

TVI TECHNOLOGY SURVEY TRAINING REPORT BRIEF 2005

The purpose of the *TVI Technology Survey* is to gather data on the current use of — and future needs for — technology by faculty and staff at TVI. These data will be used in strategic planning for both information and instructional technology across the college.

COMPUTER KNOWLEDGE AND SKILL LEVELS

TVI campus personnel are clearly interested in technology training related to increasing their computer knowledge and skill levels. While just over one-third (35.4%) rate their current skill level as “advanced”, double that number (77.9%) would like to achieve an advanced level within the next three years.

Figure 1: How would you rate your current level of computer knowledge and skill?

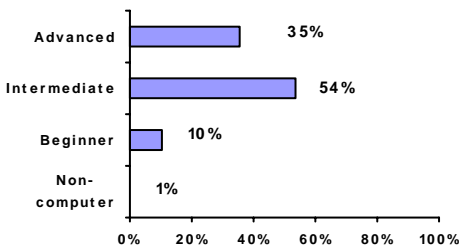


Figure 2: Where would you like your level of computer knowledge and skill to be in 3 years?

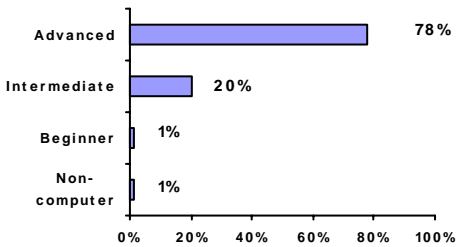
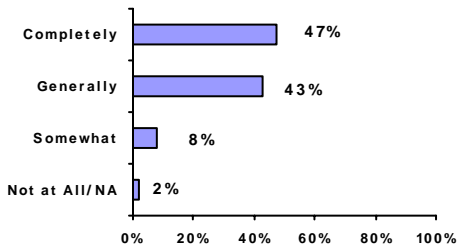


Figure 3: How well does your computer expertise match your job needs/requirements?



SOFTWARE TRAINING NEEDS

Because of this desire to increase skill levels, it is not surprising that 41% (n=238) of the respondents indicate they would use additional software if training were provided. Many indicate a desire for training on more than one type of software.

It is noteworthy that only 2% (n=16) state they would not use additional software if training were available. The table below lists the number of respondents who indicate they would use the software if trained to do so.

Table 1: Software:	Frequency (N=254)
Microsoft: PowerPoint (29), Access (27), FrontPage (27), Excel (17), Project (7), Visio (5), Publisher (6), Outlook (2)	120
Adobe/Macromedia (in general=5): Photoshop (25), Flash (11), Dreamweaver (10), Premier (8), Illustrator (7), Acrobat (2), InDesign (1)	69
Distance-learning related: WebCT (24), Camtasia (2), Snag-it (1)	27
None!	16
Banner (6), Report writer (2)	8
Drawing Programs: Corel Draw (4), Free-hand (3)	7
OS, Linux (4), Mac (1)	5
Passport	4
Two respondents for each of the following: XML, HTML (other than FrontPage), Minitab, SPSS, CAD	10
One response for each of the following: Matlab, Dragon Voice, Testing, ERDAS, Toad, Safari, Crystal reports, Filemaker, Animation, Authorware, Judicial officer, Perl, Java, Chemistry, House plan, Visual basic, SurveyTracker	17
Would use other software if training were accessible (yes, but software not specified)	29
TOTAL	192



Less than two-fifths (39.9%) of faculty members currently have a course website. As might be expected, the majority of respondents indicating an interest in FrontPage training are faculty.

SURVEY METHODOLOGY

The *TVI Technology Survey* was administered in the spring of 2005 to all TVI employees. The survey was initially administered via inter-office mail and was followed by a web-based administration (using *SurveyTracker*) to assure high response rates. The respondents to the survey consisted of administrators (N=81), faculty members (N=317) across Instructional Divisions, and staff (N=182) on all campuses.

- Main (70.7%)
- JMMC (15.2%)
- South Valley (3.4%)
- Westside Instructional Site (7.1%)
- WTC (2.1%)
- Off-Campus (1.6%)

A total of 580 campus personnel completed the survey. Not all respondents answered every question.

Over two-thirds of respondents are full-time employees at the college whereas 32% report part-time employment status.

The surveys were returned to the office of Planning, Budget, and Institutional Research for data entry and report writing.

