

IS IT iTIME YET?

Are campus educators and administrators prepared to make full use of the iPod's educational potential? Our intrepid reporter gets the inside story from faculty, students, and administrators at three schools on the vanguard. By Mikael Blaisdell



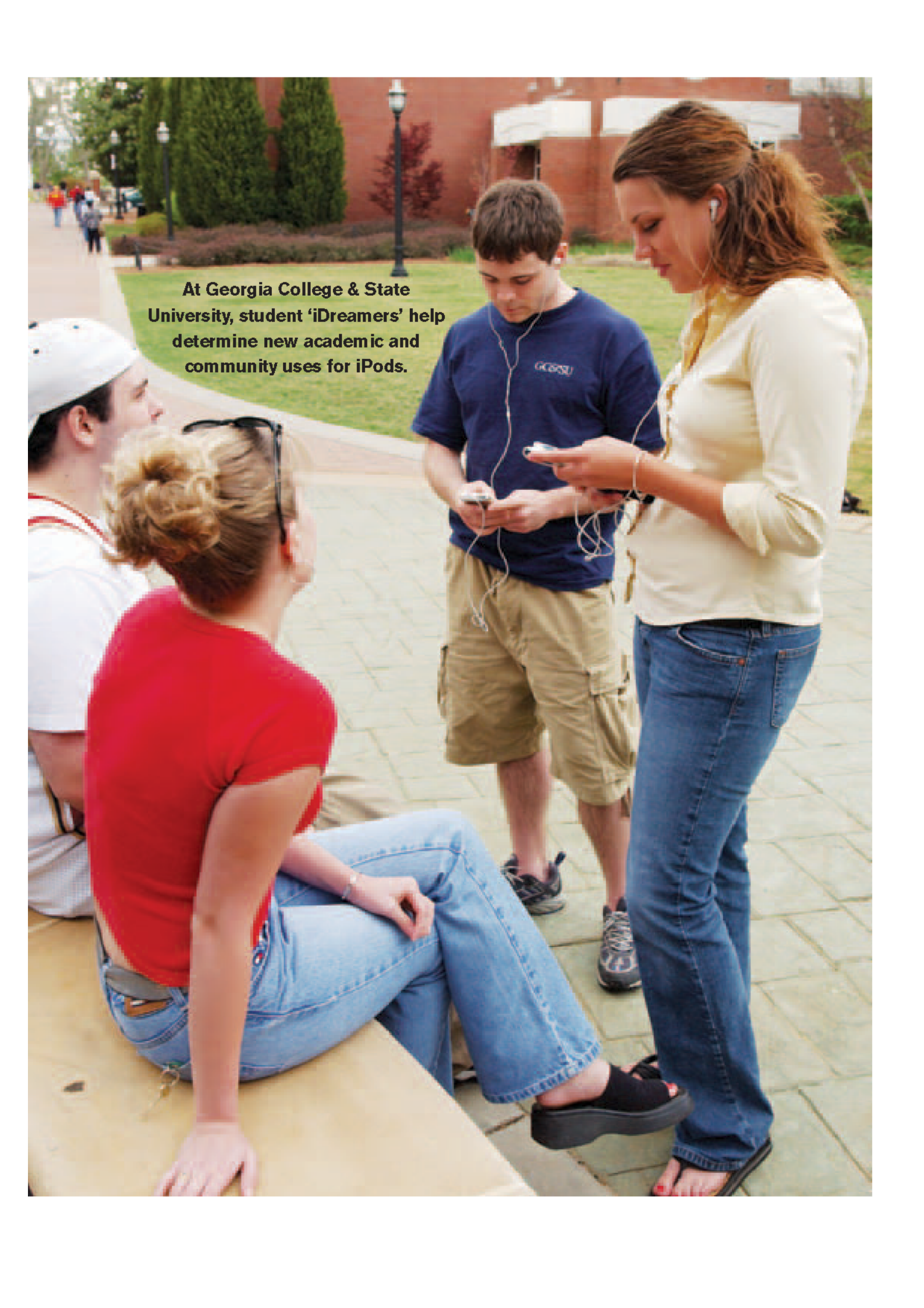
A student at the University of Michigan School of Dentistry gathers up her books and notes at the end of her class. After briefly stopping off at the dorm to grab her gym bag and update her Apple iPod (www.apple.com) with the campus server, she spends an hour on the exercise machine at the gym while reviewing the recorded lecture from the class she just completed.... On his way home from campus, a professor listens to a recent audio book offering, focused on his area of instruction. It plays through his car's stereo from his iPod, and he can continue his review of the audio content at home.... Stumped by the illustrations in his textbook, a math student views a short clip on his video-enabled iPod and is able to better understand the effect of assigning a continuous value to a calculus formula for a function—all as he sips coffee at a campus hangout.... The iClassroom—wherever and whenever—is here. But while iContent might be quickly available at the touch of an iPod's button, successful iEducation requires careful preparation and considerable effort on the part of both faculty and administrators.

