

SEPTEMBER 26, 2005

CITES



CITES Classroom Technologies

2005 Instructor Survey Overview of Results

Table of Contents

<i>Executive Summary</i>	4
<i>Introduction</i>	5
<i>Open-ended Responses</i>	6
<i>Systems Overall</i>	7
Importance of ITS Classrooms	7
Comments concerning the benefits of using an ITS classroom	8
Comments Concerning Additional ITS Classrooms.....	9
Comments Concerning Classroom Design and Overall Environment	9
Frequency of ITS Use.....	11
Challenges to ITS Use.....	11
Common Uses of ITS	12
Frequency and Source of Problems	13
Comments Concerning Equipment Problems, Culprits, and Challenges	15
<i>Audio/Visual Equipment</i>	16
Comments Concerning Projectors	16
Typical ITS Equipment Use.....	16
Seldom Used ITS Equipment.....	18
Use of Video	18
Use of Document Camera	19
Comments Concerning Specific Audiovisual Equipment.....	20
Overhead Transparency Use	21
Chalkboard Use	22
<i>Computers</i>	24
Software Tools.....	24
Comments Concerning Resident Computers	25
Laptop Computer Use	25
Comments Concerning Laptops	26
Networking Laptops	27
Comments Concerning the Network	27
<i>Training and Support</i>	28
Training by CITES ClassTech Staff	28
Quality of Training	29
Training Comments.....	29
Provision of Training Materials	29
Support	32
Comments Concerning Needs	33
Quality of Customer Service.....	33
Comments Concerning CITES ClassTech Staff.....	34
<i>Policies</i>	35
Non-Class Use	35
Security Codes	35
Comments On Security	35
<i>Miscellaneous</i>	37
Role of Classroom Users.....	37

Non-course Related Responses.....	37
New Classrooms – Foreign Language Building.....	38

2005 Instructor Survey Report

Executive Summary

- 93% of the instructors who responded report that the ITS classrooms are “very important” or “important” to their teaching, consistent with previous years.
- Use of the resident Windows computer has substantially increased (+14%).
- The top software applications used by instructors in the classroom are all part of our basic installation package (e.g. PowerPoint, Internet Explorer).
- The perceived quality of our training has dropped substantially (-19% in “Excellent” rating). This could be attributed to a much greater percentage of training sessions conducted by new part-time staff during the last year. Beginning in the fall of 2005, ClassTech returned to training sessions conducted by full-time staff.
- The use of the document camera continues to decline, along with transparency projector and chalkboard usage. However, the latter two are still perceived as critical presentation tools in the classroom.
- Teaching assistants are reportedly involved in the use of the ITS by 35% of respondents. Better methods for contacting and communicating with teaching assistants need to be implemented.
- Based on comments made by respondents in the open-ended portion of the survey, CITES ClassTech needs to continue improving its methods of user communication overall. Several users indicate they are not informed about our equipment improvements and modifications, policy changes, and new services offered. Though ClassTech has used both massmail and targeted e-mail, along with campus-mailed brochures, these techniques are clearly not reaching a number of users.

Introduction

This is the fifth year our office has collected data on instructional use of audiovisual tools in classrooms. However, in 2004 a different kind of survey was issued and none of the same questions from previous surveys were asked. Hence, we do not have longitudinal data for that year. The results of the surveys have been used to make decisions about technological funding when questions were asked about priorities and allocations as well as shaping policies around classroom use. The focus of the surveys has always been the Integrated Teaching Systems (ITS) or “smart” classrooms. These classrooms contain a collection of audiovisual tools for instructors to use in class presentations. As of August 24, 2005, 128 ITS classrooms have been remodeled with presentation systems. More rooms will receive installations are scheduled for 2006. Though our survey is only focused on these campus-controlled rooms, many more departmentally controlled rooms have been set up for high-tech media presentations over the last several years.

In addition to installing and maintaining the systems in these rooms, CITES ClassTech also provides training and assistance for those who are utilizing the classroom technology. Faculty and staff who wish to use the ITS equipment may attend a hands-on training session. Typically all ITS equipment is secured with an alarm system and the code for each room is changed at the conclusion of each academic term. Instructors can receive the codes via e-mail upon request. CITES ClassTech technicians can make adjustments and repairs to ITS equipment when identified.

Instructors may request the installation of particular software packages on ITS classroom computers. Although Microsoft Office Suite is installed by default on each system along with web browsers, basic applications, as well as many of the campus-licensed packages, instructors frequently require additional programs for their course instruction. CITES ClassTech works with each instructor on an individual basis to ensure that these programs work correctly and do not inhibit the use of the ITS systems more generally.

Information about CITES ClassTech, ITS policies, guidelines, and services offered, as well as descriptions of each of the ITS classrooms, can be found on the CITES ClassTech website at www.cites.uiuc.edu/classtech.

This report is comprised of the following five sections:

- Systems Overall
 - Survey responses having to do with the ITS classrooms as a whole.
- Audio/Visual Equipment
 - Feedback regarding specific items such as the projector, VCR, visual presenter, microphone, or other items.

- Computers
Synopsis of information concerning the use of computers, both resident and laptops, in the ITS classrooms.
- Training and Support
Commentary concerning the training sessions and support services provided by CITES ClasTech.
- Policies
Opinions and views in regards to the administration of the ITS classrooms.

The survey questions were grouped into one of these topic areas and the results are described in more detail in the relevant sections. For example, in the section on computers, the questions concerning laptop usage as well as software tools are elucidated. Each question summary includes a graphical representation and a graphical description of the topic and issues involved, as well as instructor comments if any of the open-ended responses had relevance to the topic. The comments were pooled from the areas of the survey where open-ended responses were possible.

For specific details concerning how the survey was constructed and distributed, please contact us directly at classtech@uiuc.edu.

Open-ended Responses

There were four areas in the survey where respondents could fill in their own answer to particular questions. Hundreds of responses were collected from these areas. Some were direct answers to the questions that were asked, but many were also questions or comments addressing issues that the survey failed to raise. These comments were categorized and included in the appropriate sections, but many good questions and our corresponding answers are also included in our now updated Frequently Asked Questions (FAQ) portion of our website.

To view this new page, go to our website at:

www.cites.uiuc.edu/classtech

Then, click on the link for "FAQ."

Systems Overall

One of the primary goals of the survey was to ascertain how faculty and staff perceive ITS classrooms generally. Several questions were aimed at discovering how often the systems were used and how important their use was to classroom teaching.

Note that this survey is only addressing ITS classrooms, not classrooms in general, departmentally controlled classrooms or other campus interests. Some respondents have been confused by the intention of the survey and have openly wondered why some questions were not asked. For example, the survey does not contain questions about student seating quality or arrangement because those are issues outside the purview of CITES ClassTech.

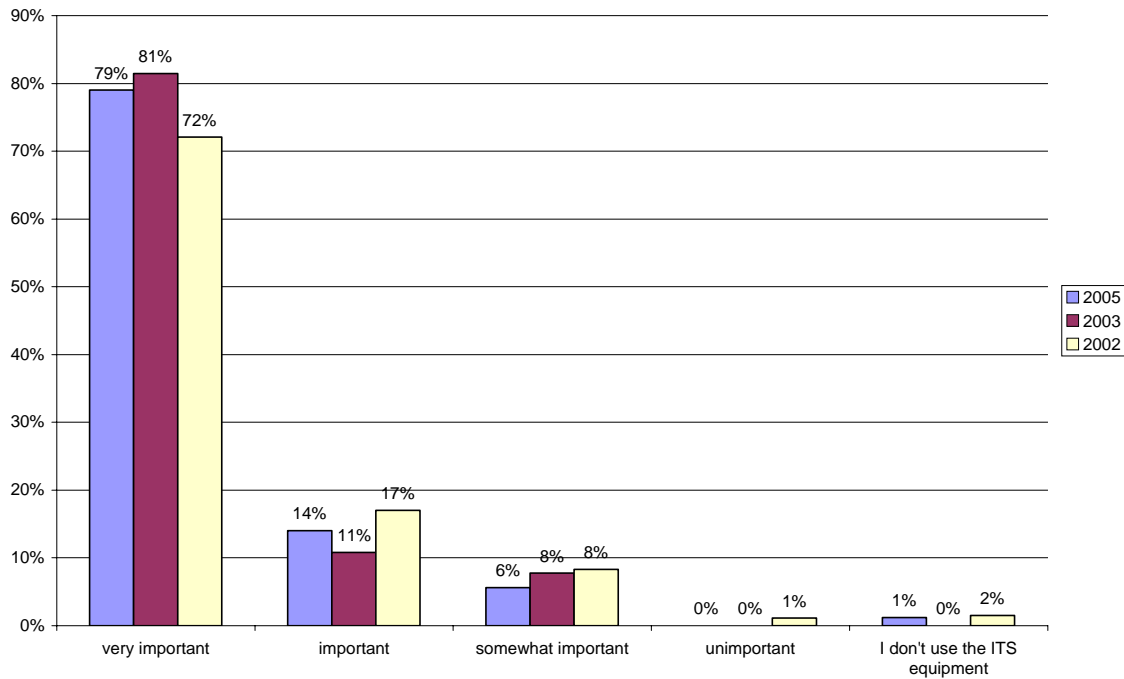
Importance of ITS Classrooms

The first ITS classrooms were remodeled in 1994. Three rooms were completed that year, with four coming online in 1995. The peak year was 2000 when 29 classrooms were added. Prior to the ITS installations, most classroom audiovisual tools consisted of the blackboard and a transparency projector. A number of rooms had a slide projector, but only the largest lecture halls, Lincoln Hall Theatre and Foellinger Auditorium for example, had any form of voice reinforcement.

Technology has become an integral part of education. Business courses require regular use of spreadsheets, the sciences require visualization tools, and many disciplines demand access to online resources in the classrooms. Figure 3 below shows how important the new generation of audiovisual tools is to instruction on campus.

Figure 3

Q1 How important is the Integrated Teaching System (ITS) equipment to your teaching?



This year, 93% of respondents said that the Integrated Teaching System is “very important” or “important” for their instruction. The numbers in those top two categories have stayed relatively constant. Less than 1% indicated that they do not use the ITS equipment at all. There is a bias in favor of a/v use with the survey because there is a tendency on the part of non-users to not respond to the survey. Their impression is that it is not intended for them. An analysis of a/v use based on security code requests between 2002 and 2003 showed 33% of those assigned to teach in ITS classrooms were not using the equipment. This is also not a true representation of a/v use because we learned from focus groups and personal communication that many instructors gain access to the ITS either by acquiring codes from colleagues, having cabinets left open at the conclusion of the previous class, etc. Therefore, the true proportion of ITS users lies somewhere between 66% and 99%.

Comments concerning the benefits of using an ITS classroom

When asked, “What are some of the benefits to your teaching that the presentation technology in the classrooms allows?,” a few instructors responded:

“Everything can be put in to a flash stick and brought in. PowerPoint is so much easier than using stupid transparencies. Using the web and being able to project the pages onto the screen for all to see. Students can post things on the web to be presented in class. Showing film clips does not require a rolling cart with a tv/vcr/dvd screen that only the front row can see clearly. I LOVE the cabinet equipment.”

“A picture is worth a thousand words.”

Comments Concerning Additional ITS Classrooms

In previous surveys a number of instructors commented that adding more ITS classrooms should be a top priority for the campus. Currently the ITS classrooms make up more than a quarter of all general assignment classrooms.

