Instructional Development Initiative

September 2002

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Executive Summary

This report provides a summary of the ongoing Instructional Development Initiative at Virginia Tech. It describes the results of the workshops conducted for faculty, outlines the status of classroom upgrades, and presents examples of course restructuring. The Instructional Development Initiative began with three pilot faculty workshops during the summer of 1993, and continued with additional workshops through August 2002. A total of 205 customized workshops have been conducted. During the first four-year cycle, the faculty development workshops were conducted for 1425 participants from all academic departments in the University. During the summer of 2002, approximately 425 faculty participated in the fourth year of the next cycle bringing the total of all participants to approximately 3500.

Approximately 60 classrooms have been upgraded with computers and projection systems, and ten centrally scheduled distance learning classrooms have been put online. Over 1000 computing stations have been installed for use by students in computer labs, the Math Emporium has been created, and the New Media Center has been established in Torgersen Hall.

The initiative is a large-scale effort to invest in our faculty by providing them with the opportunity to rethink their teaching and explore the potential of instructional technology for improving the effectiveness of the teaching-learning process. Emanating jointly from the Provost and the Vice President for Information Systems, this initiative has been designed to provide the opportunity for all faculty on a continuing basis to participate in an intensive workshop centered on the integration of instructional technology into the curriculum. The Provost, in conjunction with the academic deans, selects the mix of faculty attending the workshops each year.

Evaluation of the workshops by the faculty attendees continues to be positive. Faculty clearly value the opportunity to explore instructional issues with their colleagues and to discover the potential of technology for enhancing their teaching. They have indicated that these resources are critical if they are to adapt to the needs of their students.

The results of surveys of students and faculty involved in classes that have been restructured as a result of this initiative show strong support for these new approaches to learning. Active learning has been facilitated both in the classroom and out, and

constructive collaboration among students has been encouraged. Technology is promoting communication outside the classroom via electronic mail. There is evidence that these efforts have had a positive impact on students' understanding of and interest in the course material while promoting better class attendance. In addition, students believe they are being provided more opportunities to develop skills that transcend the subject matter, including problem-solving and critical thinking.

Background

The Instructional Development Initiative is part of the University's ongoing plan for creating an educational environment for the 21st century. The goal of this initiative is to continue to offer an opportunity to all faculty members on a four-year cycle, and to continue to upgrade classroom and laboratory facilities. The goals are structured into three components:

Faculty Development

- Provide the opportunity for all faculty in the University to participate in the faculty development program. The overarching goal is to motivate faculty to investigate, create, and utilize alternative instructional strategies.

- Provide participants who complete the program with access to state-of-the-art instructional technology, the knowledge to use it, and the motivation to collaborate with their colleagues in leveraging instructional technology in their courses.

Student Access

- Provide advice to all students on their investment in computer technology to maximize its usefulness during their college career.

- Provide access to computer labs, which run specialized software that is unique to disciplinary areas (such as Perseus, Mathematica, and Daedalus).

- Provide orientation and hands-on training sessions for new students to ensure that they have a basic foundation in the use of computing and instructional technology resources.

Course Development

- Support faculty in the development of network accessible courseware and instruction.

- Facilitate the development of electronic libraries of scholarly materials supporting designated courses.

- Provide improved classroom and presentation facilities to support faculty efforts in introducing new technologies into core curriculum courses.

Faculty Development Institute

During the first four-year cycle, the faculty development workshops were conducted for 1425 participants as a continuation of a long-term strategy to provide faculty with the knowledge and resources to take advantage of the use of instructional technology in their teaching. The first year of phase three of IDI began during the summer of 2002 during which 425 faculty participated. This series of workshops begins the third four-year cycle. The continuing goal of the workshops is to provide an opportunity for faculty to re-examine curriculum issues and instructional methods that will allow them to adapt to the changing needs of students. Evaluation of the workshops by the faculty attendees has consistently been positive over the past six years (see Appendix C for faculty evaluations of the 2002 workshops). These workshops provide the time and resources for faculty to investigate alternative instructional strategies designed to improve the productivity of the teaching-learning process. As a result of attending the workshops, faculty participants receive a state-of-the-art computer with a network connection and a suite of appropriate software applications.

The Provost, in conjunction with the college deans, selects the mix of faculty attending workshops each year. Faculty were grouped in nine tracks this year:

Summer 2002 Track Content

Track A-New Faculty Computing Orientation
Track B-Basic Computing Skills
Track C-Developing a Web Course using Dreamweaver and Blackboard
Track D-Developing Web Course Interaction
Track E-Creating Digital Media Content
Track F-Using AutoCad
Track G-Using MatLab
Track H-Creating Learner-Centered Instruction
Track J-Developing and Delivering Online Instruction at a Distance
Track K-Instructional Media/Web Production
Track L-Research Presentation Tools

Track M-Visualization and Virtual Environments

See Appendix A for additional details regarding the content of the tracks.

The 2002 Faculty Development Institute is marked by an increased effort to focus on specific projects during summer workshops. This increased project-orientation is planned for most FDI workshop Tracks to encourage faculty to undertake course enhancement and transformation based on their specific needs. Specific times for personal project development with lab assistant support were planned for all 2002 summer workshops. There were a series of spring workshops offered that served as a point of departure for the summer projects, as well as ongoing support to assist in successful project completion.

The FDI workshop tracks and the increased emphasis on project-orientation reflect the increased complexity of emerging technologies. This year's FDI tracks have web content creation and multimedia integration for interaction as an underlying theme. The Geographic Information Systems (GIS) track was expanded to include AutoCAD and 3-D Viz and had a required series of spring workshops. An "Academic Team" approach is envisioned for faculty seeking assistance with advanced course transformation projects.

FDI Track Meetings

Faculty had an opportunity to attend a series of related spring workshops. Before and after the spring workshops, focus group meetings with workshop presenters were held to discuss certain workshop topics, goals and prerequisite skills. Additional focus group meetings were planned to assist faculty in preparing materials for personal projects that were developed during the summer.

Registrants were be notified of the date, time and location of the focus group meetings by e-mail. Details of Workshop topics, instructional pace and hands-on activities were adjusted based on the input, interests and concerns expressed during these meetings. FDI Workshop topics and content will continue to reflect the stated needs, interests and instructional objectives of the participating faculty.

The content of the workshops has radically changed since the early pilot workshops in 1993. At the beginning of FDI, the core skills being taught were e-mail, introduction to multimedia, developing classroom presentations, and principles of computer-based

instruction. As the effects of FDI have spread across the campus, and with increased awareness of the Internet, appropriate changes in the focus of the workshops have been implemented. The core skill set has become more advanced, reflecting the more sophisticated computer skills and computer awareness of the participating faculty. Principles used in designing the 2002 FDI workshops were developed from the feedback received during workshop sessions in previous years. It is clear that, with changing technology and the evolving needs of faculty, the content of FDI must be constantly updated and evaluated for effectiveness. (See Appendix A for the range of topics that have been included in FDI sessions since 1993.)

Most workshop instructors and facilitators have been from Educational Technologies, the Computing Center, and the University Libraries. However, the expertise of faculty and staff from Geography, Forestry, English, Entomology, Mathematics, Computer Science, Veterinary Medicine, Engineering, Architecture, Theater Arts, Art, Music, and Humanities have been included where appropriate. A very effective feature of FDI, which was continued during the 2002 sessions, included presentations by faculty who had previously attended FDI. These sessions demonstrated how these faculty had changed their courses and provided the opportunity to answer questions about effects on student learning, productivity, development time, and similar issues.

Beyond the core skills, many workshops have focused on discipline-specific software over the past several years. For example, the Department of Mathematics is engaged in large-scale experimentation in the Math Emporium. The Emporium is a student-centered, advanced learning center, which provides an active learning environment for over 10,000 undergraduates using interactive self-paced courseware, diagnostic quizzes, small-group work, and faculty-student tutoring. The aim is to overcome conceptual barriers and thereby broaden by an order of magnitude the range of students who succeed in making mathematics an effective tool for later course work and careers. At the same time, this new approach allows problems of a more realistic character to be brought into even elementary courses, speeding the transition to professional-level work. The first of this scale in the nation, the Math Emporium is a bold example of the use of instructional technology to systematically improve student learning and faculty productivity.

Similar curricular discussions have been conducted among other faculty participants. For example, faculty from multiple disciplines involved with design concepts (such as Architecture, Art, Apparel Design, Geographical Information Systems, Landscape

Architecture and Theater Arts) examined and debated the use of computer-based tools to enrich both two-dimensional and three-dimensional design instruction. Other groups chose to supplement their introductory sessions with more in-depth sessions on specific aspects of multimedia development and use.

Most workshops included general sessions that were attended by all participants in the group. Breakout sessions were also conducted which permitted participants with different experience levels or interest areas to focus on topics that were most appropriate to them individually. In addition to gaining a basic understanding of the computer-based tools, faculty also spent time discussing the possibilities for using technology to facilitate student learning.

Open lab time was provided to give faculty the opportunity to practice working with material from each workshop session and to begin development of new course materials for the 2002-03 academic year. Over the past several years, the workshops have been project oriented, with the result that most faculty have left the workshops with a multimedia presentation for use in a lecture, or with a framework for an Internet accessible course. These introductions to instructional tools set the stage for more extensive workshops on specific topics, which will continue throughout the year (see Appendix B for a listing of workshops conducted during the 2001 Fall Semester).

Classroom Upgrades and Computer Labs

Since the summer of 1993, more than 60 classrooms have been upgraded with computer-aided teaching stations (CATS). These facilities provide faculty and students the capability for displaying a wide array of computer-generated presentations including scientific visualization, and other complex graphic displays. All of the stations have a network connection, which provides access to the Internet for downloading information during class sessions. These classrooms are in great demand by faculty across all colleges and departments in the University.

