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ABSTRACT

Intended to assist faculty of the Eastern Iowa Community College in using the District Microwave Telecommunications System, this handbook includes the following: (1) a statement of the philosophy and intent of the system; (2) its long term goals; (3) general information on the televised interactive education (TIE) system; (4) keys to being an effective TIE instructor; (5) responsibilities of campus monitor/support person for TIE courses; (6) format for the first TIE class meeting; (7) instructions for operating the TIE podium controls; (8) points to remember about remote site students; (9) TIE teaching tips; (10) TIE troubleshooting guide; (11) a guide to the design of visual materials; (12) suggestions for the course syllabus; (13) class request and course evaluation forms; (14) a process for selecting courses to be delivered via the Microwave Telecommunications System; and (15) sketches and descriptions of classroom and podium design. (MES)

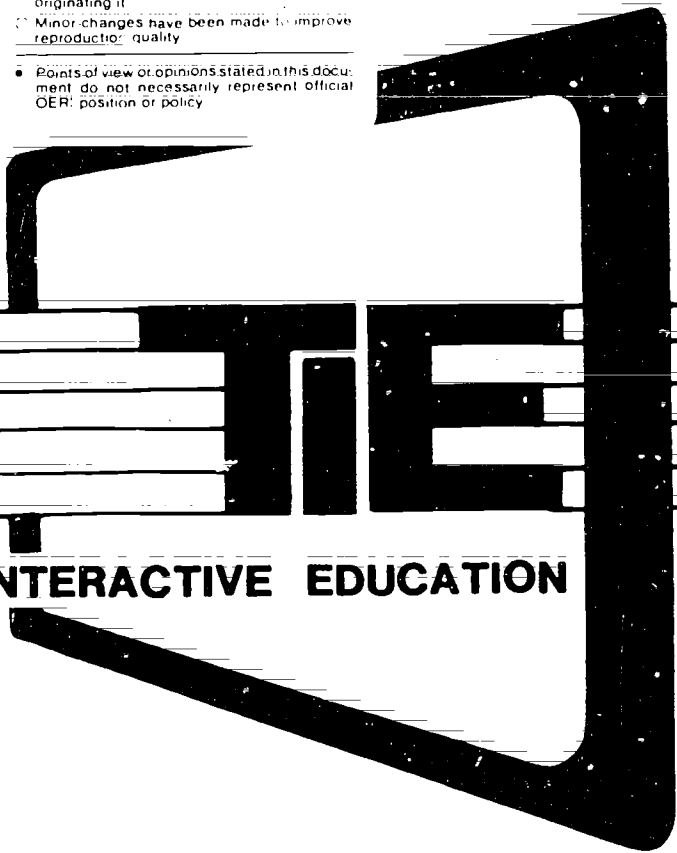
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FACULTY GUIDE TO:



TELEVISED INTERACTIVE EDUCATION

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Jeffrey Armstrong

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Microwave Telecommunications System

Philosophy/Intent Statement

It is the mission of the Eastern Iowa Community College District to "provide easily available educational programs and services which are responsive to personal and community needs." To this end, we believe that we must employ creative and flexible approaches to the delivery of these programs and services. The implementation of a District Microwave Telecommunications System will greatly enhance the realization of this belief.

The District is committed to the improvement and expansion of educational opportunities for citizens of Eastern Iowa. Such a delivery system would make feasible the district-wide offering of courses previously limited to a single campus. A greater opportunity will also exist to offer those sophomore level courses so essential to the continued quality of our curriculum. In addition, those courses with historically low enrollments could be offered to a larger student population, thereby increasing the likelihood of their viability.

The development of new delivery systems to meet the needs of the non-traditional student is a recognized goal of the EICCD. Its success can only augment the diversity and accessibility of our educational offerings in the future.

EICCD also recognizes the need to provide new opportunities for its faculty and staff to develop knowledge and skills in new technology areas. Interactive Instructional Television is clearly such an opportunity.

The instructional preparation for such an alternative delivery mode also necessitates a reassessment of one's educational objectives, strategies, and course materials. Such self-evaluation is not only essential to the continued vitality of our courses, but also represents an affirmation of our commitment to quality.

As a district comprised of three comprehensive, community-based colleges, we must recognize and preserve the individuality of these three entities but we must also strive to maintain a strong, unified district. Microwave technology will facilitate more effective use of time and personnel through council, committee, and faculty counterpart meetings on the system. Enhanced communication, information, and involvement can only lead to cooperation and unity of purpose.

With the several long-term goals of improving retention, enhancing physical accessibility of outlying geographic areas, and the continued advancement of community service/development, our immediate and fundamental concern remains deeply rooted in the classroom and the instructional process.

Long Term Goals

1. To encourage the use of the system as a support, information and resource - sharing vehicle for counterpart faculty and staff throughout the district in an effort to cultivate unity and a common vision.
2. To improve the visibility and reputation of the district within the immediate community and throughout Eastern Iowa through the quality of both our academic and non-academic offerings over the system.
3. To expand and enrich scheduling options for current students; making available those courses with historically low enrollments whose continued viability might otherwise be threatened.
4. To offer a more comprehensive selection of second-year (sophomore level) courses to meet the needs of our growing numbers of transfer students.
5. To provide new opportunities for the faculty/staff of EICCD to develop knowledge and skills in this new technology.
6. To prepare the institution for further advances in telecommunication technology and related opportunities.
7. To identify and cultivate an expertise from within the district in the area of interactive instructional television.
8. In an effort to make more effective use of both time and travel dollars; to utilize this new technology for council, committee, and faculty counterpart meetings.
9. To increase cohesion of the district through the sharing of campus speakers and other special events over the interactive system.
10. To enhance the offering of Community Education courses, workshops, and seminars across the district.
11. To improve retention of our students through the potential of increased number and variety of course offerings over the system.
12. To improve accessibility to higher education throughout Eastern Iowa through a greater variety of both credit and non-credit offerings to the broader community.
13. To promote continued community service and development through the availability of this interactive technology.

