

CHAPTER XII

MEDIA IMPLICATIONS IN INNOVATIONS

The authors of the position papers found in the preceding section were each requested to include specific references to the place media could play as a part of the innovation process. Even though most of the authors were not media specialists, they nevertheless made excellent and appropriate references to various roles which media could fulfill.

In addition to the applications which are contained in these position papers, a group of authorities in the media field were asked to examine the papers and to point out specific media implications. The authorities chosen are all well-known specialists representing different aspects of the media field, ranging from theoretically oriented individuals to persons who are practical producers of materials. The critiques which follow, therefore, are designed to enlarge and to extend the range of media applications beyond those found in the original papers.

W.C.M.

THE ROLE OF MEDIA IN COMMUNICATING RESULTS OF RESEARCH

*George Gerbner

The image which emerges from the contributions to this symposium is that of a world in which policy-makers hardly ever do anything because "research says" so. Desirable innovations and the impetus for change usually emerge from the "outside" against resistance "inside." Few are able or willing to consider the results of research on its merits, although all may look to research to rationalize or justify what they want to do anyway. As Hoban

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succinctly put it, "Researchers and potential consumers of research information live in two worlds of their own making."

I for one, writing from a vantage point of omniscience after having digested the excellent contributions to this symposium plus Professor Hoban's imaginative reflections upon them, accept this description as a caricature which captures the essence of our condition and dramatizes the problem of communication confronting inhabitants of the "two worlds."

My task in this paper is to explore that condition and to attempt to identify some roles and functions media might play in the diffusion and innovation process.

I see the communication problem as composed of three major aspects. First it is a problem of the institutional structure, social and cultural contexts, and spectrum of existing channels in which media operate. Secondly, I will discuss the question of how and to whom media uses might be directed. Last I shall raise the somewhat incestuous question of what media might say about media uses in the communication process.

Throughout the discussion I shall draw liberally from the statements of symposium participants, adding other views and my own comments when the special focus of this paper requires considerations not raised by the participants themselves.

The institutional, social, cultural contexts.

Why are the "two worlds" out of tune? The contributions to this symposium make it clear that the cards are, on the whole, stacked against rational and orderly consideration of educational innovation, experimentation, transformation. The system, if we can call it that, encourages fragmentation, disjointed proliferation, waste, and inattention. Change, when it occurs, may be by default as well as by design. Miles' "axiom" neatly sums it up: Educational innovations are almost never installed on their merits.

Characteristics of the local system, the innovating person or group, and other relevant groups often outweigh the impact of what the innovation is."

Why is that so? What are characteristics inhibiting the consideration of innovation on its merits? Let us first dispose of one answer we might be tempted to give, namely stupidity. As sociologist S. M. Miller described it in a recent article* the stupidity argument stems from the vested interest of professionals (especially researchers, I would add) in the contention that intelligence will right the world, and that research is the vehicle of rationality. Looking at events from that vantage point, we talk a great deal about "mistakes" of people who didn't "think things through," who left unanticipated consequences unanticipated, who are "shortsighted" in the face of obvious and mounting problems. There is more and more use made of the stupidity argument which is that somebody goofed, that's why things are not moving ahead.

A much more convincing line of reasoning can be called the power argument, which is that different interest and power groups have different definitions of success. It isn't that stupid things are done so much as that groups in positions of power have goals which conflict with what appear to be the "rational," and "appropriate" goals of social action.

The power argument merits serious consideration both in thinking about innovation in general and in planning for media use in that process. Of course, getting researchers into policy-making positions, making them become part of the power structure, would be one direct way to get the results of research "accepted," or to get them to re-evaluate their research; at any rate, it would be a sobering experience all around. But short of that direct solution, the problem remains one of communication in which power is a complicating variable rather than a faithful servant.

*S. M. Miller, "Stupidity and Power," Trans-action, May, 1964.

The client relationship is with those who have the option of availing themselves of the institution's goods or services and who, by exercising their option and paying for value received, affect the existence, functions, and level of support of the institution. The supervisory relationships--chain of command within the institution--insure that at least minimum demands imposed by clients are met, and usually act to maximize the usefulness--and value--of the institution to its principal clients.

The chief de jure client relationship of American public education is with the state. The major de facto clientele is the local community which exercises limited but vital financial control. In virtually reproducing the neighborhood income and status hierarchy of the local community, the American school district is a prime example of the financial, political, and educational effects of local control. The supervisory (administrative) relationships of the school system, centralized in the superintendent, are often strained by the demands of the more privileged groups to maintain and improve the quality of service they receive (and pay for), and the increasing pressures of the less privileged taxpayers for equalization--whether from local, state, or national resources (and if it is to be of any magnitude, national resources will have to play the major role)--represents one challenge to the structure of financial control which has historically doled out unequal education according to unequal ability to pay.

