

## DIVISION OF INSTRUCTIONAL INNOVATION AND ASSESSMENT

### VISION PLAN • 2003-2004

#### SUMMARY OF REQUESTS

The Division of Instructional Innovation and Assessment is dedicated to enriching the University's core academic mission by providing to all Colleges and units instructional support, services, innovations, and assessment using information technology. We believe in the power of working collaboratively with faculty, staff, and students to support the University's high standards of instruction and learning. By providing the six new initiatives listed below, we can enhance the UT Austin faculty and student in-class experience.

*New initiatives with recurring costs:* **\$475,000**

• Online Course Assessment System	\$216,000
• Inline Student Service	\$12,000
• Enhancements to eGradebook	\$47,000
• Technology Bootcamp	\$80,000
• The Crucial Element: Training	\$66,000
• Sharing What Works	\$54,000

#### INTRODUCTION

The Provost created the Division of Instructional Innovation and Assessment in July 2001 acting upon the recommendation of the Technology Enhanced Learning/Distance Education Committee. The Division Director reports directly to the Provost.

For our first ITAC Vision Plan, we submit new initiatives in two critical areas:

- infrastructure services for students and faculty
- faculty training for effective use of instructional technologies.

The synergy of the Division has yielded the development of an active Division Information Services group. We are seeking funds for information technology related projects that will benefit both students and faculty by enhancing communication, streamlining access to services, and providing a secure site for rapid posting of grades.

With ITAC funding, technology classrooms are being rapidly deployed across campus. In order to meet the challenges of supporting and championing effective technology-enhanced instruction, we are submitting this request for funding to help provide the tools and infrastructure we need to do that job.

## **ELABORATION OF REQUESTS**

### ***New initiatives with recurring costs***

**\$475,000**

#### **Online Course Assessment System**

**\$216,000**

In response to the Senate of College Councils' interest in an online assessment tool to ensure that students have the ability to give feedback to their professors, we will coordinate, create, and support a web based Online Course Assessment System. Faculty will be able to request feedback from their students multiple times throughout the semester, thus, continually receiving input about their classes. In addition to this tool, the end of semester survey can be piloted with the same survey mechanisms. This system will provide both qualitative and quantitative statistical data to assess teaching effectiveness. This system benefits both students and faculty and supports the goal of teaching and learning at the University.

#### **Inline Student Services**

**\$12,000**

The University of Texas at Austin offers many online services for students; to increase the ease of access and use, we will work collaboratively with other UT departments, such as Student Information Systems (SIS), and use the new UT Direct infrastructure to create a UT Direct Homepage service that announces student services at the appropriate times throughout the year. This service will allow students to view the information and allow them to "walk through" the student web services in a meaningful way. An example of this enhancement would include a list of tasks a student would need to complete in order to petition for a credit by examination class. Each task would have a check box next to it indicating whether a student has done the task. This service would be available to the students at appropriate times throughout the semester and would "disappear" from the UT Direct Homepage once the date to complete the task has passed.

#### **Enhancements to eGradebook**

**\$47,000**

The eGradebook is a result of a DIIA initiative with support from SIS and ITS. eGradebook was originally conceived to give students the results of scanned tests more quickly; however, it soon evolved into a much more robust tool. (The eGradebook is in UT Direct at <https://utdirect.utexas.edu/diia/egb>.) Fortunately eGradebook was available to the University when posting grades with social security numbers was no longer an option. Expanding the web-based eGradebook will enhance the student experience by allowing them to view more details about their grades online. This will also provide privacy and security by allowing them to access their grades using their UT EID. At the same time, it will allow faculty more flexibility in the system to better calculate and interpret student's grades. It will also allow faculty members to integrate the final grade of each student into the web-based final grade submission form maintained by Student Information Systems.

**Technology Bootcamp**

**\$80,000**

To help faculty work more effectively with the new equipment installed with ITAC funds, we propose to organize a summer technology training seminar for faculty teaching large, lower-division undergraduate courses. The purpose of the seminar will be to acquaint faculty with the kinds of technology support available in the actual classrooms in which they will be teaching. This will involve teaching them how to operate the equipment seamlessly as well as how to use the tools in pedagogically effective ways.

The seminar will last one week and will be restricted in size so that each faculty member can get personalized attention. Faculty will see how other instructors in their particular classrooms have used the available technology, and they will receive training in how to create materials appropriate for use with that technology. By the end of the seminar, each faculty member will have created a unit to teach in his or her UT classes. We believe that once the faculty members experience using these techniques, they will be able to develop their own materials.

Helping these faculty members learn to use the technology resources available to them is an efficient way to affect the experiences of the largest number of students in the shortest amount of time.

**The Crucial Element: Training**

**\$66,000**

Recognizing the validity of Laura Isensee's comments that "Technical skill training for professors is crucial," (*Daily Texan*, January 28, 2003), DIIA will enhance its training opportunities for faculty. Using student input, we will identify exemplary faculty whose use of technology in the classroom represents best practices. These faculty members will be videotaped as they use the technologies available in actual UT Austin classrooms. A narrative explaining the pedagogical reasons why the selected technologies are effective for the particular teaching objective will accompany the videotapes. So that faculty can access these professional development tools at any time, the videos will be available on CD or on the web.

**Sharing What Works**

**\$54,000**

DIIA is often asked about the instructional usefulness of various instructional technology enhancements. In order to make intelligent and informed recommendations, we need the ability to evaluate proposed instructional technologies in real classroom settings.

In addition to teaching faculty how to use new equipment, DIIA must also keep abreast of new developments in educational hardware and software. To do this, DIIA will purchase equipment and software which will then be evaluated for its ability to support teaching and learning beyond the obvious uses. For example, we will investigate using PDAs for transporting PowerPoint presentations to technology classrooms, facilitating group discussion with Inspiration software, and encouraging immediate student feedback with remote survey tools.

**DIVISION OF INSTRUCTIONAL  
INNOVATION AND ASSESSMENT  
Assessment Partnership Plan 2003-2004**

**SUMMARY OF REQUEST**

The Division of Instructional Innovation and Assessment (DIIA) received \$77,000 in ITAC funding for 2002-03 for the first year of a multiple-year proposal to assess the use of technology in teaching and learning at The University of Texas at Austin. The results of the first year's work have produced benchmark data not heretofore available, have informed the assessment team, and have provided clarity of focus for the second and following years of the assessment effort (see Appendices A—D). The DIIA is requesting \$130,000 for the 2003-04 second-year phase of the assessment project. It will fund recurring costs to update the first year's findings, new initiatives with recurring costs, and one-time capital expenditures. The goal is to embed an authentic assessment component into the culture of our existing and proposed technology-enhanced learning, focused on availability, use, and effectiveness. The result will be a platform for a robust and informative ongoing system with which to make future decisions about technology investments.

<b>Ongoing projects</b>	<b>\$73,000</b>
• Analysis of ITAC Vision Plans	\$ 3,000
• Collection and evaluation of existing models and results	\$30,000
• Course management software survey and analysis	\$15,000
• Develop observational system to quantify faculty use of technology	\$25,000
<b>New initiatives with recurring costs</b>	<b>\$35,000</b>
• Student input on faculty use of technology in instruction	\$30,000
• Evaluate the effectiveness of CTE-developed faculty training videos	\$ 5,000
<b>One-time capital expenditures</b>	<b>\$22,000</b>
• Computer work stations, peripherals, software, and ergonomic furniture	\$22,000

**INTRODUCTION**

In early 2002, the DIIA proposed to partner with the ITAC in a multiple-year plan for assessment of the use of technology in teaching and learning with the goal of improving

instruction at The University of Texas at Austin. In the first year, the DIIA has begun work on four projects:

- A. an analysis of ITAC vision plans (Appendix A)
- B. an assessment of faculty use of technology (Appendix B)
- C. a survey of faculty use of course management software (Appendix C)
- D. collection and evaluation of existing models and research results (Appendix D)

The analysis of the ITAC vision plans is complete, and the remaining projects are in various stages of completion. More steps will be completed by the end of the current fiscal year. Nearly all of the work has been performed by permanent staff of the DIIA and its component centers, and represents many hours and salary monies of in-kind contribution; other tasks have been accomplished by skilled graduate research assistants. While there is much related expertise in the DIIA permanent staff, it is now necessary to invest in the services of a full-time program evaluation expert, with the necessary support equipment. This person, along with graduate research assistants and a reduced in-kind contribution from the permanent staff at the DIIA, will be responsible for accomplishing the projects proposed:

## **ELABORATION OF REQUESTS**

***Ongoing projects*** ***\$73,000***

**Analysis of ITAC Vision Plans** **\$ 3,000**

The current report will be updated to include information reported in the current vision plans. This project is a continuation of the work reported in Appendix A and begins a longitudinal study of what is requested, what is funded, and what is spent. Graduate research assistants under the supervision of the program evaluation expert will do the analysis, update the database, and analyze the results for trends.

**Collection and evaluation of existing models and results** **\$30,000**

This project will inform the assessment team about the results of others who have conducted previous assessment efforts. It is a continuation of the work and plan reported in Appendix D. Graduate research assistants under the supervision of the program evaluation expert and in consultation with the DIIA staff will collect and analyze this information.

**Course management software survey and analysis** **\$15,000**

The work begun in this project (see Appendix C) has produced a vast array of data and revealed further lines of assessment. The program evaluation expert in consultation with the DIIA staff and with the assistance of graduate research assistants will continue the analysis of the data, and will develop and conduct additional surveys.

**Develop observational system for assessment of technology use** **\$25,000**

This initiative flows out of the present year's evaluation of faculty use of technology in the classroom (Appendix B). The development of a system to quantify the use of

technology will require a consultant with expertise in psychometrics and qualitative research.

***New initiatives with recurring costs*** **\$35,000**

**Student input on faculty use of technology in instruction** **\$30,000**

Two initiatives—student focus groups and a student survey—to gain student input on faculty’s use of instructional technology flow from the work reported in Appendix B, section III, step B. A *Daily Texan* columnist recently suggested that there is a need for faculty training in the use of technology in teaching, without specifying what present weaknesses exist (Appendix E). The focus groups and survey will be used to obtain specific information about student perceptions about faculty’s effective use of technology in teaching, information that is representative and therefore generalizable to the entire University student population. The funds will provide compensation for time spent to participate in surveys and in focus groups.