iEverywhere

First announced in October of 2001, sales of the instantly popular little white iPod device topped 2 million in the first 90 days. In just over four years, Apple has sold more than 30 million iPods worldwide and 600 million songs have been purchased from the company's iTunes online music store. According to market research firm NPD Group (www.npd.com), the iPod's share of the explosively burgeoning market for portable electronic music players stood at 72 percent by the fall of 2005. Not long after its introduction into the consumer market, the first iPods began turning up on college campuses nationwide.

In the fall of 2004, **Duke University** (NC) gave iPods to all 1,650 members of its incoming freshman class. But even before that, **Georgia College & State University** (GC&SU) was among the very first campuses to put ▶

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A photograph of four students on a university campus. In the foreground, a young woman with blonde hair in a bun, wearing a red t-shirt and blue jeans, sits on a light-colored stone ledge, looking towards the other students. To her left, a young man in a white t-shirt and a white baseball cap is partially visible. In the center, a young man in a dark blue t-shirt with 'GCSU' on it and khaki cargo shorts stands looking at an iPod. To his right, a young woman with long brown hair, wearing a cream-colored cardigan and blue jeans, stands looking at her own iPod. They are all wearing earbuds. The background shows a paved walkway, green grass, trees, and a brick building under a clear sky.

At Georgia College & State University, student 'iDreamers' help determine new academic and community uses for iPods.

together an academic program using the iPods, when it launched a couple of pilot programs in 2002. Today, there are active iPod programs on many other campuses around the country, including those at **Stanford University** (CA), **Drexel University** (PA), **University of Michigan**, **University of Dayton** (OH), and **Virginia Tech**. More are being added all the time. In higher education, the popularity of the device has spread beyond the US; there is an iPod program at the **Université Lumière Lyon 2**, in Lyon, France, for instance. And where there are no formal academic programs—yet—there are countless students making their own use of the iPods in their studies.

"The iPod has become a standard part of student dress," notes Thomas Skill, CIO of the University of Dayton. Anne Gormly, VP & Dean of Faculty at Georgia College & State University, agrees. "iPods are common," she says. "You see people all over campus walking around with these little white wires coming out of their ears." At the University of Michigan School of Dentistry, Director of Dental Informatics Lynn Johnson reports that 65 percent of the students already own iPods, and make heavy use of them. "They like the mobility," Johnson says. "Walking to class, working out, riding on

the bus, sitting in the cafeteria; everywhere they want to go, the iPod goes too."

iLove

"I love my iPod, and I couldn't live without it," says Jill Albano, a freshman member of a GC&SU chorus. "We're singing in Korean, Portuguese, and many other languages. Professors and students who speak those languages at the school came in to do recordings to teach us the languages that we're singing in. Now we can listen to the diction, and make sure that we're pronouncing everything correctly."

Review and create. Playback and portability are not the only reasons for the device's popularity. Capability and creativity are high on the list. "The ease and accessibility of the iPod and its tools have really boosted my confidence in what I'm capable of as a student," explains Christian Barner, a GC&SU Education grad student. "They enable me to create projects and to do things that I really didn't think were possible before. One of my projects involves using my iPod to record students and teachers talking about what makes a good teacher, and it will be presented at a conference of English teachers. I spent a few hours with the iMovie software and was immediately able to make something that I feel confident in presenting to a conference."



CURRENTLY, THERE ARE active iPod programs at U Michigan, Stanford, Drexel, and more schools weekly.

Fellow graduate student Stephen Kirkley has been impressed by how little it took to get his iPod skills up to speed. "Most of us have gone from little to no experience to where we are editing voice and .wav files within an hour or so, with only brief instruction," he says. "The experience that we're getting now will really help us later on in our teaching."