N.T.I.A.

Funding for the EICCD Telecommunications System was provided by a grant from the N.T.I.A. (National Telecommunications and Information Administration). This program falls under the administration of the Department of Commerce.

Until several years ago, the program was known as the Educational Broadcasting Facilities Program, and was located in the Department of Health, Education, and Welfare. When the program moved under the Department of Commerce, the funding possibilities were expanded to include not only broadcast facilities, but also non-broadcast telecommunication facilities as well.

The EICCD Telecommunications System qualified for funding under the new Public Telecommunication Facilities Program. Our grant is predominately aimed at equipment funding to begin operations in two-way interactive instructional television.

Who To Contact For Assistance

T.I.E. Educational Manager: Jeff Armstrong, 359-7531 (Ext. 318)

Chief Engineer: Gary Henrickson, 359-7531 (Ext. 245)

Technical Contact Persons: Larry Adams (CCC), 242-6841 (Ext. 338)
Dean Sessler (MCC), 263-8250 (Ext. 187)
Greg Rose (SCC), 359-7531 (Ext. 217)

Monitor/Support Persons: Anne Schmidt (CCC), 242-6841 (Ext. 331)
Mary Underdahl (MCC), 263-8250 (Ext. 397)
Molly Jungk (SCC), 359-7531 (Ext. 288)

T.I.E. General Information1. Travel to receiving sites:

The instructor is strongly encouraged to visit each receiving site once during the semester. This visit should occur early in the semester (within the first 3 weeks). Mileage for the initial visit would be reimbursed by the origination campus when an appropriate travel expense form is submitted. The literature suggests that "originating" at least once from every site creates a bond between instructor and student. It may also help to ease the sense of isolation that the long distance learner may experience.

2. Printing of class materials:

Class materials (syllabi, work sheets, quizzes, exams, and other hand-outs) may be typed and transmitted to the receiving site via E-Mail. A hardcopy of the materials may then be thermofaxed and copied for that campus. Any materials which do not lend themselves to E-Mail transfer (diagrams, illustrations, etc.) must be copied at the site of origination and delivered to the receiving site via an alternate route. (e.g. courier service, first class mail):

3. Secretarial Support:

Typing, copying, etc. of course materials will be provided by the identified T.I.E. support person on each campus. To ensure an effective turn around time, materials to be typed/copied should be delivered to the appropriate campus support person by noon on the Wednesday prior to the week in which the class is scheduled (unless otherwise arranged). Some materials may require a shorter turn around time; however, such arrangements must be contingent upon the availability and work load of the identified campus support person.

4. Textbooks:

Any textbooks (or other course materials routinely purchased through the bookstore) will be ordered by each individual campus bookstore separately. The instructor will be responsible for informing each campus bookstore of the number of students anticipated at each site, and the title of the intended textbook. The books will then be purchased by the students on each campus accordingly.

5. Videotaping

Videotaping of classes will not be a standard procedure. Classes may be taped in the event of system down time, class cancellations, previous notification of intended absence, review sessions, special demonstrations/speakers, or as an aid to instructors interested in taping for self-evaluation. The instructor will decide whether or not a class will be videotaped. However, it should be noted that videotaping an entire course (all classes) is neither practical nor advisable.

6. Classroom Monitors:

Monitors will be necessary during certain times throughout the semester:

- a. First class session as a resource person.
- b. Distribution, monitoring, and collection of exams and quizzes.

Requests for monitoring will be made in advance of the scheduled class on a CLASS REQUEST FORM. One monitor/support person will be identified for each campus.

7. Attendance:

Attendance policies are established by the individual instructors/departments. If it is policy to take attendance at each class meeting, it may be convenient to either take attendance over the system, or to identify a specific student at each receiving site to manage attendance sheets. These could be turned in to the identified monitor/support person at the end of each week.

8. Class Cancellations:

If an instructor's illness results in the need to cancel a "microwave" class, the identified monitor/support person on the origination campus must contact the receiving site(s). Cancellation notices will then be posted at the appropriate classrooms. If the instructor has an assignment for the class during his/her absence, this may also be "delivered" to the receiving site(s) by telephone, or via the system itself. The campus monitor/support person will insure that the assignment is in some way relayed to the receiving campuses.

If inclement weather causes the closing of any origination site campus, the class must also be cancelled at the receiving sites. The monitor/support person will be responsible for relaying this information to the receiving campuses.

If for any reason the receiving campus(s) is/are closed due to weather conditions, etc. (yet the origination site remains open) then the instructor may wish to videotape the class for use by those at the receiving site(s) at a later date. The origination site, however, will hold class as usual. If the instructor does not wish to record the class, then an alternative assignment may be made available to those who were not present.

