

MEDIA REVIEW: AN APPLICATION OF  
COMPUTER AIDED INSTRUCTION IN ADVERTISING

Richard F. Beltramini  
Assistant Professor of Marketing and Advertising  
Arizona State University

The impact of increased sophistication in educational technology has been predicted for quite some time, and limited specialized software has been developed in a number of disciplines to facilitate student learning. However, while the advantages of computer aided instruction (CAI) are numerous and well documented, the basic problem in implementing these advantages seems to be the lag between software development and hardware technology. The creation of general use software for classroom use is a time-intensive and often highly specialized task, which is often evaluated less favorably by administrators than other academic pursuits, and often lacks generalized application due to hardware incompatibilities.

While the advertising discipline is no stranger to CAI, few generalized software packages are available, and little empirical evidence exists on the effectiveness of these techniques in advertising. The focus has been on experiential exercises including simulations, models, and games, rather than on the improvement of student performance in test-taking. This is not to say that this focus is any less appropriate, only that the full benefits of CAI have seemingly yet been realized by advertising educators.

Thus in a specific effort to improve student test-taking performance in an advertising course, this author, in conjunction with Dr. George Kulp of the University of Texas at Austin, developed a CAI exercise entitled MEDIA REVIEW. The exercise was created using the BASIC language, and tested on a CDC system during the spring 1979 semester.

Volunteer students utilizing MEDIA REVIEW logged on a CRT terminal according to a simple procedure described in a handout provided by the instructor, and were presented a series of ten multiple choice questions on the screen, one at a time. Each question had four possible response alternatives, and students responded by typing in the letter corresponding to the correct answer via the terminal keyboard. After keying in an answer, a positive message appeared indicating a correct answer (e.g., "Good job! Try the next question."), or a negative message for an incorrect answer (e.g., "Now you're guessing!") followed by the correct answer.

Student scores were recorded for the instructor's later use, and the students themselves were categorized on screen to indicate their performance relative to their peers (e.g., "Einstein," etc.). The

important aspect of the exercise here was in retrieving the names and scores of those who chose to utilize the exercise, since it was presented as purely voluntary in the classroom. In this way, the Hawthorne Effect and other demand characteristics were controlled for to the extent possible by reducing the experimental nature of the exercise, likening it instead to a recreational computer game.

Approximately half of the students presented MEDIA REVIEW, voluntarily participated during the two weeks prior to the examination date. The examination covered the same body of material as the exercise, and included 50 multiple choice questions of the identical format. The subsample who utilized the exercise achieved examination scores significantly ( $p < .05$ ) better than non-users when compared via t-test ( $df=62$ ,  $t=2.31$ ).

An equally important finding was the qualitative improvement evidenced in student motivation among volunteers, and the reduction in computer anxiety among previously uninitiated CRT users. The simplistic design of the exercise permitted the addition/deletion of questions, and its application to a wide variety of other courses. Further information is available from the author.