As a graduate student in education, working toward a teaching career, Barner has had the unique opportunity to see the iPod from both the student and teacher perspective. He explains, "From the teacher's point of view, the iPod opens up possibilities. You can give the students choices: They can choose between an oral presentation, a written paper, or a project." For one assignment, Barner created a radio program—something he'd never thought to do before—and found it "a very unique and fun way to show that I've learned information, that I have collected and processed data, and what it's done for me."

iQuestions

Attendance. Yet, though students are enthusiastic, questions about iPod use on campus still persist. "If the lecture is going to be available for downloading, why bother coming to class?" some professors ask. Moreover, that questions about copyright issues persist (even though some specific usages of copyrighted materials for educational purposes is permitted under the TEACH Act and other copyright law) shows that guidance is needed for curriculum development. Then too, lack of administrative and technical support for the iPod is another frequently cited problem. And campus naysayers worry that the iPod may be seen as more of a gimmick than a true pedagogical tool.

Still, GC&SU freshman Jill Albano doesn't see the iPod as a way to skip class. "I don't think a podcast is a replacement for the class experience," she says. A classmate, Tiffany Bishop, concurs. "Being seen in the classroom is important. The professors get to know your name, especially if it's a smaller environment. They're more willing to help you

out when you go in and talk to them. The personal contact is really essential.”

While GC&SU professor Hank Edmondson uses recorded lectures to encourage study-abroad groups to take advantage of travel time on planes, etc., he has no objection to students using the iPod to record his on-campus lectures. “If you have an attendance policy, that takes care of the danger of having only one student in each class recording for everybody else,” he points out. John Fogelman, a freshman member of GC&SU’s “iVillagers” virtual community, also finds the iPod’s playback capability useful. Though he acknowledges that he is primarily a visual learner (needing to see and hear the lecture live), he adds that “After class, I still download the podcast of the lecture and discussion so that I can go over my notes as I listen to it.”

Copyright woes. As for the concerns about copyright infringement, they can be handled in several ways, according to Jim Wolfgang, GC&SU’s CIO. “Under the TEACH Act, for example, you can use small clips of songs—you don’t have to buy them,” he says. (For more information on copyright law and the TEACH Act provisions, see www.usg.edu/admin/legal/copyright.) “And if you want to use the whole piece, why not just have the students buy a copy? The songs are only 99 cents each. You can buy a lot of songs for what a textbook would cost. And over the years, the music may get used a lot more than the books, which are often sold back to the bookstore at the end of the class.” What’s more, because the school owns the iPods for some of GC&SU’s programs, it can make sure that all of the content on the iPods is legal when the students turn in their devices.

Support problems. Lack of administrative and technical support can seriously limit the success of an iPod program, as Duke University’s report on its first-year experience noted. Others concur. “This stuff doesn’t run itself,” comments GC&SU’s Edmondson. “It’s important that you don’t underestimate the challenge. Before you build a tower, be sure you’ve got the foundation to support it.”

Tech gimmick? Is the iPod just an



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BECAUSE GC&SU OWNS the iPods for many of its programs, the school can ensure legal content.

attention-grabber? GC&SU’s Gormly says no. “Will it help recruit students?” she says. “Sure it will; toys help. But the iPod and its associated tools are much more than toys.” University of Dayton CIO Thomas Skill agrees, but sounds a cautionary note. “Podcasting certainly has a very relevant application in higher education, but it needs to be carefully integrated into the curriculum in a thoughtful way. My biggest fear is that faculty may think that they can make their class more hip by doing podcasting—and they may in fact do it, but the resulting class may not be any better.” Edmondson, too, emphasizes that while the iPod can enrich and facilitate an already good program, it won’t create it from nothing. “It’ll make it worse if you’re not ready for it. You can be a whiz technologically but shallow academically.”

iMotivation

Beyond the above issues is another, more serious complaint: lack of appreciation for the increase in the teacher workload that may be generated by the use of iPods in the classroom.

Increased workload. “I was one of the first faculty to use iPods in higher education,” says one professor, who prefers not to be named. “My record of successful use of iPods to achieve specific course goals and objectives is quite well established. However, despite my various suc-

cesses, I might not be using iPods anymore, after this academic year.” The reason? According to this instructor, the administration does not recognize the workload implications of using the latest technology. “I teach two kinds of classes,” he says. “Ones that employ a moderate level of extremely labor-intensive technology, and ones that involve my coming to class with nothing but a book and a piece of chalk,” he says. “In my course load, these two kinds of courses weigh equally, despite the obvious fact that the former takes easily three to four times as much prep time.”