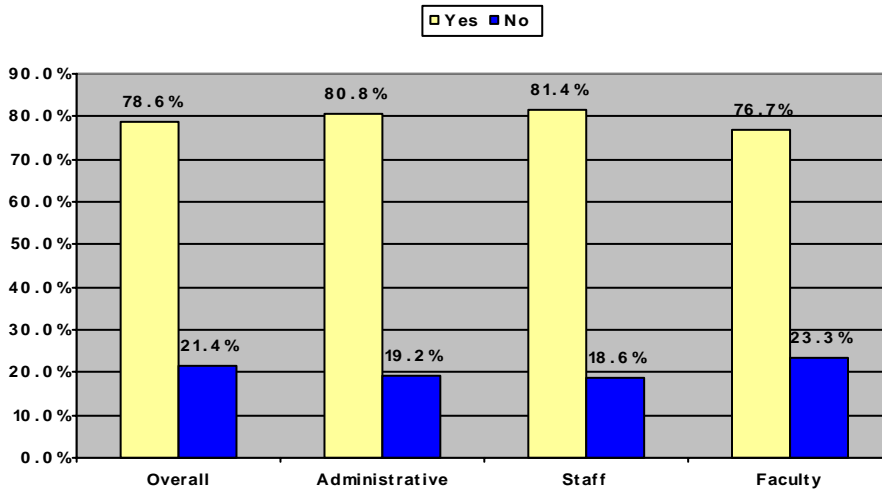
Table of Contents	
Computer Knowledge and Skill Level	1
Software Training Needs	1
Survey Methodology	1
Adequacy of Support for Evaluating Information Technology	2
Satisfaction with Support for Learning New Technology	3
Support Needed for Faculty to Add Course Website	3
Differences by Employment Status	3
Interest in Conferences and Workshops	4
Training Participation	4
Summary	4

The Instructional Technology Strategic Planning Task Team designed the survey in the fall of 2004. In addition to the questions of interest to the task team, additional questions were added to gather data for comparison with results from a prior survey (conducted in 1997) and to gather information for the Computer Information Technology department related to support services. Because of the comprehensive nature of the survey, results are individually reported in three “Briefs” available on the Planning, Budget and Institutional Research website. A complete copy is available upon request. Special acknowledgement to Dave Bergsland (BIT) who designed the print-based instrument and Rosemary Chavez for her work in *SurveyTracker*.

SATISFACTION WITH SUPPORT FOR FINDING AND EVALUATING INFORMATION TECHNOLOGY

As can be seen from **Figure 4**, well over three-quarters of all TVI employees (78.6%) state that TVI gives adequate support to find and evaluate information technology that can improve their work processes. Faculty members are less likely to agree than are staff and administrators.

Figure 4: Percentage of respondent who answer yes or no to “Does TVI provide adequate support services for helping employees find and evaluate information technology to improve work processes?” (N=580)



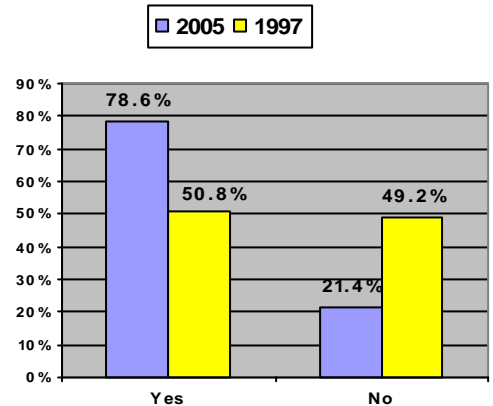
Information technology encompasses the technology involved in developing, maintaining, and using computer systems, software, and networks for the processing and distribution of data at TVI.

Instructional technology is the use of computers, multimedia, and other technological tools to enhance the teaching and learning process.

It is important to note that while the above definitions for each type of technology were provided on the survey instrument, the majority of respondents used the terms interchangeably in answering open-ended questions.

A larger percentage of employees in the 2005 survey administration indicate that TVI offers support for evaluating technology than did so in 1997.

Figure 5: Percentage of respondents who answered yes or no to “Does TVI provide adequate support services for helping employees find and evaluate information technology to improve work processes?” in 2005 versus 1997.



As can be seen from the table to the left, over one in four of respondents who do not believe TVI offers adequate support are unaware that TVI offers any support for evaluating information technology to improve work processes. For those who are aware, lack of time or limited availability of qualified staff members within CIT negatively impact their perceptions of this support.