Ten centrally scheduled distance learning classrooms have been put online to support classes being delivered to students off-campus. The Commonwealth Engineering Program and the MBA distance learning program are now taught using a two-way interactive system on Net.Work.Virginia. Net.Work.Virginia is the state's broadband

network that currently provides voice, video and data access for over 700 institutions in the Commonwealth.

Computer labs for student access have been installed in nine locations on campus providing more than 1000 computing stations for accessing the Internet and specialized software. See Appendix D for a listing of classrooms that have been upgraded.

New Media Center

Virginia Tech's original selection among just 20 colleges and universities nationwide selected as a charter of the New Media Center (NMC) consortium provided the opportunity to create a state-of-the-art resource center for teaching and learning in Newman Library. The Center was moved to Torgersen Hall when this advanced communications facility was opened in 2000.

The goals of the NMC include:

- Providing free and open access to multimedia technologies for the diverse needs of all segments of the community.
- Providing reasonable and efficient consulting in multimedia technologies for all segments of the community.
- Managing the facility and resources in a fair and equitable manner within the constraints of time, money, and resources.
- Providing up-to-date hardware and software to patrons in an easy-to-use, friendly, and well-maintained environment.

The Center is equipped with unique resources where students, faculty, and the community can interact with new media technologies in a nationally showcased forum. Over 12,000 users took advantage of these facilities over the past year.

Outcomes

One of the most significant outcomes during the early stages of this initiative was the development of Cyberschool, which is a fusion of computer-interactive classroom methodologies, traditional classroom practice, advanced multimedia programs, and distance learning. Cyberschool is a partnership between the College of Arts and

Sciences, the University's largest college, and Educational Technologies. It is conceptualized as a virtual campus, breaking the mold of credit for contact, and thereby meeting the needs of a diverse student body over the next decade and beyond. It is a response to the need to teach more students without additional resources in terms of the number of faculty and classroom buildings.

A continuous assessment of the impact of technology on instruction has been conducted since the IDI was initiated in 1993. Instructional Services has managed these assessment activities that included early support from the Sloan Foundation. A survey of students taking courses during spring 1999 indicated that students appeared to be quite satisfied with the design and implementation of their course. The results showed the following:

- 63% agreed that, because of the way their course used the internet, they enjoyed studying for the course
- 73% said they were better able to understand the course's ideas and concepts
- 78% agreed they were more confident they could reach their academic goals
- 69% said they put more thought into their comments
- 73% said they did not have difficulty keeping up with the pace of the course

With immediate electronic access to extensive course materials and the built-in communication scaffolds of online course tools, most students receive the information and support needed to succeed. As one student stated:

> Many textbooks are extremely difficult to follow, however, when there was something I found difficult to understand in the lecture notes that were posted, the audio lectures usually more than covered any questions I had, and if they didn't, there was always the discussion forum where you can post any question that you like and will be answered for you.

As noted previously, many students liked the online environment and interaction, but some indicated that certain new methods of interaction (notably the MOO for group interaction and discussion) required some adjustment. Many students liked the idea of being in control of their own pace through the course, notably being able to read and hear lectures more than once. Some comments specifically mentioned the usefulness of being able to encounter complex information in more than one form, such as audio, text and interactive discussion.

Online courses are not only productive, but also are popular. More than 700 students taking online courses were surveyed, and 92% agreed they would recommend their courses to others.

Four lower level Biology courses that use technology extensively were also early course transformation projects: General Biology, Principles of Biology, Honors Biology, and General Microbiology. These courses were assessed as part of a Sloan Foundation – funded project. A comprehensive and detailed analysis of the results of this project is available in the final report to the Sloan Foundation on the ACCESS Project. The report, **ACCESS *Asynchronous Communications Courses to Enable Student Success***, is available in hard copy and online at: **http://www.edtech.vt.edu/access/**

Since its inception, the anticipated outcomes of this initiative have been improved student productivity in terms of student learning, greater access to courses in the face of greater demand, and more cost-effective course delivery. Resources have been allocated within the University to begin the process of accomplishing this goal as described in the next section.

The Center for Innovation in Learning

Established in 1996, the Center for Innovation aims to develop online courses and provide related infrastructure, technical support and assessment of results in targeted curricular areas. The center also serves as an umbrella for coordinating communications and developing partnerships focused on integrating technology in learning.

Over the past five years, 108 course transformation projects for faculty across every college totaling over $3.1 million have been funded by the Center for Innovation in Learning. The early focus of these grants was on high enrollment core curriculum courses. The goal has been expanded to include upper division courses and distance learning programs. These grants will support courses enrolling over ten thousand students.

The center's awards are focused on particular parts of the curriculum. Faculty are invited to submit proposals to integrate technology into teaching in four curricular areas:

- distance learning programs for graduate and professional students;
- core curriculum courses that currently have little or no integration of technology;

- upper level undergraduate and professional courses with high student demand
- multiple use courses that could be used for graduate and professional continuing education (e.g., course modules, certificate programs)

Proposals are designed to achieve the following outcomes:

- active learning
- interactive communication
- more self-directed, self-paced learning
- computer literacy integrated with content
- electronic access to course material and supplemental resources
- electronic access to course information, announcements, and news.

The center also assists in the coordination of assessment and of the technical support and equipment needs of successful grantees. By strategically targeting areas of the curriculum for development, the university can realize more efficient and effective use of human, physical and financial resources. Communities of scholars and instructional development faculty and staff can form to develop, assess and communicate the results of their activities. Opportunities exist for cost sharing across parts of the university on strategic activities. Research on teaching and learning can accompany online course development more systematically. New uses of space and technology for experimentation and development of new approaches to teaching and learning can emerge. Outreach to other learning communities can grow strategically as well. (See Appendix E for a listing of the funded projects.)

Challenges and Opportunities

As faculty learn how to leverage the use of technology in instruction, they will be supported in the redesign of their courses to provide new options for students. These include electronic access to the faculty during non-class hours, as well as to course materials, references, tutorials, simulations, and on-line testing as appropriate.

The University has completed the construction of a new facility, the Advanced Communication and Information Technology Center (ACITC) - Torgersen Hall, which provides a test-bed for investigating and evaluating teaching and learning in the 21st century. This facility brings together faculty and students involved in research on the application of technology to a wide range of topics such as digital library materials,

collaborative learning, human-computer interaction, distance education, scientific visualization, multimedia, fiber optics, and wireless communication.

Faculty are assuming new roles in the design, development, and delivery of instruction in a new educational environment as forecast in the 1989 report of the *University Task Force on the Impact of Digital Technology on the Classroom Environment* and the *Report of the Commission on the University of the 21st Century*. This use of technology will provide options for students to more efficiently master the content of the course. As a welcome side effect, such use of information technology will also provide students with much greater experience with advanced computer applications that the corporate world increasingly views as one of the "basic skills" for college graduates.

These new teaching and learning options will provide the opportunity and motivation for faculty to devote time to designing course materials and to become more available to interact individually with students at a higher level of problem-solving activity. Under this scenario, students may become more independent learners as they interact with course materials, while at the same time benefiting from faculty expertise and experience in mastering course content and solving real world problems. As a result, the students acquire learning styles and attitudes that are critical to becoming successful life-long learners.

Students are now able to interact with course materials without being encumbered by the traditional credit-for-contact model. Thus, distance education has been transformed as students both on-and off-campus take advantage of courses designed with the flexibility to meet diversified needs. Physical proximity to classrooms, labs, and libraries will become less important than electronic access to these resources. Particularly successful strategies will have the potential for implementation at other Virginia universities.

Appendix A

Faculty Development Institute

2002

FDI Summer Workshop Descriptions

FDI Workshop topics and content will continue to reflect the stated needs, interests and instructional objectives of the participating faculty.

Track A - New Faculty Technology Orientation (2 days)

This workshop will provide new faculty with an orientation to computing resources at Virginia Tech. Topics will include the Virginia Tech e-mail system, web authoring, instructional resources, classroom presentation systems and network resources. Participants will have a chance to create a Course site on the University's Blackboard system, register for fall workshops and develop an inventory of campus resources specific to their needs. No prerequisites.

Track B - Basic Computing Skills (2 days)

This workshop is intended for participants new to desktop computing or with very minimal computing skills. Topics will include critical information about the computer operating system, how to use the E-mail system at Virginia Tech, introduction to the World Wide Web, and searching for library resources.

Optional "Open Lab" sessions will be available on a weekly basis to address individual needs. No prerequisites.

Track C - Developing a Web Course using Dreamweaver and Blackboard (3 days)

This workshop is intended for participants who would like to use Blackboard to develop a web course and who have little or no knowledge of HTML.

Participants will learn to use Blackboard, Virginia Tech's web course management system to manage course documents, an online gradebook, and to create online quizzing. Several interactive teaching methods and tools will also be discussed. Participants will also use Macromedia Dreamweaver and Adobe Acrobat to create high quality web documents without using HTML coding. Participants will have time to work on materials for their own courses.

Optional "Open Lab" sessions will also be available on a scheduled basis to address individual needs.

Familiarity with Microsoft Office programs is helpful. Attending a series of spring workshops is highly recommended.

Track D - Developing Web Course Interaction (3 days)

This workshop will provide participants with an overview and demonstration of interactive web-based functionality, (Chat, Discussion Boards, Quizzing and Surveys), collaboration tools, and related web elements (frames, rollovers, forms and web actions). Macromedia's "Dreamweaver" will be used extensively to demonstrate the integration of web elements, web documents and to build a web-based instructional module. Workshop time will focus on the functionality and instructional use of interactive web elements for course content interaction. Hands-on activity time will be devoted to individual projects.