In the open-ended sections, there were 10 respondents who indicated that more ITS classrooms were needed on campus. A sampling of those comments are below:

"We need more ITS classrooms. I have a hard time getting one the right size at the right time that is near my office."

"Please equip more rooms. The lack of equipped rooms, especially in David Kinley Hall, is a big problem."

"I really wish there would be more smart rooms. The way that I have my course planned as of now, there is no way I can use a normal classroom. Next semester I'll not have a smart classroom and that will be big trouble to me and my students."

Comments Concerning Classroom Design and Overall Environment

Instructors enjoy making use of new technologies without sacrificing access to other tools as well. This becomes very clear in the comments from instructors who wish to use tools like PowerPoint while at the same time making use of the chalkboard. This is a problem because in many ITS classrooms the projection screen needs to be raised to gain access to the chalkboard.

There are many variables that impact projection screen size and placement—size of the room, distance to the farthest seat, viewing angles, aspect ratio of the image to be viewed, location of the presenter and the podium, entry and egress from the room, and others. Many of the campus buildings are over one-hundred years old and the physical requirements for media presentation were never anticipated. Visual real estate at the front of a classroom is finite and always at a premium. Compromise solutions are often the norm and setting up projection screens and blackboards so that they can be used simultaneously is often not possible.

There have always been a few comments about cabinet design in previous surveys. Some instructors have felt the cabinets are too bulky, are too high for shorter people and uncomfortably low for taller people. Ergonomics is one of the issues considered in the design of cabinetry. Security and sustainability are others. It is also important to note that the media in the instructor cabinets has to be made accessible to all instructors, including those with mobility impairments.

In previous surveys, Gregory Hall 223 and 319, both partial ITS classrooms, have received numerous complaints. The older technology in the Gregory Hall rooms added a degree of difficulty that led to frustration on the part of many instructors. The rooms were updated with more modern cabinets and equipment was re-located at the front of the rooms. In the 2005 survey, there were no negative comments regarding these specific classrooms, although there were some comments about partial ITS classrooms in general.

The comments in the open-ended portions of the survey were pooled and categorized based on the topic addressed. The table below tallies the number of respondents who addressed particular topics.

Table 6

Comment Category	# of Respondents
Podium is too big	2
Lighting [is a problem]	5
Image is projected too low for students to see	1
Cannot see blackboard when ITS in use	5

Below are some additional comments made in regards to ITS classrooms:

“There is too little blackboard space in 217 Noyes Lab due to the screen placement.”

“...I like to use projection and blackboards at the same time, but the side boards have sight line obstructions for students at the far side of the classroom.”

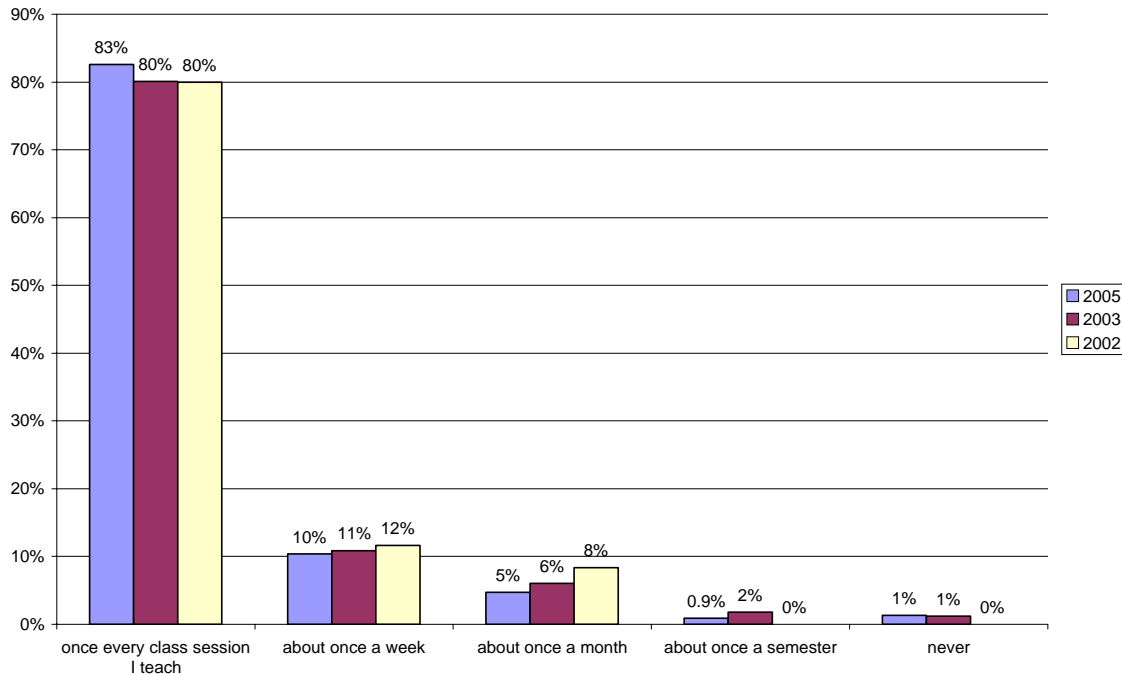
“Having to stand behind the large podium during the lecture [is a challenge.] Sometimes I feel like I’m hiding from my students. I would prefer more mobility when using the ITS system.”

Frequency of ITS Use

Connected to how dependent instructors are on the audiovisual tools is how often they need to use it. Equipment needs to always be in a functional state because of how reliant most faculty are on the equipment, day in and day out. See Figure 4 for a summary of how frequently instructors accessed the ITS equipment.

Figure 4

Q6 How often do you open the ITS cabinet and use one or more pieces of equipment?

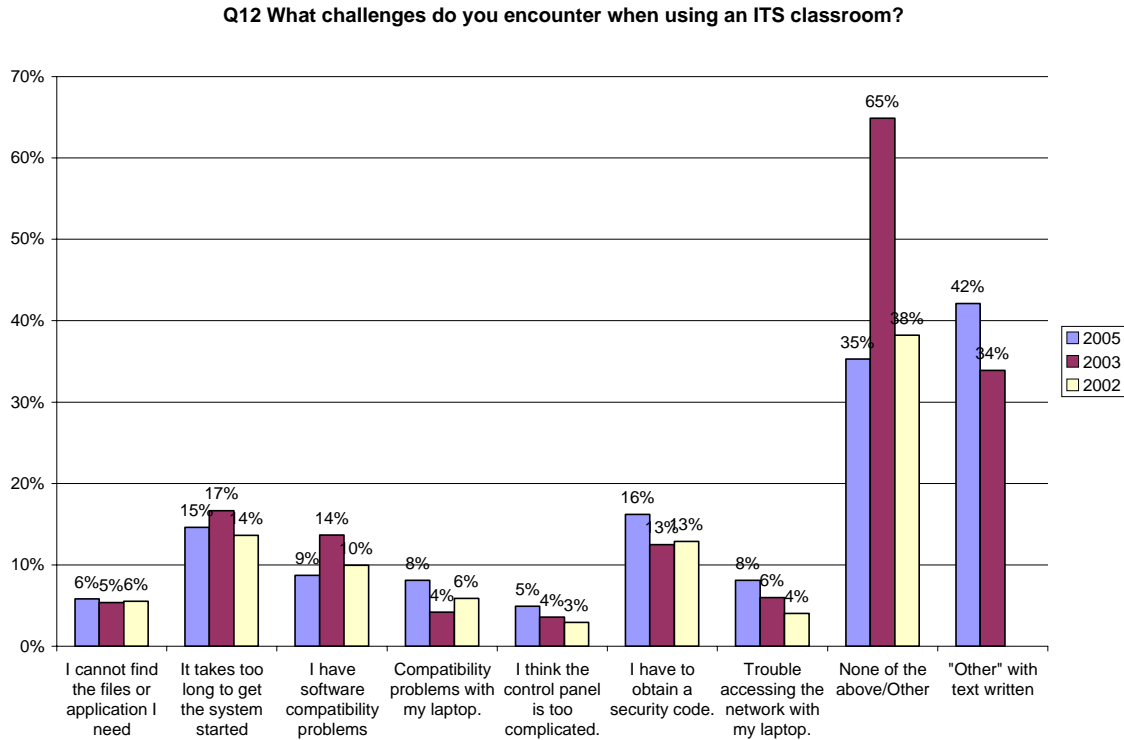


Clearly the numbers have stayed relatively constant since the 2003 survey. Four out of five instructors are using the system everyday. As the number of classrooms has increased, there are many more courses taking advantage of the technology at any given time of day. Therefore it is very important for the trained staff of technicians and support personnel to conduct preventative maintenance whenever possible and to be prepared to assist instructors when the situation requires it.

Challenges to ITS Use

Using the ITS equipment can have its problems and, on the part of instructors, requires another layer of teaching "skill." When problems or limitations are encountered not only is it an annoyance for the instructor, it can also be very distracting for the students as well. Figure 5 shows what challenges were considered to be the most prevalent when dealing with the ITS classrooms.

Figure 5



In Figure 5 above, note that this is not a forced choice question so respondents could check more than one answer if they felt it was appropriate to do so. Such a heavy reliance on classroom presentation technology does have its costs. 15% of the sampled instructors remark that it takes too long to get the system started.

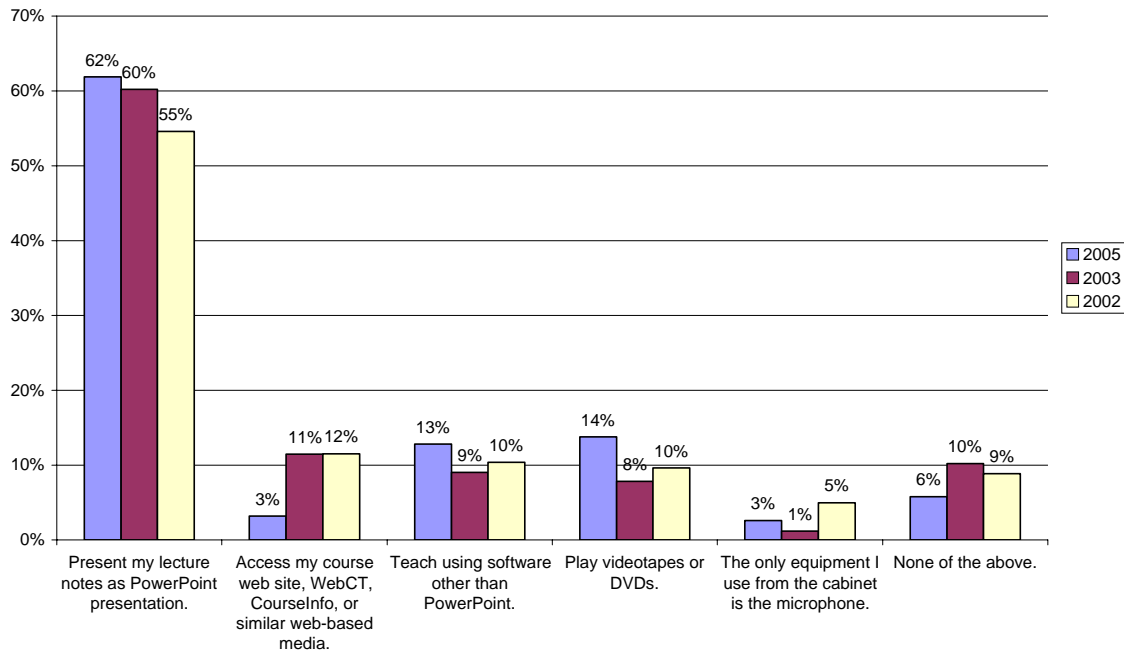
The number of respondents who indicated that obtaining a security code was a problem increased from 13% to 16%. ClassTech created a web form to improve the code request process in 2003. Codes are e-mailed to requestors within an hour on average.