**Evaluate the effectiveness of CTE-developed faculty training videos** **\$5,000**

This proposal flows from the work reported in Appendix B, section III, step C and from the first year’s proposal to embed assessment of instructional technology use throughout the instructional process. The project would obtain information from the faculty and students about the quality and effectiveness of training videos.

***One-time capital expenditures*** **\$22,000**

**Computer workstations, peripherals, software, and ergonomic furniture** **\$22,000**

Funding to equip the program evaluation expert and associated graduate research assistants with office furniture and computer equipment needed for them to complete the proposed projects.

**APPENDICES**

- A. Analysis of ITAC Vision Plans, Fiscal Years 2000–2003
- B. Initial Report on Faculty Technology Use of Research Project
- C. IAC Courseware Survey: Preliminary Review of Responses to Critical Questions  
(not for distribution)
- D. Instructional Assessment Committee: Literature Review Plan

## **Appendix A**

### **Analysis of ITAC Vision Plans, 2000–2003**

#### **Executive Summary**

This report reviews the Information Technology Advisory Committee (ITAC) Vision Plans submitted by the colleges and schools for 2000–2003 and identifies the top five technologies requested by the participating units, recommended by the reviewers, and reported by the recipients. This analysis will help guide the Division of Instructional Innovation and Assessment (DIIA) in identifying potential assessment opportunities to better inform the ITAC committee and University on allocating resources to instructional technology. The report was prepared by the DIIA's Instructional Assessment Committee (IAC) during the fall of 2002. The results summarized below describe the key trends in ITAC resource allocation.

#### **Result of Analysis** *(Because data collection was not standardized, making comparisons is difficult.)*

##### *Requested by units, 2000–03:*

1. Classroom improvement
2. Lab upgrades and teleconference facilities
3. Increased network capacity
4. Hardware, software, and peripherals
5. Services such as Help Desk improvement, etc. (2000–02)
6. (tie) Curriculum development (2002–03)

##### *Recommended by reviewers, 2000–02:*

1. Classroom improvement
2. Lab upgrades and teleconference facilities
3. Increased network capacity
4. Hardware, software, and peripherals
5. Curriculum development

##### *Self-reported expenditures, 2001–02:*

1. Increased network capacity
2. Lab upgrades and teleconference facilities
3. Hardware, software, and peripherals
4. Classroom improvement
5. Curriculum development

DIIA's assessment role for this project has been to observe, describe, and point out trends in ITAC resource allocation. We hope that colleges and schools will find this analysis of ITAC funding allocation useful in their efforts to provide more effective and consistent reporting, and that they will see us as partners in enhancing the role of instructional technology at UT Austin.

## **Process**

The IAC task force reviewed the ITAC mission, members, plans, recommended allocations, and general expenditures that are posted to the ITAC Web site <http://www.utexas.edu/computer/itac/>. We examined 48 vision plans for 2000–2003, two summaries of college plans and reviews for 2000–2002, and the 1994–2000 expenditure reports for reference. (No review data were available for 2002–2003.)

We used an Excel spreadsheet to record the data by year, then by units. Within each unit is the list of requests, their dollar value, the recommendations, and self-reported items. Major technology categories were defined and tagged to each listed item. The list was then sorted by categories and ranked according to the dollar amount associated with the items.

Next, the reviewers' recommendations were studied, analyzed, and extrapolated. Note that we were unable to determine some of the dollar values associated with the recommendations, because the reviews were in text format and the items were grouped together based on a set of criteria that required various requested items to be combined. In addition, the self-reported data, in the first year these data were made available, appeared to be incomplete because not all colleges could isolate ITAC expenditures from local funds.

## **Observations**

### **TRENDS**

The analysis showed that there is an increase in collaborative projects among colleges submitted for funding, and further, that more services-oriented requests are on the horizon. Requests for curriculum development and professional development continue to increase as well. Networking and equipment requests, while they continue to be dominant, do not seem to be the centerpiece anymore. Classroom improvement seems to have become a priority within colleges.

### **PROCESS**

Vice President for Information Technology Dan Updegrave began meeting with the Technology Deans Working Group last year to devise a more unified format for Vision Plan requests, and he is continuing the process again this year. As a result, colleges have shown more willingness to submit to a unified format and process. The existing reviewer process was eliminated last year, and instead, ITAC committee members, one faculty and one student each, were assigned to do site visits and to be the champion for the assigned units in the review process. To supplement the site visit, units are being encouraged to submit activity reports.

### **FORMAT**

For the coming year, Vice President Updegrave is refining the written guidelines for the reporting format he initiated in 2002 by providing the Tech Deans group with a template

for reporting ITAC expenditures. We hope that the template will address the reporting units' inconsistency in accounting for money spent on technologies. Last year, four colleges—Education, Engineering, Graduate School of Information, and Law—were able to separate ITAC-funded expenditures from the locally funded expenses. Liberal Arts and Pharmacy did not report on their expenditures. Most colleges have indicated the difficulty they have in accurately separating local technology spending from ITAC funding. In addition, the Office of Accounting Financial Reports Services uses a different reporting format that lumps all technology spending together.

### **Conclusion**

This DIIA IAC analysis begins the process of mapping patterns and of providing a framework for categorizing funding requests. By summarizing the trends in funding patterns, the analysis can help ITAC better understand its allocation. Future analyses would benefit from a consistent and unified format for preparing vision plans.

## **Appendix B**

### **An Assessment of Faculty Use of Technology**

#### **Abstract**

During the fall 2002 semester, interviews of faculty teaching in general-purpose classrooms indicated that less than 40% of the faculty used technology regularly, and then, generally, only to use an overhead projector or a document camera. The faculty's limited use of technology appears related to the versatility of equipment and faculty's familiarity with using it: among the factors faculty mentioned were lack of training, mismatches between course type and available equipment, and timely awareness of resources to allow planning for their use. Faculty reported that they believe being able to show more visuals supports student learning.

In a second study, an email survey of faculty teaching in technology-enhanced classrooms indicated that still less than 40% of the faculty were using equipment regularly, and they were more likely to use the document camera or computers than other equipment. The faculty in this second study were more positive about technology use than those in the first group. However, although many faculty felt the use of technology enhanced student attention and learning, not everyone was convinced that the results were all positive. This group expressed a desire for more training in how to use the technology and to be more aware of what is available and possible.

The next stage in this project includes interviews with student focus groups about the effects of technology use on their learning and the creation of an observation system to classify the uses made of technology during classes and to evaluate their effectiveness. Results from this research will inform programs offered by DIIA to support the use of technology as an aid to learning.

#### **I. Results of General Technology Use Interview Study**

**Questions: Which technology equipment are faculty overall using and to what extent?  
What is the effect on teaching or student learning?**

##### **I. General Purpose Classroom Interview study: quantitative data**

- A. **Procedure:** A stratified random sample of classrooms representing levels of technology (four rooms from each of six clusters) was identified.

A random sample of 60% of faculty teaching in target rooms was drawn from the population of all faculty teaching in those rooms.

169 faculty were in the selected sample

73 declined to participate;

96 were interviewed;

8 were in a room different from what was indicated in the official report;

88 were in the correct room and comprise the final set of faculty included in the data, resulting in a 52% return rate.

Faculty were shown a list and asked to indicate which equipment in their room they used and how often (using a 4-point scale from never [1] to every class period [4]).

**B. Results:** In general, most pieces of equipment were used by less than 40% of the faculty surveyed.

1. **The highest** level of use of any one piece of equipment was that of the **overhead projector**, which was regularly used by only 34.2% of the faculty. This result may be an artifact of the sampling and applies only to general-purpose classrooms overall.
2. **The second** most frequently used equipment was the **document camera**; 33.9% of faculty reported using it regularly.
3. **Comparison of equipment** use when both pieces of equipment were present in a room shows that **the document camera** was used more frequently than either the overhead projector or the computers. The differences, however, were not dramatic and show trends only.
4. **Comparison of the use of built-in computers with laptop** connections, when both are present, shows there was slightly more use of **the built-in computers** reported.
5. When Macintosh built-ins are compared with PC built-ins, **PCs were used by more faculty** either occasionally or regularly. Still, only about 21% of the faculty reported using either the Macintosh or the PC built-ins regularly.

### C. Discussion

1. In interpreting these data, one should note that the rooms being used in this sample ran the gamut from some with only overhead projectors to fully equipped technology rooms such as Garrison 1. **The results are generalizable across general-purpose classrooms** on the campus. The second part of this study (the email survey) targets only technology classrooms and is, therefore, more representative of the newly enhanced rooms.
2. It appears that faculty in these general purpose classrooms **prefer to use familiar equipment (the overhead)**. However, the **document camera is gaining ground** and edges out even the overhead when compared head-to-head. Based on faculty comments, this is probably due to the

versatility of the document camera and its ability to display a broad range of materials without much preparation time.

3. Although laptop connections were used by 24.3% of the faculty who had them available, when built-in computers were also available, the latter were used more regularly.

## II. General Purpose Classroom Interview study: Qualitative data

A. **Procedure:** During the interview, the faculty were also asked about how they used the equipment, if it changed their teaching, and what effect they thought it had on student learning.

B. **Results:** Interview responses were read for themes, with eight themes in two broad areas emerging:

### 1. Use of technology

- a. Most faculty who used technology enhancements referred to the **ability to display visual materials** to support student learning as the best and most obvious change in their teaching and the students' learning.
- b. Most faculty also appreciated the **ability to bring more resources** into the classroom easily.
- c. Many faculty who didn't use the technology regularly attributed that to a feeling that they **had not learned of its availability early enough** to build it into their courses or to a **need for more training in the use of the equipment** now that they knew it was available.
- d. The number of faculty who reported that they changed their teaching was equal to the number of those who reported they did not change. Some reported a change for the worse because the equipment interfered with or was insufficient for what they wanted to do.
- e. Some faculty identified as a limiting factor the amount of time it would take to convert their existing materials to the new display technologies.

### 2. Impact on student learning

- a. Opinions about **effects on student learning were mixed**. Some faculty believed that using technology increases student

attention, some that it is now expected by students, some that it has caused a decrease in attendance when materials are available on-line, and one faculty member said it made her appear more organized.