The workshop will focus on demonstration of the capabilities, suggested usage and understanding the available options.

Current use of the Internet in a course is a prerequisite. Participants are asked to attend a series of spring workshops.

Track E - Creating Instructional Web/Media Content (2 days)

This workshop is production-oriented and has a lot of hands-on activities. Participants will use various desktop programs to create digital content for use in Web-based-instruction. Topics will include project planning, web page element management, web page object creation (audio, video and animation), web media integration and interaction concepts. Macromedia's Dreamweaver will be used as a tool to put the content into a web page.

Several breakout sessions will be scheduled for small group or individual studio production. This workshop can be used as a companion to Tracks C or D.

Academic support staff and graduate teaching assistants may participant with faculty as 2-person project teams.

Optional "Open Lab" sessions will be available. Participants are asked to attend a series of spring workshops.

Track F - Using AutoCAD (3 days)

AutoDesk's AutoCad has three main "Desktop" modules; Architectural, Land Development and Mechanical. The workshop's primary focus will be based on the needs and interests of the participants, as expressed in a focus group meeting. This AutoCAD workshop is envisioned for faculty in various planning-based disciplines.

Familiarity with a particular Desktop module is required. If necessary, participants may be asked to attend a series of pre-workshop hands-on sessions.

Track G - Using MatLab (3 days)

This workshop will provide participants with a general overview of MatLab functions as well as have discipline specific presentations of how MatLab is
used in research and instructional practice.

Academic support staff and graduate assistants may participate with faculty as 2-person project teams.

No prerequisites. Participants are asked to attend a series of spring workshops.

Track H - Creating Learner-Centered Instruction (1 day, with extensive online modules)

This workshop will introduce participants to the basic concepts, methods and tools of Instructional Design. Review your existing goals and objectives with an emphasis on "improving an existing course." Designed as a hands-on, project-based workshop, participants will examine the redesign of a particular course.

Individual consultation and follow-up sessions will also be offered.

Although no software training occurs, this workshop will be offered online with 2 required half-day sessions. No prerequisites.

Participants are asked to attend an orientation during the spring.

Track J - Developing and Delivering Online Instruction at a Distance (3 days)

This workshop will focus on IDDL course development, delivery considerations and strategies for teaching distance learning courses by asynchronous or synchronous methods. Participants will use various instructional tools and course development software to create student/faculty interaction, student/student interaction and student/content interaction. Small group support and consulting will be provided for course design methods and delivery options.

No prerequisites. Participants are asked to attend a series of spring workshops.

Track K - Instructional Media Production (2 days, with personal action plan)

A studio approach for advanced FDI participants. Participant focus group meeting will be held in mid March 2002 to determine track content and feasibility. Enrollment will be limited to ensure a quality experience and adequate coverage of suggested topics.

Academic support staff and graduate teaching assistants may participant with faculty as 2-person project teams.

Knowledge of web-based instruction and familiarity with multimedia concepts are prerequisites.

Track L - Research Tools and Presentation (2 days)

This workshop will introduce participants to the basic concepts, methods and tools of several presentation and distance learning tools. Designed as a hands-on, project-based workshop, participants will learn how to bring research knowledge into a particular course or to present research findings, with computer augmentation.

Academic support staff and graduate teaching assistants may participant with faculty as 2-person project teams.

No prerequisites. Participants are asked to attend a series of spring workshops.

Track M - Visualization and Virtual Environments for Research and Instruction (3 days)

This hands-on workshop will introduce participants to the basic concepts, methods and tools used in CAVE Visualization and Virtual Environments. Participants will learn how to create and prepare content, and how to design and evaluate user interfaces for use in Virtual Environments.

The workshop will also include a hands-on introduction to DIVERSE(TM), an open-source application programming interface (API), developed by the Virginia Tech CAVE group.

C/C++ programming experience is recommended but not required.

Academic support staff and graduate teaching assistants may participant with faculty as 2-person project teams.

No prerequisites. Participants are asked to attend a series of spring workshops.

2002 FDI Summer Workshop Schedule

Workshop Title	Track	Platform	Start Date	End Date
Developing a Web Course using Dreamweaver and Blackboard	C1	Macintosh	13-May	15-May
Developing Web Course Interaction	D1	Windows	13-May	15-May
Visualization and Virtual Environments	M1	Windows	15-May	17-May
Creating Instructional Web/Media Content	E3	Windows	16-May	17-May
Developing a Web Course using Dreamweaver and Blackboard	C2	Windows	20-May	22-May
Developing Web Course Interaction	D2	Macintosh	20-May	22May
Developing and Delivering Online Instruction at a Distance	J1	Windows	22-May	24May
Basic Computing	B1	Windows	23-May	24-May
Holiday Break			27-May	27-May
Developing a Web Course using Dreamweaver and Blackboard	C3	Macintosh	28-May	30-May
Developing Web Course Interaction	D3	Windows	28-May	30-May
Developing a Web Course using Dreamweaver and Blackboard	C4	Windows	3-Jun	5-Jun
Research Presentation Tools	L1	Macintosh	3-Jun	5-Jun
Using MatLab	G1	Windows	4-Jun	6-Jun
Basic Computing	B2	Macintosh	6-Jun	7-Jun
Creating Learner-Centered Instruction	H2	Platform Independent	6-Jun	27-Jun
Developing a Web Course using Dreamweaver and Blackboard	C5	Macintosh	10-Jun	12-Jun
Creating Instructional Web/Media Content	E5	Macintosh	13-Jun	14-Jun
Using AutoCad	F1	Windows	17-Jun	19-Jun
Developing and Delivering Online Instruction at a Distance	J2	Windows	19-Jun	21-Jun
Holiday Break	-	-	1-July	5-July
Developing a Web Course using Dreamweaver and Blackboard	C8	Macintosh	8-Jul	10-Jul
Developing Web Course Interaction	D5	Windows	8-Jul	10-Jul
Developing and Delivering Online Instruction at a Distance	J3	Windows	10-Jul	12-Jul
Research Presentation Tools	L2	Windows	16-Jul	18-Jul
Personal Action Plan Consulting	NA	NA	22-Jul	25-Jul
“Summer Blitz” Production Studio	P1	Both	22-Jul	26-Jul
FDI Summer Break	-	-	29-Jul	9-Aug
New Faculty Technology Orientation	A1	Both	14-Aug	16-Aug
GTA and Support Staff “Web Clinic”	NA	Both	19-Aug	22-Aug

Faculty Development Institute

2001

FDI Workshop Descriptions

FDI Workshop topics and content will continue to reflect the stated needs, interests and instructional objectives of the participating faculty.

Track A — New Faculty Technology Orientation, (2 days)

This workshop will provide new faculty with an orientation to computing resources at Virginia Tech. Topics will include the Virginia Tech e-mail system, web authoring, instructional resources, classroom presentation systems and network resources. Participants will have a chance to create a Course webpage, register for fall workshops and develop an inventory of campus resources specific to their needs. No prerequisites.

Track B — Basic Computing Skills (2 days)

This workshop is intended for participants new to desktop computing or with very minimal computing skills. Topics will include critical information about the computer operating system, how to use the E-mail system at Virginia Tech, introduction to the World Wide Web, and searching for library resources.

Optional "Open Lab" sessions will be available on a weekly basis to address individual needs. No prerequisites.

Track C — Basic Web Course Development (3 days)

This workshop is intended for participants with limited or no knowledge of HTML, and a desire to have a World Wide Web site. An All-in-one courseware tool, "Course Info" (WebCT also available) will be used to create Internet interactions for students. Participants will use Macromedia's "Dreamweaver" to create high quality web documents without using HTML coding. The workshop will focus primarily on Web design and creating a web presence for a specific course.

Optional "Open Lab" sessions will be available on a scheduled basis to address individual needs. Familiarity with MS Office programs is helpful.

Participants are asked to attend a series of spring workshops.

Track D — Intermediate Web Course Development (3 days)

This workshop will provide participants with the knowledge and skills to develop and manage a network-enhanced or web-based course. Workshop time will focus on the use of web elements (HTML code, text and images) for course content interaction (forms, chat, and threaded discussion) using Macromedia's "Dreamweaver." Hands-on activity time will be devoted to individual projects. The workshop will focus on selecting appropriate methods and understanding the available tools.

Optional "Open Lab" sessions will be available on a scheduled basis to address individual needs. Current use of the Internet in a course is a prerequisite.

Participants are asked to attend a series of spring workshops.

Track E — Advanced Web Course Development (3 days)

Use various desktop programs to create digital content for use in Web-based-instruction. Topics will include project planning, site management, web page element management, web page object creation (audio, video and animation), web media integration and interaction concepts. The workshop will focus on advanced features of Macromedia's Dreamweaver.

This workshop is production-oriented and lab intensive. Several breakout sessions will be scheduled for small group studio production.

Optional "Open Lab" sessions will be available. Participants are asked to attend a series of spring workshops.

Track F —Using Geographic Information Systems: Spatial Data (3 days)

ESRI's ArcView version 3 and/or AutoDesk AutoCad will be used based on the needs and interests of the participants. Two separate workshops may be required. Past GIS workshops using ArcView 3 were intended for faculty in the Humanities, Natural and Social Sciences who wanted to show data relationships within a geographic context. An AutoCAD workshop is envisioned for faculty in design and planning based disciplines.

No prerequisites. Participants are asked to attend a series of spring workshops.

Track G — Applied Instructional Design (3 days)

This workshop will introduce participants to the basic concepts, methods and tools of Instructional Design. Review your existing goals and objectives with an emphasis on "improving an existing course." Designed as a hands-on, project-based workshop, participants will examine the redesign of a particular course. Individual consultation and follow-up sessions will also be offered.

