

**Videoconferencing at
California's Community Colleges:
Survey Report and Findings**

**Pacific Bell Education Market Group
Kendra J. Sheldon, MA**

Contents

- Executive Summary 1
- Introduction 1
- Study Goals 2
- Trends and Themes 2
- Results 2
- Data Collection and Interpretation 2
- Equipment Location and Use 3
- Obstacles to Increased Use 4
- Resources: PictureTel and the Chancellor’s Office 5
- Current and Future Videoconferencing Training 5
- Conclusion 6
- Survey Questions and Data 7

Executive Summary

The California Community College System, in conjunction with Pacific Bell and the PictureTel Corporation recently provided every community college in the state with a PictureTel Venue 2000 videoconferencing unit. Pacific Bell is currently working with the Chancellor's Office to develop training for community college faculty and staff. As part of that effort, Pacific Bell Education Market Group conducted a survey in the fall of 1998 of 65 California Community Colleges, to discover what the campuses are currently doing with their equipment, to identify obstacles to increased use, and to learn whether the proposed training will meet the needs of its intended audience.

While the majority (or 54 colleges) are using their equipment for everything from meetings to classes to interviews, 9 campuses are currently not using their equipment at all. While 41 reported that faculty are aware of the equipment, only 21 said that faculty are actually using it. An equal number of sites reported that administrators are using the equipment, primarily for meetings. Ten reported that staff uses the equipment, while 5 said that students, community groups and local businesses are videoconferencing.

Fifty-four campuses reported obstacles to increased use, which fell into 2 broad categories at approximately equal rates; fundamental issues and faculty or institutional resistance. Inadequate resources (money, staff, and dedicated classroom, time for training), unreliable equipment and unstable ISDN lines were some of the major issues reported. Widespread faculty resistance to videoconferencing was the other major obstacle. The vast majority of sites, however (54 out of 60), believe that the proposed training will be helpful to campus faculty and staff. Suggestions for topics to cover in the training included troubleshooting, hands-on practice with the equipment, an emphasis on audio in the technical section and videoconferencing "manners" or etiquette.

Introduction

The California Community College System is one of the largest community college systems in the United States, serving hundreds of thousands of students annually. In 1997, Pacific Bell and the Chancellor's Office established a contract to provide every campus with at least one videoconferencing unit, a PictureTel Venue 2000. The vast majority of campuses also have high speed, digital telephone lines (known as ISDN) that facilitate videoconferencing, and some even have their own multi-point bridge. Aware that providing the equipment is just the first step toward the integration of videoconferencing technology into community college campuses and classrooms, the Pacific Bell Education Market Group, in collaboration with the Chancellor's Office, is developing training for community college faculty and staff.

Study Goals

In order to customize and tailor the upcoming training to meet the needs of its intended audience, this study was conducted to get input on and feedback about the proposed content of the training, from those most intimately involved with videoconferencing at each campus. In some cases, it was a technician hired to manage and maintain the technology, in others it was librarian who inherited the responsibility when the equipment rolled into the media center. At other campuses, it was a staff member who had a special interest in technology and became the default videoconferencing expert, and at a handful of campuses, the person with the most firsthand knowledge was a secretary located in an administrative office.

The secondary goal was to use the data collected during the survey to create a "snapshot" of each campus, to learn what they are currently doing with their equipment and why. Questions included equipment location and use, the extent and quality of existing training, and obstacles to increased use of the videoconferencing equipment.

Trends and Themes

Use of the videoconferencing equipment ranges from infrequent to constant and the applications are as varied as teaching distance education classes to administrative meetings to for-profit use by community groups and businesses. The constants from campus to campus were the strong need for the training and the positive response to the proposed training modules.

Results

Kendra Sheldon, MA, conducted this study over a period of 8 weeks in October and November 1998, for the Pacific Bell Education Market Group and the Chancellor's Office. Every community college listed in the Chancellor's Office Videoconferencing Directory was contacted at least twice via telephone or e-mail, and in all, 65 campuses participated in the survey. Fifty-seven interviews were conducted over the telephone, and 8 surveys were completed electronically, via e-mail.

Data Collection and Interpretation

Though sixty-five sites participated in the survey, not all of the respondents answered every question. This was due to the dynamic nature of personal interviews, time constraints on the part of the respondents, and the fact that some provided multiple responses to some questions. For example, some of the respondents were responsible

for equipment at multiple sites, and so they described the location of several videoconferencing units, not just one. Others listed multiple barriers to increased use of the equipment, and they were all recorded for the purposes of this survey.

In most cases, the tallies for each question do not add up to 65, therefore, the results of this survey cannot be interpreted scientifically. The results are presented in quantitative form (numbers) but the content of the study is actually qualitative, or descriptive. Finally, the data collected is second-hand in that respondents reported the thoughts and feelings of campus faculty and staff. Without triangulation or confirmation by multiple sources, it is important to realize that it represents one person's view of reality, not necessarily the "true" situation.