Recognize effort. Dayton’s Skill recognizes the critical factor of faculty motivation. “If you don’t fully integrate the technology into the curriculum, and also recognize the prep effort as part of the workload of the faculty, the effort is not going to continue. At the end of the day, what are faculty members being evaluated on?”

GC&SU’s Wolfgang agrees. “For a long time in higher ed, if it wasn’t research, it didn’t count toward tenure or promotion.” He thinks that the time has come to revise the performance evaluation standards appropriately. “We need to see some weight being put on these kinds of skills and abilities, and credit given toward raises, promotion, and tenure.”

At GC&SU, Professor of Mathematics Lila Roberts is taking the iPod into new

areas, and also emphasizes the importance of motivation. "It's pretty obvious that the iPod has excellent applications in foreign language, history, art and music appreciation, etc.," she says. "However, it has equally valuable but less-obvious applications in areas such as mathematics and science. Versatility and portability make the iPod—especially the video-enabled iPod—a potentially invaluable teaching and learning tool. Administrations that wish to implement an iPod program—or any program that involves extreme technology—need to recognize that careful development of effective technology tools is a tremendous drain on faculty resources (ingenuity and *time*), and development of this type needs to be recognized in the reward and merit structure within the institution."

Champions. Skill sees a familiar pattern emerging in the integration of the

assistant professor at the School of Education, "The whole idea of being able to use video and audio, and capture and organize it, is reaching the tipping point. The question is: When will the faculty realize that we've tipped?"

iStrategy

Pedagogical opportunity. Dorothy Leland, GC&SU president, weighs in on the iPod. "Using a new technology to deliver instruction requires considerable faculty work. This work involves learning about the functionalities of the technology and its academic applications. But it also involves rethinking course objectives and learning outcomes in light of the new pedagogical *opportunities* that the technology provides." Leland sees the iPod as a powerful tool in transforming the site of learning from the desk to the pocket: In this new mode, instruction is no longer

class." Wolfgang thinks that the iPod technology not only easily enabled the time-shifting of the content and the work, but also made it more interesting to the students. "It wasn't the old 'get up and read your speech' stuff," he points out.

Expanding the classroom, and connecting. The iPod's potential is also a factor in two other strategic philosophical concepts being discussed at GC&SU: the perception of higher education as a 24/7 environment, and the need to build community among the students. Noting that the mission of the university is to create intelligent, curious, informed thinkers and communicators, GC&SU's Gormly remarks, "Students are probably learning more outside the classroom than they are in it." Gormly sees the iPod as an especially useful tool in the overall mission that extends beyond the classroom, and particularly as a way to get the stu-

“The ‘technology champion’ model in higher education is not a sustainable model.” —CIO Thomas Skill, University of Dayton

iPod and its related technologies into the higher education environment. He calls it the "champion model," and points out that while it can be useful, it has its limitations. "When I started doing technology as an administrator, I took full advantage of the champion model," he says. "For someone who's really interested in a piece of technology, willing to spend the time to learn it, and sees it as exciting, that technology builds on an individual's own curiosity and so that person is willing to put a lot into it. But the champion model in higher education is not a sustainable model."

Tipping point. And while faculty recognition and reward are significant concerns, says Skill, there is an even more fundamental issue: "The big challenge is going to be whether the curriculum and the faculty involved in curriculum development are ready to rethink the way they are doing things." According to GC&SU's J.J. Hayden, instructional technology coordinator and

confined to a limited number of physically stationary sites (e.g., classroom, library, lab, or home office), but can occur almost anywhere a student may be. "This location-independent access to digital multimedia material means that the delivery of instruction is less dependent on time and place," she says. "The iPod technology also offers the potential to shift the proportion of class time devoted to learning that benefits from face-to-face interactions between faculty and students, and shift preparatory work to outside times and locations."

Time shifting. An example of the concept that Wolfgang and Leland call "time shifting" can be seen in a GC&SU course on Shakespeare. "The students each were given the assignment to read a piece and record it on the iPod," reports Wolfgang. "The recordings were then shared with the other students so that they could listen to them outside of class, critiquing each other via WebCT [www.webct.com]; then they debated it when they got to

dents connected. GC&SU's new iVillage is an experiment in using the iPod and its related tools to knit a group of students into a community even though they do not share the same dormitories. "For new students, coming together is the biggest challenge," Gormly explains. "But 18 or 24, they have to find their place in the new environment."

