Faculty-Driven Technology Transfer: How NTID's Instructional Technology Consortium Brings Technology to the Classroom

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Summary

Now completing its fifth year, NTID's Instructional Technology Consortium (ITC) has learned a few things about how to bring faculty and educational technology together. Our presentation will describe what the ITC has learned about motivating and educating faculty in the use of technology in their classrooms.

The ITC’s Goals and Objectives

The ITC is a collaborative, faculty-driven initiative to enhance the teaching and learning of Deaf and Hard-of-Hearing students through the use of technology. Initiated in 1997, the consortium is a committee made up of representatives from each of the academic areas of NTID. Committee members are NTID faculty who have one or more areas of technical expertise, and are familiar with the educational needs of deaf and hard-of-hearing students.

The ITC has adopted the following goals:

- To improve teaching and learning by putting new instructional technology tools directly in the hands of instructional faculty.
- To provide an environment in which we can keep pace with the changing pedagogical needs of students.
- To provide a model for excellence in the application of instructional technology in the education of Deaf and Hard-of-Hearing

Those goals have been translated into these five objectives:

1. Introduce faculty to the capabilities of different technologies that they can apply to their own instruction.
2. Expose faculty to successful teaching strategies and good instructional design that incorporates instructional technology, particularly when used with Deaf learners.
3. Provide direct instruction in various computing technologies for faculty interested in increasing their computer literacy, and in developing their own instructional technology projects.
4. Serve as a resource for faculty looking for support and assistance with individual projects related to instruction technology.
5. Provide a formal system for evaluating the efficacy of technology for instructional delivery.
Over the years, NTID's Instructional Technology Consortium has learned a few things about bringing faculty and instructional technology together. More specifically, our experience has given some insight into, among other things, the following questions:

**Q: How do we know what to offer faculty in terms of new and appropriate technology?**

A. This is one area where needs assessment doesn’t necessarily work, since many faculty may not know what technology is available, and how it might be used. Ideas for workshops and presentations come from a variety of sources:

- Faculty members on the ITC who are aware of appropriate educational technology
- Faculty within the Institute who are “early adopters”
- Faculty and staff in a variety of areas of the Institute that are providing technical support to faculty projects (curriculum developers, media specialists, and tech support people)
- Individual requests from faculty members interested in learning about a particular topic or application
- Discussions with faculty during scheduled forums
- Feedback received from faculty on emailed questionnaires

**Q. How do we motivate faculty interest?**

A. At its inception, we motivated faculty by providing laptops if they completed a full week’s worth of training and began development on a technology-related project. The training included workshops on Power Point, Web development applications, and image manipulation software.

We no longer have laptops to give out as incentives, so now we have a variety of other strategies:

One successful strategy is to ask faculty to demonstrate the techniques that they have found to be successful. This in turn may inspire other faculty to adopt similar techniques in their own classrooms.

- In order to generate interest, and to overcome any intimidation that some faculty may feel about technology, we offer 1-hour demos of how different types of technology can be used in a classroom setting. The presentations are most often made by faculty currently using the technology in their classrooms, so that the potential for classroom use is demonstrated, and faculty can envision how the technology can be used to teach their own discipline. Some of the technology faculty have demonstrated have included:
Creating course materials in NTID’s two courseware options, Prometheus (called myCourses at RIT) and IdeaTools

Taking screen shots and creating videos of the PC desktop using Techsmith’s SnagIt and Camtasia

Communicating visually with students using Microsoft Netmeeting

Preparing images for the Web using Adobe PhotoElements

Creating Web pages from Microsoft Word Documents

Creating animations with Director

Using videoconferencing to communicate with students

Using some of the new features available with the Mac’s new OS X and the new TabletPC

If there is interest, we then will schedule a longer session to actually teach the “how to” with hands-on practice. For example, we’ve done more in-depth training on both types of courseware, the screen capture tools, Microsoft Netmeeting, Adobe PhotoElements, and the Mac’s iMovie.