Table 2: Reasons given (unaided) for those who answered “no” to “Does TVI provide adequate support for helping employees find and evaluate information technology to improve work processes?”

Reasons	Frequency (N=84)
Unaware that this support service is available	24
Negative answers (e.g., “Even with banner, little effort is made to improve processes. Status quo is norm.” “New technology is not embraced at TVI, it is suspect.” “No support is offered for high-level IT needs.”	18
Lack of time for TVI employees or lack of resources within CIT to accommodate limited employee time	8
Respondents indicate performing evaluations individually - without help from TVI	7
Positive comments concerning CIT especially given the “limited resources”	6
Ongoing issues with Banner support and the need to implement additional modules	5
CIT’s disregard for input especially from faculty members	5
No help offered at campuses or locations other than Main	4
Inability to download useful programs	2
Miscellaneous—1 each <ul style="list-style-type: none"> • No MAC support • No support for department-specific software • TLC only for faculty; staff not included • Inability to use private laptop on network • Need early help for new employees 	5



SATISFACTION WITH SUPPORT FOR LEARNING HOW TO USE NEW APPROACHES THAT INCORPORATE INFORMATION TECHNOLOGY

Nearly three-quarters of all TVI employees (73.1%) state that TVI gives adequate support services for helping faculty and staff learn how to use new approaches that incorporate technology. Interestingly, administrators are less likely to agree than are staff and faculty.

Figure 6: Percentage of respondent who answer yes or no to "Does TVI provide adequate support services for helping faculty and staff learn how to use new approaches that incorporate information technology?" (N=527)

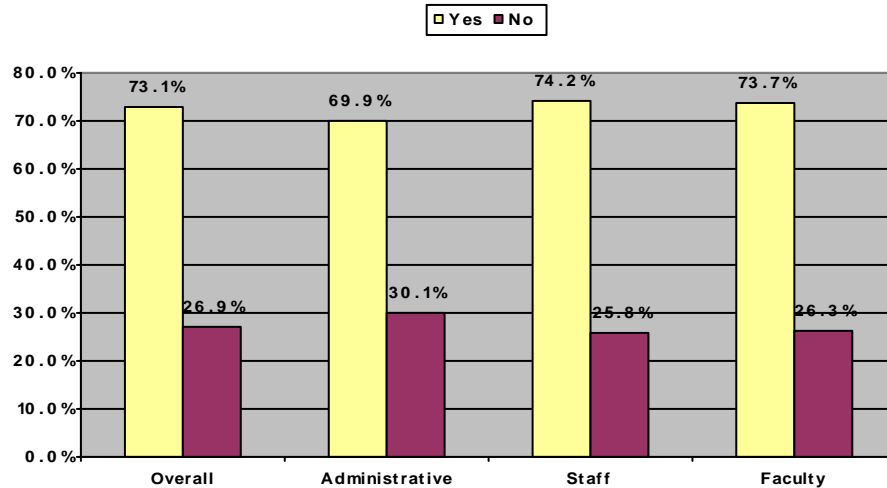
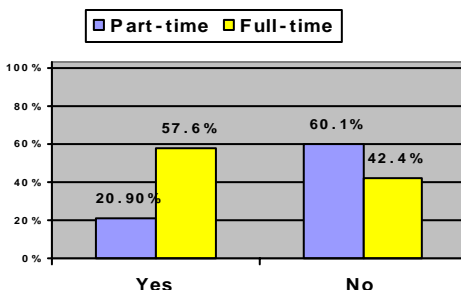


Table 3: Reasons given (unaided) for faculty who answered "If you never had a course website or do not have one now, what would you need to develop one?"	
Reasons	Frequency
Training	108
Time	31
Software	23
Desire	21
<ul style="list-style-type: none"> No desire to do so (9) Need to establish "value-added" for course website (7) No perceived need as Passport is adequate (5) 	
Support:	15
<ul style="list-style-type: none"> General assistance (10) Mentoring (4) Design talent (1) 	
Hardware	8
<ul style="list-style-type: none"> Dependable computer with sufficient space Peripherals (scanners, slide scanner) 	
Student access to computer labs	5

Figure 7: Percentage of faculty who have a course website by employment status (N=313; Full-time=158; Part-time=153)



Previous research at the college indicates a positive relationship between student usage of computer technology including email, internet resources, and specific software applications and student retention.