Getting iReady

iDreaming. GC&SU has taken an incremental approach to incorporating the iPod technology into teaching and learning. So, GC&SU is supporting a growing but contained number of iPod initiatives. The first step toward deciding which initiatives to pursue was to assemble a group from all areas of the campus—admissions, residence halls, library, and academic areas. Gormly recalls, "There were about 75 'iDreamers' in the group. We demonstrated the iSuite and all of the associated software that was available in and around the iPod. We showed the

group the possibilities of the tools and asked: What would *you* do?"

"If you just give people technology, some of them will use it, but a lot of the tools will sit on their desks while they feel guilty about it, because they don't yet have a good reason for using them," Gormly emphasizes. "You've got to have some values that are driving the use of technology, and our values are: How does this improve the teaching and learning? How does this help us create those graduates that we envision in our mission?"

Commit, and support. The outcome of the iDreamers' work was a list of possible applications for the iPod on campus. The proposals were evaluated, and a list of targets was developed. "We picked a few to go with that we thought we could support and support well," recalls Gormly. "If you have too many balls in the air, eventually some of them will fall, and then people won't trust you to complete things in a quality way."

Wolfgang also sees the issue of appropriate support as vital. "You can promote a technology like the iPod and encourage faculty so much that they tip off the far end and say 'this is too much.' Or, you can not do enough, and risk the project dying because you don't have 52 designers building tools for them. But if you can keep it in balance, finding the middle ground, then you can be successful."

"We want to encourage experimentation aimed at improving student learning but also recognize the importance of evaluating results," says Leland. "This strategy allows us to make the best use of scarce institutional resources, and ensures that funding for instructional innovation using new technologies supports the outcomes we seek to achieve." GC&SU and other schools have made significant investments in introducing and supporting the use of the iPod on campus, and are poised to make more over the next few years.

iPod Project: Nelnet-Backed Research

At GC&SU, Hayden and Linda Irwin DeVitis, Dean of Administration for the School of Education, wanted to research



Duke University

AT DUKE, the iPod experiment would have benefited from better preplanning and preparation.

the perceptions about college held by middle school students and their families. Paul Jones, GC&SU's VP for Institutional Research and Enrollment Management, and Assistant VP Suzanne Pittman came up with the idea of offering a scholarship to freshmen that included working in the community as mentors, helping middle school students in the area of college readiness. The scholarship students would have the opportunity to attend a leadership conference, and to work with technology as well.

"Technology is so attractive to these millennial students today," says Pittman. "And our iPod programs on campus had been so popular that we began looking for a way to use that technology in the middle school research project." Both the iPod's functionality and its popularity offered advantages to the program. Using the recorder head accessory, the college mentors could use the iPod to record not only their interviews with the middle school students, but also the accounts of their own personal paths toward college. The capacity for storing notes and podcasts would be useful not only in equipping the mentors with appropriate and timely information to give to their young mentees, but also in sharing information among the project team's members, as well. Plus, the popularity of the iPod was not restricted to the college students; middle school stu-

dents also were attracted to the device.

Pittman and Jones approached the educational finance organization Nelnet (National Educational Loan Network; www.nelnet.net), which agreed to sponsor the project with an initial grant of \$25,000. The funding was used for a scholarship to pay 25 college students a small stipend, and to purchase the iPods that would be used in their work.

DeVitis and Hayden created an academic course for the Fall 2005 semester around the service project, designed to prepare the students to research what actually makes a difference in the middle school students' attitudes toward college. "We've been meeting every other week," reports Tiffany Bishop, one of the scholarship recipients and student mentors. "We're learning mentoring techniques, and how to use the iPods. At one of our meetings, we discussed how to approach certain topics. We had [practice scenarios] and learned how to respond to things like bad report cards." The group members were taught to use the iPod's recording accessories, to upload the resulting files, and to create podcasts so that they could be shared with the faculty and other students.

iPod Project: The Duke Experience

As mentioned earlier, Duke University's first experiment with campus use of the

iPod began with the incoming class in Fall 2004. The school spent in excess of \$500,000, giving an iPod and a recorder accessory to each of its 1,650 incoming freshmen and a handful of faculty members. The giveaway generated substantial publicity for the school, but it also attracted challenges and criticism from inside and outside the campus.