9. Scheduling, Listing, and Promoting Microwave Courses:

To assure their vitality, "microwave" courses should be listed "twice" in all published class schedules. First, they should appear in their customary listing by alpha-numeric and computer code. They should also be listed a second time under T.I.E. (Televised Interactive Education) courses. The promotion of these courses is the responsibility of the individual campus; however, some materials which may aid in promotion of these courses - now exist, and will be updated/augmented as the system develops.

10. Camera Operators:

Although the T.I.E. system is designed to be an instructor-operated and "instructor-friendly" system, the need may arise for a camera operator. Each campus will identify a small pool of individuals to be trained by the system's Technical Manager in the operation of the video camera and related equipment. These persons would ideally be qualified for work/study dollars.

11. System "Down Time"/Technical Problems:

Although the system has been carefully designed to limit the potential for technical problems, the technology is not "foolproof" and technical difficulties are thus inevitable. Should you experience technical problems ("fuzzy" picture, audio difficulty, etc.) please notify the TECHNICAL CONTACT PERSON identified for your campus. He/she will then contact the system's Technical Manager if necessary. If the problem is such that the class cannot continue, the instructor should notify the receiving campus(es) of any assignments to be completed by contacting the identified campus monitor/support person.

12. Exam/Quiz Monitoring:

Exams/quizzes will be monitored at receiving sites by the campus monitor/support person. Requests for such monitoring should be included in your CLASS REQUEST FORM.

13. Exam/Quiz Make-up:

Make-up policies are decided by the individual instructor; however, in an attempt to standardize our efforts - all make-up tests/quizzes (at the instructor's discretion) will be arranged through the campus monitor/support person. Tests/quizzes may then be completed at the campus library/learning center.

14. Office Hours Over the System:

The non-traditional nature of this delivery system dictates an increased sensitivity to the needs of the "distant" student. In an effort to lessen the sense of isolation frequently experienced by long-distance learners, the T.I.E. instructor is strongly urged to consider the scheduling of "office hours" over the interactive system. These office hours will be scheduled through the Educational Manager of the T.I.E. system.

15. Course Fact Sheets and Syllabi:

Copies of Fact Sheets and Syllabi for all courses offered over the T.I.E. system will be kept on file in the Office of Educational Services. These materials will serve as a source of reference for future educational offerings. T.I.E. instructors are requested to send copies of these materials to the Educational Manager of the system as soon as possible before the T.I.E. classes begin.

16. Security:

Security of the T.I.E. system is the shared responsibility of all those involved in instructional delivery. The T.I.E. classroom equipment has been carefully selected for its quality and dependability, and its replacement (due to damage or theft) would be both inconvenient and costly. To avoid these security-related problems, the T.I.E. classroom doors will be locked at all times when not in use. Other specific guidelines for the safeguard of the system's equipment (ie: technical guidelines) will be presented in another narrative.

17. Student Questions/Problems at Receiving Sites:

Although the T.I.E. system emphasizes the strength of its interactive nature, the "distant" student may occasionally have instructional needs which are not immediately met. These students may logically seek out a "counter-part instructor" on their own campus to answer a question or to solve a problem. It may be wise then for the

originating instructor to communicate with his/her counterparts on the receiving campus(es) on a regular basis. Such a practice not only alerts the originating instructor to potential student problems, but also enhances communication across the entire district.

18: Use of Audio-Visual Materials.

The T.I.E. system is a video-based communications medium. Materials such as 16mm films or 35mm slides must be put onto video tape before they can be used as part of the instructional system. The T.I.E. educational or technical managers can provide information on how this can be accomplished. A certain amount of planning will make this process a smooth one.

KEYS TO BEING AN EFFECTIVE TIE INSTRUCTOR

- › Familiarity with one's subject.
- › Experience with the type of students likely to take the class (Know your audience).
- › Awareness of the ability of audio and visual material to enhance learning.
- › Willingness to accept risks and to objectively evaluate one's own performance.
- › Strong enough personality to overcome the feeling of isolation remote students can feel.
- › Receptive and flexible enough to adapt to styles of teaching which are more successful on television.
 - Proficient and enthusiastic.
 - Warm outgoing personality.
 - Adaptable and flexible.
 - Creative and resourceful.
 - Courageous and confident.

Responsibilities of Campus Monitor/Support Person
for T.I.E. Courses

1. Typing, copying, collating, etc. of instructional materials - such as syllabi, work sheets, quizzes, and exams.
2. Use of E-Mail system for transfer and receipt of intercampus instructional materials.
3. Processing of class request forms. Such forms will involve: materials to be distributed, materials to be returned by students, need for monitor assistance, audio-visual needs, and special instructions/needs for the coming week of class.
4. Follow-up on audio/visual requests - contact media services to secure equipment and insure its delivery.
5. Act as liaison between faculty and the Technical Manager.
6. Notify classes of cancellations and relay any assignments to the appropriate sites.
7. Coordinate intercampus mail/courier efforts with regard to teleccommunications course materials.
8. Act as liaison between on-campus students at receiving site and origination site faculty member.
9. Arrange and coordinate exam make-up efforts with library/learning center.
10. Distribute and/or collect course materials at appropriate class sessions when campus is identified as a receiving site.
11. Monitor exams/quizzes at a receiving site when identified by class request form.

TO: T.I.E. Faculty
FROM: Jeff Armstrong, Educational Manager
SUBJ: First Day of Class on T.I.E. - PLEASE READ CAREFULLY

In order to get your class on the EICCD Televised Interactive Educational system off to a good start, our campus monitor/support persons will be at the first class session to do the following activities.