DIFFERENCES BY EMPLOYMENT STATUS

A larger percentage of part-time employees (80.2%) agree that TVI offers support for learning new technology than do personnel

Figure 8: Percentage of respondents by employment status who answered yes or no to "Does TVI provide adequate support services for helping faculty and staff learn how to use new approaches that incorporate technology?" (Full-time=354; Part-time=167)

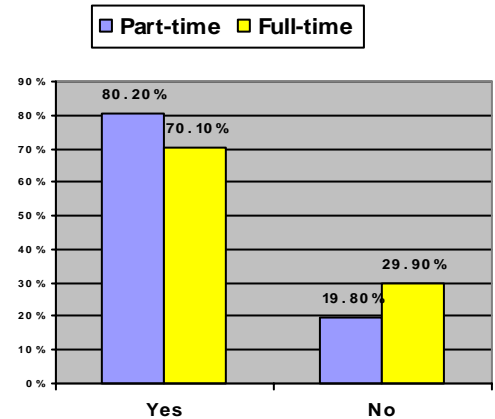


Table 4: TO WHAT EXTENT DO YOU BELIEVE THE EXPERIENCES IN THE CLASSES YOU TEACH HELP CONTRIBUTE TO YOUR STUDENTS' ACHIEVEMENT OF THE FOLLOWING SKILLS? N=300; FT=152;PT=148 Using a 4-point scale where 4=major contribution and 1=no contribution		Overall Average = OA
Acquire skills needed to use computers to access information from the library, the Internet, the World Wide Web, or other computer networks		OA=3.0 FT=3.1 PT=2.8
Acquire skills needed to use computers to produce papers, reports, graphs, charts, tables, or data analysis		OA=2.9 FT=3.0 PT=2.8
Experience contributed to knowledge, skills and personal development in "Using computing and information technology"		OA=2.8 FT=2.9 PT=2.7
Ability to use an electronic medium (list-serv, chat group, Internet, etc.) to discuss or complete a project		OA=2.5 FT=2.6 PT=2.3
Understanding of the role of science and technology in society		OA=2.7 FT=2.8 PT=2.6

Because of the relationship with computer usage and retention, we were interested in learning from faculty members about student experiences with technology in the classroom.

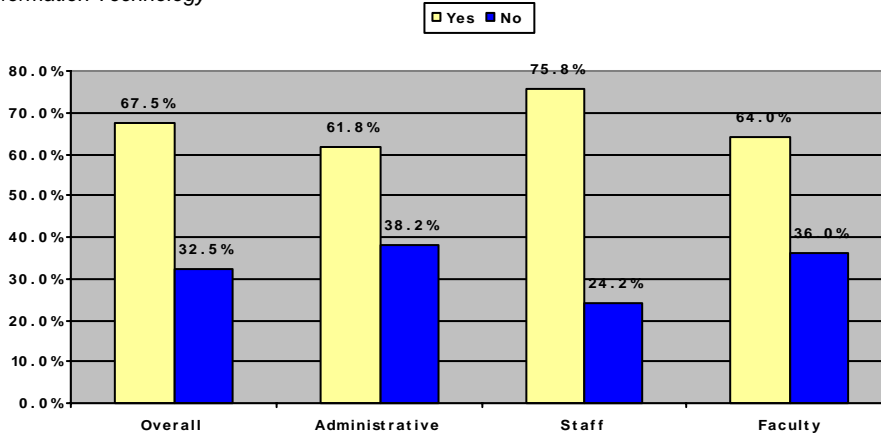
This information may help decision-makers determine what types of technology training is needed. A key finding shows that part-time faculty believe their classes contribute far less in each area as compared to the mean level of contribution assigned by full-time faculty.

INTEREST IN CONFERENCES AND WORKSHOPS

The demand for higher levels of technology skills can also be seen in TVI employees' interest in attending information technology conferences or workshops. Overall the majority of TVI personnel express interest in attending these professional development events. The level of interest is significantly higher for staff. These findings confirm previous college research that points to staff members concern that fewer training opportunities are available for their work groups.

In light of findings previously reported, it is not surprising that software and web-related training are mentioned most frequently.

