This paper attempts to provide a coherent conceptual framework for the dissemination efforts of the Research and Development Center. It distinguishes three quite different ways in which the term, "dissemination", is used: 1) spread of information to a receptive audience; 2) the effort to induce large-scale change by a wide variety of activities; and 3) intensive effort to transmit skills and approaches to selected groups of practitioners. The paper then discusses briefly where the Center stands with regard to the importance of the activities encompassed in each usage, and indicates where current Center dissemination projects fall within the described framework. (Author/CH)
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DISSEMINATION IN THE R&D CENTER: A POSITION PAPER

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Clarifying the meaning of basic terms must be one of the oldest and crustiest techniques for philosophical disputation. Yet it is rendered ever-new and useful by the continuing tendency of men to talk at cross purposes because they mean different things by the same words. Current discussion about the "dissemination" functions of the R & D Center suffers from cloudiness partly because "dissemination" has become, in educational parlance, a catchall term for anything that lessens the insularity of the research center in a sea of educational practice.

This paper is an attempt to provide a coherent conceptual framework for the Center's dissemination efforts by distinguishing three quite different ways in which the term is used, briefly discussing where the Center stands with regard to the importance of the activities encompassed in each usage, and indicating where current Center dissemination projects fall within the described framework. As with all such constructs, the framework has no independent existence and validity of its own, except insofar as it may be an efficient and helpful method of slicing up a complex reality.

Somehow, citing two quite different definitions of a term often leads to "either-or" thinking, and consequent polarization and oversimplification of argument. Instead, the three uses of "dissemination" about to be distinguished should be pictured as the three vertices or extreme points of a two-dimensional triangle. Any program or group of programs can then be informally characterized by saying what it is closest to: whether "in one corner" as a relatively pure embodiment of one definition of dissemination, or somewhere in the middle, as a mixture of two or of all three.

The first and probably the clearest way in which "dissemination" is used is to describe the deliberate flow of specific information outward and downward—which phrase is revealing of an implicit educational metaphysics—from the researchers who produce knowledge to the practitioners who consume it. This information flow may involve newsletters, TV programs, lectures, and so forth.

The first problem in clarifying this definition is the recurrent confusion of information flow with change in the recipient of the information. As David Clark of Ohio State has pointed out in an understandably petulant attempt to define the components of the continuum, research-development-dissemination-demonstration-implementation, in some mutually exclusive way,
"The objective and program of dissemination is to distribute knowledge, again not to expect change, but to get knowledge to people. That's the only objective of a dissemination program, and the kinds of criteria that can be applied to this would be in terms of intelligibility, fidelity, comprehensiveness, and pervasiveness... Its relation to change is that it informs people about innovations, and, as such, it is an appropriate thing to do, but you don't measure a program of dissemination on the basis of whether or not change occurs."

The criterion for successful dissemination of this ilk, therefore, is new awareness and knowledge among a specified group of people, the clarity of the new ideas depending on the intensity of dissemination and the complexity of the information being disseminated. True, the belief that knowledge leads to changed action is at least as old as Socrates. It can be blandly supported on the one hand by the philosophical ploy that if action does not change, the knowledge was not real knowledge, and on the other by the observation that new information often does lead to changed action. However, closer observation reveals that information alone produces change only in those who are already receptive in a situation where the changes are possible. Moreover, even where information flow does lead to change, the same information can produce quite different decisions. Siebert and Lazarsfeld have emphasized that this is true even at the level of highly skilled researchers:

"The second phase in the interplay between research and action occurs when research is completed, and the time has come to draw up specific recommendations. In approaching this subject, we should first recognize that facts do not speak for themselves any more than they can be collected without the aid of a conceptual framework. Indeed there is always an element of personal judgment involved in drawing up recommendations based on empirical research."

If this is true at the level of the "inner circle", how much more so in the world of educational practice, where the same "facts" can be used in one place to justify present practice, in another to pooh-pooh the same practice, and in a third to advertise new materials. An amusing example of the latter can be found in the new "Creative Playthings" catalog, where educators and parents are wooed with a few statements lifted from Bloom's Stability and Change in Human Characteristics, to the effect that:
"At last scientists, researchers, and educators are discovering and corroborating with statistics what Creative Playthings has been preaching for 20 years, i.e. that the early years from infancy to eight years are the critically important years for building self-image, confidence, and the will to learn. Psychologists point out that 50% of all intelligence at 17 is achieved by 5 years and that the years between 5 and 8 are the most powerful years for insuring academic achievement."