1. Will arrive at least 10 minutes early to welcome students at remote sites.
2. Turn power on in classroom.
3. Select front camera.
4. Explain how the system works, including how to interact with the instructor and encourage active involvement.
5. Explain how class materials are sent from and to the instructor and where materials are found within the classroom.
6. Will handout Student Phone-In Procedures.
7. Explain where they can be reached on campus.
8. Will handout class materials and stay in the class for at least 15 minutes to facilitate the initial class session.

If your first day of class schedule will vary from this format in any way please contact your remote site campus monitor/support person directly to confirm your plans.

Mary Underdahl (MCC) 263-8250 Ext. 397
Molly Jungk (SCC) 359-7531 Ext. 288
Anne Schmidt (CCC) 242-6841 Ext. 331

THE FIRST TIE CLASS MEETING

It is quite natural that there be a certain amount of anxiety on the first day of class for both students and instructor. The technology involved in the TIE class can heighten this anxiety, so it is important to diffuse those feelings early during the first meeting. In order to do so, we suggest the following format for the first few minutes of class:

1. Turn the system on and set cameras (see Operating TIE podium controls).
2. Check remote sites by asking if the campus monitor at the remote sites can see and hear you. If not contact the technical manager immediately.
3. Introduce yourself and the course title.
4. Tell the students that you have a videotape which you would like them to watch. The videotape, "Welcome To TIE", will explain the microwave system and what the student needs to know to be a successful TIE student.
5. Show the videotape and then ask students if they have any questions.
6. Have campus monitor distribute course syllabus. Have campus monitors introduce themselves.
7. Go through syllabus, asking students at each site if they have any questions.
8. Begin to teach class as you normally would.

OPERATING THE TIE PODIUM CONTROLS

1. Turn the system on by pushing the power button at the top of the podium control panel. (This powers up the entire classroom).
2. Switch the CAM CAP toggle to open (down). This opens the lenses of all the classroom cameras.
3. At the originating classroom, make sure the appropriate origination site button is selected.
4. Choose the source of picture. Either front camera, back camera, board camera, or VCR.
5. The front camera is fixed and shows the classroom students.
6. The back camera is operated by remote controls located on the podium control panel. The back camera can zoom in and out (wide and telephoto), and rotate up, down, left and right.
7. The board camera (fixed to the verticle pole located next to the podium) is operated by use of manual hand controls located on the verticle pole. The board camera is manually zoomed in and out.
8. To set the focus for the back and board cameras, zoom the picture all the way in, then adjust the picture with the focus control until it is in focus. The picture will then remain in focus during all camera operations.
9. The VCR is operated by means of the VCR remote controller located in the bottom right section of the podium control panel.
10. The monitor located in the podium control panel shows the picture that is going out to the remote classrooms.
11. The instructor's microphone is on the shelf below the whiteboard and can be adjusted for a comfortable fit around the neck.

FIFTEEN POINTS TO REMEMBER ABOUT "REMOTE" SITE STUDENTS

1. Always be well prepared and organized so that all necessary handouts and materials will be at the remote sites when needed.
2. Consciously check with students at remote sites by asking them by name to answer questions or repeat material. Keep the "distant" learners involved through monitoring and adjusting.
3. Restate comments and questions from students if you believe that the other classes or students may not have heard clearly.
4. Periodically, place the "originating" site students on camera.
5. Never speak only to the "originating" site.
6. Obtain as much feedback from students as possible.
7. Always ask all sites if they can see/hear what is going on in the class.
8. Teach your students first! Deal with the technical aspects of the system as necessary. Do not be afraid to ask for technical help.
9. When using the overhead camera, keep all written materials concise and in large bold type.
10. Pay close attention to seating arrangements at the remote sites. Have the students sit in the first rows, so you can see them more clearly.
11. When using the white board, use black pens. Reds and greens are more difficult to see at the remote sites.
12. Use more cooperative and competitive activities with the students to increase involvement of the students at all of the sites.
13. Experiment with using pictures and charts with the overhead camera.
14. Look at the camera regularly.
15. Refer to all students by name (when possible) and not by location in order to achieve a more cohesive class environment.

T.I.E. TEACHING TIPS

- Originate from all distant sites early in the semester. There appears to be more cohesiveness among the students if they can meet face-to-face with their instructor early on in the interactive experience. The teacher thus becomes an actual person, and not simply a "talking head".

- Be well organized for your T.I.E. classes. Allow the necessary turn-around time to insure that your hand-outs and other materials are at the "remote" sites when you need them.

- Relax. Act naturally and remain flexible. The system does not restrict your ability to teach; it simply reinforces and re-emphasizes what you already know to be effective in the classroom.

- Use videotaping as a means of self-evaluation, for review sessions, one-of-a-kind demonstrations or guest speakers, and as make-up for those students with extenuating absences.

- Be creative. Explore the possibilities of team-teaching, the utilization of guest ("remote") instructors, discussion sessions, etc.

- Experiment with and always check all equipment (video and audio transmission) before "going on the air".

- Keep the "distant learners" involved in the instructional process. Consciously "check" with students at the remote sites for feedback or questions.

- Don't hesitate to experiment with new ideas or teaching methods over the system. If you don't try it -- you'll never know

- Plan well for each class session, and try to teach to the objectives that you have previously identified.