The data collected create an interesting "snapshot" of the community college system, with each campus having its own unique personality and profile. Nonetheless, trends and themes emerged that provide key stakeholders with valuable, actionable insight into the uses of videoconferencing at California's Community Colleges, and problems the end-users are facing as they struggle to integrate this exciting but challenging new technology into large and established institutions.

Equipment Location and Use

While the videoconferencing units can be found in Libraries to TV studios to dedicated classrooms on the campuses, nearly half (30) of the sites have the equipment in administrative board or meeting rooms. Thirty-seven report that administrators, faculty and staff have access to the equipment and can use it when they whenever they wish. Five sites allow student use, but only with strict supervision and in the context of a class, usually a distance education class. Approximately two-thirds report that they have considered allowing community groups and businesses to use the equipment, but only 5 have actually hosted such events. While the majority mentioned that they are considering or are in the process of developing a policy on outside use, only 11 campuses currently have a policy in place. Of those, 7 offer a fee-based service, one asks for expenses (technician's time plus ISDN costs) and 3 have a policy against outside use.

Of those considering adoption of a policy that will allow non-educational use, most are considering a fee-for-service policy, with rates based on those offered by local for-profit businesses such as Kinko's. The belief that the community colleges have an ethical obligation not to undermine local businesses was echoed throughout the course of the survey, and consequently, respondents said that they would not charge less than the local businesses. One site mentioned that while they have hosted community groups, there was a problem in that the groups did not want to pay for the expenses generated by their use, causing the site to terminate outside future use.

While a few ambitious community colleges have embraced videoconferencing and are using it for everything from instruction to interviews to for-profit rentals, this is currently the exception, not the rule. Most of the participating campuses are using the equipment occasionally. At the other end of the spectrum, 9 campuses are not using the equipment at all, and 1 actually moved the videoconferencing unit to another site,

because the campus had no plans to use the equipment in the future, period. The respondent blamed pervasive "institutional resistance" to the technology for the situation.

The majority are using videoconferencing technology for meetings and classes, to both receive and deliver instruction. Some have also used it for personnel interviews, training and community or business functions. Most have plans for increased use in the future, but many existing obstacles must be removed before this can occur.

Obstacles to Increased Use

There were many obstacles to increased use identified, including fundamental issues such as inadequate resources (inadequate technical staff, money for ISDN charges, equipment shortages or inadequacies, etc.), problems with phone service providers and scheduling problems due to non-dedicated classrooms. Two sites reported that the Venue 2000 is ideal for meetings, but is just not adequate for instructional purposes. One technician reported that the audio component of the Venue 2000 is completely inadequate, and that his site is looking into purchasing a supplemental audio system.

A notable number of the obstacles involve the community college faculty. A host of personnel issues emerged including widespread resistance to using the equipment, which takes many forms:

- busy faculty who do not have time to learn to use the technology;
- fear of the technology;
- irritation that they (faculty) were not consulted on the acquisition of the equipment and they do not want it;
- instructors who do not want to be on "TV";
- a reluctance to give up face-to-face contact with students;
- the belief that videoconferencing is not a good fit with classroom instruction

Some instructors simply are not aware of the presence of the equipment or of its capabilities, while others have no idea how to integrate the technology into curriculum and/or how to adapt classes to a distance education model.

The fundamental issue that many respondents felt had to be addressed before faculty will embrace videoconferencing, is the so-called "bread and butter" issue, which was expressed in many ways. At its most basic level, instructors fear that the technology will displace them and reduce their value to the institutions. It is not surprising, then, that the respondents reported that part-time faculty have embraced videoconferencing more enthusiastically than their full-time colleagues. Faculty do not want their role to change from instructor to facilitator, they want more money for using the equipment and for "teaching" more classes that go out to remote sites, and others will not use the equipment until the teacher's union adopts a policy on these issues. One respondent summed up the sentiments of teachers at her site, " I don't want to do this, I have enough to do."

Others expressed frustration about the slow pace of adoption of the technology. One technician said, " I wish the faculty would embrace it (videoconferencing). That is what it is for..." Another noted, "Technology is not a displacement of faculty but an extension of the reach of the campus."

Resources: PictureTel and the Chancellor's Office

Forty-eight sites reported that they are aware of the new bridge service offered by the Chancellor's Office, while 10 were not. Of these, 41 have registered with PictureTel, 16 have not, and 4 do not know if their site has registered or not. Many who have not registered plan to do so, or have unsuccessfully tried to contact the PictureTel.

Current and Future Videoconferencing Training

A large number of community college campuses, 33 in all, currently offer faculty and staff training in one form or another, while 20 do not. Of those offering training, a few offer formal workshops on professional development days or in the summer, but most train on an "just-in-time," as-needed basis. Of those offering formal training, the respondents mentioned that turnout was consistently low, and one person said that he does not believe this will change until training and use of the equipment becomes mandatory. Nine described their current training as adequate, while 15 described it as inadequate.