An editorial in the Feb. 28, 2005 issue of *The Chronicle*, Duke's independent daily, commented on the lack of actual academic use of the iPods. Declaring the program a failure, the editor wrote: "This semester [Spring 2005], only 17 classes are using the iPod. Some of these courses, such as music classes and foreign language classes, have done a good job of integrating the iPod into academics. However, since only 17 classes are using the iPod, the majority of the freshmen who received free iPods are not

using them academically in the classroom." The editorial suggested that Duke had planned and prepared poorly for the program. "Not all professors received sufficient training and therefore some were ill-equipped to use the iPods in their classes."

Dayton's CIO Thomas Skill was an early critic of the program. Skill agreed with the editorial's concerns, and noted that his original doubt about doing a pilot using an entire class had been proven accurate. Nevertheless, "I was tagged as the critic of iPods, and got hate mail," he admitted. "The irony is that I was not as much a critic of iPods as I was critical of Duke's idea of conducting a pilot with the entire class. I have an iPod myself, and I download podcasts and spend hours listening to things as I travel."

Duke's Center for Instructional Technology conducted a comprehensive evaluation of the school's program and published the June 2005 report, "Duke University iPod First-Year Experience" (cit.duke.edu/pdf/ipod_initiative_04_05.pdf). The evaluation identified five major categories of academic iPod usage by the faculty, including course content dissemination, classroom recording, field recording, study support (via repeated listening to audio content), and file storage and transfer. Of these, it was found that the highest levels of student and faculty interest were focused on the ability to use the iPod's digital recording functionality.

On the positive side, the study found that the portability of the iPod and its contents contributed to reduced dependence on physical materials and access to library and lab resources. Students and faculty found the iPod an effective and easy-to-use tool for recording a variety of activities, including discussions, labs, field research, and oral assignments. Sixty percent of the first-year students reported using the iPod for academic recording.

The evaluation also acknowledged substantial challenges encountered in the course of the first-year program. Major issues included content storage

and access, procurement of licenses for copyrighted material, lack of instructor tools for content preparation, limited documentation and training resources, and a lack of awareness or accurate knowledge of iPod functionality among faculty and students.

"Duke was very open in the final report," said Skill. "There were pockets of success and some real strengths in using the iPod, and there were some areas where there was weakness. But as a universal tool for all students all the time, I think that the experiment proved that in their situation, it didn't pan out that way." Still, the University of Dayton is supporting the use of iPods on campus, and Skill stresses the importance of getting the faculty on board as early as possible. "Our eLearning coordinator is also the director of faculty development. It's his responsibility to make sure that if we're doing something with technology, there is a program in place to get faculty and students involved and committed to it from the start. For example, we did a program for faculty on integrating podcasting into courses. We started out with six faculty members, and now we have 20 or 30 who are actively using it in their courses."

iPod Project: iDental (or iFast)

"We're different from almost all of the other schools introducing iPod-based programs in that we didn't start out to do podcasting at all," reports Johnson at the University of Michigan's School of Dentistry. "Our students wanted us to videotape the lectures and then make them available for review. We looked into what it would cost, and it was a pretty significant investment."

But Johnson understood the students' need for the review capability. "Those lectures are really information-dense," she says. "You just can't get it all in one sitting. The key to what they have to learn is: review, review, and more review. So we had the 'nail'—the problem—and we went looking for the best hammer to use on it."

The first step was a study, involving the videotaping of the lectures, linking in the

► And Now, iTunes U

Late-breaking news as we go to press...

Apple's (www.apple.com) recently launched iTunes U may put a fast end to many of the iPod initiative challenges that administrators, faculty, and students are facing on campus. Based on the iTunes Music Store (that every campus kid knows how to access and use to its full potential), the new "U" is a free, hosted service for colleges and universities built around the now ubiquitous iPod; Apple spokespeople say it provides easy 24/7 access to an institution's educational content—including lectures and interviews. Users can download content to Macs and PCs no matter where they are; they can listen and view on a computer screen, or transfer content to the iPod, and then go! Apple claims iTunes U is an end-to-end solution that is easy for users to learn, and easy for technologists to administer. It also boasts one-click iPod support, as well as integrated podcasting support. Now, there's little to keep a campus from jumping on the iPod bandwagon. Score another hit for Steve Jobs.

instructor's slides. The result was made available to the students. "We looked to the access logs, and ran a series of focus groups to determine what best fit the students' needs," Johnson recalls. "Two-thirds of the students preferred the audio over either the video or the presentation slides. They already had the slides; the students themselves had asked their teachers to release them. That's an important point, for in the early days, there had been some faculty resistance to making the slides available. But when the students asked, they were given."