Although no software training occurs, this workshop will be held in a computer lab to allow web content interaction. No prerequisites.

Participants are asked to attend a series of spring workshops.

Track H — Distance and Distributed Learning (3 days)

This workshop will focus on course development, delivery considerations and strategies for teaching distance learning courses by asynchronous or synchronous methods. Participants will use various instructional tools and course development software to create student/faculty interaction, student/student interaction and student/content interaction. Course management and assessment strategies will also be addressed.

Track J — Advanced Topics in Course Transformation

A studio approach for advanced FDI participants. Participant focus group meeting will be held in mid March 2001 to determine track content and feasibility. Enrollment will be limited to ensure a quality experience and adequate coverage of suggested topics.

Academic support staff and graduate teaching assistants may participant with faculty as project teams.

2001 FDI Summer Workshop Schedule

Workshop Title	Track	Platform	Start Date	End Date
Special Topics in Course Transformation	J	NA	NA	NA
Using GIS: Spatial Data and/or AutoCAD	F	Windows	14-May	16-May
Applied Instructional Design	G	NA	14-May	16-May
Basic Computing	B	Mac	17-May	18-May
Basic Web Course Development	C	Windows	21-May	23-May
Intermediate Web Course Development	D	Mac	22-May	24May
Advanced Web Course Development	E	Windows	22-May	24May
Basic Computing	B	Windows	24-May	25-May
Holiday Break			28-May	1-Jun
Basic Web Course Development	C	Mac	4-Jun	6-Jun
Intermediate Web Course Development	D	Windows	5-Jun	7-Jun
Advanced Web Course Development	E	Windows	5-Jun	7-Jun
Distance and Distributed Learning	H	Windows	5-Jun	7-Jun
Basic Web Course Development	C	Windows	11-Jun	13-Jun
Advanced Web Course Development	E	Macintosh	12-Jun	14-Jun
Open Lab: Instructional Technologies	NA	Both	14-Jun	14-Jun
Basic Web Course Development	C	Mac	18-Jun	20-Jun
Using GIS: Spatial Data and/or AutoCAD	F	Windows	18-Jun	20-Jun
Intermediate Web Course Development	D	Windows	19-Jun	21-Jun
Distance and Distributed Learning	H	Windows	19-Jun	21-Jun
Open Lab: Instructional Technologies	NA	Both	21-Jun	21-Jun
Personal Action Plan Consulting	NA	NA	25-Jun	28-Jun
Holiday Break			2-Jul	6-Jul
Basic Web Course Development	C	Windows	9-Jul	11-Jul
Intermediate Web Course Development	D	Mac	10-Jul	12-Jul
Distance and Distributed Learning	H	Windows	10-Jul	12-Jul
Basic Web Course Development	C	Mac	16-Jul	18-Jul
Intermediate Web Course Development	D	Windows	17-Jul	19-Jul
Open Lab: Instructional Technologies	NA	Both	19-Jul	19-Jul
FDI Summer Break			6-Aug	10-Aug
Personal Action Plan Consulting	NA	NA	25-Jul	28-Jul
“Summer Blitz” Production Studio	NA	Both	30-Jul	2-Aug
New Faculty Orientation	A	Both	15-Aug	16-Aug
GTA & Support Staff “Web Clinic”	NA	Both	20-Aug	23-Aug

Faculty Development Institute

2000

FDI Workshop Tracks

FDI Workshop topics and content will continue to reflect the stated needs, interests and instructional objectives of the participating faculty.

Track A — New Faculty Technology Orientation, August 14-18 (2- days)

This workshop will provide new faculty with an orientation to computing resources at Virginia Tech. Topics will include the Virginia Tech e-mail system, web authoring, instructional resources, classroom presentation systems and network resources. Participants will have a chance to create a Course WebPage and develop an inventory of campus resources specific to their needs. No prerequisites.

Track B — Basic Computing Skills (2 days)

This workshop is intended for participants new to desktop computing or with very minimal computing skills. Topics will include critical information about the computer operating system, how to use the E-mail system at Virginia Tech, introduction to the World Wide Web, and searching for library resources.

Optional "Open Lab" sessions will be available on a weekly basis. No prerequisites.

Track C — Basic Web Development (3 days)

This workshop is intended for participants with limited or no knowledge of HTML, and a desire to have a World Wide Web site. An All-in-one courseware tool, "Course Info" will be used to create Internet interactions for students. Participants will use Macromedia's "Dreamweaver" to create high quality web documents without using HTML coding.

Optional "Open Lab" sessions will be available on a weekly basis. Familiarity with MS Office programs is helpful.

The workshop will focus primarily on Web design and creating a web presence for a specific course.

Track D — Advanced Web Development (3 days)

This workshop will provide participants with the knowledge and skills to develop and manage a network-enhanced or web-based course. Workshop time will focus on the use of web elements for course content interaction using Macromedia's "Dreamweaver." Hands-on activity time will be devoted to individual projects. The workshop will focus on selecting appropriate methods and understanding the available tools.

Optional "Open Lab" sessions will be available on a weekly basis. Current use of the Internet in a course is a prerequisite.

Track E — Using Geographic Information Systems: Spatial Data (3 days)

The workshop is intended for faculty in the Humanities, Natural and Social Sciences who want to show data relationships within a geographic context. ESRI's ArcView version 3 will be used. The workshop will focus on the non-technical aspects of using spatial data. No prerequisites.

Track F — Distance and Distributed Learning (3 days)

This workshop will focus on course development, delivery considerations and strategies for teaching distance learning courses by asynchronous or synchronous methods. Participants will use various instructional tools and course development software to create student/faculty interaction, student/student interaction and student/content interaction. Course assessment strategies will also be addressed.

Track G — Applied Instructional Design (May 15-18; 22-25)

This workshop will introduce participants to the basic concepts, methods and tools of Instructional Design. Review your existing goals and objectives with an emphasis on "improving an existing course." Designed as a hands-on, project-based workshop, participants will examine the redesign of a particular course. Individual consultation and follow-up sessions will also be offered. No software training occurs in this workshop. No prerequisites.

Track H — Creating Multimedia and Digital Content (3 days)

Use various desktop programs to create digital content for use in Web-based-instruction. Topics will include project planning, storyboarding, digital audio, digital video, animation, simulations and virtual reality. This workshop is production-oriented and lab intensive.

Optional "Open Lab" sessions will be available. Participants will be asked to attend a series of spring workshops.

Track J — Advanced Topics in Course Transformation

An experimental studio approach for advanced FDI participants. Participant focus group meeting will be held in mid March 2000 to determine track content and feasibility. Enrollment will be limited to ensure a quality experience and adequate coverage of suggested topics. Advanced knowledge of MS Office, knowledge of web-based instruction and familiarity with multimedia concepts are prerequisites.

2000 FDI Workshop Schedule

Workshop Title	Track	Platform	Start Date	End Date
"Basic Web Development"	C	PC	15-May	17-May
"Basic Computing"	B	PC	18-May	19-May
"Basic Web Development"	C	PC	22-May	25-May
"Applied Instructional Design"	G	Both	22-May	25-May
"Advanced Web Development"	D	Mac	23-May	25-May
"Basic Computing"	B	PC	25-May	26-May
"Basic Web Development"	C	Mac	30-May	1-Jun
"Advanced Web Development"	D	PC	30-May	1-Jun
"Basic Web Development"	C	Mac	5-Jun	7-Jun
"Using Geographic Information Systems: Spatial Data"	E	PC	5-Jun	7-Jun
"Applied Instructional Design"	G	Both	5-Jun	8-Jun
"Instructional Technologies"		Both	8-Jun	8-Jun
"Basic Web Development"	C	PC	12-Jun	14-Jun
"Using Geographic Information Systems: Spatial Data"	E	PC	12-Jun	14-Jun
"Distance and Distributed Learning"	F	Both	13-Jun	15-Jun
"Creating Multimedia and Digital Content"	H	Both	13-Jun	15-Jun
"Basic Web Development"	C	Mac	19-Jun	21-Jun
"Advanced Web Development"	D	PC	20-Jun	22-Jun
"Creating Multimedia and Digital Content"	H	Both	20-Jun	22-Jun
"Basic Computing"	B	Mac	22-Jun	23-Jun
"Basic Web Development"	C	PC	26-Jun	28-Jun
"Advanced Web Development"	D	Mac	27-Jun	29-Jun
"Distance and Distributed Learning"	F	Both	27-Jun	29-Jun
Open Lab:		Both	29-Jun	29-Jun
Week 8-Holiday Break			3-Jul	7-Jul
"Basic Web Development"	C	Mac	10-Jul	12-Jul
"Advanced Web Development"	D	PC	11-Jul	13-Jul
"Distance and Distributed Learning"	F	Both	11-Jul	13-Jul
"Creating Multimedia and Digital Content"	H	Both	11-Jul	13-Jul
"Basic Web Development"	C	PC	17-Jul	19-Jul
"Basic Web Development"	C	PC	24-Jul	26-Jul
"Advanced Web Development"	D	PC	25-Jul	27-Jul
"Creating Multimedia and Digital Content"	H	Both	25-Jul	27-Jul
"New Faculty Orientation"	A	Both	15-Aug	17-Aug

Faculty Development Institute

1999

FDI Workshop Tracks

This year's FDI program is marked by an expansion of choices to meet the diversifying needs of Virginia Tech's faculty. All workshops were project-oriented, and tutors were available in all workshops.

Track A - New Faculty Technology Orientation (2 days)

This workshop will provide new faculty with an orientation to computing resources at Virginia Tech. Topics will include the Virginia Tech e-mail system, Microsoft Office, Web Authoring, library resources, classroom presentation systems and network resources. Participants will have a chance to create a Course WebPage. No prerequisites.