Thus, the first reason that the Harvard Center’s formal dissemination projects tend not to lie in the "information flow" corner of our definitional scheme is that we feel even successful, well-understood information flow alone to be a haphazard and inefficient way to accomplish anything beyond itself. Just as it is possible to watch Huntley-Brinkley every night, yet remain psychically uninvolved and politically passive amid the crises of our time, so it is possible to be informed about countless new developments in education, yet go on doing the same old things day after day.

A second reason for rejecting an orthodox concentration in the information-flow corner is that it fosters a relationship between researcher and practitioner which has serious psychological and philosophical drawbacks. Think of the researcher-practitioner relationship as that of teacher and student. Parallels to the information-flow definition of dissemination are thus clarified, together with the reasons why this definition is becoming less and less defensible. The typical information-flow definition of teaching is one in which the teacher imparts knowledge to relatively passive students, and in which the criterion of success is whether students can demonstrate verbally, in some approved fashion, that they have acquired the knowledge. Effects on behavior in and out of school, on adult life, and on the inner world of thought and emotion, are assumed or hoped for rather than looked into systematically.

Concepts of teaching are moving increasingly away from such a schema (though once again either-or polarities must be avoided), toward emphasis on the teacher’s role as collaborator, facilitator, occasional resource and interpreter of experience. Understandably, many teachers accustomed to basing their self-esteem on how effectively and absorbingly they transmit a store of information to students find the new teaching roles troubling because their older skills are de-emphasized and others less clear-cut are required.
We feel that a parallel and equally troubling reappraisal must take place, indeed is taking place, of the ways in which the researcher can most effectively communicate with the practitioner. We are convinced that the same plentiful rhetoric used to decry information flow as the main component of classroom activity can be used to dispute it as the researcher's chief direct means of working with the practitioner: the student/practitioner is passive, thinks of himself as a consumer rather than a producer of knowledge, is disinclined to observe for himself, may become hostile and suspicious if the information transmitted seems to have no relation to life as he experiences it, etc.

Moreover, the usual type of information flow is epistemologically unsound. It produces the practitioner who mouths "Research has proven...", just as in the classroom it produces students who say "The book says..." or "The teacher says..." as a final justification. Conscientious researchers often deplore the slavish acceptance by practitioners of what they, the researchers, know to be exploratory hypotheses in need of much further testing. Yet they may unwittingly encourage such acceptance by a let-me-tell-you-what-we-know posture, or by their own assumption that, to paraphrase another pious hope, truth is just around the corner.

"An attitude that it is sheer wishful thinking that we can ever have generalizations that will be true in all cases, considering the nature of scientific knowledge and the variability of human phenomenon, needs to be communicated to practitioners. Researchers might communicate this through maintaining that a given generalization holds only in the context of a large set of related generalizations, some of which are as yet unknown. Or they can take the approach of some contemporary historians that in any given instance, a generalization must be modified by astute observation of the unique circumstances in which one is attempting to apply it. This oscillation between a general proposition and a close look at specific cases may be especially salutary in encouraging practitioners to be less passive in translating 'findings' into astute observation and constructive action."

A final constructive objection to information flow, as the researchers on the staff of the Teacher-Researcher Project have repeatedly stressed, is that in education research, "results" are most often incomprehensible and irrelevant to the practitioner who wants to do a better job. So, just as current curriculum
reform is in part an attempt to deal in the classroom with what the student experiences as overwhelming realities outside it, concerned researchers must on occasion (i.e. the Teacher-Researcher Project) try to design the scope of their research so that it deals with problems of direct relevance to the classroom, and to glean from past and present research such concepts and hypotheses as may enlighten and stimulate the practitioner. Such sifting and interpretation, though fraught with its own problems—for instance at what point has a study been 'interpreted' so heavily that the force and style of the original work is lost?—is very necessary in the struggle to turn irrelevant into relevant information flow.

In summary, then, we feel that a "dissemination" program defined primarily in terms of flow of information would be seriously limited and unworthy of serious consideration. Two qualifications need to be appended to this statement before proceeding to the next corner of the triangle.

