

Duke Digital Initiative 2007-08

Summary

The Duke Digital Initiative (DDI) continued to support innovation in classroom-based learning and instruction as well as programs to enhance co-curricular undergraduate learning. DDI supported four formal programmatic areas, several exploratory projects, infrastructure improvements, and additional staff support for academic multimedia use.

DDI Programs for 2007-08

- Exploring the Use of Mobile Digital Content
- Exploring the Impact of Classroom-based Collaborative Computing
- Grants to Enable Capture of Instructional Media
- Student Video Production Projects

Findings from 2007-08 DDI Evaluation

- iPod use remains steady and diverse. Romance Studies faculty and students using the device for language/humanities study (including the UWP) are the most typical users of this program.
- The iPod loaner pool provided several hundred loans per semester to undergraduates and eligible graduate students (those enrolled in GS 321A/B).
- The total number of iPod grants to faculty in 07-08 was slightly less than 100
- Alternative digital audio recording tools such as Wimba and Audacity have replaced iPods in some classroom settings.
- Tablet PC experimentation and use has spread across a wide range of departments and programs. Romance Studies and UWP represent the largest faculty user groups for this technology.
- Student course video production was supported by DDI in a small but diverse array of courses.
- Individual students and groups also used DDI loaner video equipment in support of five co-curricular video production projects.
- Wimba tools piloted with DDI support were successfully used in over 70 courses

Exploring the Use of Mobile Digital Content

Summary of Findings

- iPod use remains steady and diverse. Romance Studies faculty and students using the device for language/humanities study (including the UWP) are the most typical users of this program.
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Program details

In 2007-08, subsidized discount iPod sales to students through the Duke Computer Store were discontinued in lieu of a loaner pool managed by the OIT help desk. The loaner pool ensures access to an iPod for students who do not already own an iPod. DDI did continue to subsidize the full cost of iPod packages for faculty using one for instruction.

At least 105 courses (194 sections) in Fall 2007 incorporated iPod use (~1450 total students) in Fall 2007.¹ Ninety-eight (98) instructors in 21 different Arts & Sciences programs, Engineering & NSOE received new or replacement iPod grants in 2007-08. Approximately 1/3 of all instructor iPod grants went to instructors in Romance Studies. The OIT Help Desk processed over 300 requests per semester for student iPod loans; requests for all eligible students were filled. Students most frequently requested the iPod for a language course (42% of all requests in Fall 2007) or other humanities course (most frequently Writing 20). Students also requested iPods for social science and science courses, although less frequently.

A Fall 2007 faculty survey and a review of request forms submitted by faculty and students described academic uses for these devices within and beyond the classroom setting.

- Multimedia presentation and display (video, audio, images, PowerPoint) by faculty and students
- Recording classroom interactions (e.g. peer writing conferences) and instructor-student conferences
- Individual playback of audio used during testing or recording oral exams
- Data storage for student projects
- Listening to podcasts related to coursework
- Field recording of interviews

Some faculty reported a decline in course-related iPod use by their students this year due to the availability of convenient alternatives for digital audio recording and distribution including Wimba, Audacity, alternative mp3 recording devices, and/or iTunesU.

¹Full extent of iPod use among faculty and students is hard to quantify; these estimates are derived from a combination of faculty surveys and iPod requests, student iPod loans, and faculty voluntarily tagging their course as requiring an iPod through the official registrar database, so they may undercount total iPod use.

Exploring the Impact of Classroom-based Collaborative Computing Tablet PCs

Summary of findings

Tablet PC experimentation and use has spread across a wide range of departments and programs. Romance Studies and UWP represent the largest faculty user groups for this technology.

Program details

The program promoted the loan of tablets for interested faculty members to gain experience with this technology, more realistically test and evaluate their use in the classroom. In addition, this program provided support for departmental tablet PC resources by students in Engineering.

DDI supported 35 loans to 29 unique faculty participants. Several faculty borrowed PC for both semesters in 07-08. The largest number of loan recipients were in Romance Studies (9) and UWP (9). Loans were also requested by faculty in Biology (5), Engineering (2), English for International Students (2), Economics (1), and Art/Visual Studies (1).

A detailed online summary of Fall 2007 Tablet PC use by faculty is available on the CIT ("Reports by Type") and DDI ("About DDI") web sites.

Student Course Video Production

Summary of findings

DDI supported student course video production in a small but diverse array of courses. Individual students and groups also used DDI loaner video equipment in support of five co-curricular video production projects.

Program details

Eight different courses included projects where students produced video projects (see list, right).

The program provided approximately 110 loans of camera kits to individuals as well as groups of students in conjunction with these course projects as well as for five student-initiated projects not affiliated with a specific academic course.

DDI supported student video production projects in:

- Biomedical Engineering 260
- English 90
- French 76
- Italian 103
- Japanese 125
- Portuguese 53 & 76
- Public Policy 118
- TS 159

Audio/Video Capture Grants

This program was designed to offer professional audio or video recording of academic content, but did not generate much interest from faculty. Only a small number of requests (7) were received for this program; all but one of these were better suited to other means of support (e.g. direct loans of equipment to faculty or students in the course), typically because they were not received with enough lead time to plan and schedule professional recording services. One successful use of this program was an audio recording project for Daniel Foster in Theater Studies.

Wimba

DDI provided funds to license Wimba Voice Tools as an enhancement to the Blackboard course management system. Based on substantial faculty interest in the Fall 2007 pilot, the tool was made available to all Blackboard course web sites for Spring 2008. At least 44 faculty teaching 72 different courses are known to have used Wimba during this past year.² The majority of known users (over 80%) are in languages courses (including English for International Students). Other notable users including Nursing, the Writing Studio, and the cross-disciplinary Alumni Reader Project led by Cary Moskowitz which plans to continue using this tool when this project is repeated in Spring 2009.

Exploratory Grants

ISIS used DDI funds for several exploratory projects, including the purchase of a Second Life Island and an ISIS course-based collaboration to create a multimedia touch screen kiosk for the John Hope Franklin Center using visualization software. Using the beta-version software technologies Envision (to build the kiosk) and Enlighten (to power the touch screen display), students began development of the kiosk. Due to a smaller than anticipated enrollment and steep learning curve with these new software tools, students were not able to complete the kiosk project during the semester.

In Spring 2008, Elizabeth Benfey's 2nd annual Movie Making Marathon also received support from exploratory grant funds (<http://www.duke.edu/web/mmm/HOME.html>).

Infrastructure Support

In response to existing needs for audio and video production space, as well as to lay the groundwork for the 2008-09 Duke Digital Initiative focus on video, DDI supported improvements to the Multimedia Project Studio on West Campus ("MPS Pro"). Space adjacent to the existing MPS West was equipped with a 6x6 sound isolation booth and audio production station. Also, a group HD video editing station was added which includes a 37" wall mounted LCD panel, Mac Pro, HD input deck and audio receiver. The MPS Pro is available for use during any open staffed MPS hours.

² Wimba Voice Tools are broadly available in Blackboard via the instructor Control Panel. Usage statistics for individual Blackboard features is difficult to measure reliably, so this total may undercount usage of Wimba.