Track B - Basic Computing Skills (2 days)

This workshop is intended for participants new to desktop computing or with very minimal computing skills. Topics will include critical information about the computer operating system, how to use the E-mail system at Virginia Tech, introduction to the World Wide Web, and searching for library resources. No prerequisites.

Track C - Enhancing Your Course with the Web (3 days)

This workshop is intended for participants with limited or no knowledge of HTML, and a desire to have a World Wide Web site. An All-in-one courseware tool, "Course Info" will be used to create Internet interactions for students. Participants will use Microsoft Office wizards and templates to create high quality web documents without using HTML coding. Familiarity with MS Office programs is a prerequisite. The workshop will focus primarily on Web design and creating a web presence for a specific course.

Track D - Distance and Distributed Learning: Web-based-instruction (3 days)

This workshop will provide participants with the knowledge and skills to develop and manage a network enhanced or web-based course. Workshop time will focus on learning on-line technologies and methods. Hands-on activity time will be devoted to individual projects for creating and transforming part of an existing course. The workshop will focus on selecting appropriate methods and understanding the available tools. Current use of the Internet in a course is a prerequisite.

Track E - Using GIS: Spatial Data in teaching and learning

The workshop is intended for faculty in the Humanities, Natural and Social Sciences who want to show data relationships within a geographic context. ESRI's ArcView version 3 will be used as a geographic information system (GIS). The workshop will focus on the non-technical aspects of using spatial data. No prerequisites.

Track F - Distance and Distributed Learning: 2-way Interactive Video (3 days)

This workshop will focus on course development, delivery considerations and strategies for teaching live, multi-point, interactive video-conferencing courses enhanced with web-based components. Participants will use various instructional tools and course development software to create student/faculty interaction, student/student interaction and student/content interaction. Course assessment strategies will also be addressed. Familiarity with off-campus teaching is recommended as a prerequisite.

Track G - Instructional Design Strategies for Learning (May 17-20; 24-27)

This workshop will introduce participants to the basic concepts, methods and tools of Instructional Design. Your existing goals and objectives are reviewed as learning environments with an emphasis on "improving an existing course." The purpose of the workshop is to equip participants with the tools needed to align instructional goals with learning activities that integrate a range of technologies. Designed as a hands-on, project-based workshop, participants will redesign a particular course so that stated goals for students learning are optimized. Individual consultation and a follow-up session will also be provided during the fall semester.
No prerequisites.

Track H - Creating Multimedia and Digital Content (3 days)

Use Macromedia Director to create multimedia/digital presentations for use in Web-based-instruction, CD-ROM, or Distance learning courses. Topics will include project planning, storyboarding, digital audio, digital video, animation, simulations and virtual reality. This workshop is production-oriented and lab intensive. Familiarity with Human-Computer-Interface and/or Distance Learning concepts are prerequisites.

Track J - Advanced Topics in Course Transformation

An experimental studio approach for advanced FDI participants. Participant focus group meeting will be held in mid February 1999 to determine track content and feasibility. Enrollment will be limited to ensure a quality experience and adequate coverage of suggested topics. Advanced knowledge of MS Office, knowledge of web-based instruction and familiarity with multimedia concepts are prerequisites.

1999 FDI Workshop Schedule

Start Date	End Date	Track	Platform	Workshop Title	Location
5/17/99	5/19/99	C	PC	Enhancing Your Course with the Web	NMC
5/17/99	5/20/99	G	N/A	Designing Learning Environments--Instructional Strategies	DBHCC
5/20/99	5/21/99	B	PC	Basic Computing Skills	NMC
5/21/99	5/21/99	J	N/A	Advanced Topics in Course Transformation	Newman
5/24/99	5/26/99	C	PC	Enhancing Your Course with the Web	NMC
5/24/99	5/27/99	G	N/A	Designing Learning Environments--Instructional Strategies	DBHCC
6/1/99	6/3/99	D	PC	Distance and Distributed Learning: Web-based instruction	DBHCC & NMC
6/1/99	6/3/99	F	N/A	Distance and Distributed Learning: 2-way Interactive video	DBHCC & VTEL rooms
6/7/99	6/9/99	C	PC	Enhancing Your Course with the Web	NMC
6/8/99	6/10/99	H	Mac	Creating Multimedia and Digital Content	Multimedia Lab
6/8/99	6/10/99	H	PC	Creating Multimedia and Digital Content	Multimedia Lab
6/10/99	6/10/99	N/A	N/A	FDI - Open Lab [Pre-registration required]	NMC
6/14/99	6/16/99	C	Mac	Enhancing Your Course with the Web	NMC
6/14/99	6/16/99	E	NT	Using GIS: Spatial Data in Teaching and Learning	CEARS Lab
6/17/99	6/18/99	B	PC	Basic Computing Skills	NMC
6/17/99	6/17/99	N/A	N/A	FDI - Open Lab [Pre-registration required]	Newman
6/21/99	6/23/99	C	PC	Enhancing Your Course with the Web	NMC
6/21/99	6/23/99	E	NT	Using GIS: Spatial Data in Teaching and Learning	CEARS Lab
6/22/99	6/24/99	D	Mac	Distance and Distributed Learning: Web-based instruction	DBHCC & NMC
6/22/99	6/24/99	F	N/A	Distance and Distributed Learning: 2-way Interactive video	DBHCC & VTEL rooms
7/7/99	7/9/99	C	PC	Enhancing Your Course with the Web	NMC
7/12/99	7/14/99	C	Mac	Enhancing Your Course with the Web	NMC
7/13/99	7/15/99	H	Mac	Creating Multimedia and Digital Content	Multimedia Lab
7/13/99	7/15/99	H	PC	Creating Multimedia and Digital Content	Multimedia Lab
7/15/99	7/15/99	N/A	N/A	FDI - Open Lab [Pre-registration required]	NMC
7/15/99	7/15/99	J	N/A	Advanced Topics in Course Transformation	Newman
7/20/99	7/22/99	D	Mac	Distance and Distributed Learning: Web-based instruction	DBHCC & NMC
7/20/99	7/22/99	F	N/A	Distance and Distributed Learning: 2-way Interactive video	DBHCC & VTEL rooms
7/26/99	7/28/99	C	Mac	Enhancing Your Course with the Web	NMC
8/9/99	8/10/99	A	PC	New Faculty Technology Orientation	NMC
8/11/99	8/12/99	A	PC	New Faculty Technology Orientation	NMC
8/12/99	8/13/99	A	Mac	New Faculty Technology Orientation	Newman

Faculty Development Institute

1998

FDI Workshop Tracks

This year's FDI program is marked by an expansion of choices to meet the diversifying needs of Virginia Tech's faculty. All workshops were project-oriented, and tutors were available in all workshops.

Track A: New Faculty Technology Orientation (2 days)

This workshop will provide new faculty with an orientation to computing resources at Virginia Tech. Topics will include the Virginia Tech e-mail system, Microsoft Office, Web Authoring, library resources, classroom presentation systems and network resources.

Track B: Basic Computing Skills (2-3 days, self-paced)

Basic computing skills, including critical information about the computer operating system, how to use the E-mail system at Virginia Tech, introduction to the World Wide Web, and searching for library resources. Individual projects might include using Microsoft Word to create a course syllabus, creating a chart from an Excel worksheet, or developing a simple classroom presentation using Microsoft PowerPoint.

Track C: Using Microsoft Office for Basic Web Authoring (2 days)

This workshop is intended for Microsoft Office users, with a need to share existing documents in a World Wide Web environment. Participants will use MS Office wizards and templates to create high quality web documents without using HTML coding. Familiarity with MS Office programs is a prerequisite. The workshop will focus primarily on Word, PowerPoint and Excel applications.

Track D: Building and Managing Interactive On-line Courses (3 days)

This workshop will provide participants with the knowledge and skills to develop and manage a network enhanced or web-based course. Course assessment strategies will also be addressed. Workshop time is devoted to learning on-line technologies and methods. No time will be spent reviewing the computing operating system and hands-on activity time will be devoted to individual projects.

Track E (Cancelled)

Track F: Developing and Teaching Distance and Distributed Learning Courses (3 days)

This workshop will focus on course development, delivery considerations and strategies for teaching live, multi-point, interactive courses, web-based courses and hybrid courses. Participants will use various instructional tools and course development software to create student/faculty interaction, student/student interaction and student/content interaction. Course assessment strategies will also be addressed.

Track G: Designing Learning Environments-Instructional Strategies (4 days)

This workshop is the first of a two-part series during which curriculum, instruction and assessment are examined. Learning environments are reviewed with an emphasis on "improvement". The assessment part of the series will take place during the fall, 1998. The purpose of the workshop is to equip participants with the tools needed to align instructional goals with learning activities that integrate a range of technologies. Designed as a hands-on, project-based workshop, participants will redesign a particular course so that stated goals for students learning are optimized.

Track H: Creating Multimedia and Digital Content (4 days)

Learn to create multimedia/digital presentations for use in Web-based-instruction, CD-ROM, or Distance learning courses. Topics will include project planning, storyboarding, digital audio, digital video, animation, simulations and virtual reality. This workshop is production-oriented and lab intensive.

Sessions will be offered using Windows95 and Macintosh computers.