Common Uses of ITS

In Figure 4 below, the response data are summarized concerning how the systems are most often used. In many classroom situations an instructor uses several forms of media during a 50-minute session. We wanted to know the most common task that involved audiovisuals.

Figure 6

Q15 If you had to pick one way to describe how you most often use the ITS classroom, which would it be?



As shown in Figure 6, PowerPoint is now more commonly used than it was even in 2003. From personal communication with many faculty, it appears that the Microsoft application is a starting point for instructors before they go on to use other forms of educational technology, such as courseware tools like Illinois Compass.

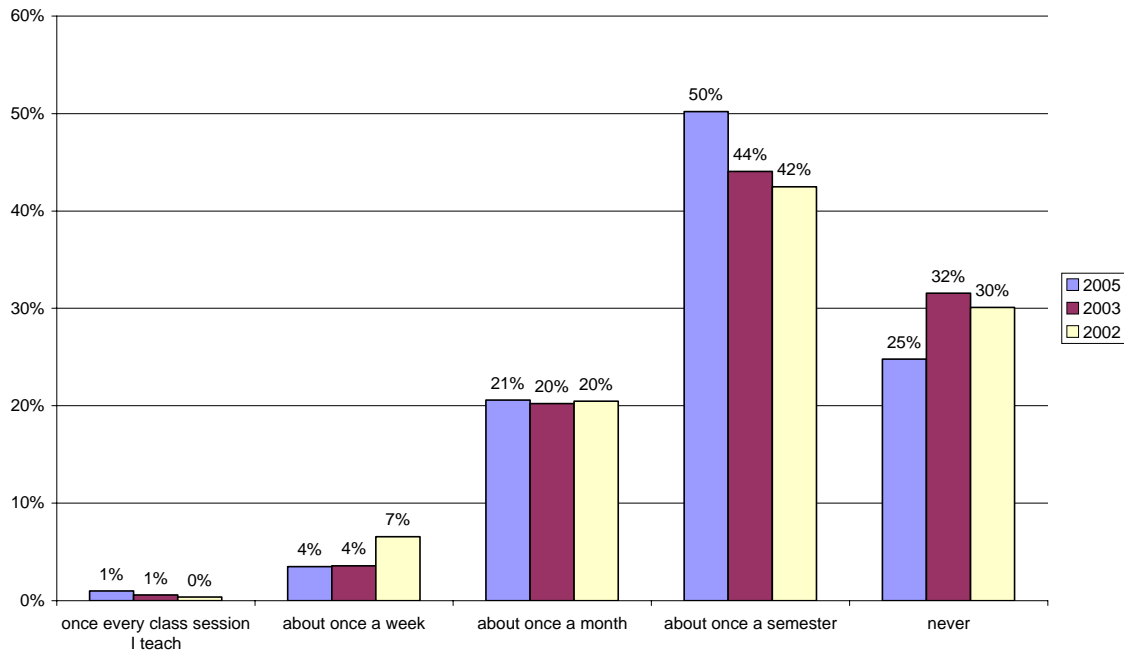
It should also be noted that video use is on the rise, increasing 6% from 2003. In this particular question VHS and DVD use were combined, though we know from other questions on the survey that VHS use has decreased slightly while DVD use has increased significantly.

Frequency and Source of Problems

Some technical problems, such as those listed in the section titled, Challenges to ITS Use, are simply a nuisance. However, some problems result in a lost class session or a topic has to be skipped entirely for the course, seriously impeding instruction. Figure 7 shows how often instructors indicated this occurred in their class during the past year.

Figure 7

Q16 How often do you encounter problems with the ITS equipment that requires you to modify your classroom lecture/presentation?



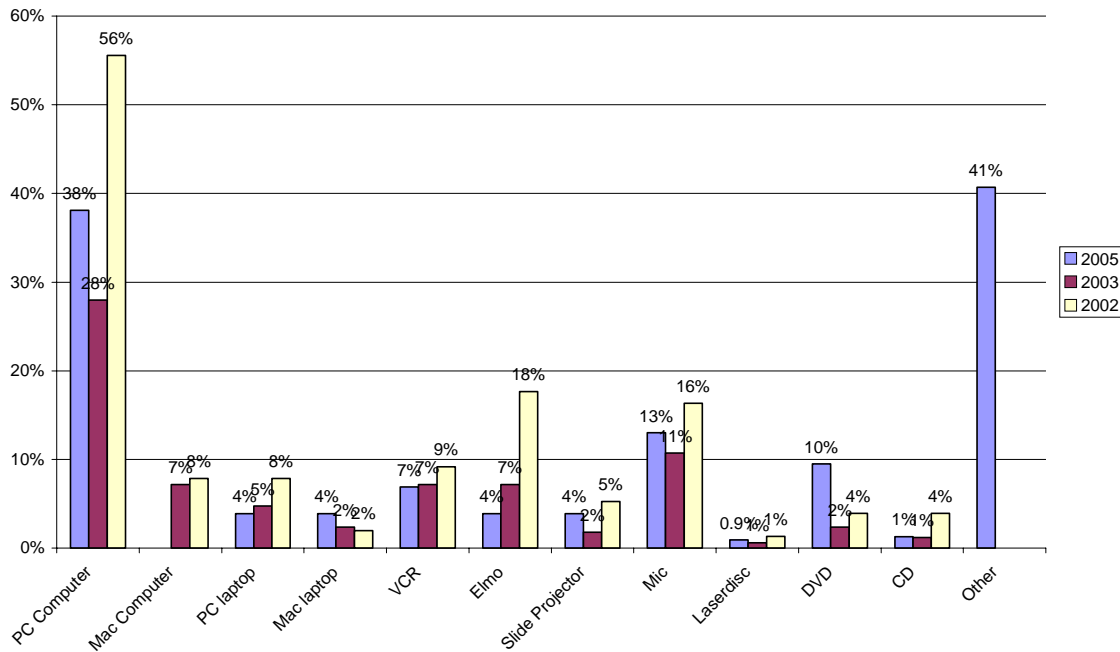
The largest group of instructors reports a serious problem with the equipment only once a semester. However, a quarter report a problem at least once a month or more. Problems could range from a complete system malfunction to a problem with the campus network. Nevertheless, CITES ClassTech continues to make improvements to its systems to lessen the number of technical breakdowns. New projectors were installed in many existing ITS classrooms during the past year. In January, 2005, new Dell computers were installed in all the full ITS classrooms. Preventative maintenance is done at the end of each semester which also reduces problems. However, some equipment is approaching or has surpassed its projected lifespan, which can lead to breakdowns. It should be noted that problems can occur not only as a result of malfunctioning equipment but because of improper operation by previous users. A significant proportion of reported problems have been identified as user error and the equipment found to be in working order.

When problems do arise, users can contact CITES ClassTech and a staff person will arrive in the room within ten to fifteen minutes on average. Many problems can be remedied immediately during the class session, if the instructor allows.

It is difficult for classroom users, without the requisite technical knowledge, to diagnose what pieces of equipment are the culprits when problems arise, but we ask them for their opinions in the survey. Figure 8 outlines which of the items users feel cause most of the problems.

Figure 8

Q17 If you indicated in the previous question that you had to modify your lecture/presentation, what piece(s) of equipment appeared to be the culprit?



In Figure 8, the PC computer is listed as the most frequent culprit of problems in the classroom, though it is also certainly the most frequently used and requires the greatest amount of support. As mentioned previously, all of the PCs were replaced during the Dec. 2004-January, 2005 break. So, many of the survey respondents who taught in fall 2004, are basing their opinions on equipment that has since been replaced.

The new Dell computers, with 3 GHz processors and removable hard drives, have proven to be reliable, fast, and easy to use. A USB extension is also on each PC workstation so that users can connect USB devices quickly and easily without having to gain access to the rear of the computer.

Comments Concerning Equipment Problems, Culprits, and Challenges

The issues described below are just a sample:

“It is sometimes difficult to get the projector to project what’s on the monitor.”

“The projector is too dim to show videos.”

“The system is really slow in responding to ‘commands’—i.e., when I switch from computer to video, there’s a lag. When I hit Fast Forward or Play, there’s a lag....”

Audio/Visual Equipment

Comments Concerning Projectors

The projectors are the most critical piece of the ITS package. Without the projector, nothing but the classroom microphone is of any use. There were no survey questions that dealt directly with the projector. However, respondents chose to single it out in many of their open-ended responses. Table 9 is a collection of comment categories addressing the ITS projectors.

There were 23 open-ended responses where instructors indicated that the projector was believed to be the culprit when the ITS was not working properly. There were 4 who thought the brightness was not high enough for students to see the images properly. However, even with the increased brightness of the latest LCD projectors, ambient light needs to be reduced, especially at the front of the room and close to the projection screen. Most of the ITS classrooms have the lighting set in such a way that the light fixtures near the screen can be turned off, but the fixtures over the audience can be left on so the projected image is not “washed out.”

Table 7

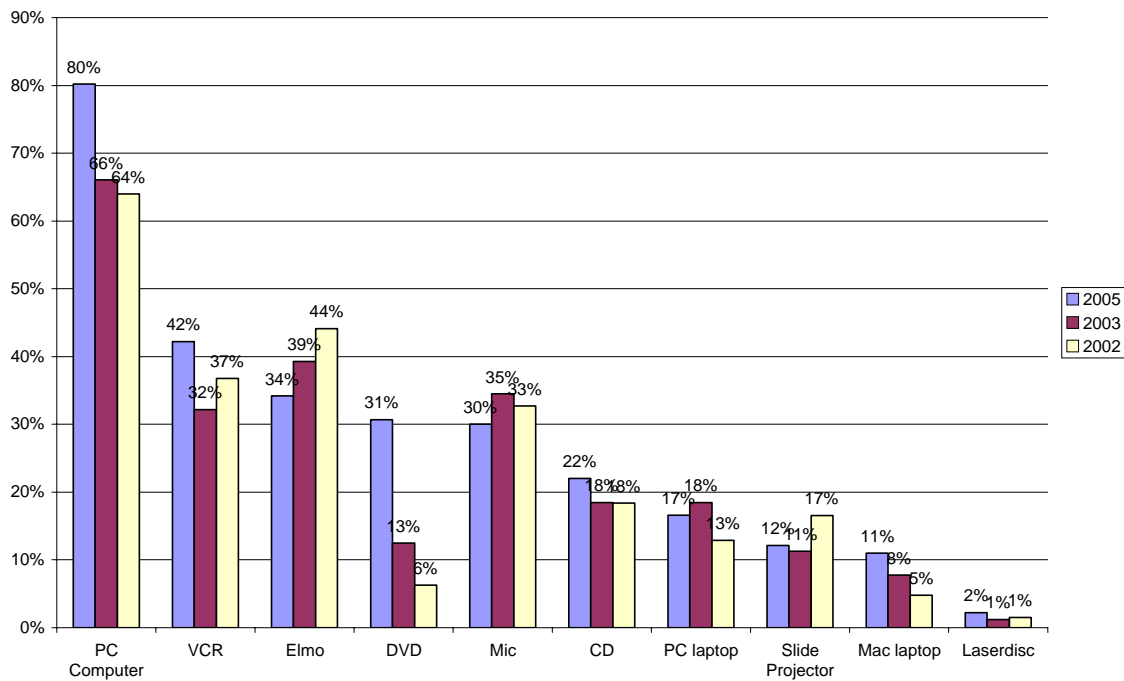
Comment Category	# of Respondents
Projector was culprit when there were problems	23
The projector was not bright enough	4
The projector is too loud	1
The projector shuts down when idle	3

Typical ITS Equipment Use

In Figure 9, the data shows what instructors made use of on an average day when they were in the ITS classrooms. Respondents could check more than one item, so the total percentage adds up to more than 100%. From left to right on the bottom axis, items are listed from most popular to least popular.