- b. Several faculty reported that technology gives the students the **opportunity to see more “real-time” data**, either through accessing the web or using simulations in class.
- c. Several faculty reported having **students use technology** to make presentations in class, thereby improving the quality of their presentations while learning to use important tools.

## II. Results of Enhanced Technology Use Email Survey

**Questions: Which technology equipment are faculty in technology classrooms using and to what extent?**

**What is the effect on teaching or student learning?**

### I. Technology Classrooms Email study: Quantitative data

A. **Procedure:** Classrooms that were classified as technology-enhanced for the first time in fall 2002 were identified (27 rooms).

Four-hundred three faculty teaching in those classrooms were contacted by email and asked about which technology they used and how often.

One-hundred fifteen responded (29%); sixteen reported using no equipment at all, while 99 used at least one piece of equipment to some extent.

B. **Results:** The equipment was used regularly by less than 40% of the faculty surveyed.

1. The **document camera was used regularly by more faculty** than any of the other equipment (46.4%), followed by use of the built-in computer equipment (Mac 33.3%, PC 28.2%), and use of the overhead projector (26.9%).
2. **A comparison of equipment use** when both pieces of equipment were present in a room shows that the **document camera and the built-in computers** were used at approximately the **same rate** and by more faculty than the number who used the overhead projector.
3. **The built-in computers** were used regularly by **more faculty than** were the **laptop connections**. Mac computers (built-in) were used by more faculty than the PC computers (built-in).

C. **Discussion:**

1. The rooms sampled for this part of the study were more nearly equivalent to one another in terms of equipment availability than were those sampled for the interview part of the study, perhaps allowing **better comparison of use patterns** for the different types of equipment **in the technology classroom designs** that are now being used.

2. If this is so, the use of the **document camera and computer projection** seems to be replacing use of the overhead projector use in these classrooms.
3. Each of these two equipment choices **represents a different potential use of technology**.
  - a. Computer projection seems to replace the traditional display of lecture outline via overhead transparencies, while also allowing access to simulations and web interface.
  - b. The document camera allows for the display of authentic materials and for the consideration of interactive problems.

## II. Technology classrooms Email study: Qualitative data

A. **Procedure:** The email survey asked faculty to comment on the usefulness of the equipment and its impact on their teaching. These responses were read for themes separately from the interview data.

### B. Results:

1. In general, the responses from these faculty **were much more positive** about the use of equipment than were those from the general-purpose classroom sample.
2. Most faculty reported that they used the equipment regularly and were **pleased to have it available**. Several offered comparisons with their teaching in non-technology classrooms and the comparisons were very favorable. One faculty member said he/she would never go back to the old style classroom.
3. Comments about how the use of technology affected student learning were along the same vein as those made by members of the interview sample. References to the ability to bring in a **wider range of visual supports and the use of technology in student presentations** were the most common comments.
4. There were some faculty who did not like the new technology and felt that it interfered with their ability to use the blackboard. One complained that the only time he/she touched the equipment was to move it out of the way.
5. Where there were problems with using the equipment, most faculty attributed them to:

- a. **inadequate training** for using the technology;
  - b. **unfamiliarity with how to incorporate it** into their teaching;
  - c. **a mismatch between the subject and the use of technology**;
  - d. **reluctance to use technology enhancements in only one** section of a multi-section course in the case where other sections did not meet in technology-enhanced classrooms.
6. Several faculty **expressed an interest in learning to use the equipment** in future semesters.

### III. Next steps

- A. We are working on an observation system that will allow us to sit in a classroom and generate data on how the equipment is being used. This will allow us to better understand how to quantify the use of technology so it can be related to objective measures of student learning. We hope to eventually be able to **recommend technology uses that have been experimentally tested and found effective**.
- B. We are ready to **convene a set of focus groups** composed of students from the classes taught by target faculty in the previous semester. We will be able to obtain direct input from students about the use of technology and its effect on their learning.
- C. We are developing some **experimental training videos** for the Web to allow faculty to see, at their convenience, what is possible in technologically-enhanced classrooms.
- D. We are investigating the feasibility of providing **ongoing training or consultation** in classroom technology use for faculty and teaching assistants newly assigned to technology-enhanced classrooms.

## **Attachment A**

### **Master Equipment List**

Type of control panel used (touch screen, push button, computer controlled)  
Digital projector  
Built-in computers (PC and/or Mac)  
Laptop connections for instructor's own computer  
Document camera  
Overhead projector  
Slide projector  
DVD capability  
Videocassette player  
Hookups for extra equipment  
Microphone  
PA system  
Wireless access

## **Attachment B**

### **Statistically Determined Classroom Clusters**

Cluster 1 classrooms: Most technologically-enhanced

GAR 1  
GAR 109  
GEO 112  
PAI 2.48

Cluster 2 classrooms

NOA 1.126  
PAR 103  
WCH 1.120  
PAR 303

Cluster 3 classrooms

CPE 2.210  
CPE 2.218  
ENS 145  
WRW 113

Cluster 4 classrooms

UTC 1.104  
UTC 3.110  
UTC 3.112  
UTC 3.134

Cluster 5 classrooms

ECJ 9.236  
ETC 4.110  
CBA 4.304  
CBA 4.328

Cluster 6 classroom: lowest level of available equipment

BAT 202  
BUR 136  
WEL 3.260  
RAS 100

## **Appendix C**

### **A Survey of Faculty Use of Course-Management Software**

#### **Preliminary Write-up: IAC Courseware Survey**

##### **Question Development**

On Tuesday, November 28, 2000, at 11:10 p.m., Pat Davis submitted, on behalf of the e-University Steering Committee, a collection of questions to be considered for inclusion in a survey of the Blackboard pilot that began in fall 2000. IAC used these questions as a starting point for the IAC Courseware Survey. (See attachment A.) IAC members and select faculty reviewed and edited these questions, and added others. In addition, personnel at the Colleges of Engineering and Education and at the Center for Instructional Technologies submitted questions specific to their supported course tools—Prometheus, TeachNet, WebCT, and Blackboard.

Four surveys were created. While many of the questions for each survey were course-tool independent, several questions targeted features associated with the specific course tools. (See attachment B.) Therefore, separate requests to complete the survey were sent to each user group.

HTML was used to code the survey forms. A Cold Fusion script was written to push the survey responses into a Microsoft Access database residing on the University's WNT server.

##### **Users Groups**

Four courseware user groups were targeted with the surveys. Two of the tools, Blackboard and WebCT, are used centrally, meaning that any UT Austin faculty member can use these tools for a course site. The other tools, Prometheus and TeachNet, are supported by the Colleges of Engineering and Education, respectively.

Blackboard users were identified by EID. Specifically, faculty users who accessed their course sites were identified due to their use of EID to login to their sites. There were approximately 600 active Bb course sites identified.

In addition to reviews of course creation requests, WebCT courses were reviewed for activity. From these analyses a list of faculty was generated. There were approximately 96 active WebCT course sites identified.

The College of Engineering submitted a mailing list of approximately 350 potential users. Many in this group had received training on the tool, but were not active users. There were 84 active Prometheus-supported course sites identified.

The College of Education provided access to two e-mailing lists, one for Kinesiology and Health and the other for the College of Education. All faculty associated with Education have access to TeachNet, which has a robust set of communication features, but lacks the assessment feature of the other tools. Discussion with TeachNet support personnel placed the number of active course sites at approximately 48.

### **Preliminary Results for Critical Questions**

1. Which courseware tools are being used?

**Faculty Responses Concerning Use of Courseware Tools**

<b>Courseware Tool</b>	<b>Fall 2002 Faculty</b>	<b>Survey Respondents</b>
Blackboard	600	123
WebCT	96	21
Prometheus	84	26
TeachNet	48	7

2. What features are being used?

Based on trends in faculty responses, it would appear the features they used most frequently were group email, course-content posting, and the gradebook.

3. Are instructors satisfied with these courseware packages?

**Faculty Responses to the Statement: Use of Courseware Will Positively Impact End-of-Semester Rating**

<b>Courseware Tool</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
Blackboard	6	15	52	38	6
WebCT	1	1	10	8	1
Prometheus	1		12	9	2
TeachNet	1	3	1	1	1

4. How has use of courseware transformed their teaching and students' learning?

A dominant theme among faculty's responses was that courseware allowed them to be flexible in addressing students' learning strategies by making course materials available on demand, encouraging student online interaction, and supplementing in-class resources with online references.

5. What specific activities occur within the CMS that make teaching and learning unique or more powerful?

The features most often mentioned by faculty were the forum (or discussion board), the gradebook, and the capability to provide course information to the class as a whole.

### **CMS Survey Findings**

These results are being tabulated. DIIA anticipates releasing the survey results later this year.

**Attachment A**  
**Notes from Sub-Group on Potential**  
**Questions for the Faculty Involved in the Pilot Project**

I. Functionality Issues

1. What features are you using and why?
2. What features are you not using, and why not?
3. What features did not work well for you?
4. Were you prevented from doing something you wanted to do?
5. What additional capabilities would you like the system to have?
6. Overall, does the package meet your expectations? [Note: what should be globally on/off versus under individual faculty control may be dictated by these responses].

II. Impact on Instruction

1. What impact has this application had on our instruction?
2. What impact has this application had on student/faculty interactions?
3. What impact has this application had on student/student interactions?
4. What impact has this application had on faculty/faculty interactions?
5. Did you take (or would you take) steps to evaluate the differences between using and not using this application?
6. What were your instructional goals for using this application?
7. Where was the application effective and where did it fail to meet your effectiveness expectations?
8. What feedback did you get from the students?
9. How would you characterize the time associated with the faculty learning curve? The student learning curve? If this learning curve took away instructional time, was it worth the trade off?

### III. Usability Issues

1. How would you rate the ease of use of this package?
2. How would you characterize the faculty learning curve in terms of usability? The student learning curve?
3. Was the navigation what you expected and did it respond as expected?
4. Was the labeling (buttons, menus, etc) what you expected, and did labeling respond as expected?
5. Did you find that consistency among the various categories of tools, options, etc?
6. Were forms well designed & consistent with good practices?
7. How would you characterize the performance of the package (speed, loading, breakdowns, number of times you could not access)?
8. Did you find it easy/possible to report problems that arose?
9. Were the search functions useful; what you expected?