1998 FDI Schedule

Date	Track	Platform	Location
May 13-15	B	Mac	NMC
May 13-15	F	-	NEB
May 18-20	B	Win	NMC
May 19-21	D	Win	LC
May 21-22	C	Win	NMC
May 26-28	D	Win	LC
May 26-29	G	-	DBHCC
May 28-29	C	Mac	NMC
June 1-3	B	Mac	NMC
June 2-3	C	Win	LC
June 4-5	C	Mac	NMC
June 8-10	D	Mac	NMC
June 9-10	C	Win	LC
June 11-12	C	Mac	NMC
June 15-17	F	-	NEB
June 22-24	D	Mac	NMC
June 23-25	F	-	NEB
July 6-8	B	Mac	NMC
July 6-9	H	Mac/Win	HAN
July 7-9	B	Win	LC
July 9-10	C	Mac	NMC
July 13-15	D	Mac	NMC
July 13-16	H	Mac/Win	HAN
July 14-16	D	Win	LC
July 16-17	C	Win	NMC
July 20-23	H	Mac/Win	HAN
Aug 10-11	A	Win	LC
Aug 12-13	A	Win	LC
Aug 13-14	A	Mac	NMC

NMC	New Media Center
LC	Library Classroom
HAN	Hancock Multimedia Lab
NEB	New Engineering Building
DBHCC	Donaldson Brown Hotel and Conference Center

1997

FDI Workshop Tracks

Each FDI participant registers for one workshop track. All FDI workshops run 8:30-4:30 over three consecutive days, on a M-W, T-Th, or W-F pattern. Workshops were offered May 14-August 15

Track I - Basic Computing Skills

Track I provided very basic computing skills, including critical information about the computer and how to use the e-mail system at Virginia Tech. Individual projects might include typing a course syllabus in Microsoft Word, or developing a simple classroom presentation using Microsoft PowerPoint.

- Survival skills
- Your computer's operating system
- E-mail using Eudora
- Word processing
- Introduction to the World Wide Web using Netscape
- Searching for library resources on-line
- Creating simple classroom presentations using PowerPoint
- Individual classroom presentation projects

Track II - Computer-based Classroom Presentations

Track II stressed the development and enhancement of computer-based classroom presentations using PowerPoint. Participants learned about Virginia Tech resources, which would allow them to present in the classroom and to provide students with network access to PowerPoint presentations for review.

- Review of your computer's operating system
- Creating computer based classroom presentations using PowerPoint
- Using advanced features of PowerPoint
- Scanning and editing images for classroom presentations
- Individual classroom presentation projects
- Demo of a classroom computer-aided teaching station (CATS)
- Acquiring and editing course materials using Netscape and the World Wide Web
- Searching on-line library resources
- Using the Electronic Reserve System to make course materials accessible
- Preparing course materials for Electronic Reserve
- Using Adobe Acrobat

Track III - Developing A Network-interactive Course

Track III will provide advanced participants with the knowledge and skills to develop a network-enhanced or distance learning course. Workshop time was devoted to learning new on-line technologies and methods. No time was spent reviewing the computer operating system, and little time was devoted to individual projects.

- Elements of a network-enhanced course: what's possible and practical
- Analysis of current courses offered on-line
- New developments in Distance Learning technologies

- Designing a set of World Wide Web course pages
- Development/production methods for Web course pages
- Communicating interactively on-line with your students
- Providing on-line practice tests with answer feedback
- Scanning and editing images for use on the web
- Making your course materials available on-line using Adobe Acrobat
- Faculty guide to Web Servers

FDI Schedule

Luncheon Speakers

Each week during the summer, FDI participants attended luncheon presentations on how other Virginia Tech faculty are creatively using instructional technology. These demonstrations provided an excellent overview of how teaching and learning at Virginia Tech is being enhanced through the use of instructional technology.

Scheduling Details

The following shows the starting date of three-day workshops, along with the platform and track being taught, and the starting location of the class.

Track I - Basic Computing Skills
Track II - Computer-Based Classroom Presentations
Track III - Developing A Network-Interactive Course

NMC - New Media Center, 2nd floor of Newman Library
LTC - Library Training Classroom, 2nd floor of Newman Library
DER - Derring 2069

Summer I

May 14	Mac Track II	NMC
May 19	Mac Track I	LTC
May 20	PC Track I	DER
May 21	Mac Track I	NMC
May 27	PC Track I	DER
June 2	PC Track II	NMC
June 3	PC Track II	DER
June 4	Mac Track III	LTC
June 9	PC Track II	NMC
June 10	PC Track II	DER
June 11	Mac Track III	LTC

June 17	PC Track III	DER
June 23	PC Track III	NMC
June 24	PC Track III	DER

Summer II

June 30	Mac Track I	NMC
July 1	PC Track I	DER
July 7	PC Track II	NMC
July 8	PC Track II	DER
July 14	Mac Track II	NMC
July 15	PC Track III	DER
July 21	Mac Track III	DER
August 13	New Faculty	TBD

Appendix B

Workshop Topics in FDI for the 2001 Fall Semester

Getting Started
FDI Fall 2001 - Open Lab Sessions
Introduction to Acrobat 5 - Creating PDF files
Introduction to Desktop Computing: Tips and Techniques
Introduction to Digital Media: Audio, Images and Video
Introduction to Microsoft PowerPoint
Using Microsoft Outlook
Using Microsoft Word

Web Development
FDI Fall 2001 - Open Lab Sessions
Dynamic Websites using PHP
Using MacroMedia Dreamweaver to Create a Web Site
Web Design Tips and Techniques
User-Centered Web Design
Web Portals: Uses and Structure
Web Searching with Metadata

Digital Content
FDI Fall 2001 - Open Lab Sessions
Basic Imaging techniques with Adobe PhotoShop 5.0
Creating Digital Video for Instruction
Creating Graphics with FreeHand
Creating Web Graphics with Adobe Photoshop 5.0
Introduction to Streaming Audio and Video
Using Adobe Illustrator
Using Adobe PageMaker
Using Adobe Premier 6.0 and Apple QuickTime 5.0
Using Macromedia Flash to create Web Interactions

Web-Based Instruction
FDI Fall 2001 - Open Lab Sessions
Creating Interaction at a Distance
Creating Streaming Media for Distance Courses
Designing Instructional Activities for the Web
Intermediate Blackboard (CourseInfo)
Introduction to Blackboard v5 (CourseInfo)
Introduction to Online Teaching
Preparing to Teach via Interactive Videoconference
Synchronous Online Communication
Web-based Instruction: Methods, Tools and Techniques

Web-Based Research
Search Engines and the Invisible Web
Information Validity & Analysis
Professional Development: Jobs, Internships and Fellowships
Grants, Funding and Conferences

Emerging Technologies
Using CADD: Introduction to AutoCAD 2000 (A/E/C Drawings)
Using GIS: Introduction to ArcView 3 (Maps and Spatial Data)
Using GIS: ArcView Data Sources
Using GPS: Introduction to Global Positioning

Workshop Topics in FDI for the 2000 Fall Semester

Basic Skills
FDI Fall 2000 - Open Lab Sessions
Introduction to Acrobat 4 - Creating PDF files
Introduction to Microsoft PowerPoint
Using Microsoft Word

Web Development
FDI Fall 2000 - Open Lab Sessions
Web Design
Using MacroMedia Dreamweaver to Create a Web Site

Digital Content
FDI Fall 2000 - Open Lab Sessions
Basic Imaging techniques with Adobe PhotoShop 5.0
Using Adobe PageMaker 6.5
Creating Web Graphics with Adobe PhotoShop 5.0
Using Macromedia Flash to create Web Interactions
Creating Graphics with FreeHand 8
Creating Digital Video for Instruction
Using Adobe Premier 5.0 and Apple QuickTime 4.0
Introduction to Streaming Audio and Video
Introduction to QuickTime Virtual Realty
Using MacroMedia Director to create Digital/Multimedia Content

Web-Based Instruction
FDI Fall 2000 - Open Lab Sessions
FDI Instructional Portal
Designing Instructional Activities for the Web
Web Interface Design Principles
Digital Discourse - Brown Bag Roundtable: "Cyber Teaching"
Using CourseInfo for Web-based Instruction
Strategies for Distance and Distributed Learning Classes
Distance Learning Course Support
Using Symposium 3.0
Managing Online Courses

Emerging Technologies
Using GIS: Introduction to ArcView 3 (Maps and Data)
Using CADD: Introduction to AutoCAD 2000 (A/E/C Drawings)
Using GPS: Introduction to Global Positioning

Workshop Topics in FDI for the 1999 Fall Semester

- Computing Fundamentals
- Basic Imaging techniques with Adobe PhotoShop 5.0
- Introduction to Acrobat 4 - Creating PDF files
- Adobe Acrobat: 4 Part 2
- Creating a Web-based course using CourseInfo
- Web Design
- Creating Web Graphics with Adobe PhotoShop 5.0
- Using Geographical Information Systems: Introduction to ArcView 3
- Adobe PageMaker 6.5 -Part 1
- Adobe PageMaker -Part 2
- Using MacroMedia's Dreamweaver to Create a Web Sites
- Digital Discourse - Brown Bag Roundtable: "Cyber Teaching"
    - Digital Discourse — Overview of Tools (Creating and Managing Listservs, Chat Rooms, Discussion Groups & MOOS)
    - Explore new dimensions in Web-based instruction.
- Introduction to Streaming Audio and Video
- Using MacroMedia Director to create Digital/Multimedia Content
- Using Adobe Premier 5.0 and Apple QuickTime 4.0
- Introduction to Visualization Tools for Designers
- Introduction to Visualization Tools for Data Sets
- Creating Digital Video for Instruction
- Introduction to QuickTime Virtual Realty

Appendix C

Written comments on the 2002 faculty workshop questionnaire

Overall the workshop was a good experience and very useful. I especially thought all the presenters (and the assistants) were really great - pleasant, cordial and patient people. I enjoyed seeing/meeting everyone. It would be nice to have a link to some thumbnail sketches about all the presenters and assistants. Thanks for a good 3 days.

I liked the spacing of active presentations mixed with personal project time.

