with us for your class assignments. These are called: Answer: Course Reserves	4.46

The questions that fall below four will most likely be examined. Either the questions need clarification or the video should be edited to provide a better explanation of each concept.

With a total of 100 points possible, we measured a high of 92 and a low of 83 on the quiz. The scores average to an 87, quite acceptable to us. However, the numbers do not concern us as much as the specific questions that were missed the most. Again, those items will be reviewed and hopefully improved on the video.

Next, we examined the participation level. Our best and only way to determine this was by looking at the numbers of quizzes completed and handouts turned in to the Reference desk. In twenty-seven sections, there were 749 students. Not including a small number who started but did not finish the quiz, we measured an 80% participation level. Regarding handouts, we cannot account for thirty of them, meaning either thirty students only took the quiz, without actually doing the tour, or they simply did not turn the handouts in to the Reference librarian (or the Reference librarian forgot to ask). We are aware of this occurring a few times. If these thirty students did not complete the tour, we calculate a 76% participation rate.

# of Sections	# of Students	# of Handouts turned in	# of Quizzes completed	Started, but did not complete quiz	Quiz not attempted
27	749	567	597	15	137

Overall, the participation rate is adequate, but of course, we would like to see an increase in the percentages. We have not begun discussion yet on how to ensure that more students complete the activity.

Within the quiz, two opinion questions were added.

1. Using the iPod was…	a. easy. I totally understand how to use the iPod.	a. 78%
	b. ok, but the video was either too fast, too slow, or confusing.	b. 20%
	c. confusing. I did not understand how to use the iPod.	c. 2%
2. The iPod Investigation was…	a. informative. I learned a lot about the library.	a. 81%
	b. confusing. I would rather have a class about the library.	b. 12%
	c. a waste of time. I did not learn anything helpful about the library.	c. 7%

It seems as though most students understood how to use the iPod, and did learn something about the library during the tour. The video does need to be slowed down a bit, however, as it tends to go too quickly in a few places.

CONCLUSIONS AND RECOMMENDATIONS
Things to know

One technical detail that we learned early on was that when setting up multiple iPods to sync with a single copy of iTunes on a centralized workstation, you need to set each iPod to the "manually sync" setting rather than allow iTunes to automatically manage syncing and updates. The reason for this is that when iTunes has an update to be applied, it quickly overwhelms the machine trying to apply the update to thirty devices all at once. The manual sync setting also gives you far more control over what content actually resides on each individual iPod, so you could theoretically set some of them up to have different profiles. For example, some of them could have the freshman orientation video and some could have more advanced content for upper-division students. If you leave the iPods set to sync automatically, then iTunes will put everything in iTunes on every iPod. We felt the manual option was more flexible for us.

Another logistical element we looked at was scheduling across the semester. Obviously, the iPod format allows students to do the tour whenever they want, but with only thirty iPods available, we wanted to make sure that all 700+ students could be accommodated during the term. Each section of USTU101 has approximately thirty students. So we figured that by scheduling no more than three sections to take the tour each week, we could essentially guarantee there would be no more than a hundred people competing for the iPods in any seven-day period. We introduced the idea of scheduling the tour early when we went to share the new iPod format with the instructors before the term began. Once we had planted the seed of scheduling early, we were quickly able to book quite a large number of sections via email. Then, through discussions with the remaining USTU101 instructors, we were able to distribute the sections across the semester carefully so that no one week was too "crowded" and we never had to turn away a student because the iPods were all checked out.

The final caveat to keep in mind is the overall importance of communication, both internal and external, whenever you substantially change a program such as this. Internally, we had to keep everyone on both main service desks aware of the program through email alerts and reminder posts to our internal blog. Access Services in particular appreciated regular communication about the groups scheduled and how we were doing throughout the semester. For those at the Reference desk, we also taped a paper reminder to the top of the desk that gave step by step instructions on what to do when students arrived at the desk with their completed clue sheets. As for external communication, all librarians involved in the USTU101 iPod program had to keep on top of communication with the twenty-four USTU101 instructors to ensure everyone had the information they needed about scheduling, the assignment procedure and eventual grade reporting.

Things to avoid

Regarding the clues on the handouts , the questions/statements all related to Chattanooga, and were, in retrospect, too easy. The students often knew the answers before they even completed the tour, defeating the purpose of using the clues as a method to avoid cheating.

During the creation of the video, editing problems surfaced with the addition of the script. A script was written word for word to go along with the video. It would explain what the students were seeing on the video, as well as in the library, as they took the tour.   Unfortunately, the video clips filmed were often too short or too long, not matching the length of what needed to be said.   This meant speeding up or slowing down the video to match the audio – a time consuming process, especially when we had no experience in iMovie.   In hindsight, using the script to measure the length of the video clips while filming would have saved an enormous amount of time.

Using Blackboard for this iteration of USTU101 turned out to be a frustrating experience. Previously, students took the quiz in their library class, getting step-by-step instructions from the librarian.   Now, students were on their own. When they accessed the quiz in Blackboard, students had to choose their section in order for their grades to be reported correctly. For example, a student in USTU101 Section 5, would select the Section 5 quiz.   Unfortunately, many students did not follow these instructions, and took the wrong section quiz. Another problem: they could access the quiz on Blackboard before the fifteen-minute introduction – many did and tried to complete it, without realizing it was for a future assignment. Students only had one chance to complete the quiz (to help avoid cheating), so if they had already begun it, they could not go back and retake it later. Both of these issues meant that when the grades for a particular section were downloaded, many were missing, since students had taken the wrong quiz or were not able to retake an uncompleted quiz. After the discovery of this problem, the quizzes were manually locked down until the week of a specific class, then opened, then closed down again at the end of that week. There were also technical issues such as students being logged out of Blackboard for taking too long to answer a question. This meant resetting the quiz for the entire class to allow for multiple attempts.

What will the future bring?

Things rarely stay the same for long at UTC and the coming year is no exception. USTU101 is changing formats yet again and will be transformed over the summer into a one-credit-hour course rather than a three-credit-hour course. As of this writing, we have not received details on exactly how the course

syllabus has been changed to reflect the downgrade, but we have been assured that the library component is still included. Because a one-credit course does not fulfill an elective requirement nor count towards full time enrollment as effectively as the former three-credit version did, it is expected that enrollments will decline in USTU101 for the coming year. Once we have definitive information about the newest incarnation of the course, we will adjust the assignment accordingly.

Even if USTU101 usage declines in the future, there are other courses that match nicely with the orientation basics included in our iPod tour. Several faculty members teaching in the English Composition Program have expressed interest in using the tour for their developmental writing classes (ENGL106). These students do not have the full-blown term papers and annotated bibliographies that the regular freshman English students have, but do need to develop some awareness of services and resources available in the library as they work on their fundamental writing skills.

Although we focused our first efforts on a video tour, the instruction librarians at UTC have also created a robust set of video tutorials that cover our databases, our open url link resolver and other basics of information literacy training that could easily be loaded onto the iPods for anyone to use, regardless of which particular classes they are enrolled in. We see this as an area we will be investigating over the summer as we decide how to deliver and advertise these new services we are able to offer.

And finally, the most exciting thing our IT department has been investigating for the Lupton Library future services wish list is the new e-book readers that are available for the iPod Touch and the iPhone. It is our hope that we can consider circulating at least some of our iPods with freely available content such as Google Books or Project Gutenberg titles. As this would probably entail letting students take the iPods outside of the building, we would have to consider circulation policies, replacement fees and security measures very carefully. All of us in the Reference and Instruction Department at UTC look forward to continuing our own iPod Investigation as we look for ways to improve what we do with this exciting new instructional format.