- Restate comments or questions from students if you believe that other students (or classes) may not have heard them clearly.

- Try to pace the amount of "camera switching". Only do so when necessary; since erratic switching may become distracting.

- Try to address your presentation to all sites. Avoid speaking only to the "origination site" students.

- Obtain as much feedback from the students as is possible.

- Periodically observe the small monitor built into your podium. It is this "picture" that the remote students are seeing.

- Always ask if all sites can see/hear what is going on in class.

- Arrange your classroom (within the obvious camera limitations) to best fit your personal teaching style and methods.

- Teaching comes first! Don't hesitate to ask for technical assistance. Technology can never replicate what you do in the classroom.

- Practice using the overhead camera for illustrations, diagrams, personal texts, etc. When writing on transparencies or paper for overhead camera viewing, use only black or dark blue pens. Other colors may be difficult to see at remote sites.

- When using the overhead camera, keep all written materials concise, and in large, bold letters.

- Use cooperative rather than competitive activities with your students to increase the level of participation at all sites.

- Brief the students on the Do's and Don'ts regarding the classroom equipment on the first day of class. Make clear the procedures for dealing with any technical problems that may arise.

- Try not to speak too rapidly when delivering your lecture materials or answering questions over the system. Remember that the "distant sites" may have difficulty understanding you.

- Remember to look at the camera regularly so as to involve the distant sites in classroom activities.

- Try to refer to students by name rather than by site (location) to develop a more cohesive classroom environment.

- Don't allow the technology to force you to "take root" behind the podium. Feel free to move about the classroom and prepare to switch the cameras accordingly.

- Be enthusiastic in your delivery. Your personality will transcend the medium!

- Spell out your expectations clearly. Avoid surprising your students regarding their responsibilities.

- Encourage active participation! Lecture is a viable tool; but don't allow the students to passively "survive" your efforts. Conduct your classes with interaction in mind.

- Use frequent illustrations and applications. Their value is immeasurable!

- Think about holding "office hours" over the system. These may take the form of special "help sessions" if the need exists.

- Provide some means to establish quick, genuine, positive reinforcement to students within the first few class periods.

- Emphasize your willingness to provide individual help with course content. Development of trust in the instructor can act to buffer the impersonal effects of the technology.

- Establish a procedure for making up assignments should you miss a class.

- Invite students to ask questions freely. When answering a question, you may ask a student to repeat the answer in his/her own words to be sure that your answer was understood.

- Create opportunities for student leaders to emerge from the class. Use these leaders to improve student performance at your distant sites.

- Encourage the development of study group. Emphasize the importance of cooperation -- not competition.

You can overcome the physical distance between sites by creating an atmosphere which focuses on the importance of the individual. The great diversity of your students can be utilized to produce positive results. The maintenance of a sense of humor, an air of approachability, and a genuine interest in the student's feedback -- will generate group rapport -- and pay you substantial dividends.

TIE TROUBLESHOOTING GUIDE

<u>Problem</u>	<u>Solution</u>
1. Audio levels are muted	- Check to see that all student mike keys are released at all sites.
2. Sound but no picture	- Check to see that camera input (either front, back or VCR) is selected on the podium control panel.
3. Student handouts not at remote sites	- Contact campus/monitor support person at originating site.
4. Videotape picture does not show on monitor control panel.	- Select VCR button on podium
5. Zoom on back camera is stuck	- Try gently rocking wide and telephoto buttons until zoom "breaks loose"
At Clinton/Muscatine wrong remote site shows on monitor	- Contact Scott control room ext. 364.
Instructor microphone not being received at remote sites	- Check to see the microphone is plugged in below podium control panel. Check to see that correct originating site button is pushed.

VISUAL MATERIALS DESIGN

The following information can be used as a checklist when designing or adapting visual materials such as illustrations, outlines, "overheads" and graphics for use on the overhead camera (Camera 3). Well designed visual materials should provide a "Yes" answer to every question in the checklist. If any questions are answered "No", then some revisions in, or additions to, the visual materials are indicated.

Text Layout

- Is there lots of white space on the page?
- Are matrices, tables and flowcharts used to organize procedures or contrast concepts?
- Are different typefaces and typestyles used to highlight key points?
- Are words or key phrases used as marginal or sub-headings to facilitate rapid scanning, reading or retrieval?
- Are lists of items (except for sequential procedures) "bulleted"?

Illustrations

- Are illustrations combined with captions or explanations to aid understanding?
- Are illustrations sequenced from the less detailed, overview, type, to more detailed, specific point, type?
- Are line drawings, not pictures, used to show details of objects?
- Are color, highlighting, arrows used to emphasize or separate key items?
- Are there a maximum of 7 elements shown in each illustration?

Chunking

- Are large amounts of information broken down into "chunks" of 7 pieces per chunk?
- Does each "chunk" have a label naming it?
- Are the names of all the chunks presented first, followed by a breakdown of each chunk in sequence?

THE COURSE SYLLABUS

Accessibility is not the primary concern in a traditional instructional setting, where students are within physical reach of both the classroom and faculty offices. The need for communication and clarification, however, does not diminish with the distance created by microwave technology. On the contrary, its need is enhanced. The syllabus thus becomes an essential tool for maintaining this communication link with the "distant" student. Such a guide clearly states your expectations, objectives, and class procedures. Although an "informal syllabus" is preferred by many instructors for its flexibility and responsiveness, such a syllabus works best in a traditional classroom setting.