After determining that the audio of the lecture was the key issue, the next step was how to effectively capture and distribute it. "We put a computer in the back of the lecture halls," Johnson explains. "A student starts a script at the beginning of the class, and the lecture is automatically recorded through the PA system and fed to the mixer. At the end of the lecture, the student enters the metadata—the name of the class and instructor—and the file is immediately uploaded to the school's area, on iTunes. Four minutes after the class is over, the file is ready for downloading to the students' iPods or laptops."

The decision to use an area of iTunes came after an interim period of using several different Web sites, dividing the files according to subject or class group. "The students wanted a subscription approach with the content all in one place," recalls Johnson. "We moved to RSS feeds in January of 2005, and then shifted to Apple and iTunes later on."

"All the way through, we were talking to the students and to the faculty," Johnson emphasizes. "And the ownership of the project was on the students; they were responsible for getting permission from the faculty, and they were the ones doing the work of recording. It succeeded because it was helpful to everybody. I still marvel that, in the end, this was such a simple project."

iPod Project: iVillage

"One of the problems Georgia College & State University shares with almost all other higher education institutions, is

student retention," CIO Jim Wolfgang acknowledges. "We have some entering freshmen with 3.9 grade-point averages coming out of high school who just fall apart in their first year of college because they haven't built a community here; they don't have a sense of unity and association. We have the traditional dormitory communities, which can help, but those all inevitably disperse at the end of the year." In addition to the standard dormitories, GC&SU already had several special living/learning communities. Wolfgang and other GC&SU administrators and faculty talked about a different

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Don't miss the high-powered "iPods on Campus" panel at **Campus Technology 2006**, Jul. 31-Aug. 3, in Boston, MA. Among the panelists will be administrators, students, and faculty from schools in this article. Panel participants will debate academic/administrative/social issues, and will discuss iPods and the new iTunes enablement of ubiquitous iPod use on campus. For more information about the conference, head to www.campus-technology.com/conferences/summer2006.

approach, of building a "virtual" community that was not based on a common living space or on any particular major. The "glue" that would keep the members together would be technology.

Authorized by President Dorothy Leland as one of a small number of carefully monitored experiments in using the iPod and related technology, the "iVillage" began with a group of entering freshmen in the Fall semester of 2005. The results of the first year were carefully monitored and compared to the benefits of GC&SU's more traditional living/learning communities.

"Originally," recalls Wolfgang, "we hoped to start the iVillage with our incoming freshmen even before they arrived on campus. We thought we'd try to get the students an iPod in March of

their senior year in high school, to get them started on building their community early. Then, when they came to regular orientation, they'd already know each other." The timing did not work out as hoped (although the 2006 incoming freshman iVillagers may get their iPods early). Admission into the iVillage was via an online application, with students responding to questions about why they wanted to be in the program, what it could mean to them, their technological know-how, and what they could bring to the iVillage. "We made it almost like a scholarship," says Wolfgang. "We didn't want educational challenges getting in the way, so we started at the top and worked down to fill the openings. Their replies were really interesting."

Early on, the iVillage was built around the concept of the frontier. "We set out to use the analogy of the Wild West," says Wolfgang. "You are the pioneers," he told the iVillagers. "How is your community going to be governed? What will it be named? What roles will be needed?" The burden would be on the students to make the iVillage succeed. The new participants accepted the challenge.

While the iPod was a key element, the students used iChat on their computers, and the iSight cameras for video chatting, as well. These technologies have allowed the boundaries of the community to be expanded considerably. "One of our iVillagers is going to go away to study business at another campus for awhile," says GC&SU freshman Jill Albano, "and she'll be using iSight so that she can still chat with us and stay involved even though she's away."

What does the future hold for the school's iVillage? According to Wolfgang, "The current iVillagers will be welcoming in the next group, who will do the same for those who come after. This first group has already told me they're going to be the Senior iVillage." Says Albano: "There are so many possibilities." **CT**

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