The vast majority (54 out of 65) of sites believe that the training modules that Pacific Bell and the Chancellor's Office are currently developing will be helpful to personnel at their site. The responses to the detailed descriptions of the proposed training modules was almost universally enthusiastic, with various respondents describing the future training as "comprehensive" or that it will "cover all of the bases." Many asked when it would be ready and "how can I sign up?"

When asked for input on the content of the training, the respondents mentioned videoconferencing "manners" or etiquette, troubleshooting, hands-on training, the conversion of traditional classes to distance education classes and/ or the integration of the technology into curriculum, audio problems and how to correct them, and proper attire for videoconferences.

Conclusion

The results of this survey paint a picture of a Community College System in transition, and that is responsive to the needs of a population requiring knowledge, information and technology, which have become the most critical forces shaping and defining the world today. The system is responsive to changes and is gradually adapting to them, including the acquisition of powerful technology including videoconferencing. Yet technology and its integration into educational institutions represents a new paradigm, one that takes staff, teachers and students time to adapt to before they can excel.

The reality is that the Community College System is in the formative stages of the adoption and integration of videoconferencing technology into the institutions, creating a time when problems are many and successes are a relative few. The challenge is to adopt a sort of "startup" mentality, where expectations are initially low, problems and setbacks are anticipated, and evaluation and change are constant. The results provide stakeholders with actionable results, or hard data that can be acted upon to make positive changes and move the Community College System into the next century.

Survey Questions and Data

Q1. Where is the videoconferencing equipment located on your campus?	
Location	Number
Board or conference room	30
Regular Classroom	13
Library	13
Portable units	11
Amphitheater or multipurpose room	10
Learning resource or media center	10
TV Studio	6
Dedicated classroom	6
Office	2
No Response	2

Q2. Who has access to it?	
Person (s)	Number
Staff	7
Administrators	5
Faculty	4
Students	1
All of the above	32
Community groups & businesses	5

Q3. Who uses it?	
Person (s)	Number
Administrators	21
Faculty	21
Staff	10
Students	5
All of the above	12
Community groups & businesses	5

Q4. What do they use it for?	
Use	Number
Meetings	46
Classes	34
Not using at all	9
Interviews	7
Off-site training	7
Community or business functions	3

Q5. Is faculty aware of the equipment?	
Response	Number
Yes	45
No	5
Somewhat	12

Q6. Do they have the opportunity to use it?

Response	Number
Yes	52
No	6

Q7. Are students aware of the equipment?

Response	Number
Yes	25
No	29
Somewhat	4

Q8. Do students have the opportunity to use it?

Response	Number
Yes	18
No	37
Don't know	2

Q9. Have you considered making the equipment available for non-college activities, to community groups or local businesses?

Response	Number
Yes	41
No	22

Q10. Does the college have a policy on this?

Response	Number
Yes	7
No	44

Q11. If yes, what is your policy?

Response	Number
Fee-based service	7
Free	0
Expenses only	1
Do not allow outside use	3

Q12. Are you aware that the Chancellor's Office has a PictureTel Bridge Service?

Response	Number
Yes	48
No	10

Q13. Has your site registered with PictureTel?

Response	Number
Yes	41
No	16
Don't know	4

Q14. Do you currently offer videoconferencing training to faculty and staff on your campus?

Response	Number
Yes	33
No	20
Don't know	4

Q15. Is it adequate?

Response	Number
Yes	9
No	15

Q16. Can you think of any obstacles preventing videoconferencing at your site?

Response	Number
Yes	55
No	4

Q17. If yes, what are they?	
Response	Number
Scheduling problems as a result of not having a dedicated classroom for videoconferencing	16
Equipment inadequate for instructional purposes	2
Faculty resistant to using the technology without additional pay	5
Faculty do not want to use videoconferencing to teach because they do not want their role to change from instructor to moderator or facilitator	8
Expense of ISDN charges	13
Unreliable ISDN lines	8
Not enough awareness of the equipment	6
Do not know how to use videoconferencing	10
Lack of training	7
Constrained by capability of equipment	9
Inadequate resources (support staff, money, equipment, ISDN lines)	34
Fear of the technology	9
Employees are too busy to learn to use the equipment	2
Other	6

Q18. We are in the process of creating 4 training modules. Do you think that these training modules will be helpful?	
Response	Number
Yes	54
No	6

Q19. Additional topics for training modules?	
Response	Number
Troubleshooting	10
Protocol, or videoconferencing etiquette	6
Converting traditional classes to classes via videoconference	4
Hands-on training	4
Managing audio	3
Using other media during a videoconference	3
Other (managing costs, attire, testing, remote site supervision)	5