Figure 9

Q2 On a typical class day, what ITS item or items do you use?



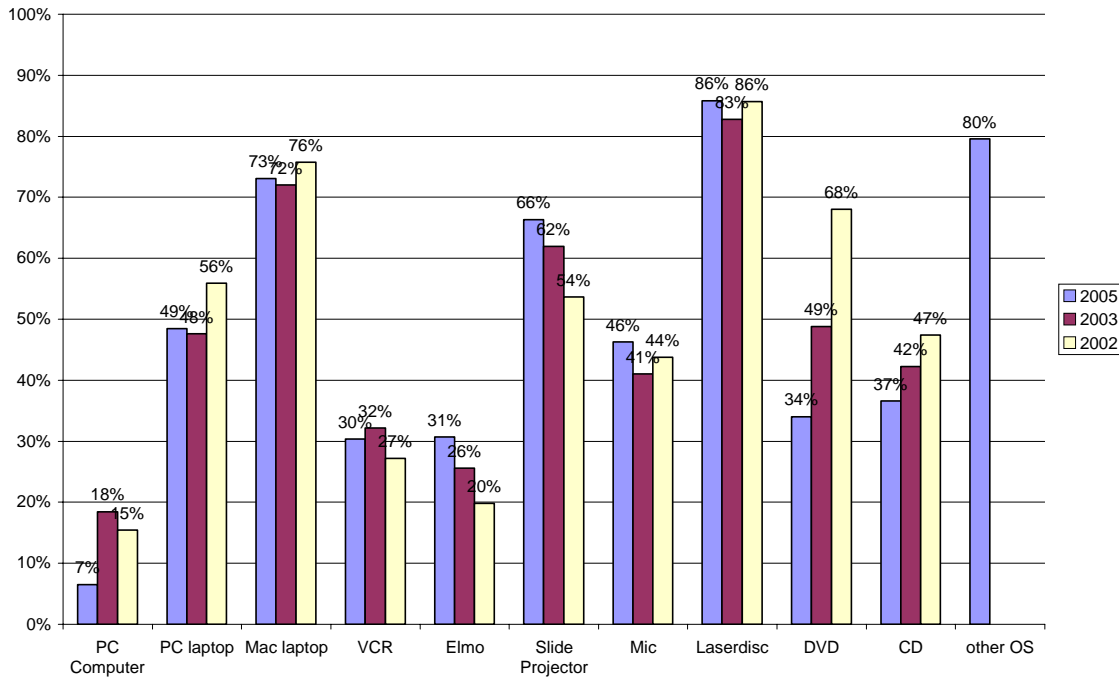
In Figure 9 above, one can see a typical class day more than 80% of all instructors make use of the PC computer, a 14% jump over 2003. For the most part all the devices are used with much the same frequency as in previous years. Use of the visual presenter or “Elmo” is steadily declining and DVD usage has jumped significantly since last year.

Seldom Used ITS Equipment

Figure 10 highlights the equipment that does not get used in the ITS classrooms. Note that the laserdisc and stand-alone DVD players are only housed in a handful of the classrooms.

Figure 10

Q3 Are there any items that you have NEVER used in the ITS classrooms?



The number of people who say they never used the PC continues to drop. Overall, compared to 2003, fewer instructors are using the visual presenter or the slide projector. This was verified in Figure 7 as well. Use of the VCR has stayed fairly constant. Much of the instructional material on VHS used by instructors has not yet been migrated to DVD. Also, some departments still have extensive laserdisc libraries.

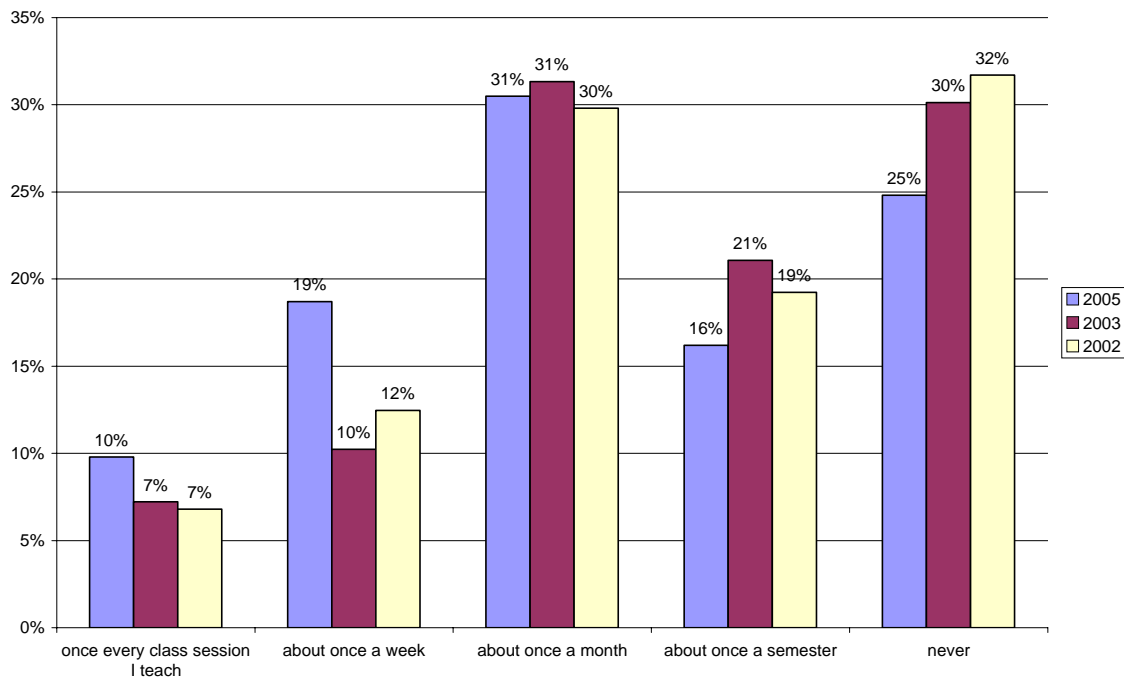
Though the slide projector is fourth on the least-used list, many instructors still make heavy use of it. In fact, of seven campus instructional award winners who were interviewed two years ago, two insisted that the slide projectors remain a standard feature of the lecture halls and that their removal would be devastating to their ability to teach their courses.

Use of Video

A growing number of users are relying on DVD media. However, there have been occasional problems when playing DVDs in the Windows computers. The problems have been experienced beyond just the classroom and are an industry-wide concern. Even stand-alone DVD players will encounter a playback problem on occasion, due to media that is not clean, not formatted properly or other problems.

Figure 11

Q7 How often do you show video (VHS, DVD) with the projector?



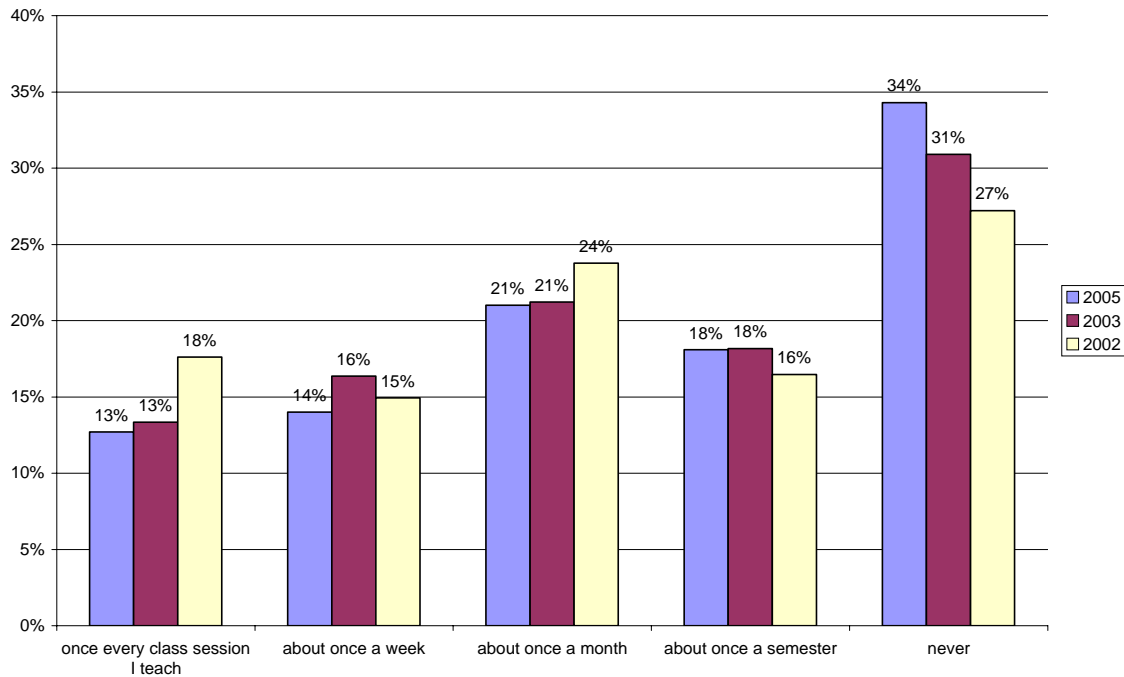
The number of instructors who never use video has steadily declined, while the number who use it on a regular basis has increased.

Use of Document Camera

The document camera is a device often thought of as allowing for an easy transition from traditional forms of media presentation like the transparency projector to a more high-tech system like ITS. Although once the most popular piece of equipment in the ITS cabinet, Figure 12 shows that there is a steady decline in its use. This was confirmed by other questions concerning equipment as well.

Figure 12

Q8 How often do you use the document viewer or overhead camera (a.k.a. "Elmo")?



Some instructors are still expecting a higher level of quality than what a document camera can produce, and have commented that it is useless until the resolution is improved. Although higher resolution document cameras exist, they are extremely expensive.

Comments Concerning Specific Audiovisual Equipment

The comments in Table 8 are addressing specific pieces of equipment in the ITS classroom. There is no question that audio is an important component of the audiovisual system, especially in larger lecture halls.

Obstacles to good audio most commonly are a dead battery when it comes to wireless microphones. The CITES ClassTech staff checks the wireless microphones and re-stocks batteries in the classrooms at least twice a week. Wireless microphones are also very sensitive pieces of equipment that do not stand up well to daily abuse. During preventative maintenance appointments, CITES ClassTech staff find many microphones with frayed wires, cracked cases, and other damage that causes intermittent problems. The training staff works with faculty to improve the handling of these devices.

Table 18

Comment Category	# of Respondents
Microphone problems	6
Doc camera is not as bright as a transparency projector	1
VCR problems; VCR audio problems	3

A few examples of comments made by respondents concerning specific equipment::

“The batteries for the microphone are gone or do not work.”