We’ve also provided half- or full-day training in software that some of our faculty have adopted and want to share with other faculty, that some faculty have expressed an interest in learning, or that members of the committee feel would be interesting. Workshops have included Adobe Acrobat, Orbis’ Easy Grade Pro for online grading, Turnitin for catching plagiarism, and Microsoft Word features that are particularly useful to faculty: formatting tools for catchier instructional materials, and tracking changes for sharing documents with faculty and students.

We have established a Software Allocation Fund that allows us to purchase software for the faculty who have participated in training on that software. For example, we have bought Adobe Acrobat, Orbis’ Easy Grade Pro, Adobe PhotoElements, Techsmith’s Snagit and Camtasia and QuickTime Pro for workshop participants.

We try to provide workshops during convenient times for faculty. These include one-hour sessions during our faculty “activity hour” when no classes are normally scheduled, three-hour sessions during exam week, and half-day or full-days sessions during the first week of June after classes are over.
• We try as much as possible to invite instructors who sign for themselves, since these presenters are much appreciated, particularly by our deaf colleagues.

• And the key motivator: we always provide some type of refreshment. (Cookies and beverages during one-hour sessions, lunch during half-day and full-day sessions)

**Q. How do we deal with different levels of technical expertise among our faculty?**

A. We know that faculty who don't know where to save a file so they can find it again will be turned off until they’ve developed more confidence with the basic technology. Therefore:

• We try to offer a variety of workshops that serve faculty all along the technical skill continuum.

• We encourage faculty to take advantage of other basic training opportunities available at RIT.

• We make the prerequisites for intermediate and advanced workshops very clear.

• We choose presenters that can make their presentations match the skill level of their audience.

• Our demos of software are done show-and-tell, but training always includes a hands-on component in a computer lab with experts on hand to assist anyone needing assistance.

• We’ve suggested that training on such basic topics as email, file organization and virus protection be a part of new faculty orientation rather then an ITC responsibility so that every faculty member starts off on roughly the same footing.

**Q. How do we provide faculty with support for projects?**

A. Not every faculty member will be able to create his or her own Flash animations and even more technically skilled faculty members will need help over hurdles. The ITC sees itself as responsible for demonstrating the possibilities that technology can provide to their classrooms, but it does not have the resources to provide ongoing support. It's therefore essential to provide a place for faculty to go for help with both development and debugging. In that regard:
• We have established strong linkages with the faculty and staff who provide support for the technology we are demonstrating, and pass their names on to the faculty who are considering adopting the new technology. Our support staff, which includes curriculum developers, programmers and media specialists, are available in NTID’s Educational Technology Resource Room, along with the hardware and software faculty need to develop new teaching and learning techniques using the technology.

• We invite the support faculty and staff to be included in training workshops to help answer questions and assist in the hands-on activities.

Q. How do we decide what's working?

A. Evaluation can be slippery, but it’s essential. We evaluate in several ways:

• We ask participants to fill out evaluation forms at the end of every workshop and training experience. The forms ask for an overall 1-10 rating, as well as for what participants liked most and least, and if they’d like a follow-up experience.

• At the end of the year we send out an email questionnaire to faculty about what they attended, what they didn’t attend and why, what they liked and didn’t like, and what they’d like to see for the next year.

• Early in the year we have held faculty forums to discuss technology and the frustrations that faculty have encountered and their goals for the future (with lunch provided, of course.)

• For the student perspective, questions related to the technology that a faculty member is using have been added to our Student Rating Systems forms, and include questions on the faculty member’s use of Power Point, Web resources, courseware, as well as general questions about the use of technology to make the course more interesting, help the student learn, or help them interact with the faculty.

Summary

So, what has the ITC learned over the last five years about training faculty in instructional technology? We’ve learned that, once faculty are shown how their own colleagues have used technology for enhancing student learning:

• Most faculty are interested in adopting technology that helps them organize their classroom materials and helps them communicate more effectively with their students.

• Many faculty are interested in going a step further, and use their ITC training to create more innovative and interesting approaches to teaching.
In the end, the ITC has learned that although technology is no substitute for good teaching, and the best PowerPoint presentation will never improve poor content, many of the faculty at NTID have learned to use technology to both deliver good content and to enhance communication both with and among our students.