A High-Tech Lab for Speech, Sign, and Foreign Languages at Johnson County Community College.

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Reports - Descriptive (141) -- Speeches/Conference Papers (150)

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Johnson County Community College, in Kansas, recently implemented a unique laboratory combining interactive video, computers, and peer tutors to support its speech communication, foreign language, and interpreter training departments. The facility is equipped with 15 interactive, video-based work stations, costing $3,930 each; four computer stations; and a video-recording studio with a camcorder and monitor. Sign language interpreter training students use the lab to complete skills tests in a fraction of the time individual interviews would require. A library of over 200 videotapes is also kept in the lab for students to practice signing, and members of the local deaf community produce additional tapes. Foreign language students view videotapes of foreign language television programs purchased from PBS and the lab currently employs peer tutors for sign, Spanish, French, and German languages. In addition, a world-wide television satellite is being installed to form the core of foreign language lab instruction in the near future. Finally, students in public speaking and interpersonal communication classes use the lab to watch speech-related videos and to videotape their speeches for self-critique. A large variety of video programs, motion pictures, and collections of speeches are available in addition to a computer program for organizing speech outlines.

(KP)
A High-Tech Lab for Speech, Sign and Foreign Language

Richard W. Scott

Paper Presented at the Annual International Conference of the National Institute for Staff and Organizational Development on Teaching Excellence and Conference of Administrators (16th, Austin, TX, May 22-25, 1994)
Research data agree that laboratory support can improve student success. While labs have existed for decades in some disciplines, their value in communication studies is only now beginning to be recognized. JCCC recently implemented a unique laboratory combining interactive video, computers and peer tutors to support its speech communication, foreign language and interpreter training departments. This presentation will explain the lab's design, equipment and uses.

My goals for this presentation are two: first, I want to provide listeners a specific and detailed description of our lab so that anyone interested in establishing a similar facility can have the benefit of our experience. Second, and even more important, I want to stimulate the imagination of listeners to envision the possible uses and benefits of labs in departments and disciplines not traditionally associated with them.

LAB DESCRIPTION

The lab is housed in three connecting rooms. Its heart is its "state of the art" audio and video recording and playback equipment, which includes fifteen interactive, video-based work stations, four computer stations, three video recorder/monitors and a video recording "studio" equipped with a camcorder and monitor. The work stations, computer stations, student check-in station and lab assistant's area are housed together in a single, large room. The TV studio is next door in a smaller room that is painted and lighted appropriately. The third room is for tutoring. Room usage is flexible and it is possible, for example, to have several tutoring sessions taking place simultaneously in different rooms. Several lab assistants and tutors are employed to run the lab and provide one-to-one tutoring services. Several old-fashioned audio work stations left over from our previous foreign language lab are available for student use, but are in little demand. The exact nature and amount of equipment in any lab will be governed by the financial resources available. Our lab was delayed for several years by a lack of funding. Even with limited resources, however, labs can be developed and improved gradually with used furniture and equipment, outside grants and other non-traditional approaches. Imagination and patience are more important than money.
COMMUNICATIONS LABORATORY EQUIPMENT

If possible, computers should be the latest and best available: 486 or better for DOS machines and System 7 or better for Macintosh. Most software still runs on DOS machines only, although new Macintosh models will also run DOS programs. CD-ROM drives and sound are virtually essential with new programs. Laser printers - about one per six computers - also will be needed. Computers and printers should be networked via file servers. Video disk players will add to the interactive and multimedia capability of a lab. Of course, one should expect today's "state of the art" computers to be obsolete in a few years. Fortunately, the current interest in language instruction by the federal government is making increased funding available. "Goals 2000" legislation will have a major impact for the rest of the decade.

Following is a description of the audio-video sections

15 Work Stations, each containing:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Cost (each)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SONY ER 1100 Student Desk</td>
<td>545.58</td>
</tr>
<tr>
<td>SONY HS-90 Headset/microphone</td>
<td>110.00</td>
</tr>
<tr>
<td>SONY AC-E6DM Power Supply</td>
<td>27.42</td>
</tr>
<tr>
<td>Panasonic CT 13934 13&quot; Color Monitor</td>
<td>386.00</td>
</tr>
<tr>
<td>Panasonic AG 1270 VCR with mounting bracket</td>
<td>394.00</td>
</tr>
<tr>
<td>SONY DXC 107 Color video camera</td>
<td>1,361.00</td>
</tr>
<tr>
<td>SONY MDAVI headset</td>
<td>25.00</td>
</tr>
<tr>
<td>SONY CMA D7 Camera Power Supply</td>
<td>371.00</td>
</tr>
<tr>
<td>SONY 41/1 BSND Lens</td>
<td>260.00</td>
</tr>
<tr>
<td>VICON V82 AWM Camera Mount</td>
<td>25.00</td>
</tr>
<tr>
<td>Synson 300 Series Carrel</td>
<td>425.00</td>
</tr>
</tbody>
</table>

Cost (Each work station): $3,930.00

Total Cost: $58,950.00
Due to space and budget concerns, our lab does not have a central teacher station. Such a station would add flexibility and usefulness.