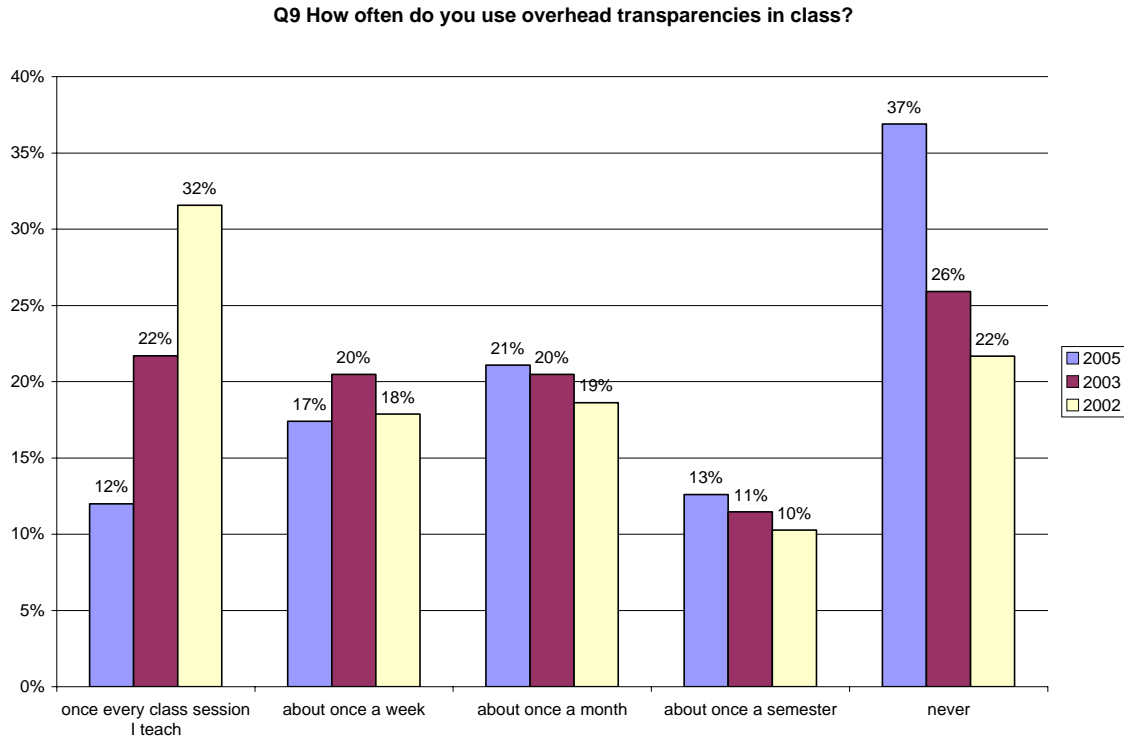
“Microphone is not always there...not always working when it is.”

“I have repeatedly reported problems with the VCR: color films jump to grainy black and white for up to 30 minutes at a time, etc. It has been checked repeatedly and while nothing is wrong, it continues to work poorly half the time a video is running, not matter which video is being used.”

Overhead Transparency Use

Even though ITS classrooms have an abundance of high-tech presentation equipment from which to chose, many instructors prefer to make use of the transparency projector at some point during the class sessions. There is at least one transparency projector in each of the more than four hundred general assignment classrooms. These projectors are now maintained by CITES Classroom Technologies. Figure 13 below shows the frequency of use of this device.

Figure 13



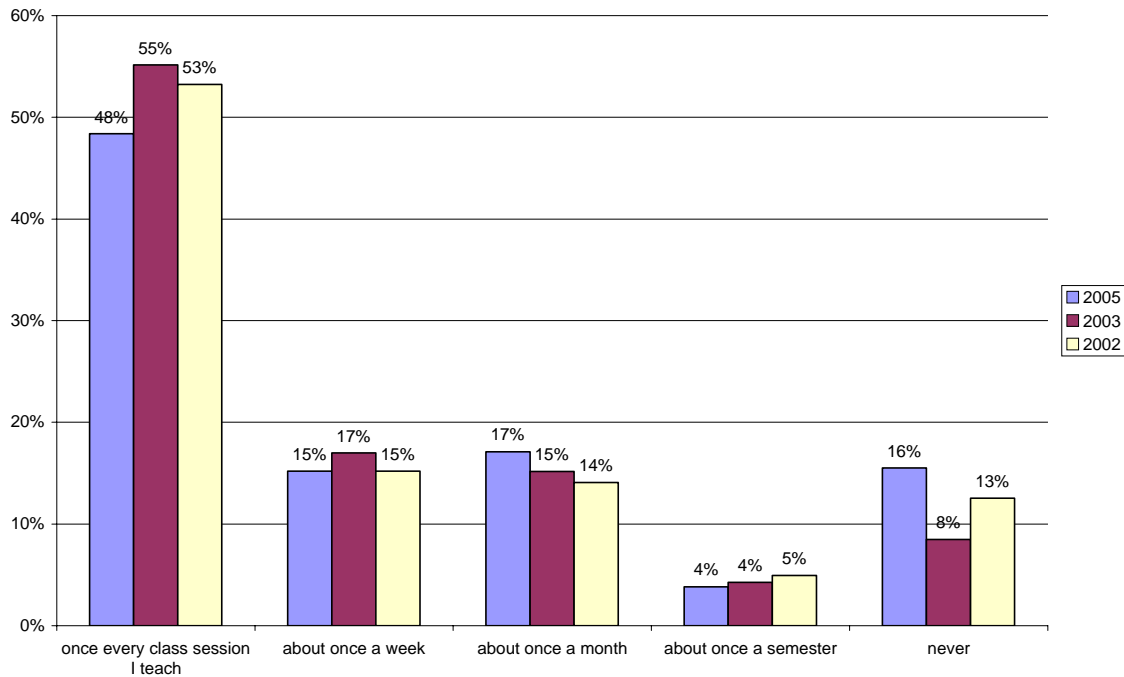
This year there was a sharp 10% drop in the heavy use category, “once every class session I teach.” Nevertheless, 29% still use it at least once a week. Many instructors use the transparency projector much of the time along with the other presentation tools and will probably continue to do so in the foreseeable future. For example, instructors will place the lecture outline on the transparency projector and use the ITS for PowerPoint.

Chalkboard Use

Like the transparency projector, the chalkboard is in every general assignment classroom. Chalkboards offer an easy way for instructors to present small chunks of information spontaneously or on-the-fly. Many instructors feel this is a critical part of the teaching process, a part not allowed by static, prepared PowerPoint presentations. Most of the instructors assigned to ITS classrooms make use of the chalkboard along with the other forms of instructional media. Figure 14 below shows how frequently instructors indicated using chalkboards.

Figure 14

Q10 How often do you use the chalkboard in class?



Used even more often than the transparency projectors, the chalkboards are used by 63% of instructors at least once a week or more.

Going back and forth between electronic media and the chalkboard is a desire of many instructors and presents some real challenges for classroom design. Not only do the projection screens often obscure the chalkboards in many classrooms, but they require opposing lighting scenes. Typically what is good for one is not good for the other and a compromise is required. For instance, many classrooms have a bank of lights available for illuminating the chalkboard directly, often a requirement in lecture halls. Conversely, those same lights and any other lights illuminating the front of the room will wash out whatever is being projected on the screen, making any video or computer images difficult to see.

Computers

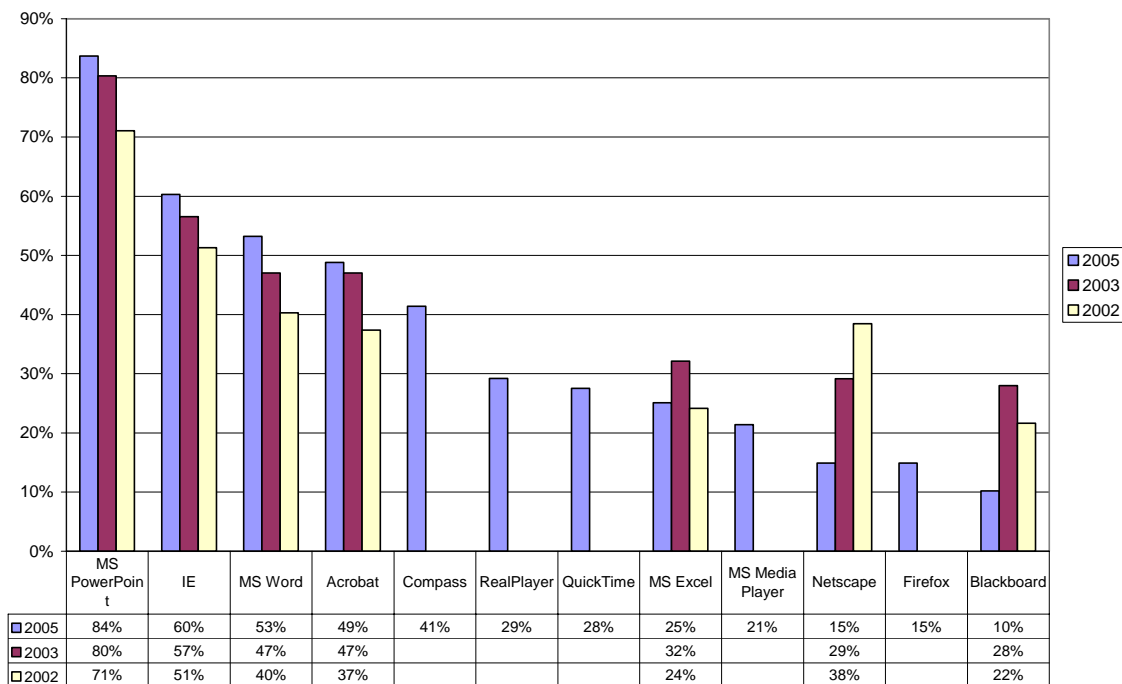
Computers are one of the most expensive commodities in the ITS classrooms, though they are a powerful teaching tool. They demand a great deal of expertise to support, which is why they are served by a group of CITES ClassTech staff members separate from the instructional media technicians. These team members install a basic software package along with special software requests, set permissions, as well as handle issues related to security, hardware, and networking.

Software Tools

CITES ClassTech provides a number of software packages on the ITS computers by default, though instructors can request additional software when necessary. Figure 15 shows only the top twelve most popular software applications. The total number of applications installed on the computers is more than twice that number.

Figure 15

What software tools do you use to deliver instructional content to your class?



Most noticeable in Figure 15 is that there is an increase in use amongst the “big four” overall. There has been a decrease in Netscape usage, though it is still high on this campus. However, Firefox, a browser installed on classroom machines since January, 2005, is already equal to Netscape in number of reported users. Not surprisingly, PowerPoint is still the leading software tool of instructors on campus.

A greater number of programs are installed by default on the computers every year, which has not necessarily resulted in reduced install requests from users. New applications are continually promoted and requested.

Comments Concerning Resident Computers

In Table 9 there are a number of comments requesting services that are currently offered by CITES ClassTech. For example, a number of respondents request a location where they can save files on the local computer or a method to connect with remote servers in their home departments. CITES ClassTech has made this possible since 2000. Instructors can save their work to the “Classes” folder on the desktop. Such a misunderstanding can easily be remedied through better communication procedures and training programs, a matter which will be addressed later in the report.

Table 9 shows a list of comment categories and the number of corresponding responses pertaining to the resident computers.