### IV. Accessibility

1. Have there been any complaints from students about access to the system (availability of workstations, access to the system)?
2. Have there been any problems experienced by faculty or students with disabilities using this application?

Additional topics to be discussed:

V. Additional Student Issues (from Faculty Perspective)

VI. Should this be universally implemented?

VII. Self-Sufficiency (how much support is needed).

VIII. Who will be polled (faculty, students).

IX. Security of Information

**Attachment B**  
**IAC Course Management Software Survey Response Frequency Tables**

Provides accessibility for students with disabilities					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	6	3.2	3.4	3.4
	Unimportant	5	2.7	2.8	6.1
	Neutral	40	21.4	22.3	28.5
	Important	77	41.2	43	71.5
	Very Important	51	27.3	28.5	100
	Total	179	95.7	100	
Missing	System	8	4.3		
Total		187	100		

I access my site-?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	3	1.6	1.7	1.7
	Less than once a week	17	9.1	9.4	11.1
	Once or twice a week	75	40.1	41.7	52.8
	Daily	56	29.9	31.1	83.9
	Several times a day	29	15.5	16.1	100
	Total	180	96.3	100	
Missing	System	7	3.7		
Total		187	100		

Faculty development support from college/school is adequate					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	8	4.3	4.5	4.5
	Disagree	30	16	16.8	21.2
	Neutral	77	41.2	43	64.2
	Agree	38	20.3	21.2	85.5
	Strongly Agree	26	13.9	14.5	100
	Total	179	95.7	100	
Missing	System	8	4.3		
Total		187	100		

Class Information Pages (CLIPS)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	97	51.9	56.7	56.7
	Unsatisfied	5	2.7	2.9	59.6
	Neutral	26	13.9	15.2	74.9
	Satisfied	33	17.6	19.3	94.2
	Very Satisfied	10	5.3	5.8	100
	Total	171	91.4	100	
Missing	System	16	8.6		
Total		187	100		

I will use (future estimate) courseware in subsequent semesters.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	2.1	2.2	2.2
	Disagree	4	2.1	2.2	4.4
	Neutral	9	4.8	4.9	9.3
	Agree	54	28.9	29.7	39
	Strongly Agree	111	59.4	61	100
	Total	182	97.3	100	
Missing	System	5	2.7		
Total		187	100		

I would recommend courseware.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	1.1	1.1	1.1
	Disagree	3	1.6	1.6	2.7
	Neutral	24	12.8	13.2	15.9
	Agree	75	40.1	41.2	57.1
	Strongly Agree	78	41.7	42.9	100
	Total	182	97.3	100	
Missing	System	5	2.7		
Total		187	100		

Round-the-clock support					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	4	2.1	2.2	2.2
	Unimportant	3	1.6	1.7	3.9
	Neutral	35	18.7	19.6	23.5
	Important	69	36.9	38.5	62
	Very Important	68	36.4	38	100
	Total	179	95.7	100	
Missing	System	8	4.3		
Total		187	100		

What rank or position do you hold at the college?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Full Professor	39	20.9	24.8	24.8
	Associate Professor	14	7.5	8.9	33.8
	Assistant Professor	41	21.9	26.1	59.9
	Instructor	22	11.8	14	73.9
	Lecturer	35	18.7	22.3	96.2
	Teaching Assistant	5	2.7	3.2	99.4
	Other	1	0.5	0.6	100
	Total	157	84	100	
Missing	System	30	16		
Total		187	100		

Current appointment full or part-time?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Part-time	50	26.7	28.2	28.2
	Full-time	127	67.9	71.8	100
	Total	177	94.7	100	
Missing	System	10	5.3		
Total		187	100		

Appointment Status regular/adjunct/temporary?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Regular	50	26.7	71.4	71.4
	Adjunct	12	6.4	17.1	88.6
	Temporary	8	4.3	11.4	100
	Total	70	37.4	100	
Missing	System	117	62.6		
Total		187	100		

How would you characterize your use of the courseware?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Novice	30	16	16.6	16.6
	Intermediate	69	36.9	38.1	54.7
	Proficient	77	41.2	42.5	97.2
	Expert	5	2.7	2.8	100
	Total	181	96.8	100	
Missing	System	6	3.2		
Total		187	100		

What percentage of course is web-based?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Web presence	14	7.5	7.7	7.7
	Web-presence (1-24% on the web)	89	47.6	49.2	56.9
	Web-enhanced (25-49% on the web)	45	24.1	24.9	81.8
	Web-centric (50-74% on the web)	14	7.5	7.7	89.5
	Web course (75-100% on the web)	19	10.2	10.5	100
	Total	181	96.8	100	
Missing	System	6	3.2		
Total		187	100		

How many hours developing website?		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 hours	12	6.4	6.7	6.7
	1-100 hours	139	74.3	78.1	84.8
	101-198 hours	12	6.4	6.7	91.6
	199-414 hours	11	5.9	6.2	97.8
	415-810 hours	4	2.1	2.2	100
	Total	178	95.2	100	
Missing	System	9	4.8		
Total		187	100		

Courseware is easy to use.		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	2.1	2.2	2.2
	Disagree	10	5.3	5.6	7.8
	Neutral	30	16	16.8	24.6
	Agree	89	47.6	49.7	74.3
	Strongly Agree	46	24.6	25.7	100
	Total	179	95.7	100	
Missing	System	8	4.3		
Total		187	100		

Faculty development support (CIT,CTE,etc.) is adequate.		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	2.1	2.3	2.3
	Disagree	14	7.5	8.1	10.4
	Neutral	54	28.9	31.2	41.6
	Agree	75	40.1	43.4	85
	Strongly Agree	26	13.9	15	100
	Total	173	92.5	100	
Missing	System	14	7.5		
Total		187	100		

Courseware is reliable.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	1.6	1.6	1.6
	Disagree	13	7	7.1	8.8
	Neutral	25	13.4	13.7	22.5
	Agree	107	57.2	58.8	81.3
	Strongly Agree	34	18.2	18.7	100
	Total	182	97.3	100	
Missing	System	5	2.7		
Total		187	100		

Instructional goals and or overall instruction					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	3.2	3.4	3.4
	Disagree	12	6.4	6.7	10.1
	Neutral	42	22.5	23.5	33.5
	Agree	90	48.1	50.3	83.8
	Strongly Agree	29	15.5	16.2	100
	Total	179	95.7	100	
Missing	System	8	4.3		
Total		187	100		

Student to Student interactions					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	8	4.3	4.5	4.5
	Disagree	34	18.2	19.1	23.6
	Neutral	84	44.9	47.2	70.8
	Agree	33	17.6	18.5	89.3
	Strongly Agree	19	10.2	10.7	100
	Total	178	95.2	100	
Missing	System	9	4.8		
Total		187	100		

Student to Faculty interactions					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	2.7	2.8	2.8
	Disagree	19	10.2	10.7	13.6
	Neutral	47	25.1	26.6	40.1
	Agree	80	42.8	45.2	85.3
	Strongly Agree	26	13.9	14.7	100
	Total	177	94.7	100	
Missing	System	10	5.3		
Total		187	100		

Faculty to faculty interactions					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	18	9.6	10.6	10.6
	Disagree	46	24.6	27.1	37.6
	Neutral	91	48.7	53.5	91.2
	Agree	9	4.8	5.3	96.5
	Strongly Agree	6	3.2	3.5	100
	Total	170	90.9	100	
Missing	System	17	9.1		
Total		187	100		

Use of courseware will positively impact end-of-semester instructor ratings					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	9	4.8	5.1	5.1
	Disagree	19	10.2	10.8	15.9
	Neutral	80	42.8	45.5	61.4
	Agree	58	31	33	94.3
	Strongly Agree	10	5.3	5.7	100
	Total	176	94.1	100	
Missing	System	11	5.9		
Total		187	100		

Allows guests access to the course		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	25	13.4	14	14
	Unimportant	35	18.7	19.6	33.5
	Neutral	49	26.2	27.4	60.9
	Important	50	26.7	27.9	88.8
	Very Important	20	10.7	11.2	100
	Total	179	95.7	100	
Missing	System	8	4.3		
Total		187	100		

Single logon for all courses		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	7	3.7	4	4
	Unimportant	5	2.7	2.8	6.8
	Neutral	17	9.1	9.6	16.4
	Important	85	45.5	48	64.4
	Very Important	63	33.7	35.6	100
	Total	177	94.7	100	
Missing	System	10	5.3		
Total		187	100		

Loads students into the course directly from registrar		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	5	2.7	2.8	2.8
	Unimportant	5	2.7	2.8	5.6
	Neutral	15	8	8.3	13.9
	Important	54	28.9	30	43.9
	Very Important	101	54	56.1	100
	Total	180	96.3	100	
Missing	System	7	3.7		
Total		187	100		

Ability to customize the site					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	4	2.1	2.2	2.2
	Unimportant	11	5.9	6.1	8.3
	Neutral	39	20.9	21.5	29.8
	Important	84	44.9	46.4	76.2
	Very Important	43	23	23.8	100
	Total	181	96.8	100	
Missing	System	6	3.2		
Total		187	100		

Provides write-access to files					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	9	4.8	5.3	5.3
	Unimportant	9	4.8	5.3	10.5
	Neutral	54	28.9	31.6	42.1
	Important	60	32.1	35.1	77.2
	Very Important	39	20.9	22.8	100
	Total	171	91.4	100	
Missing	System	16	8.6		
Total		187	100		

Capable of uploading/downloading gradebook to spreadsheet program					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	7	3.7	3.9	3.9
	Unimportant	11	5.9	6.1	10
	Neutral	28	15	15.6	25.6
	Important	50	26.7	27.8	53.3
	Very Important	84	44.9	46.7	100
	Total	180	96.3	100	
Missing	System	7	3.7		
Total		187	100		

Gradebook is integrated w/ registrar's records		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	13	7	7.3	7.3
	Unimportant	20	10.7	11.2	18.4
	Neutral	42	22.5	23.5	41.9
	Important	54	28.9	30.2	72.1
	Very Important	50	26.7	27.9	100
	Total	179	95.7	100	
Missing	System	8	4.3		
Total		187	100		

