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ABSTRACT

Twenty-eight medical schools formed the Southern Medical School Consortium, later expanded to the Health Sciences Consortium. The sole purpose was to set in motion the Self-Instructional Materials Project to produce self-instructional materials which could be used in several institutions. The project developed self-paced, inexpensive instructional packages which could be exported to other schools; these materials also had to meet the criteria of possessing clear objectives and practice activities, being documented by post-test evidence of student learning, providing feedback to students, and of allowing for revision as needed. In its earliest stages 55% of the project time was allocated to faculty training, 30% to dissemination and the remainder to production, testing, and revision; in the future the need for the first activity will decline, but more effort will be required for the last three. The first Directory of Self-Instructional Materials was published in 1972; 150 instructional packages were cataloged and over 4000 user orders resulted. A second edition is scheduled for 1974 and will contain 300 packages. The project has been successful to date and should make greater contributions as production, quality control and dissemination activities increase. (PB)

THE SELF-INSTRUCTIONAL MATERIALS PROJECT: PROGRESS AND PROSPECTS

Stuart R. Johnson and Rita B. Johnson

"Is it possible to develop instructional programs which can be shared among different schools?" This was the question asked by a group of Deans of medical schools in the Spring of 1971. They expressed a desire to export especially effective instructional programs produced in one school to members of a group of twenty-eight cooperating schools. The technology available to achieve their goal was to be instructional product development. The basic question was whether we could provide replicable instruction. Could we export self-contained instructional units which would reliably produce intended learnings at different times and places?

In the Summer of 1971, the founding group of schools formed the Southern Medical School Consortium. It was expanded two years later to the Health Sciences Consortium due to demands for assistance from a broad variety of health related institutions. The sole purpose of the Consortium was to set in motion the Self-Instructional Materials Project and bring about the production of self-instructional units which could be shared for use in the instructional programs of many institutions.

The Basic Project Goal

Many inquiries were received which presumed that the Project would develop a catalogue of audio-visual aids. However, the addition of audio-visual components to instructional materials does not in itself increase student learning (1, 2). Therefore, the Project attempted to develop the following:

- Reproducible instruction which would cause intended learnings at various locations and at different times,
- Exportable instruction which could be sent to other locales as "packages," without the instructional designer being present,

- Documented instruction which would require a post-test to provide evidence of intended student learning,
- Self-paced instruction which would provide the student with frequent practice at what he was to learn to do; it also would provide regular feedback on whether his practice was correct,
- Packaged format which could facilitate gathering revision data to show where students have difficulties,
- Communication media which would allow maximum student practice of the objectives, and permit student self-pacing,
- Replicable instruction which might be inexpensive and easy to duplicate.

The result was that most self-instructional units developed for Project use utilized a paper-and-pencil format, sometimes accompanied by 2" X 2" slides with hand viewers or projectors, ancillary charts, diagrams, specimens, reference materials, and audio tapes.

Progress to Date

The first Directory of Self-Instructional Materials was published late in 1972 and represented the earliest assemblage of units which met Project criteria. Some 150 packages were listed, 30% of which had been revised at least once from data obtained by testing with students. Each unit mandatorily had a post-test, practice exercises for the students based upon performance required by the post-test, and immediate feedback to the student following each practice exercise. We also urged faculty producers to include measures of student attitudinal response as well as clear statements of objectives.

Over 4,000 packages were ordered during the last year. The nature of the requests suggests that most inquirers were familiarizing themselves with the idea of self-instruction. There was some broad adoption of units into the on-going instructional program of several institutions. However, our impression is that package distribution efforts to date have largely served to inform prospective users of the potential of the self-instructional package.

A second edition Directory is planned for late Spring of 1974; it will include a broader array of self-instructional units. There will be approximately 300 units for medical and health educators. Packages will be available for patient education. In addition, we will list the first units of a Spanish language collection.

Program Activities

Four basic program activities were viewed as necessary to initiate and enlarge the collection of self-instructional units available at any one campus.

