COLLEGE & RESEARCH LIBRARIES

Research Notes

CONTENTS

Julia F. Baldwin and Robert S. Rudolph 78 Improving Student Recall of Library Information from Slide/Tape Programs

Janell Rudolph and Kit Byunn 80 Academic Library Newspaper Collections: Developing Policy

JULIA F. BALDWIN AND ROBERT S. RUDOLPH

Improving Student Recall of Library Information From Slide/Tape Programs

For library instruction, slide/tape programs offer several advantages. They are flexible, lending themselves to easy updating of information and correction of errors. They are suitable for point-of-use applications or for showing to class-size audiences. It is possible to get close-up shots of pages, individual index entries, and catalog cards as well as on-site shots and pictures of graphics. In addition, slide/tape programs are relatively simple to make, at least in comparison to videotape. The film "crew" can be a single person, thus minimizing problems of scheduling the filming and of disrupting normal library operations. The narrator does not have to memorize the script or use specially prepared prompter cards. This simplicity makes creating a slide/tape program relatively inexpensive.

However, as an instructional tool, the slide/tape program has the drawback of being an inherently static medium. The pictures do not move. There is no eye contact with the narrator. In a slide/tape setup, the presentation advances according to a predetermined pace, irrespective of the needs of particular audiences. In classroom showings, the lights are often turned off. As a result, students' attention may wander and important points may not get across.

This article offers librarians a technique that improves the effectiveness of the slide/tape program as an instructional tool. The technique involves a kind of programmed instruction in which selected material is periodically reviewed in question-and-answer slides. Our findings from a year-long study demonstrate conclusively that this kind of interactive feature does improve immediate recall of library information.[1]

Test Sample

Our findings are based on a sample of 569 students enrolled in a business-report-writing course during the 1978–79 academic year. An introduction to the library is a regular part of the course since students are required to write a library research paper. Our slide/tape program is designed to provide this introduction.

To assure a random sample, we used odd and even section numbers as a basis for placing students in the experimental (odd-numbered sections) or the control (even-numbered sections) group. This odd/even grouping eliminated bias due to variations in student alertness during different times of day since sections of the course are scheduled by odd/even pairs at the same hour but on different days. Differences in motivation and maturity between night- and day-school sec-

Julia F. Baldwin is documents librarian, and Robert S. Rudolph is professor of English, the University of Toledo, Toledo, Ohio.

tions were also thereby avoided. Bias due to differences in teachers' abilities was eliminated by having teachers exclude all library instruction from the course until students were able to see the slide/tape presentation. This sampling procedure produced 564 scorable answer sheets (268 in the experimental group and 296 in the control group).

Testing Procedure

Two versions of the presentation were created for the purpose of testing the effectiveness of the interactive feature. The experimental group (called *Q/A* in table 1 below) saw a version containing 12 additional slides (for a total of 102) and appropriate accompanying script raising and then answering questions about important bits of information. The question/answer feature was introduced at four important places – after presentations on books, periodicals, microfilm holdings, and government documents. Each question/answer period contained two or three questions. Each question or pair of questions was followed by an average 2.6-second pause and then slides and audio giving the answers. A total of ten questions and their answers were given. The control group (called *No Q/A* in table 1) saw a version of the presentation that lacked the interactive feature.

Since we were interested in the effect of this interactive feature on immediate recall, testing was done immediately after the presentation was seen. The testing was prefaced by a set of standardized instructions. Eight of the fourteen questions covered material included in the interactive feature.

Findings

To determine the effectiveness of the interactive feature on improving immediate recall of library information, we ran three t-tests on student scores: one (*A* in table 1) on the scores for all questions; one (*B* in table 1) on scores for questions about just those points covered by the interactive feature; one (*C* in table 1) on scores for questions about points not included in the interactive feature. Table 1 presents the results of these three t-tests.

The favorable impact of the interactive feature on immediate recall is dramatized by comparing the results of t-tests *B* and *C*. The t-test *C* value of 1.35 shows no significant difference between the scores of both groups for questions on material not covered by the interactive feature. The t-test *B* value of 7.83, on the other hand, shows that for questions on material included in the interactive feature, the experimental group's recall was far superior to the control group's. This finding would be statistically significant even at the .0005 level of probability (critical value – 3.29).

TABLE 1

Comparative Results of T-Tests

	t-test *A*	t-test *B*	t-test *C*
Q/A Group*			
N	268	268	268
Mean	9.91	6.26	2.74
S.D.	2.57	1.62	1.22
No Q/A Group†			
N	296	296	296
Mean	8.42	5.14	2.61
S.D.	2.77	1.79	1.20
t-test value (df = 562)	6.60**	7.83**	1.35

*Q/A Group's slide/tape presentation contained the interactive feature.

†*No Q/A* Group's slide/tape presentation lacked the interactive feature.

**p > .05

Conclusions

This study shows that material reviewed in an interactive feature improves immediate recall of library information presented in a slide/tape program. Two factors may account for this result: the greater emphasis given to those details included in the interactive feature; and the improved attentiveness produced by questioning students about material just presented.

The positive results of the study and its fairly narrow scope invite further research on the impact of the interactive feature. Our program highlights only ten details from an eighteen-minute presentation. Would our results have been altered if, given the same test, the experimental group had been exposed to a higher number of question and answer slides? Intuition suggests that there must be a point at which the addition of further question-and-answer slides becomes counterproductive. But as yet we do not know when that point is reached.

Another unanswered question concerns the durability of the effect. Does the use of an interactive feature assure better retention of learning over several weeks?