Capable of uploading/downloading quizzes		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	10	5.3	5.6	5.6
	Unimportant	21	11.2	11.7	17.2
	Neutral	45	24.1	25	42.2
	Important	61	32.6	33.9	76.1
	Very Important	43	23	23.9	100
	Total	180	96.3	100	
Missing	System	7	3.7		
Total		187	100		

Ability to track student access		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	7	3.7	3.9	3.9
	Unimportant	9	4.8	5	8.8
	Neutral	28	15	15.5	24.3
	Important	91	48.7	50.3	74.6
	Very Important	46	24.6	25.4	100
	Total	181	96.8	100	
Missing	System	6	3.2		
Total		187	100		

Full featured grade book (weighting,averaging,calculations)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	12	6.4	6.7	6.7
	Unimportant	14	7.5	7.9	14.6
	Neutral	27	14.4	15.2	29.8
	Important	52	27.8	29.2	59
	Very Important	73	39	41	100
	Total	178	95.2	100	
Missing	System	9	4.8		
Total		187	100		

Batch processing of files					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	4	2.1	2.2	2.2
	Unimportant	8	4.3	4.5	6.7
	Neutral	53	28.3	29.8	36.5
	Important	65	34.8	36.5	73
	Very Important	48	25.7	27	100
	Total	178	95.2	100	
Missing	System	9	4.8		
Total		187	100		

Integrated equation editor					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	16	8.6	9	9
	Unimportant	22	11.8	12.4	21.5
	Neutral	99	52.9	55.9	77.4
	Important	28	15	15.8	93.2
	Very Important	12	6.4	6.8	100
	Total	177	94.7	100	
Missing	System	10	5.3		
Total		187	100		

Reuse course content from semester to semester		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	4	2.1	2.2	2.2
	Unimportant	4	2.1	2.2	4.5
	Neutral	14	7.5	7.8	12.3
	Important	63	33.7	35.2	47.5
	Very Important	94	50.3	52.5	100
	Total	179	95.7	100	
Missing	System	8	4.3		
Total		187	100		

Preformatted with sessions that correspond to class dates		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	11	5.9	6.2	6.2
	Unimportant	17	9.1	9.6	15.7
	Neutral	75	40.1	42.1	57.9
	Important	45	24.1	25.3	83.1
	Very Important	30	16	16.9	100
	Total	178	95.2	100	
Missing	System	9	4.8		
Total		187	100		

Allows student access to online course materials after completing course		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	20	10.7	11.2	11.2
	Unimportant	30	16	16.9	28.1
	Neutral	67	35.8	37.6	65.7
	Important	46	24.6	25.8	91.6
	Very Important	15	8	8.4	100
	Total	178	95.2	100	
Missing	System	9	4.8		
Total		187	100		

Allows for content organization		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	7	3.7	3.9	3.9
	Unimportant	6	3.2	3.4	7.3
	Neutral	39	20.9	21.8	29.1
	Important	81	43.3	45.3	74.3
	Very Important	46	24.6	25.7	100
	Total	179	95.7	100	
Missing	System	8	4.3		
Total		187	100		

Integrates with common PDAs		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	18	9.6	10.1	10.1
	Unimportant	34	18.2	19	29.1
	Neutral	89	47.6	49.7	78.8
	Important	26	13.9	14.5	93.3
	Very Important	12	6.4	6.7	100
	Total	179	95.7	100	
Missing	System	8	4.3		
Total		187	100		

Integrated use of course packs from publishers		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	14	7.5	7.9	7.9
	Unimportant	21	11.2	11.8	19.7
	Neutral	86	46	48.3	68
	Important	49	26.2	27.5	95.5
	Very Important	8	4.3	4.5	100
	Total	178	95.2	100	
Missing	System	9	4.8		
Total		187	100		

Enable/Disable course features					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	4	2.1	2.2	2.2
	Unimportant	4	2.1	2.2	4.5
	Neutral	22	11.8	12.4	16.9
	Important	74	39.6	41.6	58.4
	Very Important	74	39.6	41.6	100
	Total	178	95.2	100	
Missing	System	9	4.8		
Total		187	100		

Rate entered feature #1					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unimportant	1	0.5	5	5
	Important	3	1.6	15	20
	Very Important	16	8.6	80	100
	Total	20	10.7	100	
Missing	System	167	89.3		
Total		187	100		

Rate entered feature #2					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Important	1	0.5	10	10
	Very Important	9	4.8	90	100
	Total	10	5.3	100	
Missing	System	177	94.7		
Total		187	100		

Class Information Pages (CLIPS) roster		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	39	20.9	22.4	22.4
	Very Unsatisfied	1	0.5	0.6	23
	Unsatisfied	3	1.6	1.7	24.7
	Neutral	10	5.3	5.7	30.5
	Satisfied	60	32.1	34.5	64.9
	Very Satisfied	61	32.6	35.1	100
	Total	174	93	100	
Missing	System	13	7		
Total		187	100		

Class Information Pages (CLIPS) email		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	66	35.3	37.7	37.7
	Very Unsatisfied	2	1.1	1.1	38.9
	Unsatisfied	9	4.8	5.1	44
	Neutral	10	5.3	5.7	49.7
	Satisfied	46	24.6	26.3	76
	Very Satisfied	42	22.5	24	100
	Total	175	93.6	100	
Missing	System	12	6.4		
Total		187	100		

Class Information Pages (CLIPS) file management		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	95	50.8	54.9	54.9
	Very Unsatisfied	4	2.1	2.3	57.2
	Unsatisfied	5	2.7	2.9	60.1
	Neutral	19	10.2	11	71.1
	Satisfied	36	19.3	20.8	91.9
	Very Satisfied	14	7.5	8.1	100
	Total	173	92.5	100	
Missing	System	14	7.5		
Total		187	100		

Post course Announcements		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	19	10.2	15.3	15.3
	Very Unsatisfied	1	0.5	0.8	16.1
	Unsatisfied	3	1.6	2.4	18.5
	Neutral	6	3.2	4.8	23.4
	Satisfied	55	29.4	44.4	67.7
	Very Satisfied	40	21.4	32.3	100
	Total	124	66.3	100	
Missing	System	63	33.7		
Total		187	100		

Post course Syllabus		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	16	8.6	13	13
	Very Unsatisfied	1	0.5	0.8	13.8
	Unsatisfied	4	2.1	3.3	17.1
	Neutral	5	2.7	4.1	21.1
	Satisfied	47	25.1	38.2	59.3
	Very Satisfied	50	26.7	40.7	100
	Total	123	65.8	100	
Missing	System	64	34.2		
Total		187	100		

Post Content info		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	15	8	12.1	12.1
	Very Unsatisfied	1	0.5	0.8	12.9
	Neutral	10	5.3	8.1	21
	Satisfied	55	29.4	44.4	65.3
	Very Satisfied	43	23	34.7	100
	Total	124	66.3	100	
Missing	System	63	33.7		
Total		187	100		

Post Course content					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	12	6.4	9.8	9.8
	Very Unsatisfied	5	2.7	4.1	13.9
	Unsatisfied	3	1.6	2.5	16.4
	Neutral	5	2.7	4.1	20.5
	Satisfied	47	25.1	38.5	59
	Very Satisfied	50	26.7	41	100
	Total	122	65.2	100	
Missing	System	65	34.8		
Total		187	100		

Course email					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	15	8	12.2	12.2
	Very Unsatisfied	1	0.5	0.8	13
	Unsatisfied	13	7	10.6	23.6
	Neutral	8	4.3	6.5	30.1
	Satisfied	38	20.3	30.9	61
	Very Satisfied	48	25.7	39	100
	Total	123	65.8	100	
Missing	System	64	34.2		
Total		187	100		

Discussion board					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	54	28.9	43.5	43.5
	Very Unsatisfied	1	0.5	0.8	44.4
	Unsatisfied	3	1.6	2.4	46.8
	Neutral	25	13.4	20.2	66.9
	Satisfied	22	11.8	17.7	84.7
	Very Satisfied	19	10.2	15.3	100
	Total	124	66.3	100	
Missing	System	63	33.7		
Total		187	100		

Virtual classroom tool					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	93	49.7	75	75
	Very Unsatisfied	1	0.5	0.8	75.8
	Unsatisfied	2	1.1	1.6	77.4
	Neutral	18	9.6	14.5	91.9
	Satisfied	6	3.2	4.8	96.8
	Very Satisfied	4	2.1	3.2	100
	Total	124	66.3	100	
Missing	System	63	33.7		
Total		187	100		

Create Student Group					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	75	40.1	60.5	60.5
	Very Unsatisfied	1	0.5	0.8	61.3
	Unsatisfied	4	2.1	3.2	64.5
	Neutral	19	10.2	15.3	79.8
	Satisfied	18	9.6	14.5	94.4
	Very Satisfied	7	3.7	5.6	100
	Total	124	66.3	100	
Missing	System	63	33.7		
Total		187	100		

Quiz					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	80	42.8	64.5	64.5
	Very Unsatisfied	2	1.1	1.6	66.1
	Unsatisfied	6	3.2	4.8	71
	Neutral	17	9.1	13.7	84.7
	Satisfied	15	8	12.1	96.8
	Very Satisfied	4	2.1	3.2	100
	Total	124	66.3	100	
Missing	System	63	33.7		
Total		187	100		

Digital drop box					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	89	47.6	71.8	71.8
	Unsatisfied	2	1.1	1.6	73.4
	Neutral	18	9.6	14.5	87.9
	Satisfied	8	4.3	6.5	94.4
	Very Satisfied	7	3.7	5.6	100
	Total	124	66.3	100	
Missing	System	63	33.7		
Total		187	100		

Calendar					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	80	42.8	65	65
	Very Unsatisfied	1	0.5	0.8	65.9
	Unsatisfied	3	1.6	2.4	68.3
	Neutral	21	11.2	17.1	85.4
	Satisfied	12	6.4	9.8	95.1
	Very Satisfied	6	3.2	4.9	100
	Total	123	65.8	100	
Missing	System	64	34.2		
Total		187	100		