Illustrations #1 - 4 show the lab's video work stations.

**INTERPRETER TRAINING APPLICATIONS**

Johnson County Community College offers a two-year Associate's degree program to train sign language interpreters. Ours is the only such program in the state of Kansas and is one of only a handful of interpreter training programs in our region. Thanks to society's increased sensitivity and responsiveness to deaf citizens, enforced by legislation such as the Americans with Disabilities Act, the demand for well-trained interpreters is at an all-time high. Each year, we accept thirty new students into the program, yet traditionally fewer than ten survive the program's rigors to graduate. In fact, our program has the highest attrition rate of all career programs at our college. Given the low success rate and the increasing demand for graduates, it became apparent to us several years ago that we needed to do something to increase student success. Research involving students, faculty and surveys of other programs nationally convinced us that a video-based support lab would probably have the greatest and most immediate impact on our students' success.

Interpreter training students are required by their instructors to use the lab several hours each week; in fact, they actually spend several times the required hours there. Interpreting students use the lab to improve their signing and interpreting skills. They can videotape themselves as they practice signing, translate audiotapes to sign and sign to audio for self-critique or grading by the instructor. Instructors can administer skills tests in the lab in a fraction of the time individual interviews would require. Lab assistants, most of whom are deaf, are available to provide personal tutoring. Illustrations #5 - 11 show students using the video work stations.

The lab's computers provide additional individualized instruction. While the number of computer programs available to support interpreter training is limited, more are becoming available all the time. New programs are interactive and require computers with CD-ROM and sound capability. The computers can also be used to help teach workplace and academic skills with readily available programs. Illustration 12 shows our original computer configuration, while illustration 13 shows how our new configuration will appear.
A library of over two hundred video tapes is kept in the lab for students to practice signing. Most of the tapes were professionally prepared, although we also depend on producing our own videos in our lab studio. The videos are kept in a large, lockable cabinet and are checked out for student use by the lab assistants. (Illustration #14) There is a constant demand for new, challenging videotapes.

The video recording studio is used to produce new videos for interpreter students. Members of the local deaf community usually are happy to help us develop new videos. They are videotaped in our studio as they converse in sign language. The tapes are added to our library for student practice. The capability to produce our own signing videos allows us to meet our students' insatiable demand for videos while avoiding much of the cost of commercially produced programs.

FOREIGN LANGUAGE APPLICATIONS

Our foreign language department abandoned our traditional audio-based language lab years ago and functioned without a lab until recently. The tedium of audio-based drill simply became too much for our students and teachers to tolerate. Still, the need for practice and exposure to languages outside of the classroom continued. Our answer was to house a video- and computer-based foreign language lab in the same facility as our sign language lab, sharing much of the same equipment. While we still do not have adequate facilities for faculty to require lab time of their students, our ultimate goal is a lab large enough for classes to meet in occasionally, for open student practice throughout the day and evening and for oral proficiency testing in all eight foreign languages offered by our department. Those goals will be achieved gradually, as lab space and acquisition of equipment allow.

In our lab, foreign language students can view videotapes of foreign language television programs, French in Action, France - TV, Spanish - TV, motion pictures and the instructional videos that accompany our texts. Many of our videotapes were purchased from PBS sources. We are now in the process of installing SCOLA world-wide television and radio satellite programming and expect that service to form the core of our foreign language lab instruction in the near future. Students can videotape themselves and compare their speaking to a native's. Of course, we have the capability for students to use the traditional audio drill tapes as well. Most of the time students use the same video work stations used by interpreting students, although they can also use the three video monitor/recorders when the other equipment is in use.
The lab also can be used as an extremely efficient vehicle for oral proficiency testing.

The small TV recording studio is beneficial for foreign languages. We can videotape guest speakers conversing or being interviewed in their native languages for students to use later to practice their listening and translating skills. We will use this technique to build a video library of people using a variety of dialects of each language in a natural setting.