Other forces are also impinging upon the supervisory relationships of the educational establishment and tugging away on the reins of the existing structure of controls. Among these are forces of equalization in the form of professionalization, teacher organization and mobility on the national level; development of broadly conceived, expertly designed, and heavily capitalized modern curricula including large-scale use of new media and technologies; and teacher education programs responsive to these and other

developments.

Without following up all the implications of this institutional sketch, let us use it as a backdrop against which we examine the observations of contributors to this symposium concerning factors impeding and enhancing educational change, and the role of media among them.

"Education is not noted for the rapidity with which it changes," notes Pierce. "There are some characteristics of the public schools which make it difficult for them to change even when the need may be obvious.... People who make decisions about the schools and their programs often do so from the frame of reference of their own era as students.... The system of lay control of schools tends to place a premium on maintaining the status quo. The basic organizational pattern of the public school system, consisting as it does of thousands of local school districts.... is not conducive to educational change.... Educators themselves, working as they must in the conservative environment which surrounds schools, are not noted for being oriented to creative imagination."

The influence of community forces, educational and other organizations, and the broadening circle of curriculum innovators are noted also by Brickell. "Today the task of designing the instructional sequences has been moved consciously and dramatically away from the classroom," he states. "Indeed, it has been moved beyond local and state school systems to the national level.... This is the day of the pre-packaged instructional system, developed by talented, high prestige, national curriculum teams supported by NSF, NDEA, Ford, or the US Office.... Local schools have consciously assumed the posture of consumers."

Against this background of institutional forces Miles calls attention to the "reality of a national system.... indicated, supported, and reinforced by such factors as the national recruitment of teachers, successful mobility of

students from school to school, the national market for instructional materials, and national examination systems." Therefore, Miles comments, "Any innovation attempt in the American educational system will be conditioned by forces working within or between sub-systems falling in the general categories of educational agencies, government systems and commercial and non-profit organizations."

These considerations lead Miles to offer another "near axiom": "In most cases the initiation for change in an educational system appears to come from outside. Most local changes appear to involve adoption or adapting, rather than direct invention; outside commentators can induce fear and movement toward change on the part of local administrators; and the school board and public create general pressures toward innovation. Local system inhabitants, on the other hand, are naturally much more preoccupied with successful operation of the existing educational program."

In the institutional context of American education, much of the discussion of educational change thus shifts to the process of cultural change itself, and to the problem of how cultural change acts upon professional developments. Several contributors sketched the process in a larger community and even global context. "It seems quite likely, stated Miles, "that educational innovation in the next few years will depend very largely on the course of international relations. More generally, it does seem apparent that the general cultural context serves as a backdrop for innovation: the going Zeitgeist creates specific pressures toward change and applies sanctions for not changing. In the American school system, such general concerns for change are often expressed as specific public demands on the school, which are by general agreement vulnerable to public opinion."

Pierce also developed the point that "The fundamental forces which are responsible for educational adaptation appear to reside largely in the community,

and in the larger society rather than in the schools themselves. The level of community understanding of what good schools are like, the community's expectations of schools and its commitment to education are the factors which weigh most heavily in bringing about educational improvements. However, the instruments of actual change are generally within the profession itself, although they tend to act under the stimulus of community forces."

Among the cultural forces which tend to influence the rate and channel the direction of educational change are technological developments and the mass media. Miles is again instructive as he suggests that these forces "include widespread social change; affluence and the resultant need for intellectually sophisticated manpower; the growth of cultural and aesthetic activities; growth in the rate of production of knowledge; and increases in information handling and retrieval capacity. In addition, it seems very likely that the mass media influence the processes and rate of educational innovation by stimulating the need for change, aiding communication between educational decision-makers in the larger society, and serving occasionally as a kind of feedback device on the public's attitudes toward particular innovative efforts."

Chin points out that media not only influence the rate but affect the bases and processes of social change. "With the increased availability of mass media of communications and channels of influence and persuasion," he says, we have shifted the basis of influencing change. What used to be based on community of interests now rests on diverse and multifarious interests. We probably have more technology for inducing change than we have ever had before. Albeit of a different kind of channel and under different sets of circumstances. With the reduction of community while accompanied by a net increase in quantitative interaction and communications in mass society, we are posed with new conditions of use of the technology and channels for

influencing change."

Whether the mass media in fact stimulate or retard educational change, or both is a controversial point. Pierce argues that "available information on the character of current educational change and how this change takes place indicates that media have played no role of importance." However, he emphasizes that "This need not be interpreted to mean that no important role exists for media. It does mean that any such role remains to be developed. The function of media contributes essentially to strengthening and accelerating the diffusion process rather than supporting invention as such. The imperatives of hastening educational improvements clearly suggest the creation of a more dynamic role for media."