The first is that to reject information flow as a primary goal does not mean to reject it altogether. Only by similar fallacious reasoning might it be concluded that a child emerging from a "discovery-centered" classroom is not supposed to know anything, or that each generation of learners, rejecting "authorities," ought to start from scratch and build all the disciplines anew. The charge of being anti-knowledge or anti-intellectual is one of the easiest to level at many aspects of the current educational revolution, but luckily it is also one of the easiest to refute. Happily, the information-flow definition of dissemination can be fused and mingled with other meanings in highly productive ways. Like many chemicals, it is inert alone but catalytic in certain combinations.

The second qualification concerns flow of information among researchers, which is often confusingly lumped with efforts to inform practitioners and the public. We prefer to think of this kind of interchange as communication among peers who share, in varying degrees, a common language and common assumptions. Information flow within the field of professional researchers is a primary goal without which the advancement of knowledge on a national and international scale would be crippled. Clearly, communication by the Pre-School Program with other groups studying preschool children, meetings of the staff of the Pathways Project with other researchers concerned with adolescents and Negroes, and similar collaboration for each of the Center's projects, are of the highest importance in promoting the best and most efficient use of researchers' time in all institutions. The same could be said for communication
among different projects in the same institution. We do not mean to minimize the great problems of conflicting methodologies, rival schools of thought, and explosion of information that are all too evident when one surveys the research scene. However, in the last analysis all this information is running round and round on the same circuit. That is, the problem of how our R & D Center is to affect practice is qualitatively different than the problem of communication within the academic community.

For this reason, we need to make a somewhat delicate distinction between two kinds of national and international impact on other research institutions. Our efforts at keeping others abreast of our research and its results, and keeping abreast of theirs, will contribute, we trust, to the building of a healthy educational research climate both at Harvard and elsewhere. Insofar as we are able to promote novel combinations of researchers, stimulate interchange among scholars at conferences, and better the conditions, training opportunities, and prestige of educational research, the same is true. However, insofar as we attempt to transmit to the academic world our experiences with experimental programs through which we have deliberately sought to affect practice, and insofar as we are able to evaluate the effects of such programs on practice, that communication is part of our impact on dissemination.

Thus, we expect that the flow of information to our academic peers will consist of two main streams: first, contributions to the advancement of knowledge about education; second, new ideas for more effective ways of interacting with practitioners. The two streams will come together as we are successful in developing modes of research which involve direct contact with practitioners (i.e., elements of the Teacher-Researcher Project, the Pre-School Program, and the Shadow Faculty). However, they will normally be separate in that most of our more "activist" projects include little or no effort to transmit to local administrators and teachers the findings of the Center's formal research and development activities.

The mention of activism will serve to push this analysis on to the second corner of the triangular definition of "dissemination." In this, perhaps most aptly called the hard-headed corner, dissemination is a blanket term used to describe any activity engaged in to bring about certain changes in schools. Change is the key word, rather than information. Since dissemination as defined here often involves work with practitioners, it must be distinguished not so much from information-flow dissemination, to which it bears little resemblance, but from "service"
in the conventional sense--so, in general, definitions serve not so much to distinguish one thing from another which is quite different, as to explicate shades of meaning in terms commonly confused.

The much-discussed conflict between research and "service" begins after a while to sound like a soliloquy on Love versus Duty (substitute any two abstractions) in a closet drama. Can Research be served if the pleas of Service are answered? Can Service wait till Research has grown up? Can one man serve two masters? Can the man of contemplation lead the life of action? Will Service swallow Research whole? And so forth. In such discussions, although the salutary effect of contact with real schools and real children on researchers is often pointed out as compensation, and a sense of responsibility to the schools is frequently manifest, there is a certain grudging note in the response to pleas from the practitioner. Hard-nosed dissemination, by contrast with this caricature of service, is aggressive and cagey, reacting selectively to initiatives from the field, and choosing among alternatives as a part of a strategy of achieving certain goals. According to one Harvard faculty member:

"Dissemination today is a much more sociological, political effort to really change the schools. 'Service' in the grand tradition was a kind of noblesse oblige...a blend of sentimentality and credit-gathering for teachers... Dissemination is much more an intellectual strategy in itself, not being nice to the poor overworked teacher to whom we have an obligation: It's political, strategic, manipulative...We should get rid of the word 'service'. If you want to substitute 'change', then change itself becomes a research problem of fantastic importance."

From such a burst of trumpets, it is easy to imagine this second definition to mean that university educators go stomping into surrounding communities, political muscles flexed, determined to introduce particular changes. On the contrary: mindful of the fable in which the gusts of the North wind only made the traveler wrap his cloak more tightly around him, those who advance this definition tend to emphasize low-key, non-directive approaches, coupled with skillful behind-the-scenes maneuvering and an occasional bold thrust.

