Notes and Summary for On-Air Presentations

Instructional Methods for the EDNET Distance Learning Teacher

There are a variety of instructional methods and techniques that the distance learning teacher can use in the EDNET classroom. His/her familiarity with the EDNET technology will dictate the level of involvement of the technique and the technology with the students. Below is a list of some successful techniques that have been used in EDNET teaching.

Textbooks, Workbooks, Lab Manuals, Reference Texts, Printed Materials	Text materials used by the teacher and students may form the basis of the curriculum. Often it is the only materials students can have that is "hands on."
Lecture From the Teacher	There are obvious times when the teacher must present basic information about the curriculum. Lecture format provides a direct link to discussions and question-and-answer sessions as well as interaction with the students.
Cooperative Group Discussions	Students need the opportunity to work, discuss, and learn from each other. The teacher can facilitate that process.
Laboratory (Science) Activities, Demonstrations	Science lab activities require considerable forethought and preparation for "remote" students.
Use of Video, Videotapes, Document Camera	Video is the major medium of distance education. The style of presentation, the preparation of materials for the document camera, and use of videotapes must be carefully thought out.
CD-ROM	The teacher or student can use a CD-ROM to enhance the curriculum, both on-air and off-air (asynchronous).
Audiotapes	Used in music in foreign language instruction.
Computer Activities, Internet, E-mail, Simulations	The EDNET multimedia computer has connections to email and to the Internet allowing worldwide access for your class. Preparation and utilization of these resources must be carefully planned out.
Computer Presentation Programs	Desktop presentation programs are available to present textual information in an attractive format that can be saved and later modified on the computer. A great resource for the busy teacher.
Video Conferences	The EDNET distance learning network ties together over 150 different locations throughout the state, allowing access for students and guest speakers to visit with our classes. Plan well ahead for these activities. Coordinate with your LSR (Local Service Representative).

These items are used with permission . ©Dr. Carla Lane, CERI, U.S. Dept. of Education, Star Schools DLRN Project Director, Far West Laboratory, 2862 Millbridge Place, San Ramon, California 94583. Also, see EDNET Faculty Training Manual (Preparing Teachers for EDNET Technology), section 8.4, Utah State Office of Education (http://www.usoe.k12.ut.us/curr/inservice/ednet/faculty/html) 1996.

Instructional Design Template (Carla Lane)

The following is a new method devised to assist the distance learning teacher plan the best type of teaching style to match the requirement of the objective. For example, a teacher can help students work together by following the advice on the chart. In the "People" column there are four checkmarks–those kind of activities will foster "People" skills. Perhaps you would want to do a video conference with small group discussions.

Instructional Design for Distance Learning
*(An activity developed by Dr. Carla Lane)

Method	*Learning Style*								
	Detail	Num	Qual	Inan	People	Listen	Read	Icon	Dir. Exp.
TEXTBOOK	•						•		
LECTURE	•					•			
DISCUSSION			•		•				
COOP. GROUP					•				
MANIPULATIVES	•			•					•
VIDEO	•					•		•	
CD-ROM	•		•	•		•	•	•	•
WORKSHEETS	•	•							•
SIMULATION	•					•	•	•	•
FIELD TRIP					•	•		•	•
COMP. CONFERENCE	•						•	•	
VIDEO CONFERENCE					•	•			