A formal syllabus does not dictate a rigid class plan, since changes may be made and communicated over the system as you progress through the semester. However, students can develop a sense of security and direction when they are aware of your expectations and policies.

Below are several suggestions for items to include in your T.I.E. syllabus.

Administrative Information:

- Name, catalog, and computer number of your course
- Your name, office location and office phone number
- Office hours and best times to catch you by phone
- Message procedures

General Course Information:

- Course description
- Policies and expectations (e.g., attendance, class participation, suggestions for studying)
- Required textbooks, optional or recommended readings

Daily Class Information:

- Course calendar
- Assignments and due dates
- Topics of study
- Grading policy

Exams:

- Testing dates
- Make-up policy
- Exam description (essay, multiple choice, etc.)

T.I.E.: A New Way of Learning

- How T.I.E. courses may be different from traditional courses
- New roles and responsibilities for your students
- How T.I.E. courses operate (using the technology)

EXAMPLE

T.I.E. COURSE FACT SHEET

Course Title: Anatomy and Physiology I

Course Number: BIO 160

Credit Hours: 4 semester hours

Time: 9-9:50 A.M. (lecture)

Day: Monday, Wednesday, and Friday

Lab: 10-11:50 a.m. (Wednesday) - Scott Community College only

Description: Presents the structure and function of the human body as an integrated whole. Beginning with the relation of the cells and tissues to the organization of the body, the student will progress through the ten bodily systems. Emphasis is placed on the recognition of major structures within each system and selected functions. This process is supported and reinforced by laboratories which emphasize the effects these functions have within each system, and upon the body as a whole.

Topics Covered:

1. Anatomical terminology and biological chemistry
2. Cellular anatomy and physiology
3. Tissues and the integumentary system
4. Skeletal system
5. Muscular system
6. Nervous system (CNS & PNS)
7. Endocrine and reproductive systems
8. Cardiovascular and lymphatic systems
9. Digestive and respiratory systems
10. Urinary (Renal) system

Prerequisite: (NONE) Suggested high school biology course

Fulfills: Laboratory Science graduation requirement

- Books:
1. Principles of Anatomy and Physiology, Tortora and Anagnostakos, 4th Edition, Saunders Publishing, 1984. (required)
 2. Human Anatomy and Physiology Laboratory Textbook (short version), Benson and Gunstream, 5th Edition, 1983. (required)
 3. The Anatomy Coloring Book, Kapit and Elston, 1981. (optional)

Instructor: John Baker

Classes begin the week of January 13th, 1986.
Final exams begin May 19th, 1986.

CLASS REQUEST FORM

T.I.E. Televised Interactive Education

Course: _____

Date of Class: _____ Time: _____

Instructor's Origination Site: _____

Materials to be Distributed: (Please be specific, e.g., typed, copied, collated, etc.) _____

Materials to be Returned by Student: (Please be specific) _____

Monitor Assistance Needed? YES _____ NO _____

Purpose: (e.g., monitor exam, quiz, etc.) _____

Time Needed: (e.g., from 10-10:50 A.M.) _____

Special Instructions: _____

Material Distribution: (Number of Copies Needed at Each Site)

CCC _____ MCC _____ SCC _____

This form is due to the identified monitor/support person on the origination site campus by noon on the Wednesday prior to the week in which the class is scheduled.

CCC _____ EXT: _____

MCC _____ EXT: _____

SCC _____ EXT: _____

EASTERN IOWA TELECOMMUNICATIONS NETWORK

EASTERN IOWA COMMUNITY COLLEGE DISTRICT
TELEVISED INTERACTIVE EDUCATION (T.I.E.)

STUDENT PHONE-IN PROCEDURES

Campus Numbers

Muscatine Community College - (319) 263-8250
Scott Community College - (319) 359-7531
Clinton Community College - (319) 242-6841

You can call your local campus switchboard and ask to be connected to any other campus or office in the Eastern Iowa Community College District.

Toll free number 1-800-462-3255 (this number connects you to Scott Community College's Urban Center, from there you can be connected to any campus or office).

Check your course syllabus for appropriate phone-in office hours per each instructor.

EVALUATION FORM

Please answer the following questions from your experience as a T.I.E. student in the class you are presently taking.

Choose either agree or disagree.

1. My TIE class is being presented in a well-organized way.
_____ agree _____ disagree
2. When I have a question, I am at ease in using my microphone to get the instructor's attention.
_____ agree _____ disagree
3. The TV monitor in my TIE classroom is adequate for viewing the instructor.
_____ agree _____ disagree
4. The sound quality on the TIE system is adequate.
_____ agree _____ disagree
5. My instructor has given me instructions as to how I may reach her/him outside of class if I need to do so.
_____ agree _____ disagree
6. I am learning as much in this TIE class as I would in a regular class.
_____ agree _____ disagree
7. The one or two things I like best about taking a course on TIE are:

8. The one or two improvements I would suggest to make the class work best for me are:

EASTERN IOWA COMMUNITY COLLEGE DISTRICT
T.I.E.
TELEVISED INTERACTIVE EDUCATION

AGREE

DISAGREE

	STRONGLY	MODERATELY	SLIGHTLY	STRONGLY	MODERATELY	SLIGHTLY
1. I have a positive attitude toward school.						
2. My T.I.E. class is stimulating.						
3. My T.I.E. class is being presented in a well-organized way.						
4. I prefer to be in the same classroom as the instructor.						
5. When I have a question, I am at ease in using my microphone to get the instructor's attention.						
6. The T.V. monitor in my T.I.E. classroom is adequate for viewing the instructor.						
7. The sound quality on the T.I.E. system is adequate.						
8. The instructor is aware of those students at remote sites during class.						
9. It is easy to be attentive to the instructor on the T.V. monitor.						
10. My instructor has given me instructions as to how I may reach her/him outside of class if I need to do so.						
11. My T.I.E. instructor encourages me to become involved in class activities.						
12. Students in my T.I.E. class should have a coordinator present during each class.						
13. Students in my location talk to each other during class, making it difficult for others to pay attention to the T.V. monitor.						
14. I am learning as much in my T.I.E. class as I would in a regular classroom.						

The one or two things I like best about taking a course on T.I.E. are:

The one or two improvements I would suggest to make the system work best for me are:

One or two things my instructor does (or should do) to help me feel a part of the class are:

One or two services I would like Eastern Iowa Community College District to provide to students located at distant sites are:

Any other comments about T.I.E.?

Please provide the following information in order to help Eastern Iowa Community College District understand the needs of students enrolled at remote sites.

Age: 15-20 ___ 21-25 ___ 26-30 ___ 31-35 ___
36-40 ___ 40 or over ___

Sex: M ___ F ___

Full-time ___ Part-time ___

Are you taking more than one T.I.E. course this semester?
Yes ___ No ___

Are you planning to pursue a certificate, diploma or degree at Eastern Iowa Community College District?
Yes ___ No ___

Is this course required for your program?
Yes ___ No ___

**Process for Selecting Courses to be
Delivered via the Microwave Telecommunications System**

1. **Input form faculty and Department Chairs**
- Explanation and distribution of Class Proposal form by Department Chairs to faculty.
- Faculty complete the form after dialogue within their college department and their instructional counterparts on the other two campuses.
- Proposal form reviewed and signed by the Department Chairs
- Proposal form to Associate Dean

2. **Associate Deans review proposal forms and complete Selection Criteria Checklist.** Each checklist is attached to its corresponding Class Proposal Form.

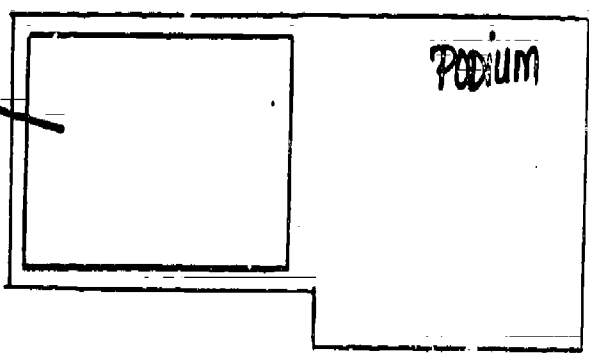
3. **Associate Deans complete Campus Summary: Proposed Microwave Telecommunications Classes.**
The Campus Summary is reviewed and signed by College Deans.

4. **Completed Class Proposal forms, Selection Criteria Checklist, and Campus Summaries sent to Educational Manager of the EICCD Instructional Telecommunications System.**

5. **Review of proposals by Instructional Council's Coordinating Committee for the Microwave Telecommunications System.** This committee is composed of:
Director of Curriculum Development and Program Evaluation
Dean of Instruction, CCC
Dean of Instruction, MCC
Associate Dean, Science and Technology, SCC
Associate Dean, Arts and Human Resources, SCC
Educational Manager of the Microwave Telecommunications System
Recommendations formulated

6. **Proposed classes presented to Instructional Council for approval.**

PORCELIN
"WHITE"
SURFACE FOR
OVERHEAD (CEILING-MOUNTED)
CAMERA



FRONT
CAMERA
(VIEW OF
CLASSROOM)

STUDENT'S
MONITORS
ON CARTS



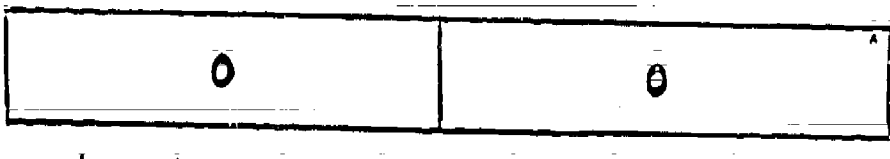
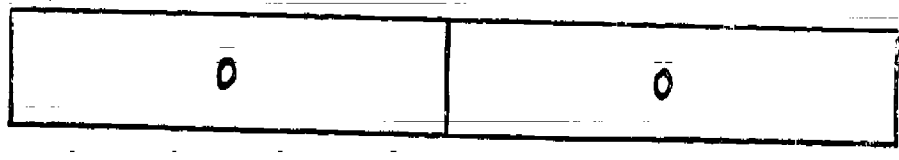
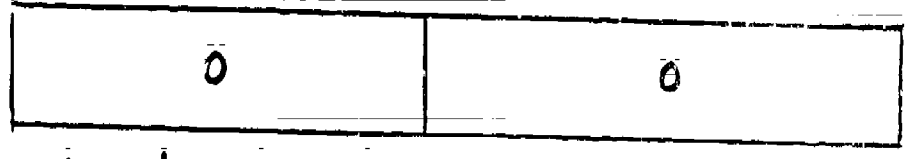
TABLE
MICROPHONE