The availability of lab assistants during and between sessions is invaluable -- I never felt overwhelmed, even when I missed a step, because someone was always immediately available to assist me. I have a disability, and (without exception) the presenters and lab assistants have been extremely accommodating.

I appreciate the commitment and professionalism of the instructional staff, especially your willingness to continue to support our work after the workshop is over and to make all the resources possible available to us. Thank you!

The new Media center FDI staff has always been very helpful, friendly and supportive to my students and myself - It is always a good experience when I come over here.

I have learned a lot in this workshop that will be very helpful in my courses in the future. The best FDI workshop I've been to (two others). Thanks to everyone!

I liked the exposure to a broad range of programs.

Thanks for the over-all great workshop.

Thoroughly enjoyable! I am fired-up and excited about the possibilities, ready to start work on my web-based teaching.

I liked the fact that we are exposed to lots of possibilities and given the information/tools to further pursue those of interest.

Hands-on activities are very desirable - to see what is out there, and how to use that.

I loved hearing about new software/techniques!

Seeing the programs in action, demonstrated by a user. Easier than just trying to learn it yourself.

I like the opportunity to get an overview of what's new out there.

I liked the sessions on different topics, which give a broad overview and the input from class participants who are using these or similar software items. The future support, per stated constraints, given by FDI staff for people in the workshops will be very valuable.

Dreamweaver was particularly interesting and informative as I am going to be doing some web page development. All the other sessions were informative. They gave me some good background on the various digital media objects.

The flexibility that this workshop offered was a big improvement over previous FDI's. I really appreciated being able to take element K tutorials and choose areas that are relevant to my research/teaching needs.

The hands on work in the sessions was very helpful. Presenters' willingness to provide help outside the sessions.

It was helpful to have the flexibility to work down in the Media Center instead of staying upstairs for the session. The two co-facilitators were extremely helpful in this aspect. It is also helpful to now know where I can find help when I need it during the year. Dreamweaver, Interface Design, Information Resources, PowerPoint were all very useful Nice pacing of material, good breaks, good opportunity to get to know others. I felt comfortable even though I am definitely not a computer whiz....Great to have assistants. Also, I really liked being introduced to K materials and to being encouraged to learn on my own....Keep that emphasis. Good instruction—nice styles and good command of material.

The hands-on assistance is most useful -- it is much easier to understand when you can actually see it for yourself and make changes on the computer -- I always remember things much better by participating rather than just listening and trying to take notes.

It would be desirable to have even more flexibility and an even more concerted attempt to put faculty in sessions with colleagues who have comparable experience--more breakout opportunities with instructors.

This course was exactly what I wanted -- a brief overview of the different media options available and how to create them. I liked all of the segments and thought the time allocated to each was adequate. This was significantly different from the first FDI course I took, 2 cycles ago. I think this track is on the mark. Thanks.

Good overall session. I appreciate the information and the availability of assistance.

The two days were well worthwhile. Keep these kinds of workshops...don't go to the ‘work at your own pace' workshops exclusively.

Overall, a very useful two days. Each instructor demonstrated proficiency and concern for the students.

For me, the most important tool will be Blackboard, and the rest support the activities within that tool Blackboard (all). Prior to the workshop, my knowledge of Blackboard was nil. Dreamweaver sessions ran a close second.

All the presenters demonstrated a high level of competence.

Friendly, helpful administrators and lecturers.

The workshop provided an excellent orientation, pace and level of instruction.

I had no idea about the scope of the resources to which I had access. It's fantastic.

It was very desirable to have hands on assistance while trying to learn a piece of software instead of trial and error.

I enjoyed every minute of it, as well as the comments and discussion.

I really appreciated the excellent help from the lab assistants.

Overall, this was an excellent workshop.

I would like to thank the instructors and the participants for making an outsider feel at home for 3 days on your campus. It was a very nice experience. Thanks!

I appreciated the sustained attention to the relevant issues raised by the course and the highly qualified and helpful staff.

This is a well-oiled machine. We didn't have many questions as a group because they were answered.

The constant and good-natured self-evaluation the facilitators have clearly done impresses me too since I know that criticism, even when it's constructive, can be very hard to take, particularly when it's constant. I've been telling colleagues how incredibly thoughtfully the course was put together. Thank you.

I found the cohesiveness of the material, the concentration of material over 3 days, the breaks came at optimal times to be desirable. In short, I felt that the course was very well structured even though at times, especially on Day 1, I felt overloaded.

It was very desirable to learn what services are available, where they are available, and who and what support these services. Again, this information will be shared - will probably copy everything in the folder and give to our other AREC faculty.

Most desirable for me was the streaming audio and PowerPoint, because this is something I can immediately use and put into production for fall semester. This will allow me to link a lot of information to my blackboard in the form of modules for review sessions, and substitutes for lectures when I am away from campus.

I use Blackboard to support my TV classes taught to graduate students on and off campus.

I learned an incredible amount. It was a great 3 days. Thanks.

This was the best of the FDI workshops that I have attended. It really met my needs and helped me see how I can actually implement on-line teaching modules. Now if it were only possible for FDI to give us more time!! Thank each of you for the time and effort that you put into making this such a positive and profitable experience.

The flexibility of the flow was great and the instructors are to be commended for their knowledge and ability to change gears in the presentations and the schedule to accommodate the needs of the class. Thanks for a very enjoyable and informative workshop.

Written comments on the 2001 faculty workshop questionnaire

Thanks very much for a really good two days.

The most comfortable workshop situation that I can remember. All presenters and assistants were gracious and great to meet and work with. THANKS!

The assistants you had in the lab were superb. They help to keep everyone on task with others. No one is left behind.

The workshop contained a wealth of information and opened the door to several topics that I can go back and learn about in more detail. The instructors were all very knowledgeable, helpful, and professional.

I appreciate the hard work and cheerful presentations. The availability of backup by the people at the back. The exposure to possibilities that have been emerging--in the many years since I was a grad student, when there weren't even hand calculators yet.

I enjoyed this experience, I learned a lot and I will participate in the future in whatever training is made available to me. Thank you so much for making this kind of training available to me.

A great experience. Thank you very much!

Overall, a very well run program. Keep up the good work. Enjoyed what was presented. Very good help from attendants.

I want to compliment the organizers, presenters, and support staff for a very good, useful session.

I honestly did not think I would learn anything from this track because it was 'basic'. You did a great job at enhancing the 'basics'. I was afraid to take any of the upper level tracks because I am not doing distance learning, but I feel like next time, I will ...because I can probably do something to enhance the regular classroom.

I think that the planning of topics was very good. The speakers were of all of very good quality.

I appreciate all the effort that the instructors put into making this so successful and interesting.

I thought the tech helpers were terrific. They were patient, long-suffering, creative, and gave the appropriate guidance. Many thanks!

Overall good workshop. Lab assistants very willing to help.

Very well organized and executed. Good work by all behind the scenes and in front of the scenes.

Overall, this is an excellent program that Tech offers, and worth the investment.

Very well done. I enjoyed it much more than anticipated!

The seminar is well organized and effectively presented. I appreciate the professionalism of the staff.

All of the class assistants were enthusiastic and knowledgeable. Give them a pay raise!

Having the lab assistants available was wonderful. They were all so helpful and alert to those of us who needed their help.

The entire Track C FDI instructional staff deserves to be congratulated for an excellent set of presentations. Everyone, from the presenters to the technical staff, were helpful, clear, and determined to demonstrate how to adopt a wide range of applications to the instructional and pedagogical needs of faculty. Track C was an excellent workshop for which I am sincerely grateful.

This was a wonderful experience. I have learned a great deal from all of the wonderful resources at FDI and Virginia Tech. It was extremely well planned and organized.

I enjoyed the workshop. Great information. Kudos to the staff.

In spite of my limited knowledge of some programs, I learned a lot.

Good overview of so many topics that we need to be aware of; exceptionally well planned; excellent to bring a faculty perspective of rewards, frustrations, etc. having just finished 10 years as a dept head I would not want to see someone misled on the realities of these activities relative to T and P. THANK YOU!!!

Overall, a positive experience. The organization and presenters did good work. At some point we need to move beyond the technology itself and get to the underlying instructional issues. Thanks for the support.

The facilitators showed a remarkable geniality in the face of my ignorance of the subject. The program was constructed in a useful and cohesive fashion.

This was a fantastic course. I knew that getting the computer opened a great opportunity, but I got much more out of the course than I had expected. Putting together a course like this takes a tremendous amount of work; just want to express my appreciation for it. Thanks much.

This workshop was both educational and very enjoyable. My compliments and thanks to everyone involved.

The workshop was generally very well done.

The best FDI training. I attended two FDI before but this one was the BEST!!!!!!!!!!!!!!!!!

Very pleasant and knowledgeable group of people running the course -- helpful and clearly committed to the problems/activities of online instruction support.

I commend the FDI institute from the top to the presenters and organizers for all. I am constantly impressed with the quality of presentations.

Great organization and variety. I'm very pleased with the time spent. Making me feel

comfortable to work on my own project during sessions that I wasn't particularly interested in made the difference.

This is the most worthwhile expenditure of $$$ on this campus. We are fortunate. Thanks

This is a great workshop. I do learn a lot and appreciate the effort that makes it happen. Thank you!!!

Overall, I enjoyed the three days and learned a lot. I plan to attend more FDI sessions this coming year.

Overall, I was quite pleased w/ this entire experience! I have learned much, and certainly hope that there will future opportunities to participate in these workshops.

I think this was very useful for me and that it was well done. I always leave this building wanting to become a computer wizard. It happened again.

Five Stars!!!! Would like to have access to the power point presentation. More discussion on headsets and microphones with price ranges would be helpful. Great Job :)

Digital Video: Really enjoyed the session and thought of applications for it in my field.