Foreign language students use the lab's computers. The number of foreign language computer programs is increasing. The lab computers contain the "Lingua-Rom" program currently, along with several computerized instruction and testing programs accompanying our texts and others that were developed internally. New programs are becoming available almost daily. Almost invariably they are multimedia programs requiring reasonably sophisticated hardware. At a recent foreign language conference, I was both impressed by the increasing emphasis on computers and surprised by the relatively small number of publishers becoming involved in computer-assisted language learning.

Finally, the lab employs peer tutors in Spanish, French and German. These tutors are JCCC students who are either native speakers of the language they tutor or students who have taken all of the courses in a language offered by our department. In every case, tutors are evaluated strictly and must be recommended by the faculty; after hiring, they are carefully trained in proper tutoring techniques. The tutors are paid by the college and their services are free to students. Each tutor works about ten hours per week.

**SPEECH COMMUNICATION APPLICATIONS**

Students in public speaking and interpersonal communication classes use the lab to watch videos related to class topic, videotape their assigned classroom speeches in the studio for self-critique and use the computers to help develop and organize their speeches. In addition, one lab computer is coupled with a "Data Show" projection unit for use in classrooms.

The video revolution in the classroom is perhaps nowhere more evident than in the field of speech communication. An almost endless variety of video programs, motion pictures, collections of speeches on tape and instructional tapes to accompany texts are available. While many of these videos are shown in speech classes, there is insufficient time for most instructors to use video to its fullest potential during class. The inclusion of tapes in the lab and provisions for students to view videos there
is one of the most valuable applications of the lab. These tapes can be used to help students learn communication principles being discussed in class or as springboards to written assignments, class discussions and even "capstone" papers at the end of the semester.

Public speaking students can use lab equipment, especially the video recording studio, to videotape their assigned speeches and critique themselves before doing a speech in class for a grade. Having a chance to see themselves giving a speech as their audience will see them is an excellent method of improving student oratory. In our lab, a TV monitor sits next to the camcorder, allowing the student to see himself and keep his image properly aligned for the camera while he videotapes his speech.

While videos have become very popular as lab tools in speech, computer programs still lag far behind. Two of our instructors have developed a computer program, known as "CASOD," to assist students in developing, organizing and outlining speeches. Each year, more programs accompanying texts become available. We have installed all such programs on our lab computers for student use.

Our portable computer contains the CASOD program for speech organization and outlining. (Illustration #17) Using the DataShow projection system, instructors can take the computer into classrooms and use the CASOD program to help teach students proper organization and outlining. The computer also contains a new speech evaluation form program developed by two of our instructors. Using macro commands, this program allows instructors to produce a neatly printed, complete grading form for each student speech -- a definite improvement over our old rushed, hand-written evaluations!

**OTHER POSSIBLE APPLICATIONS**

Uses for a lab such as ours are limited only by the imagination (and perhaps by financial support!). We intend to place significant reliance on the SCOLA service, once it becomes operational and we learn more about its capabilities. Also, we envision required lab projects for students in all departments served by the lab. As measurable student competencies and outcomes assessment become embedded in our culture, we may come to rely on our lab for testing and measuring student outcomes. Certainly, the lab will have a helpful role for students working on term projects, research papers, portfolios and other "capstone" assignments.

I encourage everyone in the audience, regardless of academic discipline, to consider the possible uses and benefits of a support lab. Of course, labs have some requirements: a room,
furniture, equipment and support from faculty and administration. Just as essential are imaginative applications of the lab and the desire to make it succeed. Developing our communication studies lab has been a refreshing challenge and a great deal of fun. It has been especially gratifying knowing that our lab has improved academic life for our students and made teaching easier for faculty. I hope you will investigate the helpful possibilities of a lab for your department.

Please write or call if I can be of assistance in any way.

Richard W. Scott, Ed.D.
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Johnson County Community College
Overland Park, KS 66210
(913)469-8500 extension 3904
A. ENTRY/CHECK-IN AREA
B. VIDEOTAPE STORAGE
C. COMPUTER STATIONS
D. FOREIGN LANGUAGE/SPEECH/SCOLA VIDEO STATIONS
E. AUDIO-VIDEO WORK STATIONS
F. TV STUDIO/PRACTICE-INTERVIEW ROOM
G. TUTORING ROOM
1. Check-in area

2. Work Stations
When you can't hear, you...

3. Work Stations

4. Detail of workstation equipment
5. Students at work

6. One student at work
7. Students working individually

8. Students working as a team
9. Three students working as a team
10. Lab assistant communicating in sign
11. Successful students having a signed conversation
12. Original computer stations

13. New computer stations
14. Video storage cabinet
15. Foreign language/speech video stations
16. Studio camcorder and monitor
17. Portable computer and Data Show