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### **ABSTRACT**

This introduction to a symposium on the status of research in instructional technology discusses the ongoing debate among developmental researchers as to the instructional effectiveness of media. The controversy dates from the publication in 1983 of an article by Richard E. Clark, who presented the position that media do not really contribute to learning, but merely allow for the storage and delivery of information that might produce learning. On the other hand, many highly regarded researchers have taken issue with Clark's arguments and have recommended that research on media and learning continue. The symposium was designed to bring together researchers who advocate the extreme positions on this matter—Clark, Michael Simonson, William Winn, Robert Tennyson, and James Kulik—and to give them the opportunity to present their views. A brief statement about each cl the speakers is provided by way of introduction to the group attending the symposium. (MES)

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# ". . . MERE VEHICLES. . . "

A Symposium on the Status of Research in Instructional Technology

SYMPOSIUM INTRODUCTION

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"The best current evidence is that media are MERE VEHICLES that deliver instruction but do not inflence student achievement any more than the truck that delivers our groceries causes changes in nutrition." (Clark, 1983, p. 445)

With the publication of this sentence one of the most interesting controversies in the history of educational media research began. Clark's article formally presented a position that for years had been the hidden fear of many in the media research community, the fear that media do not really contribute to learning, but merely allow for the storage and delivery of information that might then produce learning. Clark said what others feared, and he said it persuasively.

Basically, Clark presented the argument that media did not influence achievement in any predictable, generalizable way, and studies that reported that media alone, or in part, did produce learning gains were confounded in some way. Clark went on to support his position by carefully reexamining the considerable body of educational media research. His conclusions were so convincing that the focus of instructional media research shifted almost overnight, and many researchers began to reexamine their own position on the impact of media on learning and education.

All who read or heard about Clark's article were not pleased or in agreement with his arguments, however. Almost immediately a "howl of anger" was heard from many media professionals. The most immediate concerns were expressed by the many media practitioners, such as media center directors, who felt betrayed. Media programs and media specialists in schools and colleges had been experiencing a decade long period of decline and were looking for support from others in the profession, especially



researchers, who they thought should publicize how necessary educational media were. These practitioners certainly did not appreciate Clark's widely publicized report that they thought said "media don't make any difference." Many expressed bewilderment over how "one of our own" could advocate a position considered to be detrimental to the "cause". Some even felt that Clark's article was a further demonstration of how far removed researchers were from the real world.

With the publication of these new articles the pace of the controversy quickened and interest increased in the educational media research community. In many respects, sides were taken and battle lines were drawn.

During this same time period, James Kulik and his colleagues at the University of Michigan had been publishing the results of meta-analysis studies that reviewed research on computer based instruction. In general, Kulik's studies indicated that the computer had a significant positive influence on student learning. Clark took notice of Kulik's results and published a series of articles that examined Kulik's work, took issue with Kulik's conclusions, and reiterated his own position on the confounding of media research, including research on computer based instruction.

Again, the battle was joined. The JOURNAL OF EDUCATIONAL COMPUTING RESEARCH (JECR), and ECTJ published articles and rebuttals from Clark and from Kulik (Clark, 1985a; 1985b; Kulik, 1985). Clark's position was basically the same. He said that "any resulting change in student learning or performance may be attributed to the uncontrolled effects of different instructional methods, content, an/or novelty" (Clark, 1985a, p.137). Kulik, on the other hand, continued to report the results of meta-analyses that indicated the positive influence of computer based instruction on learning.

Presentations at Conferences and Conventions were made by both Kulik and by Clark, but not at the same time. The issue became so engrossing that a review editor for ECTJ felt moved to write an



article discussing his reactions to the Clark article and why he recommended it for publication. This was a unique occurrence in the history of ECTJ (Cunningham, 1986).

As of the 1987 Association for Educational Communications and Technology Convertion, the controversy continues. Neither position is universally accepted, although the arguments of both sides have received wide distribution and have attracted many advocates.

The intent of this symposium is to bring together the researchers who advocate the extreme positions on this matter, and to give them the opportunity to present their views. While resolution of the controversy may be impossible, it is hoped that the papers and discussions presented at this symposium will help "clear the air" on this issue. The symposium participants include:

Michael R. Simonson, Professor Iowa State University

Simonson is the organizer of the symposium and will act as the symposium moderator. As the editor of the RTD/AECT Convention PROCEEDINGS, Simonson has been a long time observer of all four presenters.

Richard E. Clark, Professor University of Southern Cali rnia

Without Clark there would be no symposium because there would probably be no controversy. Although Clark himself has stated that the criticism of media research has a long history, he was the researcher who focused interest on this issue and who presented the "mere vehicles" argument concisely and convincingly.

William Winn, Professor University of Washington

While it might be possible to categorize Winn as Clark's "second" in this duel, it would be a superficial generalization. Winn, editor of ECTJ, is like Clark, one of AECT's and media's most respected researchers. His work as editor has made him familiar with the status or research in our discipline, and apparently has made him an advocate with basically the same interpretation of this research as Clark.

Robert Tennyson, Professor University of Minnesota

As a member of the team who first publicly disputed



Clark's position, and as a widely respected researcher, Tennyson brings to the symposium the unique perspective of one who has followed Clark's work, and who has considerable experience in educational media research.

James Kulik, Professor University of Michigan

Kulik's excellent meta-analyses of research on computer based instruction have been widely distributed and cited by advocates of the positive impact of computers on learning. Kulik's efforts to synthesize results into some body of information that has meaning to practitioners as well as other researchers has been widely appliauded by many in the profession, including Clark.

## CONCLUSION

Following are the four papers prepared by the four researchers who participated in this symposium. These papers represent their current positions, and will clarify for the reader the impact media have on learning as this concept is understood by arguably the brightest and most knowledgeable minds in our profession. For, as Oliver Wendell Holmes said of reading the works of great thinkers:

"Thus only can you gain the secret isolated joy of the thinker, who knows that, a hundred years after he is dead and forgotten, men who never heard of him will be moving to the measure of his thought - the subtle rapture of a postponed power, which the world knows not because it has no external trappings, but which to his prophetic vision is more real than that which commands an army."



## REFERENCES

Clark, R.E. (1983). Reconsidering research on learning from media. REVIEW OF EDUCATIONAL RESEARCH 53(4), 445-459.

Clark, R.E. (1985a). Confounding in educational computing research. JOURNAL OF EDUCATIONAL COMPUTING RESEARCH, 1(2), 137-148.

Clark, R.E. (1985b). Evidence for confounding in computer-based instruction studies: Analyzing the meta-analyses. EDUCATIONAL COMMUNICATIONS AND TECHNOLOGY JOURNAL, 33(4), 249-262.

Clark, R.E. (1986). Absolutes and angst in educational technology research: A reply to Don Cunningham. EDUCATIONAL COMMUNICATIONS AND TECHNOLOGY JOURNAL, 34(1), 3-10.

Cunningham, D.J. (1986). Good guys and bad guys. EDUCATIONAL COMMUNICATIONS AND TECHNOLOGY JOURNAL, 34(1), 3-7.

Kulik, J.A. et.al. (1985). LETTERS-The importance of outcome studies: A reply to Clark. JOURNAL OF EDUCATIONAL COMPUTING RESEARCH, 1(4), 381-386.

Petkovich, M.D. and Tennyson, R.D. (1984). Clar's "Learning From Media": A critique. EDUCATIONAL COMMUNICATIONS AND TECHNOLOGY JOURNAL, 32(4), 233-241.