18\"/>

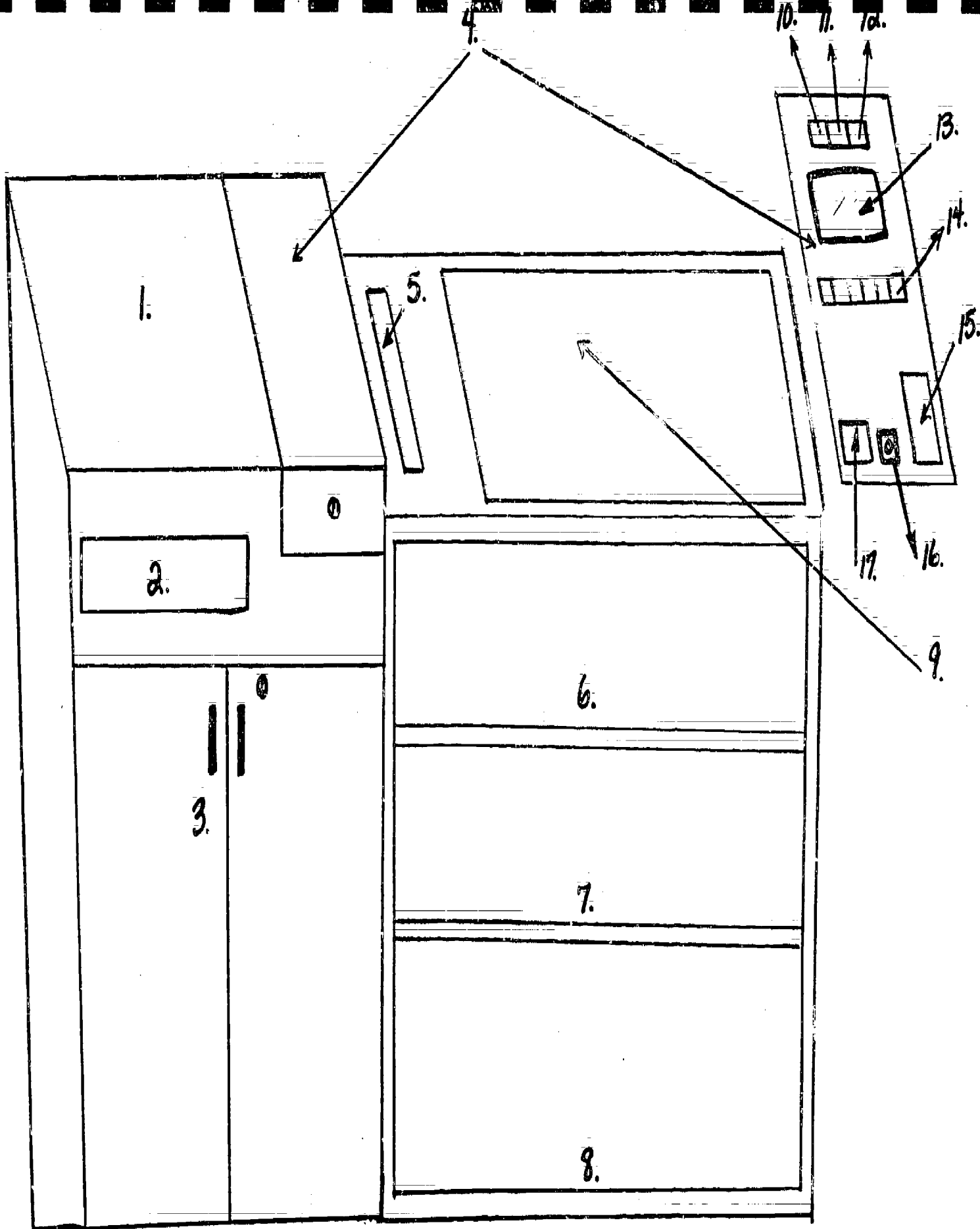


INSTRUCTOR'S
MONITORS
ON CARTS



CLASSROOM DESIGN

REAR
CAMERA
(VIEW
OF INSTRUCTOR)



PODIUM DESIGN

PODIUM DESIGN

- (1) Work space for lecture notes/text book, etc.
- (2) 1/2" (VCR) video tape recorder/player.
- (3) Cabinet: Housing wiring, power packs, etc.
- (4) Control panel:
 - Shown locked (cover in place) to left
 - Shown exposed (cover removed) to right
- (5) Storage well for pens, markers, etc.
- (6) Open shelving for storage of hand-outs, texts, etc.
- (7) Open shelving for storage of hand-outs, texts, etc.
- (8) Open shelving for storage of hand-outs, texts, etc.
- (9) Porcelain (white) board for overhead camera use.
- (10) Main system power switch.
- (11) Main system camera switch.
- (12) Originate/receive switch.
- (13) 5" color monitor.
- (14) Camera/VCR buttons:
 - (1) for classroom (front) camera
 - (1) for instructor's (rear) camera
 - (1) for overhead camera
 - (2) for VCR
 - (2) buttons not presently being used
- (15) VCR control panel.
- (16) Pan/tilt joystick for rear (instructor's) camera.
- (17) Zoom/focus control for rear (instructor's) camera.
- (18) Controls for overhead camera. (Presently not shown on diagram)