Table 9

Comment Category	# of Respondents
Specialized software problems (requested software installs)	3
USB port inaccessible	7
No floppy drive	1
Problems with Quicktime specifically	2
Trouble downloading from NetFiles	4
Problems with CD and DVD player software	6
Macintosh-produced files do not work on resident PC	2
Keyboard and mouse are clumsy (FLB room)	1
Need more Macintosh support	5

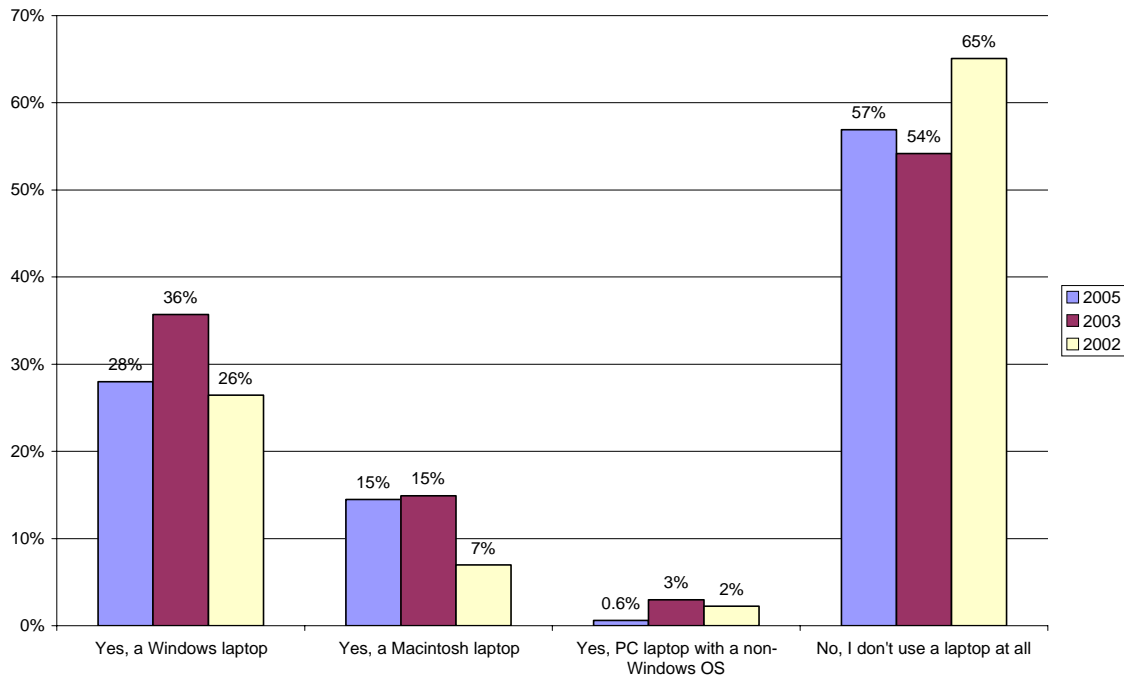
Many instructors believe they need access to the back of computers or find the port placement confusing. USB extension cables have been on ITS computers since 2003. Even with the installation of new computers with front-side USB ports, extensions have been installed to improve the ease with which USB devices can be connected.

Laptop Computer Use

As noted in the 2004 survey, some instructors like the security of knowing their instructional content is with them on their own machine and that it can be manipulated at any time. Also, there may be some issues when accessing password-protected resources from the classroom computers, a roadblock that can be avoided with the use of a personal laptop. Figure 16 presents to what degree instructors make use of laptop computers in the classrooms.

Figure 16

Q4 Do you use a laptop computer in the ITS classrooms?



There was an 8% decrease in Windows-based laptop usage between 2003 and 2005. The decrease may be due to the addition of the new resident computers, which are more powerful than the previous machines and are more reliable.

Comments Concerning Laptops

Table 10

Comment Category	# of Respondents
Too many laptop cables (network, power, video, audio)	1
Laptop connection or interface problems	10
Need resident computer in all ITS classrooms	4
Need more campus Macintosh support	5

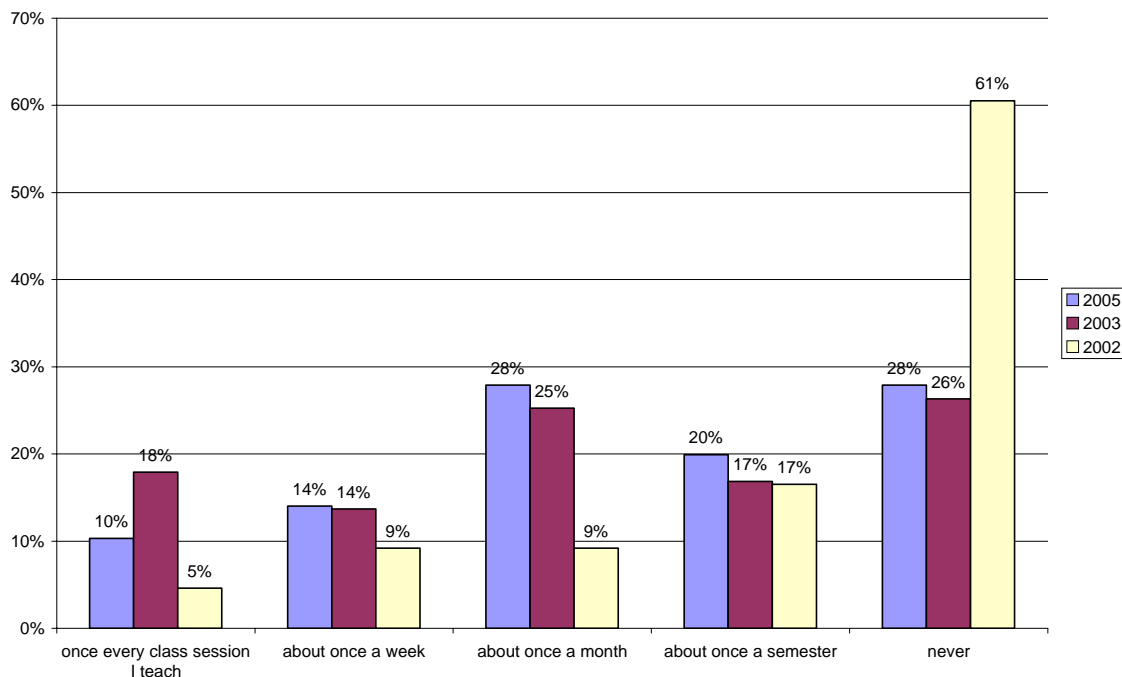
A significant number of laptop users reported video connection problems. More often than not, ClassTech assistance will remedy most laptop problems. Booting after the audiovisual system has started, setting the screen resolution and refresh rates to recommended levels, and making necessary horizontal position adjustments has corrected nearly all reported laptop problems. These tips are included in the ClassTech online training videos and documentation.

Networking Laptops

Networking a laptop in an ITS classroom has never been easier. More classrooms are on the ClassTech network, and a form on the ClassTech website which requires a user's machine address allows our staff to register that user, who can then move from ITS classroom to classroom without having to enter a different static IP each time. As the network upgrade continues, it allows greater flexibility in how connectivity is handled, therefore making it an easier process for instructors. The network upgrade will also increase the reliability and speed of the network overall. The addition of wireless in many buildings also improves instructor access. Figure 17 displays how frequently instructors make use of the network when using their laptop.

Figure 17

Q5 If you use a laptop computer, how often do you connect to the network?



Problems with network connectivity are largely out of ClassTech control. There are still several classroom buildings on campus that are in need of upgrading and are relying on older, slower, CAT 3 wiring. The network is also administrated by building network administrators, most of whom are unknown to us. They are often not CITES employees and making connections with these individuals can often be difficult.

It is difficult to explain the drop in network usage. One reason could be the wider wireless availability.

Comments Concerning the Network

Only four respondents reported problems with the network and no one mentioned wireless needs. These kinds of comments were common in previous surveys. One could assume that network problems are becoming less of an issue in classrooms.

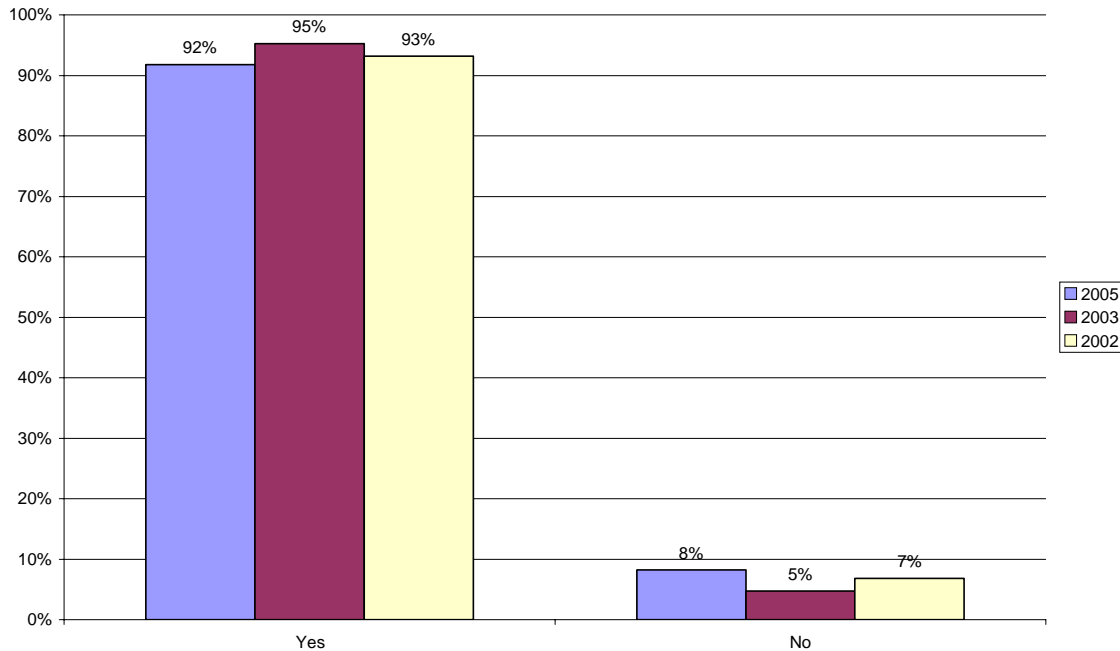
Training and Support

Training by CITES ClassTech Staff

In December, 2004, the ClassTech policy of requiring training of all ITS classroom users, whether teaching assistants or full professors, was terminated. Still, training sessions are offered and many instructors continue to register for these hands-on, one-on-one meetings that usually take place in the classroom to which the instructor is assigned. Workshops are also offered just prior to the start of semesters. Figure 18 shows how many instructors indicated that they had received ClassTech training.

Figure 18

Q13 Have you ever been trained to use the ITS classroom by a CITES ClassTech (or OIR) staff member?