"This role is not likely to rest on simple communication for the purpose of informing only," Pierce continues. "Many responsible educators learn about new educational practices and even appreciate their value without going to the trouble of putting them into effect in their own work. Therefore, the role of media must include their use to motivate and develop understandings which will lead to action. This concept means that speeding the tempo of educational change to the extent that schools will keep step with the cultural revolution depends on more effective continuous education of both the professionals and the lay public....Therefore there are two important tasks of media. One is to make it possible for the layman to develop better understandings of what good schools are and their value. The second is to accelerate the rate at which schools systems take on new practices."

How should media be used?

The study of communications and of the mass media themselves suggests a model or point of view from which to approach consideration of their use. Chin suggests this approach. "Starting originally as a problem of understanding

(and exploiting) propaganda," he writes, "the research and application in this field has been flowing along three separate lines. The first area, often neglected by many academic persons concerned with change is the field of advertising....A second large area of study has focused on one facet of mass communications, namely the study of the two-step process of communication and influence. This approach looks at the role of strategic people in the formation and transmission of influence. These people have been variously called the opinion-makers (Katz, Lazarsfeld, Berelson), gatekeepers (Ewin) and power structurers (Hunter, Mills) of the elite. A third set of approaches is that of the basic research in the variables in cognition and changes in cognitive structures."

Edling makes further specific suggestions. "First," he writes, "let us not expect existing films and other new media to impress others as they impress us. They may be much more, or much less impressive, depending upon the values and interests of the people who experience them. Second, let us not attempt to prepare messages for the newer media to persuade a given audience to 'accept research results, etc.' on the basis of some kind of intuitive logic as to 'what ought to be effective.' Facts, as facts, are not very effective persuaders. There are lots of facts on the effects of smoking, eating, fast driving, etc., and they are commonly known but they have very little effect on behavior."

"If the newer media are to reach their full potential as agents for planned change," Edling continues, "(1) an extensive and specific type of audience analysis must be conducted, (2) messages must be prepared that are congruent with the findings of the analysis and which utilize known principles of persuasion, (3) the messages must be thoroughly tested to determine their 'validity,' and (4) when the messages have been demonstrated empirically to be effective with their intended audiences, then they must be used in a manner

which does not negate their effectiveness."

The dynamics of persuasion, consideration of the social process of influence and of cognition, getting rid of some assumptions dear to the heart of media enthusiasts, and careful audience and effects testing have thus been noted by symposium participants as principles of media use. One cannot advance beyond such general suggestions without specifying the nature, purpose, and circumstances of the communication effort.

Symposium contributors have specified some features of supervisory relationships which affect change within school systems. These features are relevant to the principles of media use noted above.

Major educational innovations are introduced by administrators--not by teachers," states Brickell. Miles concurs and elaborates the point:

"The rationalistic, high-involvement model of curriculum change long advocated by some educators seems seriously inadequate as a model of actual innovative processes," he writes. "The sequence is not that of careful school-wide or system-wide assessment of the pros and cons of an innovation, accompanied by various forms of rational persuasion and missionary fervor, culminating in a general decision to 'go ahead.' Rather, there is a decision (usually administrative) to add particular equipment or materials on a modest ('pilot study') scale; consultant help and special training are then employed to teach teachers to handle the innovation effectively."

Planning for media use should thus consider (1) the broadest cultural context in which educational change occurs, with special attention to the mass media; (2) the possibility of conflict with the existing institutional structure inherent in some uses of new media and new technologies, along with the fact that the existing structure of American education is under severe pressure and in a process of reluctant transformation; (3) the effect of the supervisory relationships within the schools upon innovation and, therefore,

its implications for media strategy, and (4) the fact that even if teachers rarely originate new ways of teaching, they must be supported, assisted, and reinforced in their practice.

This last point has two aspects. One is that, as Brickell suggests, "The key to successful innovation is providing assistance to the teachers as they begin to implement the new approach." The other is also noted by Brickell when he points out that "Turnover in school faculties is so high that training in the innovation must be available continuously to new teachers coming into the school."

When contributors to the symposium mentioned schools of education at all, they were not too hopeful about them as sources of educational change. My own experience prompts me to be more sanguine and to suggest that prospective teachers and teacher training institutions should also be included as important users of "media about media."

What should media do?

Finally we raise the question of content. What should media say about media? Brickell is emphatic in stating that "Research results are useful if disseminated to other researchers or to people who have the time and insight to translate the results into action programs. What should be disseminated to local practitioners is not research results, but better behavior." He also makes the suggestion that a medium should deal with other media rather than with its own uses alone and that "the most effective way to convince a school staff that it should adopt a new program is to let it observe the successful new program in action."

Chin stresses the point that planned change is a "collaborative effort," implying that media should not attempt to present pat solutions, nor "reject the fact that the change agent does have some specialized valid knowledge about new technology and procedure."