> Training: Activities in which time was spent in planning, conducting, and evaluating faculty training workshops, including preparing workshop training materials which could be used by medical and health faculty.
>
> Production: Activities in which project staff worked directly with faculty and coordinators so as to aid them in the production and development process. This included holding Leadership Conferences and tutoring faculty.
>
> Tryout/Revision: Activities which involved pilot-testing, data gathering, formative revision, field-testing, obtaining content reviews, evaluating media and format.
>
> Sharing: Activities which involved preparation of newsletters, progress reports, supplements of the Directory, package fairs, slide-tape presentations and general information dissemination. Activities also included distribution of packages on a national basis as well as ongoing follow-up support concerning distribution and installation of materials.

Trends in Expended Effort

In order to plan the activities of Project staff members, it was necessary to determine when each of the four basic activities needed special emphasis. For example, it was deemed essential to produce a critical mass of trained faculty producers as soon as possible so that self-instructional units could be developed. Although the staff members of most product development programs spend major effort on actual production, our Project capitalized on the training of faculty who would produce the materials with the help of their campus coordinators.

The trends shown in Figure 1 on the next page represent our best estimate of expenditure of effort by Project headquarters staff during a five year period. Figure 1 graphically portrays past efforts and expected future shifts in emphasis. The trends for each program activity are summarized in the small graph above each column of the figure.

Analysis of trends reveal the following:

1. Training activities are expected to decline in emphasis over the five years. Coordinators begin to pick up their own training capabilities. Leadership Conferences held by project staff teach coordinators and faculty members to conduct their own workshops. Staff involvement decreases although the total numbers of faculty trained by other people each year on different campuses actually increases.

2. Production activities by project staff are minimal throughout the total period. Major producers are faculty members on each campus. Our contact is most often with the Coordinator who has developed staff capabilities to provide on-campus and local support services and resources.

3. Tryout/Revision activities are expected to increase over the five-year span. Quality control through tryout and revision cycles should become a dominant activity of project staff in the next few years. The first two years were spent in producing the first assemblage of units and making them available for sharing.

4. Sharing activities are expected to be dominant and steady throughout the five-year period. However, two opposing trends can be identified to account for this.

   a. Dissemination of information about the project was initially necessary to inform administrators and faculty about the purposes of the project and the advantages of cooperative development.

Much time was spent at first in sharing information through executive committee meetings, newsletters, convention participation, package displays, etc. This should decrease over time.

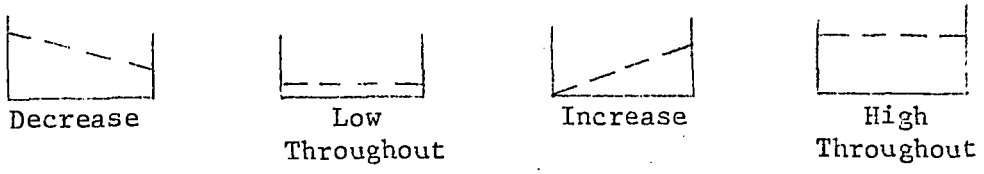
b. On the other hand, as more packages accumulate and become available for sharing, they must be installed in the curriculum. Implementation of these materials and the general exchange of units within campuses is expected to increase each year.

