Introduction

In January of 2000, the Duke University Center for Instructional Technology received a grant from Dell Computer Corporation for $25,000 in support of faculty instructional projects. These funds were used to launch Dell FAST-start, a program that matched faculty and students to complete technology projects for Duke classes. Students received training from the CIT, and CIT staff helped the faculty and student partners plan and develop the projects. Students were provided a Dell laptop that allowed them to work remotely and at their convenience on the projects. Dell Computer, Inc., provided an additional $25,000 to continue and expand the program during the 2001-2002 academic year.

During the two years of the Dell FAST-start program, 28 faculty were paired with 16 students on technology projects. The efforts embraced a wide variety of disciplines and schools within the university, from the sciences to the humanities. A total of 15 projects were supported through the Dell FAST-start program.

The Student-Faculty Partnerships

A key concept behind the program was the idea of students and faculty members working as a partnership to construct an instructional technology resource. CIT staff worked with the faculty-student partners to plan the projects in such a way that the faculty member could update it and expand it at a later time. The faculty members learned new aspects of the technology from the student partners and obtained help in completing their projects, while the students had an opportunity to work closely with Duke's world-class faculty.

Students were recruited for the program based not only on their interest in and skill level with technology, but their personal interest in the subject matter of the project. The first year, the FAST-start program supported six projects; this was expanded to an additional nine projects during the second year. Both faculty and students were overwhelmingly positive about the partnerships. Students remarked that they learned more than just technical skills while working with the faculty, gaining a deeper understanding of a topic they will find useful in their major or area of work after their studies at Duke.

"My faculty partner was wonderful in providing resources for me to work with, answering all of my questions, and working with me as an equal."

-- Dell FAST-start student partner, Spring '01

A list of projects that were a part of the program, along with individual student comments on the projects can be viewed on the CIT's web site.

Training and Skills Development

"Although the project bolstered my computer skills, I feel that I benefited most from learning about the details of project planning, how to work as part of a team, and the need to be flexible."

-- Dell FAST-start student partner, Spring '01
Individual Tutorials and Consulting

The CIT staff provided some training on software and hardware for the student workers. The training consisted of both formal tutorials and informal consulting with individual students. Some of the topics covered in these sessions included working with digital video, editing and exporting sound for the Web, creating multimedia presentations, and Web design and layout. Students were given advanced training in the use of software such as Dreamweaver, Flash, Premiere, and Photoshop.

Group Training Sessions

CIT staff offered eight group training sessions to Dell FAST-start students. In the group sessions, students who had used particular types of software were encouraged to show their work and offer their own tips and observations on the topic. Topics included concepts of design for the Web, using sound and video on the web, and use of advanced software packages including Flash, Photoshop, Premiere, and Acrobat.

Peer to Peer Learning

Many students in the students in the program have shared their skills and knowledge with their fellow student partners. In the group training sessions mentioned above, some students discussed their work on the web or with a particular software package and demonstrated examples. In some cases, students conducted a one-on-one session to demonstrate a needed skill for a project, in areas such as scanning or audio/video digitization.

“In addition to the projects I have worked on, the training I have received in using the resources available in the Project Studio and the frequent meetings where Dell members would give updates on their various projects have allowed me to gain a better appreciation for the potential that technology has to contribute to an innovative and valuable learning experience.” – Amanda Jones, FAST-start student partner

Beyond the Projects

“I have learned about video digitizing, document and photo scanning, Dreamweaver, and Photoshop, and as a result, now have practical skills that can be used in either my personal or professional life. I am overall very fortunate to have been selected to participate in this program.” – Marisa Donna Lee, Dell FAST-start student partner

Several students in the program reported using their skills and new insights on the technology in their course work or in projects for student organizations. The CIT encouraged students to use their laptops and the CIT’s Project Studio for class work or individual short-term projects that would enhance their skills. These types of projects included digitization of audio materials or scanning of photos for an individual class project and more ambitious efforts, including production of a short documentary video as a class project.

The Dell Laptops

The laptop supplied to me for the project was especially helpful both for the project and the academic environment. As a college student who certainly appreciates a flexible work schedule, it allowed me to work more efficiently.” – Anthony Kang, Dell FAST-start student partner

The student partners were loaned Dell laptops so they could work on their projects in conjunction with faculty in the faculty members’ offices or while in their dorms or the library. The laptops were configured
with a basic suite of tools -- email and Web browsing/authoring, graphics -- that were applicable to most projects. In some cases, additional software was added for a specific project. Each laptop was configured to work with the university's network and included a CD-RW drive for transferring and backing up the work. Higher-level types of work such as video and audio editing or scanning were performed in the CIT's Project Studio on Dell workstations. Materials were then transferred to the laptops for integration into the projects.

The laptops were provided both as an incentive for the student partners, but also as a more efficient means of producing the material in conjunction with faculty. The laptops were indeed an incentive for students in the program. It was rated highly in a student partner survey and many students commented on the laptop as an incentive to join and stay in the program. Some students noted the added convenience of the laptop as either a primary or secondary machine for use in their personal or class related work. Students who stayed with the program for a period of two years will keep their laptop.

**Conclusion**

The Dell funding of the FAST-start program allowed the Center for Instructional Technology to launch a program for supporting faculty technology projects with the assistance of student workers. It also allowed the Center for Instructional Technology to demonstrate the value of wireless, mobile computing through use of the student laptops. We thank Dell for this grant and for their support of the CIT.

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