GradeBook					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	32	17.1	25.8	25.8
	Very Unsatisfied	9	4.8	7.3	33.1
	Unsatisfied	10	5.3	8.1	41.1
	Neutral	14	7.5	11.3	52.4
	Satisfied	31	16.6	25	77.4
	Very Satisfied	28	15	22.6	100
	Total	124	66.3	100	
Missing	System	63	33.7		
Total		187	100		

Add Powerpoint presentations					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	59	31.6	47.6	47.6
	Very Unsatisfied	7	3.7	5.6	53.2
	Unsatisfied	4	2.1	3.2	56.5
	Neutral	17	9.1	13.7	70.2
	Satisfied	16	8.6	12.9	83.1
	Very Satisfied	21	11.2	16.9	100
	Total	124	66.3	100	
Missing	System	63	33.7		
Total		187	100		

Add Images					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	74	39.6	60.7	60.7
	Very Unsatisfied	5	2.7	4.1	64.8
	Unsatisfied	3	1.6	2.5	67.2
	Neutral	16	8.6	13.1	80.3
	Satisfied	18	9.6	14.8	95.1
	Very Satisfied	6	3.2	4.9	100
	Total	122	65.2	100	
Missing	System	65	34.8		
Total		187	100		

Add Audio					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	92	49.2	74.8	74.8
	Very Unsatisfied	3	1.6	2.4	77.2
	Unsatisfied	1	0.5	0.8	78
	Neutral	13	7	10.6	88.6
	Satisfied	8	4.3	6.5	95.1
	Very Satisfied	6	3.2	4.9	100
	Total	123	65.8	100	
Missing	System	64	34.2		
Total		187	100		

Add Movies					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	95	50.8	77.9	77.9
	Very Unsatisfied	3	1.6	2.5	80.3
	Unsatisfied	1	0.5	0.8	81.1
	Neutral	13	7	10.7	91.8
	Satisfied	6	3.2	4.9	96.7
	Very Satisfied	4	2.1	3.3	100
	Total	122	65.2	100	
Missing	System	65	34.8		
Total		187	100		

Add Word documents					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	25	13.4	20.2	20.2
	Very Unsatisfied	4	2.1	3.2	23.4
	Unsatisfied	3	1.6	2.4	25.8
	Neutral	8	4.3	6.5	32.3
	Satisfied	34	18.2	27.4	59.7
	Very Satisfied	50	26.7	40.3	100
	Total	124	66.3	100	
Missing	System	63	33.7		
Total		187	100		

Add HTML files					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	52	27.8	41.9	41.9
	Very Unsatisfied	3	1.6	2.4	44.4
	Unsatisfied	4	2.1	3.2	47.6
	Neutral	6	3.2	4.8	52.4
	Satisfied	34	18.2	27.4	79.8
	Very Satisfied	25	13.4	20.2	100
	Total	124	66.3	100	
Missing	System	63	33.7		
Total		187	100		

WebCT content module					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	8	4.3	38.1	38.1
	Satisfied	9	4.8	42.9	81
	Very Satisfied	4	2.1	19	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT Syllabus					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	5	2.7	23.8	23.8
	Neutral	1	0.5	4.8	28.6
	Satisfied	13	7	61.9	90.5
	Very Satisfied	2	1.1	9.5	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT Glossary					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	12	6.4	57.1	57.1
	Very Unsatisfied	1	0.5	4.8	61.9
	Neutral	3	1.6	14.3	76.2
	Satisfied	4	2.1	19	95.2
	Very Satisfied	1	0.5	4.8	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT Search					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	13	7	61.9	61.9
	Neutral	4	2.1	19	81
	Satisfied	4	2.1	19	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT Image					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	11	5.9	52.4	52.4
	Unsatisfied	2	1.1	9.5	61.9
	Neutral	2	1.1	9.5	71.4
	Satisfied	5	2.7	23.8	95.2
	Very Satisfied	1	0.5	4.8	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT Calendar					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	8	4.3	38.1	38.1
	Unsatisfied	1	0.5	4.8	42.9
	Satisfied	9	4.8	42.9	85.7
	Very Satisfied	3	1.6	14.3	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT Index					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	15	8	71.4	71.4
	Neutral	4	2.1	19	90.5
	Satisfied	2	1.1	9.5	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT CD					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	16	8.6	76.2	76.2
	Neutral	4	2.1	19	95.2
	Satisfied	1	0.5	4.8	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT Compile					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	14	7.5	66.7	66.7
	Neutral	4	2.1	19	85.7
	Satisfied	3	1.6	14.3	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT Resume					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	15	8	71.4	71.4
	Neutral	3	1.6	14.3	85.7
	Satisfied	2	1.1	9.5	95.2
	Very Satisfied	1	0.5	4.8	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT Disc					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	7	3.7	33.3	33.3
	Neutral	4	2.1	19	52.4
	Satisfied	7	3.7	33.3	85.7
	Very Satisfied	3	1.6	14.3	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT Chat					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	10	5.3	47.6	47.6
	Very Unsatisfied	1	0.5	4.8	52.4
	Neutral	2	1.1	9.5	61.9
	Satisfied	5	2.7	23.8	85.7
	Very Satisfied	3	1.6	14.3	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT mail					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	13	7	61.9	61.9
	Unsatisfied	1	0.5	4.8	66.7
	Neutral	2	1.1	9.5	76.2
	Satisfied	2	1.1	9.5	85.7
	Very Satisfied	3	1.6	14.3	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT White					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	17	9.1	81	81
	Neutral	3	1.6	14.3	95.2
	Satisfied	1	0.5	4.8	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT Organizer Page					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	6	3.2	30	30
	Neutral	1	0.5	5	35
	Satisfied	7	3.7	35	70
	Very Satisfied	6	3.2	30	100
	Total	20	10.7	100	
Missing	System	167	89.3		
Total		187	100		

WebCT URL					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	7	3.7	35	35
	Neutral	2	1.1	10	45
	Satisfied	7	3.7	35	80
	Very Satisfied	4	2.1	20	100
	Total	20	10.7	100	
Missing	System	167	89.3		
Total		187	100		

WebCT Single Page					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	6	3.2	28.6	28.6
	Neutral	1	0.5	4.8	33.3
	Satisfied	8	4.3	38.1	71.4
	Very Satisfied	6	3.2	28.6	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT Quiz					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	9	4.8	42.9	42.9
	Neutral	1	0.5	4.8	47.6
	Satisfied	8	4.3	38.1	85.7
	Very Satisfied	3	1.6	14.3	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT Self					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	16	8.6	76.2	76.2
	Neutral	1	0.5	4.8	81
	Satisfied	3	1.6	14.3	95.2
	Very Satisfied	1	0.5	4.8	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT Grades					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	3	1.6	14.3	14.3
	Unsatisfied	2	1.1	9.5	23.8
	Neutral	2	1.1	9.5	33.3
	Satisfied	7	3.7	33.3	66.7
	Very Satisfied	7	3.7	33.3	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT Assign					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	9	4.8	45	45
	Neutral	2	1.1	10	55
	Satisfied	7	3.7	35	90
	Very Satisfied	2	1.1	10	100
	Total	20	10.7	100	
Missing	System	167	89.3		
Total		187	100		

WebCT Progress					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	11	5.9	52.4	52.4
	Neutral	3	1.6	14.3	66.7
	Satisfied	4	2.1	19	85.7
	Very Satisfied	3	1.6	14.3	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT Language					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	18	9.6	85.7	85.7
	Neutral	2	1.1	9.5	95.2
	Satisfied	1	0.5	4.8	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT Present					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	13	7	61.9	61.9
	Unsatisfied	1	0.5	4.8	66.7
	Neutral	1	0.5	4.8	71.4
	Satisfied	4	2.1	19	90.5
	Very Satisfied	2	1.1	9.5	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

WebCT Homepage					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	12	6.4	60	60
	Unsatisfied	1	0.5	5	65
	Neutral	3	1.6	15	80
	Satisfied	2	1.1	10	90
	Very Satisfied	2	1.1	10	100
	Total	20	10.7	100	
Missing	System	167	89.3		
Total		187	100		

WebCT Tips					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	12	6.4	60	60
	Neutral	3	1.6	15	75
	Satisfied	4	2.1	20	95
	Very Satisfied	1	0.5	5	100
	Total	20	10.7	100	
Missing	System	167	89.3		
Total		187	100		

WebCT Conditional Release					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	9	4.8	42.9	42.9
	Unsatisfied	1	0.5	4.8	47.6
	Neutral	1	0.5	4.8	52.4
	Satisfied	4	2.1	19	71.4
	Very Satisfied	6	3.2	28.6	100
	Total	21	11.2	100	
Missing	System	166	88.8		
Total		187	100		

Prometheus Syllabus					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	2	1.1	7.4	7.4
	Very Unsatisfied	3	1.6	11.1	18.5
	Unsatisfied	2	1.1	7.4	25.9
	Neutral	3	1.6	11.1	37
	Satisfied	12	6.4	44.4	81.5
	Very Satisfied	5	2.7	18.5	100
	Total	27	14.4	100	
Missing	System	160	85.6		
Total		187	100		

Prometheus Outline					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	3	1.6	11.5	11.5
	Very Unsatisfied	2	1.1	7.7	19.2
	Neutral	6	3.2	23.1	42.3
	Satisfied	9	4.8	34.6	76.9
	Very Satisfied	6	3.2	23.1	100
	Total	26	13.9	100	
Missing	System	161	86.1		
Total		187	100		

Prometheus Projects					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	15	8	57.7	57.7
	Very Unsatisfied	1	0.5	3.8	61.5
	Unsatisfied	1	0.5	3.8	65.4
	Neutral	4	2.1	15.4	80.8
	Satisfied	4	2.1	15.4	96.2
	Very Satisfied	1	0.5	3.8	100
	Total	26	13.9	100	
Missing	System	161	86.1		
Total		187	100		

Prometheus Lecture					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	11	5.9	40.7	40.7
	Very Unsatisfied	1	0.5	3.7	44.4
	Unsatisfied	1	0.5	3.7	48.1
	Satisfied	11	5.9	40.7	88.9
	Very Satisfied	3	1.6	11.1	100
	Total	27	14.4	100	
Missing	System	160	85.6		
Total		187	100		