Figure 8: Percentage of respondents who would like to attend a conference or workshop on Information Technology

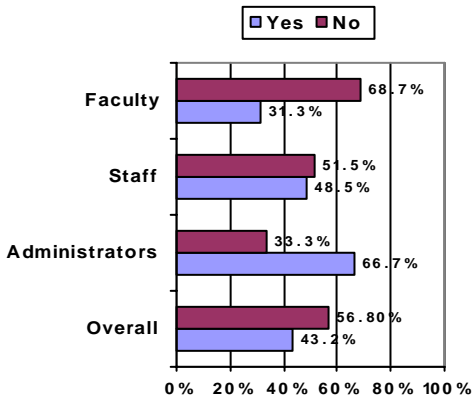


TRAINING PARTICIPATION

It is also important to understand barriers employees face to participation in technology-related training. In an effort to determine these obstacles and to better understand how these might be overcome, we asked respondents — in an open-ended fashion — to list participation incentives. The ability to conveniently schedule, incentives such as understanding the value-added and the ability to participate during paid hours are the most frequently mentioned.

Frequency	Table 5: "I would participate in technology training if...." (N=270)
124	Convenient times and personal availability: Scheduled at convenient times (47); Personally have available time (34); Does not conflict with teaching schedule (18); Offered on Friday (13); or an alternative time (i.e., not 8-5 M-TH) (10)
82	Clear incentive: Time off with pay (42), Clear understanding of the value-added to my work (40)
31	Format-related or logistics: Offered online (9); Mini-workshops (6); Specific levels advertised (i.e., beginning, intermediate, advanced) (4); Miscellaneous 1 each (12)
18	Convenient locations (i.e., campuses and locations other than Main)
15	Appropriate classes (e.g., relevant to work area or job)

Figure 9: Are you aware of the how computer data file security laws apply to your department? (N=469)



NEED FOR DATA FILE SECURITY TRAINING

While the majority (72.8%) of respondents believe computer data files are secure at TVI, fewer are aware of the laws that govern data file security and how those laws apply specifically within their department.

- Just over two-fifths (43.2%) of campus personnel are aware of state and federal laws that govern data file security.
- Figure 9 shows that just over one-third (35.2%) are aware how those laws apply specifically to their departments at the college.

Table 6: Conferences and Workshops Desired (Unaided; N=280)

104	Software: Microsoft products (76); Adobe/Macromedia (16); Windows XP (5); and 1 each: Room scheduling, Accutrak, C++, SurveyTracker, Star Logo, Inspiration, One Note, Pinnacle 8, S horepoint, Open Source software, Perl scripting, Tutoring software
71	Web-related: Passport(20); Web design (16); Outlook (10); Email (7); Networking (4); Wireless (3); Steaming video (2); HTML (2); and 1 each: FTP,Browsers,Tutoring online, and Online tutorials
55	Classroom-related: WebCT (23); Instructional technology-value added (10); Grading, testing and/or assessment (5); IT in specific programs (1.e. Math=3, Biology=1, Reading and English=1) for a total of (5); Strategies for online teaching (5); Smartboard (3); and 1 each: Camtasia, Learning objects, PDAs in instruction, Hardware in the classroom
20	Systems: Banner (14); Security (3); Linux (2); and Unix/SQL (1)
16	Program/department-specific: Advising or career mentoring using IT(5); Accounting (3); ESL (2); Work keys/Key train (2); and 1 each: Room scheduling, Document imaging, Depreciation inventory, Electronic meetings
9	"What's New": New software and IT applications as they become available (7) and Open workshops with CIT prior to IT decisions (2)
5	Peripherals: Computers in general (2), Digital cameras (2), and Shortcuts and Tips (1)

SUMMARY

TVI employees clearly recognize the need for and benefits of technology training.

- The demand for training will increase over the next three years especially as employees desire to advance their computer knowledge and skills from intermediate to advanced levels. Currently fewer than one-half state their computer expertise completely matches their job needs.
- Software training is likely to represent the highest level of demand. While Microsoft products are most frequently mentioned, Adobe/Macromedia products also rank high on list of priorities.
- Additional high-priority items include web-related training and classroom technology.
- Convenient scheduling, establishing the value-added benefits for incorporating technology, and supporting the resolution of "lack of time" issues are the most effective methods for assuring participation in technology related training.

Decision-makers may want to consider the following technology training opportunities: instructional technology training—including implementing course websites—for part-time faculty and computer data file security training for all TVI employees.