And Miles raises the provocative question of whether talking about media as such represents any "real change." "Behavioral scientists and philosophers remind us," he writes, "that the more things change in American society the more it remains the same in fundamental value orientations.

"What we call change, then, depends upon the frame of reference within which it is viewed and defined....Is the introduction of more movie projectors, more films, programmed learning instructional materials, even TV receivers, real change? If more teachers use these media of instruction does this represent the change we were thinking about? Or do we have substitution or alteration in teaching methods without 'real change'?"

Obviously, talking about educational innovation as if it were mere form or gadgetry is as shallow as it is suspect. Form and content, means and ends, systems and functions are intricately related and we cannot change one without also changing the other.

The implication of this and of much of the foregoing discussion is that demonstrations of specific applications of new media and new technologies in educational systems and processes, utilizing the insights derived from research but not attempting to convey research results directly, appear to be the most promising content areas. Brickell's advice for successful demonstrations is that they should portray situations which are "ordinary, unenriched, and normal."

Certainly the comparative portrayal of specific practice in concrete situations under controlled conditions whether designed for the general public, parents, school administrators, or teachers, or a combination of these audiences, is the forte of the audiovisual media.

Summing up

Philosophers are not kings and researchers are not rulers. Intelligence, when not the servant of power, may be a threat to it. Results of research

about new media in education, and their dissemination via media, may implicitly or explicitly strain existing institutional relationships. These are already under the pressure of sweeping social change. It is imperative that media planners analyze their role and anticipate their functions in this process. Attention and resources will have to be devoted to ensuring that the very effectiveness of new media of instruction serves to close rather than widen the gaps of inequality now plaguing the educational institution.

Major instructional developments tend to come through governmental, professional, non-profit, and commercial organizations operating in the larger community, and through cultural change itself, manifested largely via the mass media. The media have transformed the processes of change and influence in society, but their role in affecting educational change has been ambivalent.

Clearly, therefore, work in and with the mass media is a major "media" task of educational development seen in the institutional, social, and cultural contexts. This is a task which itself demands considerable research and development. Careful analysis of the institutional structures of the mass media and their relationships to the educational enterprise, along with their informational and dramatic requirements should be helpful in such planning.

Content analyses of informational and dramatic media fare would probably show that largely outmoded conceptions of what schools are and ought to be are the most prevalent. Improved public understanding of what good schools are, what new ways and new media of instruction can do, is probably the primary requirement for gaining acceptance of research results in the new media.

The communication principles of media application to specific school-related audiences are fairly well-known even if not always observed. Whether

for professional or lay audiences, one principal role for media indicated by symposium participants is that of dissemination of demonstration programs designed according to the communication principles of maximum effectiveness. A recent report prepared under the auspices of the President's Science Advisory Committee on Innovation and Experiment in Education* is relevant in that it calls attention to the relationships of new media uses to the content of instruction and the problems of inequality. The report states:

"One matter with which the panel is concerned is the education of those whom it calls the deprived and the segregated. And one possible program in this area is the same kind of large-scale effort in curriculum development that proved effective in improving science instruction. Much mathematics and science instruction, for example, is unnecessarily bookish. It should be possible to design new curricula in these subjects which, although ultimately just as ambitious as more familiar curricula, are less dependent upon the student's reading skill. Indeed, in elementary school, mathematical and scientific problems can themselves become an introduction to reading."

The same report also emphasizes the need for the development of preservice and in-service training materials for teachers in the area of new instructional programs and media. Such materials would include, in the words of the report, special curriculum units for prospective teachers to use in practice teaching programs; materials that would help a prospective teacher or working teacher examine the problems of teaching a subject, as he advanced in his own study of that subject; and the design and production of

*Innovation and Experiment in Education. A Progress Report of the Panel on Educational Research and Development to the U. S. Commissioner of Education, the Director of the National Science Foundation, and the Special Assistant to the President for Science and Technology. Washington, D. C.: U. S. Government Printing Office, March, 1964.

films showing all sorts of teachers at work in all sorts of classrooms, with all sorts of children under all sorts of conditions."

Our discussion has revolved around ways and means of using media to "mediate" between the "world" of researchers and that of potential consumers and the broader culture which supports and directs their choices. The emphasis has been mostly on the requirements of the latter world. But a final note might be in order on the needs of the former.

Researchers and "academics" themselves are in need of improved communication. This need suggests the desirability of exploring conditions of research publication and other media uses which serve not only the specialized research fraternity but the broader and most influential community of academic and cultural opinion leaders and decision makers. This "cosmopolitan" national community is relatively independent of institutional inhibitions but is poorly informed of new developments in education and of the reciprocal influences between educational and cultural change. One major outcome of an appraisal of research dissemination systems might be the exploration of the feasibility of a central organ, including diversified media activities, which would serve communications and media interests of many professional and academic groups concerned with related problems of education, society, and culture.