I am really interested in incorporating audio into my sites, so this was a much-anticipated session.

Uniformly excellent workshop leaders and appropriate topics.

Great overall presentation and treatment. The presenters were knowledgeable, the facilities great and the food, minus the fire drill, excellent.

Great workshop! Much appreciated!

Outstanding! A beautifully done job!

Great session (GIS)! Very useful material. Please provide more of this type of material.

Good exposure to latest developments in CAD industry

Exposure to other departments and research. Also, bringing in the speakers was wonderful.

Excellent workshop/training. Presenters were well prepared and presented the information in an easy to learn format.

The Realpresenter and RealSlideshow helped out a lot. Those were the two applications that I wanted to know the best about.

THANKS for a fine job over the last three days!

Nicely done -- a lot of fun and a lot of great information nicely presented.

Excellent presentation from the trenches - many useful comments; great job!

I appreciate the focus on a good design is to keep in mind what you want your students to learn and then how to appropriately apply the teaching technology

This was one of the best roundtable discussions I've been a part of in quite some time. I felt that the people were very honest in their assessment and recommendations.

Very helpful, but some of the aspects of your products are certainly of use to all the employees of the university and should be offered to a wider group of attendees.

Overall good, very informative course. I learned a lot but the real learning will come in the application process. Thanks for all the hard that you have obviously put in to develop the course.

Overall, a great course that opens the door to some new teaching possibilities.

Appendix D

Facilities upgraded

Computer Assisted Teaching Stations (CATS)

CATS are located in various buildings across campus. There are five different types of CATS located on campus, but they all have a computer with Ethernet access and a projection system.

Given below is a list of the buildings and rooms that contain CATS:

Arch Annex 109
Derring 1076
Derring 1090
Engel 219
Hancock 100
Hutcheson 204
Hutcheson 409
Holden 114
Litton Reaves 1890
Litton Reaves 1760
Litton Reaves 1670
Litton Reaves 1840/1870
Litton Reaves 1850/1860
Major Williams 502
McBryde 100
McBryde 113
McBryde 126
McBryde 129
McBryde 209
McBryde 216
McBryde 218
McBryde 231
McBryde 232
McBryde 238
McBryde 307
McBryde 321
McBryde 322
McBryde 332
Norris 136
Norris 200
Performing Arts105
Price 221
Price 503
Randolph 110
Randolph 120
Randolph 210
Randolph 212
Randolph 331
Robeson 112

Seitz 313
Smyth 146
Smyth 232
Squires Colonial
Squires 234
Torgersen 1000
Torgersen 1020
Torgersen 1030
Torgersen 1040
Torgersen 1050
Torgersen 1060
Torgersen 2150
Torgersen 3100
Vet Med III 102
Wallace 234
Wallace 244
Wallace 342
War Memorial 124
Whittemore 300
Whittemore 349

Computer- Integrated Classrooms (CIC)

Computer-Integrated Classrooms are located in various buildings across campus. These classrooms provide computing workstations with Ethernet access for each student or for pairs of students and a projection system.

Given below is a list of the buildings and rooms that contain CICs:

Arch Annex 1
Davidson 123E
Derring 2069
Major Williams 502
Math Emporium
Price 301A
Saunders 100
Shanks 160
Shanks 180
Shanks 360
Torgersen 1010
Torgersen 1080

Distance Learning Origination Classrooms

These classrooms are equipped with state-of-the art two-way interactive video systems for delivering classes to off-campus sites.

Burruss Hall 123
Durham 463
Durham 261
Math Emporium
Randolph 110
Torgersen 1000
Torgersen 1030
Torgersen 1050
War Memorial 234
Whittemore 267
Whittemore 281

Appendix E

Center for Innovation in Learning (CIL)

Projects Funded for 2002-03

	Faculty	College	Award
1	Jones	Arts & Sciences	39,400
2	Mack	Agriculture	51,400
3	Bourdon	Arts & Sciences	35,435
4	Bevan	Arts & Sciences	25,000
5	Badinelli	Business	13,513
6	Downey	Arts & Sciences	10,875
7	Magliaro	Human Res & Education	19,711
			195,334

Center for Innovation in Learning (CIL)

Projects Funded for 2001-02

	Faculty	College	Award
1	Anderson	Chemistry	29,158
2	Ball	Economics	57,879
3	Campbell	Geography	38,064
4	Downey	Arts & Sciences (CIS)	22,325
5	Mack	Agriculture & Life Sciences	60,000
6	Merrill	Library	37,730
7	Papadakis	Urban Affairs	15,484
8	Sen, T.	MIT Program	120,000
9	Toth	Veterinary Medicine	28,000
10	Zallen	Arts & Sciences (CIS)	41,360
			450,000

Center for Innovation in Learning (CIL)

Projects Funded for 2000-01

	Faculty	College	Award
1	Armstrong	Engineering	30,000
2	Carlisle	Arts & Sciences	40,000
3	Da Silva	Engineering	30,000
4	Davis	Engineering	30,000
5	Downey	Arts & Sciences	25,450
6	Dubinsky	Arts & Sciences	35,150
7	Hatfield, D.	Business	30,000
8	Heath-Camp	Human Resources & Education	41,779
9	Jones	Architecture & Urban Studies	36,100
10	Merrill	Library	28,000
11	Midkiff	Engineering	30,000
12	Newcomb	Agriculture & Life Sciences	25,186
13	Ragsdale	Business	20,000
14	Sen, T.	Business	30,000
15	Toth	Veterinary Medicine	18,335
			450,000

Center for Innovation in Learning (CIL)

Projects Funded for 1999-00

	Faculty	Department	Award
1	Lockee	Teaching & Learning	58,000
2	Swenson	English	73,990
3	Downey	Center Science & Society	27,150
4	Smith	Marketing	18,300
5	Luke	Political Science	37,800
6	GPIT	Electrical Engineering & CS	50,000
7	Anderson-Cook	Statistics	26,800
8	Redican	Teaching & Learning	10,500
9	Balci	Computer Science	72,200
10	Bohn	Mechanical Engineering	48,149
11	Weaver	Entomology	36,200
			459,089

Center for Innovation in Learning (CIL)

Projects Funded for 1998-99

	Faculty	Department	Award
1	Anderson-Cook	Statistics	11,600
2	Bakhit	Hum Nutrition & Foods	32,850
3	Bender	Biomedical Science & Path	4,500
4	Burger	Women's Studies	25,000
5	Capone	Art & Art History	27,000
6	Ciao	Architecture	20,000
7	Dascanio	Large Animal/Equine Center	12,000
8	Kornhauser	Mechanical Engineering	19,000
9	Lockee	Teaching & Learning	67,000
10	Myklebust	Mechanical Engineering	32,000
11	Persaud	Crop & Soil Science	8,000
12	Quinn	Mathematics	10,000
13	Siegle	English	12,000
14	Sriranganathan	Biomedical Science & Path	28,000
15	Stubblefield	Adult Education	27,000
16	Swenson	English	35,000
17	Ward	Chemistry	16,000
18	Weaver	Entomology	38,000
			424,950

Center for Innovation in Learning (CIL)

Projects Funded for 1997 (Round 2)

	Faculty	Department	Award
1	Aiken	Art & Art History	41,993
2	Bender	Biomedical Science & Path	37,000
3	Caceci	Biomedical Science & Path	25,382
4	Downey	CIS	17,324
5	Ferrari	Electrical & Computer Eng	45,000
6	Gallagher, et.al.	Civil Eng/Geol Sc/CSES	25,383
7	Jones	History	44,000
8	Klein	Biomedical Science & Path	21,078
9	Lederman	Biology	10,250
10	Lockee	Teaching & Learning	21,000
11	Luke	Political Science	20,000
12	Murray	Large Animal/Equine Center	70,000
13	Neal	Biology	31,720
14	Papillon	Hum Nutrition & Foods	3,136
15	Richards	Mining & Mat'l Engineering	12,000
16	Roberto	Gerontology	27,740
17	Rogers	Mathematics	35,000
18	Rojiani	Civil Engineering	31,487
19	Shrum et al.	Foreign Languages	48,125
20	Simmons	Humanities/CIS	9,000
21	Smith	Marketing	9,960
22	Tillar	Management Science	20,000
23	Mills	Building Construction	45,000
24	Schubert	Architecture	39,916
25	Stephenson	Agric/Applied Economics	35,000
26	Persaud	Crop & Soil Science	11,000
			737,494

Center for Innovation in Learning (CIL)

Projects Funded for 1997 (Round 1)

	Faculty	Department	Award
1	Ashley	Economics	15,321
2	Boisen	Mathematics	73,900
3	Broadwater	Electrical & Computer Eng	7,500
4	Buikema	Biology	16,870
5	McCaughey	Women's Studies	10,200
6	Cooper	Psychology	15,093
7	Ficenec	Physics	17,400
8	Fuhrman	Sociology	26,746
9	Long	Chemistry	20,482
10	Claus, G.W.	Biology	25,422
11	Hendricks	Materials Science	15,000
12	Holmes	Teaching & Learning	5,530
13	McKenna	Crop & Soil Science	11,000
14	Knox	Architecture/UAP	31,400
15	Mack	Entomology	20,750
16	Simmons, N.	Humanities/CIS	16,200
17	Patterson	Economics	2,000
18	Persaud	Crop & Soil Science	1,000
19	Rogers	Family & Child Development	24,958
20	Seiler	Forestry	23,750
21	Williams-Green	Black Studies	19,520
22	Lee	Computer Science	14,300
			414,342

For additional copies of this report or to obtain supplemental materials, please contact:

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The URL for the Instructional Development Initiative is:

http://www.fdi.vt.edu/