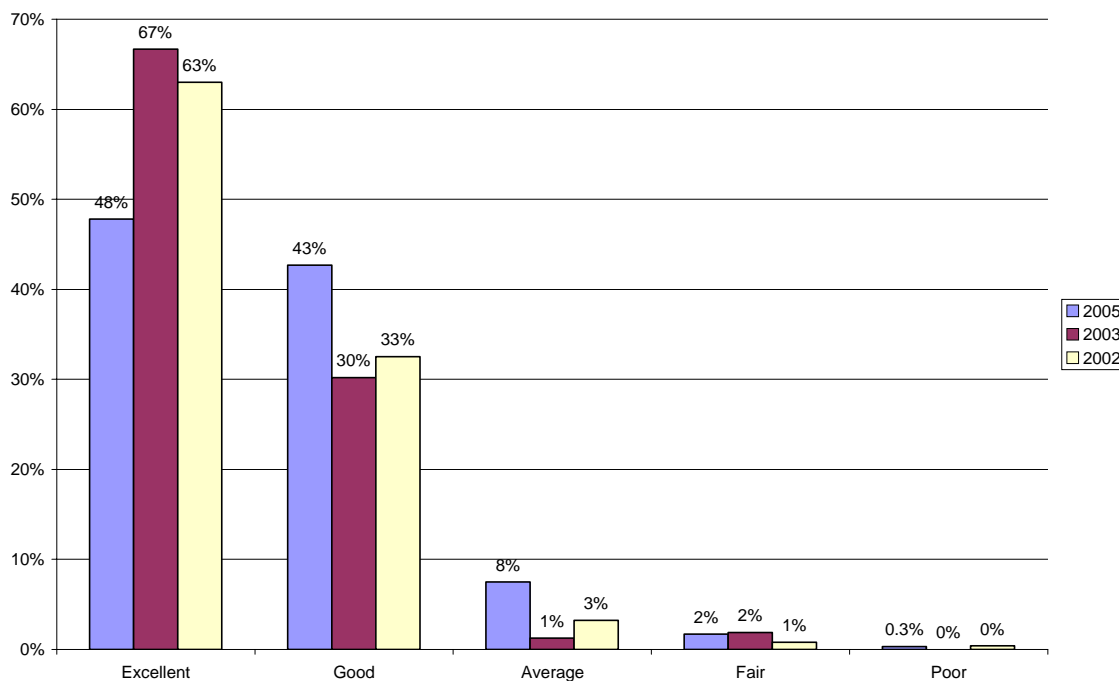


The 3% difference between the 2005 and 2003 surveys is negligible. There are still instructors who are unaware that training and support are even offered, obtaining security codes from colleagues and departmental support staff rather than registering through the ClassTech website. Others are teaching assistants, given codes by their instructor and made responsible for running class presentations. CITES ClassTech makes every attempt to contact the faculty and staff who are assigned to use the ITS classrooms weeks before the start of every semester. E-mail is sent out to all instructors, either targeted or through massmail and eWeek announcements.

Quality of Training

Figure 19

Q14 How would you rate the quality of the training you received?



This year there was a sharp drop in “excellent” ratings, down 19%. Still, 91% of the 2005-year respondents felt the training was either “Excellent” or “Good,” which is close to past survey results. The graduate student coordinators, who had taken over much of the responsibility of instructor training, had fewer opportunities to build up expertise. Three of the four were new to CITES ClassTech in 2004 and two were new to the University. ClassTech will be returning to full-time staff to handle the training and support duties.

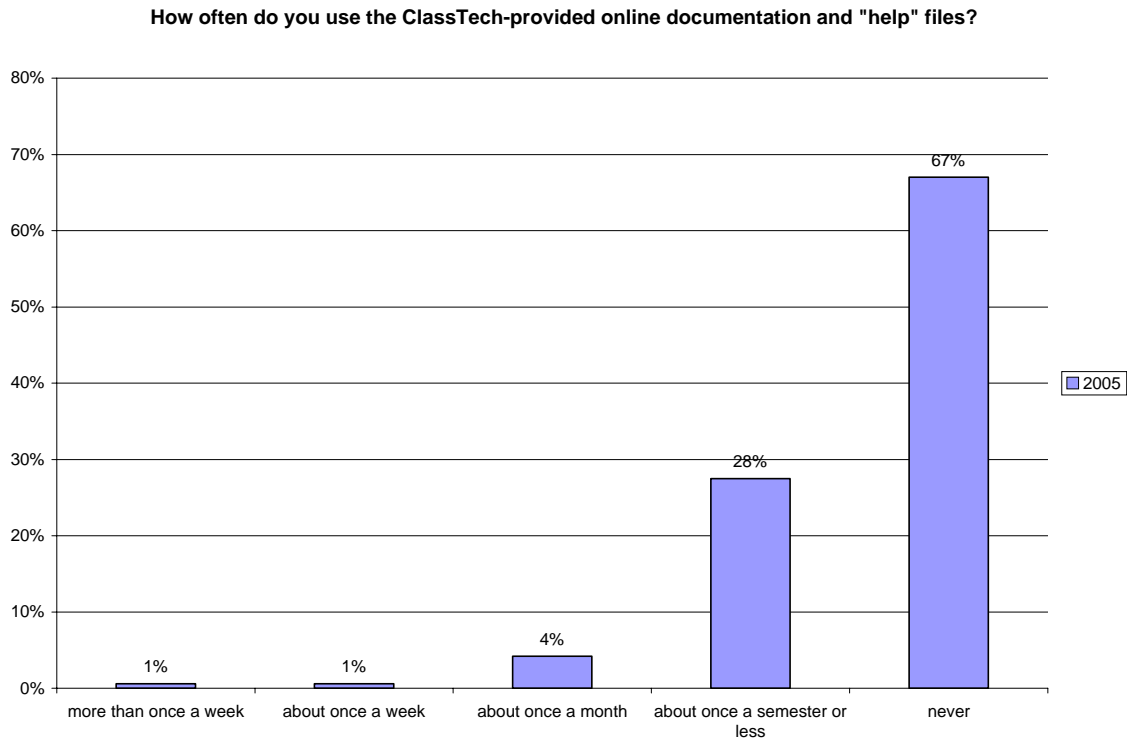
Training Comments

Three respondents commented that the training requirement is bothersome and they wish to do away with it. These instructors are most likely users from the fall 2004 semester and did not use the systems in the spring of 2005. ClassTech no longer requires training.

Provision of Training Materials

In past surveys, a number of instructors have asked for printed training materials to be provided by CITES ClassTech. The coordinators have made a number of downloadable documents available on the ClassTech website. Also, two-page documents outlining basic steps to equipment operation have been included in all the partial ITS classrooms and the push-button controlled ITS classrooms. Still, there were two respondents who in the open-ended portion indicated that ClassTech could do a better job here. One of them recommended that a one-page document be available on the outside of the cabinet, offering advice on how to get into the cabinet and how to shut it down and arm when complete.

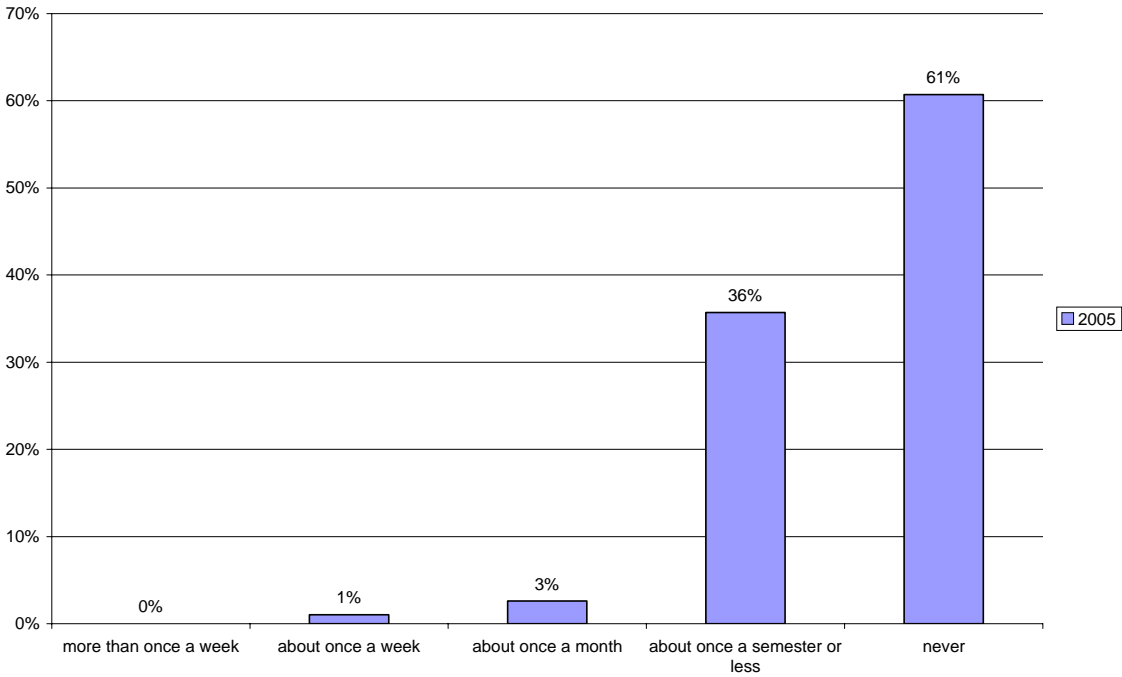
Figure 20



At least one-third of respondents are accessing the online documentation. We have not yet analyzed what percentage of survey respondents are first-time ITS users, information that will be valuable in ascertaining what level of experience the instructors have that need online assistance.

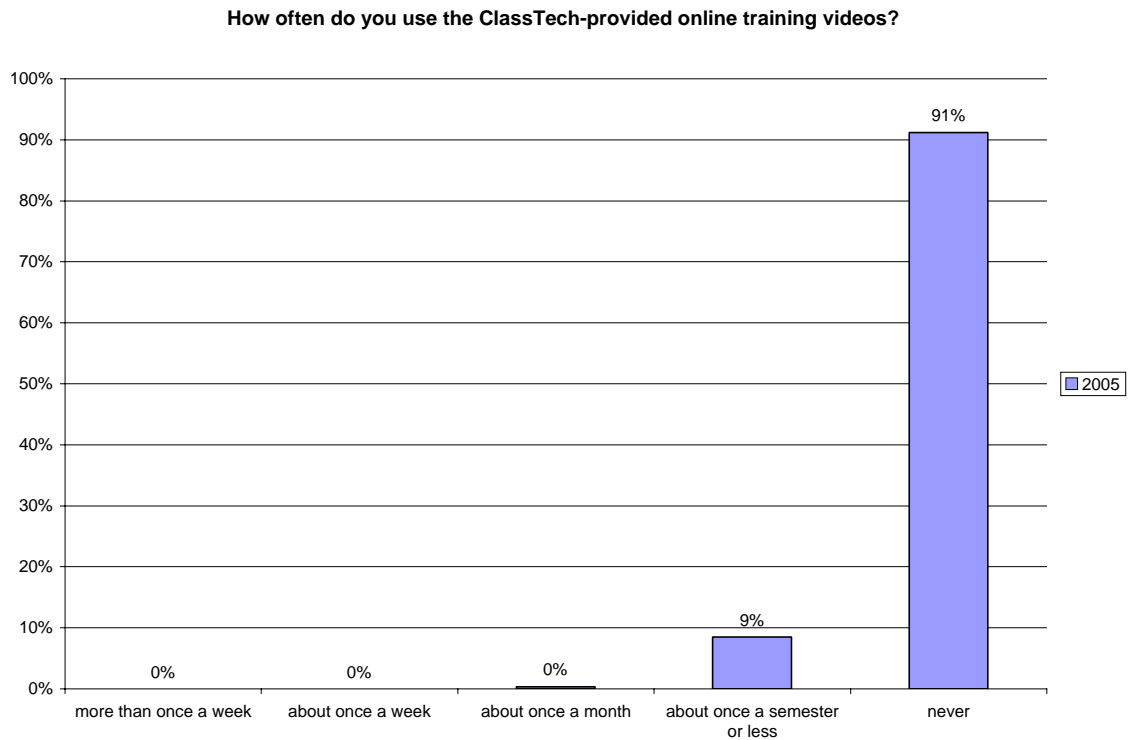
Figure 21

How often do you use the ClassTech-provided online images of ITS classrooms?