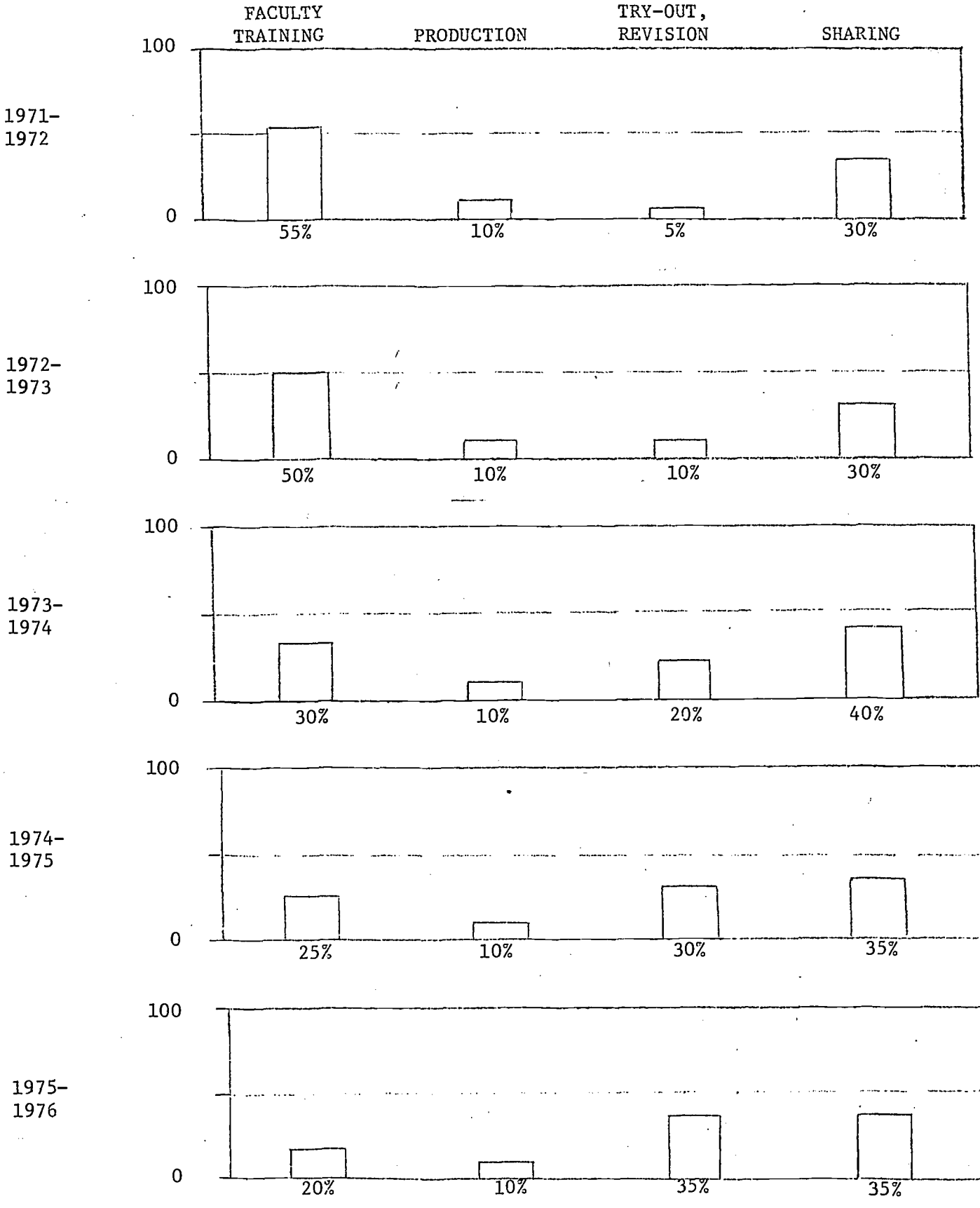
The Future

In view of the progress and prospects to date the Self-Instructional Materials Project will place greater emphasis upon quality control and sharing procedures in the next few years. These shifts in emphasis will be more clearly visible as packages tend to accumulate and become available for exchange. We would expect to see training efforts directed towards distribution and sharing. Faculty members and coordinators must learn to use materials once they have been produced. Administrators must be urged to find ways to reward those involved in the instructional product development and exchange process. The Health Sciences Consortium is likely to expand as the need for self-instruction and its use in health-related areas becomes more apparent.

Figure 1

ESTIMATED PERCENT OF EFFORT ON MAIN PROJECT ACTIVITIES





BIBLIOGRAPHY

1. Popham, W. James, "Curriculum Materials," Review of Educational Research, June, 1969, p. 327.

2. Baker, Eva, "The Technology of Instructional Development," from Second Handbook of Research on Teaching, edited by Robert Travers. Published by the American Educational Research Association, Rand McNally, 1973, p. 261.