The Satellite Technology Demonstration (STD) adopted a coordinated approach called the "courseware team concept" to effectively merge content and video production expertise in television programing. To encourage involvement and participation by the entire staff in the production of a television series, a system was designed to avoid an assembly-line process but yet create an atmosphere conducive to open discussion and the exchange of ideas. The courseware team avoided isolation and separation of content in script writing and program execution by combining educators, writers, and television directors into teams charged with meeting the project objectives. This method of programing was highly accepted by the student audience. Two flow charts illustrating personnel and programing are included. (Author/DS)
THE USE OF COURSEWARE TEAMS FOR ACHIEVING CONTENT OBJECTIVES IN TELEVISION PRODUCTION
INTRODUCTION

The Satellite Technology Demonstration (STD) of the Federation of Rocky Mountain States adopted a coordinated approach -- called the "courseware team concept" -- to merge effectively content and video production expertise. This approach varied from the more frequently used method of maintaining separate and independent activities for content design and scripting on the one hand and video production on the other.

A coordinated approach was needed to satisfy certain STD design policies and Project constraints. The user-designed policy, for example, called for the close monitoring of design parameters into actual production. Also, the constraints of limited time and funds dictated a closely related process for content design and video production. Funding constraints eliminated the option of subcontracting production efforts. Given these limits, the programming staff's job was to develop a content-through-production organization, with the capability to implement Project requirements.

INVESTIGATING ALTERNATIVES

An investigation of existing production organizations included the "course-team" concept employed by the British Broadcasting Corporation (BBC) and the United Kingdom's Open University. Under this system, an "education by television" committee (composed primarily of educators and chaired by a university academician) meets regularly, perceives curriculum needs, and sets forth the courses required for broadcast programming and production.

These courses are assigned to course-teams, consisting of researchers, writers, and content specialists; each team is under the leadership of an educator-director, who is trained in television production. The committee receives periodic progress reports from each course-team and approves on-going procedures or recommends changes. A BBC representative offers technical counsel and suggestions at committee meetings.
In the BBC/Open University course-team approach, content objectives are determined by the education-television committee. Research provides insight to audience needs and receptivity to assist the committee in making decisions about what courses and formats will be implemented. Editorial control of content guidelines, therefore, constantly influences the course-team's production output. Although this system is effective for the Open University, the STD thought it would be ineffective in meeting the Project's need for user involvement throughout production.

Other aspects of the course-team concept, as practiced by the BBC, also seemed inappropriate to the STD's needs. The BBC/Open University teams operate in virtual isolation; team members do not attend regular committee meetings to obtain first-hand reports or to offer suggestions. Instead, they send written reports, detailing the status of a particular course, to the committee; the committee, in turn, approves or disapproves the courses in writing.

These procedural aspects do not conform to the STD's need for both immediacy and flexibility to inject user and staff feedback into the Project. Another apparent disadvantage to the BBC concept is the lack of opportunity for crossover interaction between teams. Each team is responsible for its own program objectives and video production. For the STD, this independency would lead to the development of different program elements, with no clear knowledge of the overall objectives.

The STD Courseware Teams

A major STD objective was involvement and participation by everyone included in the design and production of the television series. Specifically, the programming staff had three major responsibilities:

1. The design and development of content-specific programs.
2. The production of those programs.
3. The development and production of print-support materials.

Academic and productive expertise at the design and production level were needed to accomplish these goals. Personnel had to work together, as a team, to reach a consensus.
Management, therefore, designed and implemented an organizational structure within the Project to merge educational and production talents which were receptive both to user-based information and feedback and to data or suggestions supplied by other STD personnel. Known as the "courseware team concept," the structure was similar to the BBC/Open University course-team, but it was modified slightly to address the problems unique to the STD.

The STD courseware organization, as shown in figure 1, consisted of two teams or units; each team was headed by a unit director, who was responsible for the team and its finished products. Experienced television director-producers were chosen as directors to alleviate the problem of training educators to become technical experts. Unit directors were involved in the construction of studio sets, as well as the selection of talent.