Prometheus Assessment (tests and surveys)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	11	5.9	42.3	42.3
	Very Unsatisfied	2	1.1	7.7	50
	Unsatisfied	2	1.1	7.7	57.7
	Neutral	2	1.1	7.7	65.4
	Satisfied	8	4.3	30.8	96.2
	Very Satisfied	1	0.5	3.8	100
	Total	26	13.9	100	
Missing	System	161	86.1		
Total		187	100		

Prometheus Gradebook					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	6	3.2	24	24
	Very Unsatisfied	4	2.1	16	40
	Unsatisfied	5	2.7	20	60
	Neutral	3	1.6	12	72
	Satisfied	4	2.1	16	88
	Very Satisfied	3	1.6	12	100
	Total	25	13.4	100	
Missing	System	162	86.6		
Total		187	100		

Prometheus Files					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unsatisfied	2	1.1	7.4	7.4
	Unsatisfied	6	3.2	22.2	29.6
	Neutral	2	1.1	7.4	37
	Satisfied	12	6.4	44.4	81.5
	Very Satisfied	5	2.7	18.5	100
	Total	27	14.4	100	
Missing	System	160	85.6		
Total		187	100		

Prometheus Messages					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	3	1.6	11.1	11.1
	Very Unsatisfied	3	1.6	11.1	22.2
	Unsatisfied	1	0.5	3.7	25.9
	Neutral	4	2.1	14.8	40.7
	Satisfied	11	5.9	40.7	81.5
	Very Satisfied	5	2.7	18.5	100
	Total	27	14.4	100	
Missing	System	160	85.6		
Total		187	100		

Prometheus Chat					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	16	8.6	64	64
	Unsatisfied	1	0.5	4	68
	Neutral	4	2.1	16	84
	Satisfied	2	1.1	8	92
	Very Satisfied	2	1.1	8	100
	Total	25	13.4	100	
Missing	System	162	86.6		
Total		187	100		

Prometheus Discussions					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	13	7	50	50
	Very Unsatisfied	1	0.5	3.8	53.8
	Unsatisfied	1	0.5	3.8	57.7
	Neutral	4	2.1	15.4	73.1
	Satisfied	4	2.1	15.4	88.5
	Very Satisfied	3	1.6	11.5	100
	Total	26	13.9	100	
Missing	System	161	86.1		
Total		187	100		

Prometheus Equation Editor					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	19	10.2	73.1	73.1
	Very Unsatisfied	1	0.5	3.8	76.9
	Neutral	4	2.1	15.4	92.3
	Satisfied	2	1.1	7.7	100
	Total	26	13.9	100	
Missing	System	161	86.1		
Total		187	100		

Prometheus Content modules					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	12	6.4	46.2	46.2
	Very Unsatisfied	1	0.5	3.8	50
	Unsatisfied	3	1.6	11.5	61.5
	Neutral	6	3.2	23.1	84.6
	Satisfied	3	1.6	11.5	96.2
	Very Satisfied	1	0.5	3.8	100
	Total	26	13.9	100	
Missing	System	161	86.1		
Total		187	100		

Prometheus Groups					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	13	7	50	50
	Unsatisfied	2	1.1	7.7	57.7
	Neutral	4	2.1	15.4	73.1
	Satisfied	6	3.2	23.1	96.2
	Very Satisfied	1	0.5	3.8	100
	Total	26	13.9	100	
Missing	System	161	86.1		
Total		187	100		

Prometheus Tracking					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	10	5.3	38.5	38.5
	Very Unsatisfied	1	0.5	3.8	42.3
	Unsatisfied	1	0.5	3.8	46.2
	Neutral	4	2.1	15.4	61.5
	Satisfied	10	5.3	38.5	100
	Total	26	13.9	100	
Missing	System	161	86.1		
Total		187	100		

TeachNet Online discussion group					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	2	1.1	28.6	28.6
	Neutral	2	1.1	28.6	57.1
	Satisfied	2	1.1	28.6	85.7
	Very Satisfied	1	0.5	14.3	100
	Total	7	3.7	100	
Missing	System	180	96.3		
Total		187	100		

TeachNet Email					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	1	0.5	14.3	14.3
	Satisfied	2	1.1	28.6	42.9
	Very Satisfied	4	2.1	57.1	100
	Total	7	3.7	100	
Missing	System	180	96.3		
Total		187	100		

TeachNet Text mail					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	1	0.5	14.3	14.3
	Satisfied	4	2.1	57.1	71.4
	Very Satisfied	2	1.1	28.6	100
	Total	7	3.7	100	
Missing	System	180	96.3		
Total		187	100		

TeachNet Voice mail					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	4	2.1	57.1	57.1
	Neutral	2	1.1	28.6	85.7
	Very Satisfied	1	0.5	14.3	100
	Total	7	3.7	100	
Missing	System	180	96.3		
Total		187	100		

TeachNet Attachments					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	1	0.5	14.3	14.3
	Satisfied	3	1.6	42.9	57.1
	Very Satisfied	3	1.6	42.9	100
	Total	7	3.7	100	
Missing	System	180	96.3		
Total		187	100		

TeachNet Signature					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	1	0.5	14.3	14.3
	Neutral	1	0.5	14.3	28.6
	Satisfied	3	1.6	42.9	71.4
	Very Satisfied	2	1.1	28.6	100
	Total	7	3.7	100	
Missing	System	180	96.3		
Total		187	100		

TeachNet font/color					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Satisfied	5	2.7	71.4	71.4
	Very Satisfied	2	1.1	28.6	100
	Total	7	3.7	100	
Missing	System	180	96.3		
Total		187	100		

TeachNet automatic reply/forward					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	2	1.1	28.6	28.6
	Satisfied	3	1.6	42.9	71.4
	Very Satisfied	2	1.1	28.6	100
	Total	7	3.7	100	
Missing	System	180	96.3		
Total		187	100		

TeachNet Chat					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	4	2.1	57.1	57.1
	Neutral	1	0.5	14.3	71.4
	Satisfied	1	0.5	14.3	85.7
	Very Satisfied	1	0.5	14.3	100
	Total	7	3.7	100	
Missing	System	180	96.3		
Total		187	100		

TeachNet Calendar					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	3	1.6	42.9	42.9
	Neutral	2	1.1	28.6	71.4
	Satisfied	1	0.5	14.3	85.7
	Very Satisfied	1	0.5	14.3	100
	Total	7	3.7	100	
Missing	System	180	96.3		
Total		187	100		

Teachnet Publishing web pages					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	3	1.6	42.9	42.9
	Neutral	2	1.1	28.6	71.4
	Satisfied	1	0.5	14.3	85.7
	Very Satisfied	1	0.5	14.3	100
	Total	7	3.7	100	
Missing	System	180	96.3		
Total		187	100		

TeachNet Web interface					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	2	1.1	28.6	28.6
	Neutral	1	0.5	14.3	42.9
	Satisfied	3	1.6	42.9	85.7
	Very Satisfied	1	0.5	14.3	100
	Total	7	3.7	100	
Missing	System	180	96.3		
Total		187	100		

TeachNet upload/download files					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	2	1.1	28.6	28.6
	Neutral	1	0.5	14.3	42.9
	Satisfied	1	0.5	14.3	57.1
	Very Satisfied	3	1.6	42.9	100
	Total	7	3.7	100	
Missing	System	180	96.3		
Total		187	100		

TeachNet check lab ability					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	3	1.6	42.9	42.9
	Neutral	2	1.1	28.6	71.4
	Satisfied	2	1.1	28.6	100
	Total	7	3.7	100	
Missing	System	180	96.3		
Total		187	100		

TeachNet graphic interface folder icons					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	2	1.1	28.6	28.6
	Neutral	2	1.1	28.6	57.1
	Satisfied	2	1.1	28.6	85.7
	Very Satisfied	1	0.5	14.3	100
	Total	7	3.7	100	
Missing	System	180	96.3		
Total		187	100		

TeachNet graphic user interface-graphic background of class workspace					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	2	1.1	28.6	28.6
	Neutral	3	1.6	42.9	71.4
	Satisfied	1	0.5	14.3	85.7
	Very Satisfied	1	0.5	14.3	100
	Total	7	3.7	100	
Missing	System	180	96.3		
Total		187	100		

TeachNet graphic user interface background color					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Used	2	1.1	28.6	28.6
	Unsatisfied	1	0.5	14.3	42.9
	Neutral	3	1.6	42.9	85.7
	Very Satisfied	1	0.5	14.3	100
	Total	7	3.7	100	
Missing	System	180	96.3		
Total		187	100		

IT Funds					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		8	4.3	4.3	4.3
	AdlFac	3	1.6	1.6	5.9
	CoDevTme	46	24.6	24.6	30.5
	DepSupSf	18	9.6	9.6	40.1
	FacITTr	22	11.8	11.8	51.9
	FacSupSf	15	8	8	59.9
	FacSupSTr	5	2.7	2.7	62.6
	HighPay	10	5.3	5.3	67.9
	InDesSup	21	11.2	11.2	79.1
	InsDes	6	3.2	3.2	82.4
	Other	8	4.3	4.3	86.6
	RedWkld	16	8.6	8.6	95.2
	StuCoLab	6	3.2	3.2	98.4
	StuSupSf	3	1.6	1.6	100
	Total	187	100	100	

Other IT Fund					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		178	95.2	95.2	95.2
	a do-it-yourself primer for faculty who are proficient computer users	1	0.5	0.5	95.7
	I can't answer these questions effectively as we've not yet started working with Prometheus.	1	0.5	0.5	96.3
	Increased help desk support for students; a student user's manual specific to UT; stipends for faculty users.	1	0.5	0.5	96.8
	more computer classrooms	1	0.5	0.5	97.3
	options on the course site that we don't have	1	0.5	0.5	97.9
	Student computer labs that can be reserved. Current labs are snapped up at the beginning of the semester.	1	0.5	0.5	98.4
	student learning	1	0.5	0.5	98.9
	Summer support for course development	1	0.5	0.5	99.5
	the Sp&P departmental computer lab for graduate students is a disaster - I can't even access my e-mail account	1	0.5	0.5	100
	Total	187	100	100	