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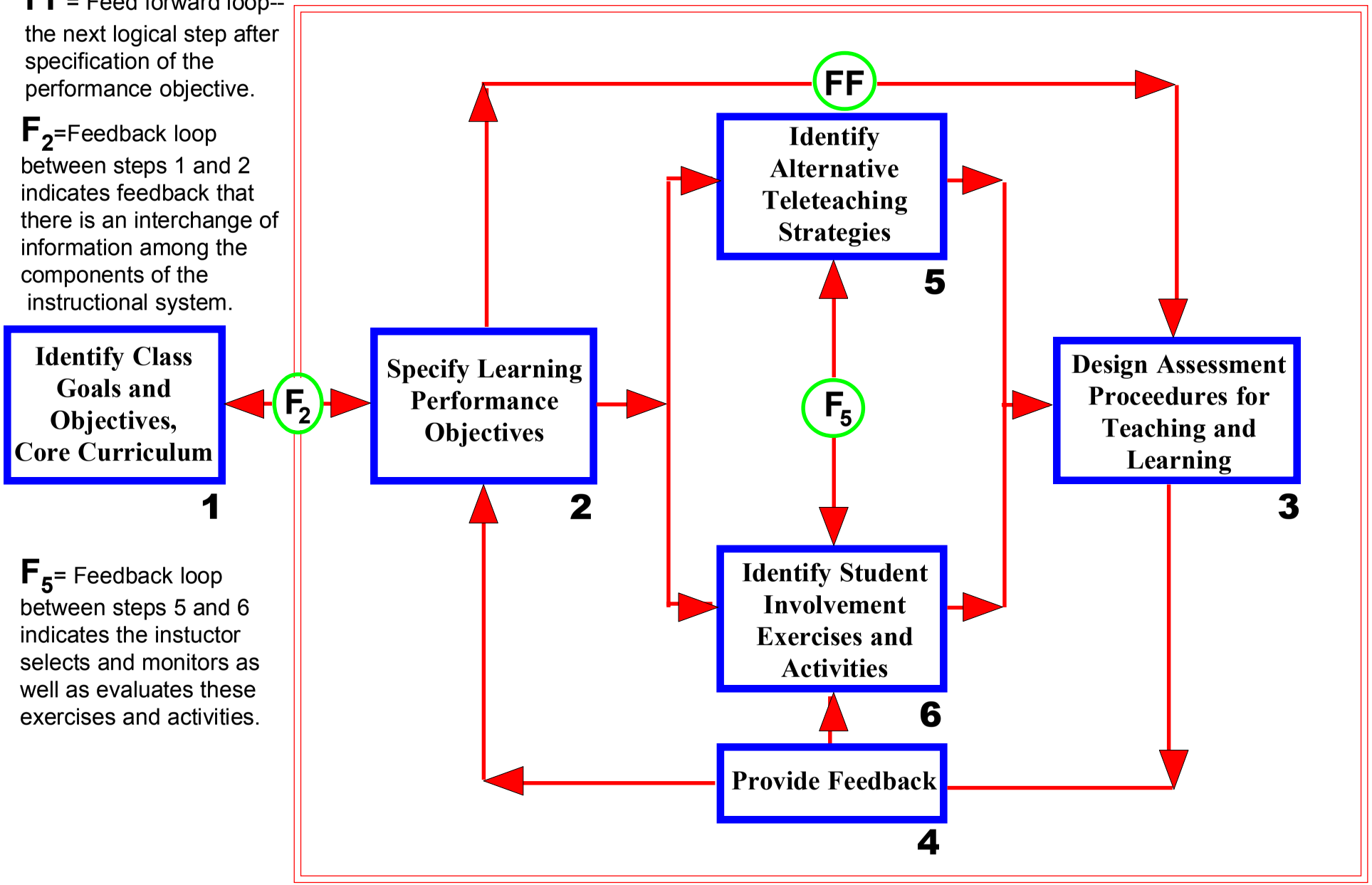
The ISAT Model--Instructional Systems Approach to Teleteaching

FF= Feed forward loop--the next logical step after specification of the performance objective.

F_2=Feedback loop between steps 1 and 2 indicates feedback that there is an interchange of information among the components of the instructional system.

F_5= Feedback loop between steps 5 and 6 indicates the instuctor selects and monitors as well as evaluates these exercises and activities.



Teaching At A Distance with Merging Technologies: An Instructional Systems Approach, Thomas E. Cyrs (Center for Educational Development, New Mexico State University, 1997). Pp 57-62.

The ISAT Model--Instructional Systems Approach to Teleteaching

1. Identify Class Goals, Objectives matched to the Core Curriculum--The goals of the school system and the course should be carefully articulated. These goals should be matched to the state core curriculum. Needs assessments are also helpful in determining the objectives of the proposed course.

2. Specify Learning Performance Objectives--Learning performance objectives include a statement of end-of-telecourse objectives. These objectives should be formulated around "Bloom's Taxonomy of Educational Objectives" in cognitive, affective, and psychomotor skills. These end of course objectives are typically stated in 3-5 statements.

3. Design Assessment Proceedures for Teaching and Learning--Assessment of teleteaching effectiveness involves self-assessment, student assessment, peer assessment, and possibly administrative assissment, depending on the purpose of the assessment. These data are meant to provide feedback to the instructor so that the course can be imporved in the future. Assessment should also include teaching methods, student activities, and exercises.

4. Provide Feedback--In the area of learing, the feedback arrows mean that assessment procedures, in whatever form, must be at the same intellectual level as the stated learning performance objectives. Example: If the learning objective is at the application level, then the measurement porcedure must be at the same intellectual level. Formative and summative evaluations procedures should be used.

5. Identify Alternative Teleteaching Strategies--The teleteaching strategies define what the teleteacher will do. These methods include synchronous and asynchronous communications with students such as monologue by the instructor, two-way interaction, high-level questions, student-to-student dialogue, peer teaching, etc. Teaching strategies answer the questions of how the instructor will teach at a distance using any single delivery system or combination of delivery systems.

6. Identify Student Involvement Exercises and Activities--Research indicates that the more students are involved in the learning the more permanent the learning will be. Responsibility for learning rests with the students.

Quality Teaching does not JUST HAPPEN!