Each courseware team also consisted of an experienced educator (content generalist), two writers (each with at least five years experience in related media fields), and a clerk-typist. In addition, the organizational structure contained a pool of support specialists who reinforced and interacted with both teams. This pool consisted of a third content generalist, a print-media specialist, a script editor, and a reference specialist.

The responsibility for seeing that the combined content and production objectives were observed and satisfied rested in the leadership of two people: an executive producer and a content coordinator. The executive producer was responsible for approving the visual treatment, integrating program segments into a uniform vehicle, or vehicles, and maintaining production standards. The content coordinator evaluated content interpretation for accuracy, consistency, and integrity. Their joint responsibilities extended to guidance and approval of script design, talent selection, and development of supplementary materials.

The courseware system was designed to: avoid a mechanical assembly-line process; eliminate demarcation lines between production and content by combining the various skills of both academic and non-academic personnel; create an atmosphere conducive to open discussion and objective exchange of ideas; and cross-pollinate between and among team members.
Figure 1. Personnel Chart
The STD Courseware Team Process

The four major steps in the development of a program or program segment are to:
1. Identify content objectives for the audience.
2. Design a format or framework for creating perceptions in the audience.
3. Script a vehicle, or vehicles, for communicating the specific content to an audience.
4. Produce finalized scripts for presentation and audience consumption.

After the content structure is determined, the courseware team meets frequently to discuss the educational objectives, to receive information from the field and other staff members, and to be informed of the capabilities of the studio under construction. These meetings are designed to promote team member awareness and understanding of each other's functions, purposes, and problems.

The content coordinator and content generalists, who are aware of program length requirements, develop specific behavioral objectives for each scheduled program. The executive producer, unit directors, and writers -- working within the guidelines provided by content personnel -- develop format alternatives, possible production vehicles, and suggestions for character delineations. Final recommendations on production factors such as format, vehicles, and characters result from team discussions and majority agreement. These recommendations are subject, of course, to field appraisal and reaction, as well as to Project management's approval, before adoption.

The executive producer divides and assigns individual programs between the two courseware teams. Often, these programs have interrelated vehicles, objectives, and sequential content development. Each unit team, therefore, must be aware of the other's recommendations and treatment. Informal gatherings and regular group meetings help to make this correlation and awareness possible. Information memos, design outlines, and scripts are distributed to all team members and to other staff people for comments. Monitoring procedures and checkpoints are used at each stage of development, as shown in figure 2.

The content generalist is responsible for preparing the "information memo" for the unit; this memo defines the specific content to be addressed in a given program. Under
Figure 2. The Formative Process for STD Student Programming ("Time Out!")
the unit director's leadership, the courseware team then arrives at a design outline, which identifies the vehicle, basic storyline, and time length for each segment. The writers are responsible for expanding the outline into scripts; they work closely with the unit director and content generalist. Further modifications are provided by other members of the courseware team, including cross-checks and critical reviews by the script editor, content coordinator, and executive producer.

The unit director is responsible for studio execution of approved scripts. His involvement in the developmental process helps to blend content and production efforts. The content generalist and the writer assist the director in last-minute production or script changes, thus insuring adherence to content objectives.

Cross-pollination and feedback are also obtained from other programming staff members. The script editor checks scripts for sequential continuity, appropriate language, character development, and visual requirements. The print-media specialist, with the assistance of content generalists, correlates and integrates teacher and student materials with the program objectives and the scripts. The artists and set designer consult with unit members to achieve a thorough understanding of the visual requirements for producing the video components and supplementary materials.