As noted in Figure 21, online images are the most frequently used asset on the CITES ClassTech website. This is true not only for the classroom users but the ClassTech staff as well. They often rely on the images as they correspond with users via the phone and e-mail, in real-time or asynchronously.

Figure 22



The online videos were produced using Serious Magic's Visual Communication authoring tool. Video segments average 3-5 minutes in length and cover general ITS classroom use as well as specific tasks such as connecting a laptop. As noted above in Figure 22, few respondents have taken advantage of this resource, most likely because users generally are unaware of the online availability of video. ClassTech will do more promotion of all the online resources that exist.

Support

Five respondents commented that we did not inform them of recent changes to the system, such as the new computer installations and their lack of floppy and Zip drives. Though few in number, these kinds of comments require us to re-consider the manner in which we communicate with potential users. Another respondent commented that "I have no idea what 'classtech' is." We are still a relatively new unit in name and the connection between ClassTech and the ITS classrooms is not a strong one in everyone's mind. In fact, many instructors still refer to us as "OIR."

Comments Concerning Needs

Table 11

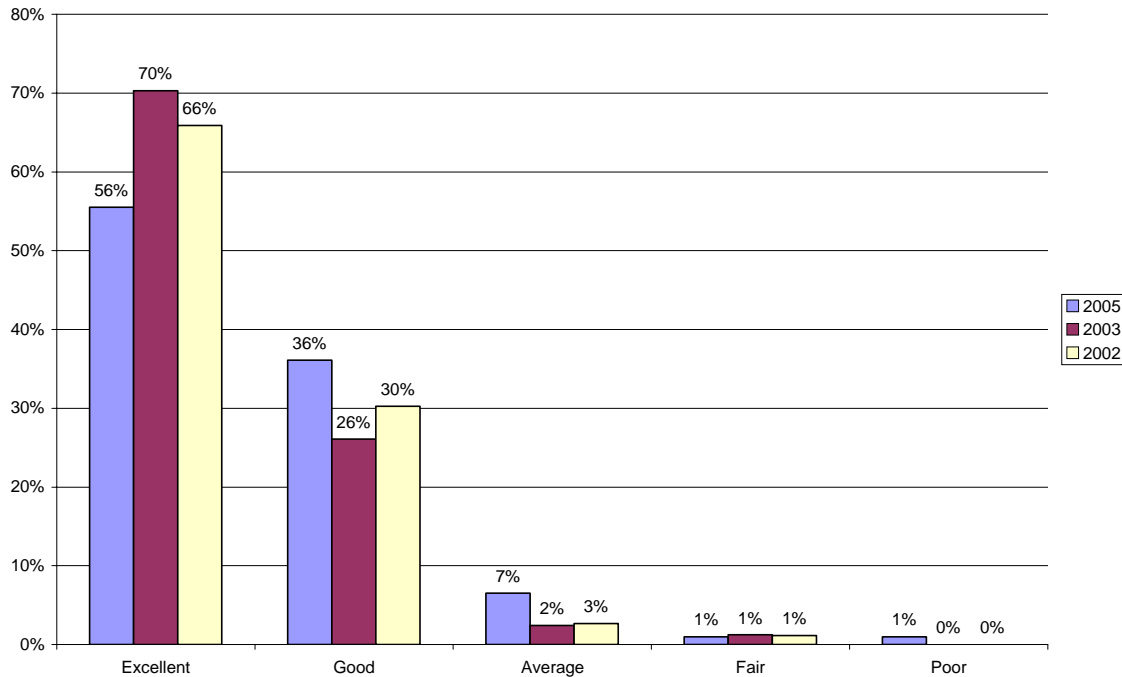
Comment Category	# of Respondents
Need a telephone in the classroom	1
Need television/cable tv	1
Need to provide web building and consulting	1
Need projectionists; 16 mm projector expertise	1
Need to project multiple simultaneous images	1
Need remote controls for the DVD/VCRs	1
Need document cameras in the smaller classrooms	1

The comments made in Table 11 are usually made by one or two respondents every survey. These are requests that often cannot be fulfilled because of the high cost, physical or environmental limitations, or the complimentary support costs are too high.

Quality of Customer Service

Figure 23

Q18 How would you rate the overall quality of customer service of CITES ClassTech (or OIR)?



As shown in Figure 23, there was a 14% drop in customer service satisfaction (for the "Excellent" rating), just as there was a drop in perceived training quality.

Comments Concerning CITES ClassTech Staff

In the open-ended portion of the survey, two respondents stated that a ClassTech staff member was rude to them when contacted about the ITS security codes. As the number of ITS classrooms increase and the level of usage increases campus-wide, ClassTech needs to reclaim its high standards of customer service and train its staff accordingly. Eighteen respondents made positive comments concerning staff knowledge, willingness to help, responsiveness and pleasant demeanor.

Policies

Non-Class Use

CITES ClassTech often receives calls from UIUC personnel who wish to use the ITS equipment for non-Timetable listed functions. With the demise of the Center for Teaching Excellence's Instructional Media Division, we now handle a greater number of these issues. Most non-course related activities are required to pay a per-use fee for accessing the audiovisual equipment. Requests are typically handled on a case-by-case basis. When an operator or assistance is required, there is a per hour charge for compensating our staff. Although there were no questions that addressed this issue directly, some of the non-course related support staff who responded said they desired more of these services.

Said one respondent, "I have been very happy with the training and the facilities. One suggestion- It would be helpful to have a person on-call (especially evenings or weekends) if a problem or difficulties arise when the ITS facility is reserved to be used."

CITES ClassTech hours will be extended later into the evening, beginning fall of 2005. Additional staff will be employed for off-hours assistance.

Security Codes

As has been mentioned previously, each classroom has a lock and an alarm system. A four-digit code is required for entry. Each classroom has its own unique code and ClassTech staff change it at the end of each semester. CITES ClassTech maintains a database for every instructor who has received a code. Information collected consists of e-mail addresses, department, course number, the days and times the course meets, and the location of the course. This information is frequently used to notify classroom users of any modifications to the equipment. It also is used for targeted e-mails and the creation of reports on the demographics of classroom usage.

Comments On Security

Security is a balance between safeguarding the equipment and allowing for ease of use. This often results in a difficult compromise. Respondents have commented, this year and in previous surveys, that the security measures are sometimes an impediment to instruction.

Five respondents had general complaints about the padlocks. For example, they reported that the dials were too difficult to read, previous users put the locks on backwards, and the padlocks are less convenient than the electric locks. A sixth respondent reported that ClassTech should install swipe card readers to make access easier, that it is too difficult to remember the codes, especially when teaching in multiple rooms.

Another instructor wrote that the code policy does not work well when students need access to rehearse for high-stakes presentations. The ClassTech policy states that students cannot have the code, so the instructor needs to be present during any student use of the equipment. This is inconvenient.

Two respondents reported that the codes are changed too often and they did not see the point in changing them at the end of every semester.

It should be noted that two recently remodeled classrooms in the English Building, installed in March, 2005, do not have entry locks. There is still a security system for safeguarding the equipment, however. Students and others can use these systems without needing to request a security code from ClassTech.

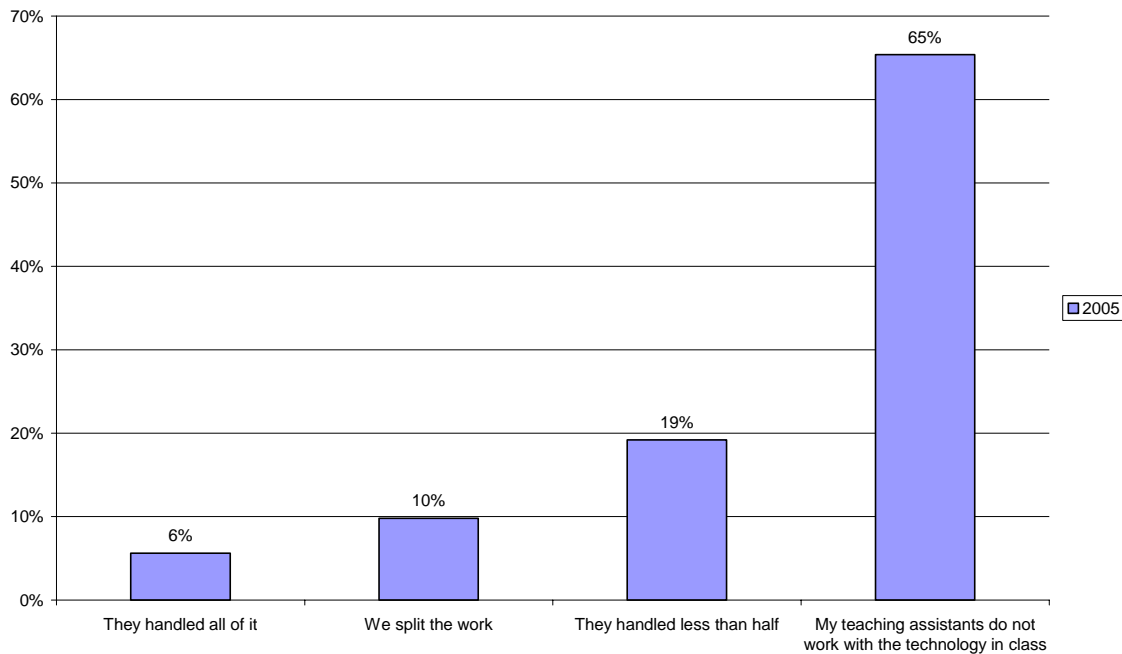
Miscellaneous

Role of Classroom Users

Over a third of teaching assistants are involved in classroom technology at some level. There were 24 respondents who taught in Foellinger Auditorium, 112 Gregory Hall, and Lincoln Hall Theatre. Yet even when just examining these environments—the three largest classrooms on campus—the number of instructors who had teaching assistant involvement with the technology only increased to 43%.

Figure 25

What amount of responsibility do your teaching assistants take for instructional technology in class?



Non-course Related Responses

There were 7 non-course related staff and 24 support staff who responded to the survey. Many of them pointed out that the survey was difficult for them to complete because the questions were more directed at teaching rather than more general use of the classrooms. A sample of some of their open-ended responses are below:

“Make sure there is trained personnel present at all times a little before, during, and little after class. “

“I have used [classroom A] almost as much as [classroom B] for my ...activities. Your survey question should allow multiple choices.”

It should be noted that the main goal of the survey has always been to gain greater understanding of instructional use of presentation technology in the ITS classrooms.

New Classrooms – Foreign Language Building

The eight classrooms in the Foreign Language Building were completed four months prior to the survey's distribution. These were unique rooms—small, stout cabinets with no document camera but with a resident computer and multi-format VCR and a stand-alone DVD player.

Of the twelve FLB instructors who responded, six said the ITS was “very important” and one said it was “important” for their instruction. Four do not use a laptop for instruction but three of them do. All of them use the chalkboard. Two of the respondents commented that they required a remote control to operate the DVD and the VCR. A remote control is not provided by ClassTech in the ITS classrooms, but the ATLAS office provides a check-out service for remotes.

One of the comments from an FLB user is below:

“Everyone has been very nice, even when solutions have not been forthcoming. Remote controls are a must for DVD/VCRs. (Offer a check-out system?) DVD players in FLB should be zone-free.”