COLLEGE					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		3	1.6	1.6	1.6
	Business	26	13.9	13.9	15.5
	Communication	12	6.4	6.4	21.9
	Education	27	14.4	14.4	36.4
	Engr	26	13.9	13.9	50.3
	FineArt	4	2.1	2.1	52.4
	GradSch	1	0.5	0.5	52.9
	Law	6	3.2	3.2	56.1
	LibArts	43	23	23	79.1
	NatSci	22	11.8	11.8	90.9
	Nurse	4	2.1	2.1	93
	OTHER	2	1.1	1.1	94.1
	Pharm	3	1.6	1.6	95.7
	SchoolInfo	2	1.1	1.1	96.8
	SocWork	6	3.2	3.2	100
	Total	187	100	100	

Degree					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		10	5.3	5.3	5.3
	B.A.	1	0.5	0.5	5.9
	BA	4	2.1	2.1	8
	BA & BS	1	0.5	0.5	8.6
	bachelor	1	0.5	0.5	9.1
	Bachelor	1	0.5	0.5	9.6
	bs	1	0.5	0.5	10.2
	BS	1	0.5	0.5	10.7
	BSEE	1	0.5	0.5	11.2
	D.Phil	1	0.5	0.5	11.8
	DBA	1	0.5	0.5	12.3
	Doctorate	1	0.5	0.5	12.8
	Ed.D.	1	0.5	0.5	13.4
	EdD	1	0.5	0.5	13.9
	J.D.	4	2.1	2.1	16
	jd	1	0.5	0.5	16.6
	JD	1	0.5	0.5	17.1
	M.A.	6	3.2	3.2	20.3
	M.C.D.	1	0.5	0.5	20.9
	M.O.B.	1	0.5	0.5	21.4
	M.S.	1	0.5	0.5	21.9
	M.S. in L.S.	1	0.5	0.5	22.5
	MA	19	10.2	10.2	32.6
	Master's	1	0.5	0.5	33.2
	Masters	2	1.1	1.1	34.2
	MBA	3	1.6	1.6	35.8
	MEd.	1	0.5	0.5	36.4
	MLS	1	0.5	0.5	36.9
	ms	1	0.5	0.5	37.4
	MS	5	2.7	2.7	40.1
	MSIE	1	0.5	0.5	40.6
	MSME (PhD in Progress)	1	0.5	0.5	41.2
	MSW	1	0.5	0.5	41.7
	ph. d.	1	0.5	0.5	42.2
	Ph. D.	2	1.1	1.1	43.3
	Ph.D	7	3.7	3.7	47.1
	Ph.D.	39	20.9	20.9	67.9
	PharmD	1	0.5	0.5	68.4
	phd	8	4.3	4.3	72.7
	phD	1	0.5	0.5	73.3
	Phd	1	0.5	0.5	73.8
	PhD	47	25.1	25.1	98.9
	PHD	2	1.1	1.1	100
	Total	187	100	100	

Degree year					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		14	7.5	7.5	7.5
	1	1	0.5	0.5	8
	1957	1	0.5	0.5	8.6
	1959	2	1.1	1.1	9.6
	1962	1	0.5	0.5	10.2
	1963	1	0.5	0.5	10.7
	1964	1	0.5	0.5	11.2
	1966	1	0.5	0.5	11.8
	1967	1	0.5	0.5	12.3
	1968	4	2.1	2.1	14.4
	1969	4	2.1	2.1	16.6
	1970	4	2.1	2.1	18.7
	1971	2	1.1	1.1	19.8
	1973	2	1.1	1.1	20.9
	1974	2	1.1	1.1	21.9
	1975	3	1.6	1.6	23.5
	1976	2	1.1	1.1	24.6
	1977	2	1.1	1.1	25.7
	1978	2	1.1	1.1	26.7
	1979	2	1.1	1.1	27.8
	1980	5	2.7	2.7	30.5
	1983	1	0.5	0.5	31
	1984	3	1.6	1.6	32.6
	1985	1	0.5	0.5	33.2
	1986	2	1.1	1.1	34.2
	1987	5	2.7	2.7	36.9
	1988	3	1.6	1.6	38.5
	1989	2	1.1	1.1	39.6
	1990	4	2.1	2.1	41.7
	1991	6	3.2	3.2	44.9
	1992	2	1.1	1.1	46
	1993	4	2.1	2.1	48.1
	1994	4	2.1	2.1	50.3
	1995	9	4.8	4.8	55.1
	1996	11	5.9	5.9	61
	1997	9	4.8	4.8	65.8
	1998	12	6.4	6.4	72.2
	1999	5	2.7	2.7	74.9
	2000	17	9.1	9.1	84
	2001	7	3.7	3.7	87.7
	2002	7	3.7	3.7	91.4
	2003	1	0.5	0.5	92
	67	1	0.5	0.5	92.5
	68	1	0.5	0.5	93
	72	1	0.5	0.5	93.6
	76	1	0.5	0.5	94.1

Degree Year continued

	77	1	0.5	0.5	94.7
	78	1	0.5	0.5	95.2
	81	1	0.5	0.5	95.7
	86	2	1.1	1.1	96.8
	88	1	0.5	0.5	97.3
	92	2	1.1	1.1	98.4
	93	2	1.1	1.1	99.5
	96	1	0.5	0.5	100
	Total	187	100	100	

Operating System					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	2.1	2.1	2.1
	mac	59	31.6	31.6	33.7
	other	3	1.6	1.6	35.3
	windows	121	64.7	64.7	100
	Total	187	100	100	

browser					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	BothNew	6	3.2	3.2	3.2
	IEFive	16	8.6	8.6	11.8
	IENew	23	12.3	12.3	24.1
	IEOther	9	4.8	4.8	28.9
	IESix	78	41.7	41.7	70.6
	Netfour_seven	16	8.6	8.6	79.1
	NetOther	1	0.5	0.5	79.7
	NetSeven	19	10.2	10.2	89.8
	NetSix	11	5.9	5.9	95.7
	OMITTED	5	2.7	2.7	98.4
	Other	2	1.1	1.1	99.5
	Unknown	1	0.5	0.5	100
	Total	187	100	100	

Received Assistance					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		7	3.7	3.7	3.7
	No	96	51.3	51.3	55.1
	Yes	84	44.9	44.9	100
	Total	187	100	100	

who assisted					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Other	12	6.4	6.4	6.4
	Colleague	13	7	7	13.4
	GRA	2	1.1	1.1	14.4
	TA	21	11.2	11.2	25.7
	CIT Staff	26	13.9	13.9	39.6
	Dept Spt Staff	10	5.3	5.3	44.9
	Omitted	103	55.1	55.1	100
	Total	187	100	100	

## **Appendix D**

### **Instructional Assessment Committee**

#### **Literature Review Plan (in progress)**

1. Review all collections and associated documentation
  - a. Summary write-up by those who gathered materials
  - b. Annotations to be done by initial reviewers
  - c. Follow-up by independent reviewers
  - d. Develop categorization system for materials
  
2. First Steps Related to Undocumented Materials
  - a. Alphabetize all URLs/Titles
  - b. Review sites
  - c. Write short description
  - d. Develop categories by using input from researchers, IAC, faculty
  - e. Assign categories

**Appendix E**  
**The Daily Texan Article Concerning**  
**Faculty Use of Instructional Technology**

***Relying on technology hinders learning***

***The use of teaching technology can quickly transform into a pedagogical crutch.***

*By Laura Isensee (Daily Texan Columnist)*

*January 28, 2003*

*Once upon a time, a computer wizard conjured wondrous things to amaze his pupils: PowerPoint presentations, online chat forums, interactive quizzes, even electronic textbooks. The magical-seeming creations revealed many truths, and the pupils increased their knowledge and lived happily ever after.*

*Or did they?*

*The fairy tale of e-learning assumes that classroom technology enhances the learning experience for both the professor and the students. The reality of such educational technology is far from ideal. Often poorly integrated into a course, its use skews the balance of content and technology and lessens dynamic interaction among students and between students and faculty.*

*While no substitute exists for the enthusiasm and intelligence of a good professor, technology can improve poor instruction provided by mediocre faculty. In order to improve the implementation of technology, Information Technology Services should further promote and fine-tune its workshops for faculty interested in modernizing their courses. Technical skill training for professors is crucial. Without it, attempts to improve the learning process does more harm than good.*

*The use of teaching technology can quickly transform into a pedagogical crutch. In an upper-division linguistics course last fall, the daily lecture consisted of no more than a PowerPoint presentation and printed handouts of the same display. This un-innovative approach reduces the role of the teacher to a mere conduit that transmits ideas into student depositories.*

*Particularly troubling are the choices of lower-division language classes to implement technology that might allow for a greater quantity of students but lessens the quality of the education.*

*First-year Spanish students are required to attend a weekly lab session. The time a Spanish 506 student spends in front of a computer would be better spent in a conversation group. Similarly absurd is an online chat session for French 312L students who are sitting in the same lab. Instead of relying on instant messaging to communicate passively, they could be engaging and challenging their speaking skills in an open discussion. In any department, this fancy "synchronous communication" (online chatting or interactive quizzes) can lessen, even eliminate, intellectual debate that sharpens critical thinking and oral expression.*

*A prime example of the increasing pervasiveness of classroom technology is the electronic textbook. The e-book makes technology the primary educational tool, even though many students seem to prefer to use technology as a secondary source. Consider the case of Management 320F last fall when the chosen text was electronic. Professor Victor Arnold initially ordered enough print copies of the textbook for less than a quarter of the class. Students could buy a download version of the e-book or purchase a password that would allow a page to be viewed a maximum of four times. Yet one-third of the class opposed the e-book and lobbied for more print copies to be ordered. This response revealed that e-books were not as effective for students as a traditional paperback.*

*In the end, the student body holds the key to successful classroom technology. Individuals realize when technology hinders or helps their education. Despite being an essential measure of the effectiveness of new educational technologies, student feedback is not adequately evaluated. The University's intercollegiate Technology Classroom Committee does not have the resources or scope to evaluate classroom technology.*

*Although ITS researches student opinion regarding technology to a degree, we need a more objective means, such as one where the same group that develops much of the technology being critiqued does not administer the survey. Course instructor surveys, for example, should include pertinent questions. Students' evaluation of classroom technology must be considered before their education falls through the cracks of this fractured fairy tale.*

*Isensee is a Plan II/Spanish senior.*