Feedback is further insured by personal contact; by user and team interaction. Team members and state coordinators visit participating sites for personal interviews with community teachers, students, and residents. Teams are exposed to planning variables, such as regional linguistic eccentricities, student vocabulary levels, life styles, social attitudes, future aspirations, and ethnic composition. They also learn about a town's demographic characteristics and geography, community interest in the school system, and students' interests and attitudes. They talk with the potential viewers (the junior high school students) about their reactions to certain formats for programs and supplementary materials, as well as about their feelings toward participating in the Satellite Technology Demonstration. The team's written reports and perceptions add greatly to the STD's knowledge of local situations and influence discussions, scripts, and production treatments.
Additional script modifications are obtained by distributing early drafts to consultants in the eight-state area. Sample programs are viewed by students and teachers in a continuing effort to obtain user reactions and preferences.

**Difficulties Encountered by the STD Courseware Teams**

Several things made it difficult for the STD to implement the courseware team concept. For one, there was a rapid turnover in personnel. One team had four different unit directors during a five-month period. The same team had one writer who twice left and re-joined the staff. The position of executive producer was held by three different people during a four-month period.

Given this fluctuation of staff and the stringent deadlines for production of scripts, the courseware team did not function always according to theory. Further, once the studio was in operation, the unit directors were seldom available for team or staff meetings. The writers, as well as the directors, were under particularly demanding schedules after production began; thus, only the content generalists moved back and forth from team to studio on a daily basis.

Time constraints made it impossible to achieve consensus among team members and across team lines. The democratic organization implicit in the theoretical structure of the courseware team concept requires time; time, however, became an unaffordable luxury at the STD.

On the one hand, the teams found it impossible to attain democratic procedures; on the other hand, they wished to avoid authoritarian procedures. As a compromise, the teams often developed a laissez-faire approach. Two areas -- character development and character portrayal -- were affected by this approach. The writers did not have the opportunity to explain character development to each other or to the directors; the directors, who were unsure of the character development, did not have the understanding necessary to elicit consistently professional performances by the actors.

Another major source of difficulty for the courseware teams was the problem of trying to implement a new concept. Some team members embraced and adapted to the system; others did not. The people who did not adapt had several reactions. Some reacted defensively;
they attempted to form cliques and garner support among other team members. Others reacted aggressively; they tried to attack the other team members' integrity, knowledge, and products. Still others reacted indifferently; they tried to ignore the requisite process by acting unilaterally.

In spite of these problems, communication and cross-pollination occurred often. Effective programs were produced.

RESULTS

No one person was responsible for the success of the program. Programs emerged as cohesive products, not as separate, erratic, individual contributions. Program segments dovetailed regardless of who directed individual parts. Team members encouraged each other's creative efforts.

The system's reliance on interface between academic and non-academic personnel resulted in educational programming that was highly accepted by the audience. Thirty-six hours of creative, dramatic television was produced within a period of less than 10 months. These hours represent the original, pre-recorded portions of the J-Series.

RECOMMENDATIONS

In terms of operational policy, the following requirements appear necessary for future success of the courseware team concept:

1. There should be regularly scheduled meetings in which all members -- course-team personnel, necessary support specialists, executive directors, and content coordinators -- participate.

2. No one should be allowed to take a dictatorial stand on any issue, and each participant should be assured that his or her ideas will be considered.

3. All members should be encouraged to speak their minds.

4. All members of a unit should engage in give-and-take discussion on the information memo, design outline, or resulting script.
5. No script should be considered for production unless approved by both the content coordinator and the executive producer.

The courseware team relies heavily on people working closely with each other to achieve a desired end through consensus. Not only must team members exhibit the necessary job skills, but they also must be capable of high levels of human and professional interaction. If difficulties arise once the teams are organized, then small group strategies and techniques can be used to define and solve problems.

SUMMARY

The STD program staff used a courseware team organization and process that was adapted from the course-team system of the British Broadcasting Corporation and the United Kingdom's Open University. The courseware team avoided isolation and separation of content, script writing, and program execution by combining educators, writers, and television directors into teams charged with meeting the Project objectives. This team approach also operated in ways that encouraged user and staff involvement during the design and production of the J-Series.

This report was produced with funding from the National Institute of Education. The views expressed do not necessarily reflect those of the National Institute of Education or the U.S. Department of Health, Education, and Welfare.