Clarification of the paradox, "aggressive nondirectiveness," which is one part of this definition, can best be made by a quick look at COPED, the very large inter-university project
for bringing about change in selected school systems currently being run by the National Training Laboratories. Equipped with elaborate research techniques for measuring what they have brought about, holding planning sessions via inter-university telephone hookup, carefully selecting the communities in which they will work from the many which are willing, the researchers move very deliberately. Yet what are they perpetrating upon these communities? Nothing to make them wrap their cloaks around more tightly: they wish to make school personnel more able to deal with problems by using a variety of T-group and other interaction-oriented modes of training to create greater sensitivity and ability to work on problems in a group. No new curriculum to promote, no research findings to impart—except implicitly.

The activity at the Harvard R & D Center which is nearest to this corner of the definition of dissemination naturally looks quite different from COPED's, first because we are not studying our efforts to bring about global changes with the same intensity that COPED is, and second because we are undoubtedly more content-oriented and committed to different interests. However, we regard COPED's work with interest in that we can learn from it how to be more effective in dealing with groups and the hierarchies within school systems, and more sophisticated in our overall strategy. Currently our policy is to use the literature on planned change within school systems, including descriptions of projects like or unlike COPED, as a resource for our own planning; we are not engaging in large-scale research on our own dissemination efforts, at least in a manner which might rival COPED.

In or near this corner one could place several activities at the Center aimed at goals such as better communication with school systems, reducing hostility toward Harvard, encouraging school systems to be less inbred, encouraging openness to change and interest in intelligent critiques of existing conditions, creating new roles within the hierarchy which can act as points of leverage for change, and facilitating communication between urban and suburban practitioners. The activities cited extend far beyond the projects officially budgeted under "Dissemination," and include direct involvement in local politics, advisory work with new private inner-city schools, countless permutations and combinations of lunch and dinner meetings, involvement with Operation Exodus and METCO, arguments about the merits of locating research facilities in one place rather than numerous sites and so on.

Several arguments can be mustered against Harvard's using this definition of dissemination to any significant degree.
First, such activities are inappropriate for an R & D Center in a university and an inefficient use of the time of research personnel; regardless of the lure of activism, a university research center can make its greatest contribution to better education in the long run by intensive, high-quality research and development. Second, most of this kind of dissemination has little to do with the research currently in progress here, nor are our actions dictated by soundly established findings. Third, such activities are of benefit only locally, whereas an R & D Center is supposed to have national impact.

Our rebuttal is a blend of conviction and pragmatism, for neither of which we apologize. First, many staff members do feel that the Center has a responsibility for improving local conditions, independent of our wish and mandate to have national impact. Second, these freewheeling, often semi-political activities are things people want to do. They take no more of the time of highly trained researchers than the researchers feel is appropriate and professionally edifying. More importantly perhaps, many can be carried out by people who are not primarily researchers, but educators of various backgrounds who are interested in change-agent or liaison roles. The effective use of such key people, whether technically on our staff, jointly appointed, or formally in the schools, produces a multiplier effect, we suspect. The Center’s six r & d directors, twenty-six teacher-liaisons, fifteen research workshop participants, and numerous recipients of small grants, for example, produce changes on a far wider spectrum of places than their own classrooms and offices. Hard-nosed dissemination, when well done, is an efficient use of time and money—or so we hope to demonstrate.

Fourth, working toward goals like openness and less inbreeding in school systems may pave the way for successful information-flow dissemination at some future time. And fifth, for this sort of dissemination which addresses itself to gross problems within a system and among systems, "soundly established findings" are often extraneous to the diagnosis of the painfully obvious problems which are all around us.

To move from the second to the last corner of the dissemination triangle is to go from the macroscopic to the microscopic, from almost-anything-goes to a narrower range of concentration. Dissemination in this third sense is a flow or transmission, this time not of specific information, but of skills, methodologies, intellectual orientations, and attitudes, from Center...
staff, resulting in something which feels more like collaboration, and has a fertilizing effect upon University personnel but which also results in the spread of something important. This third corner could be called intensive dissemination, or training.

Choice of this definition as an important mode of operating is dictated primarily by knowing that there is no substitute for sustained, intensive personal contact in any substantial effort to affect basic attitudes and ways of perceiving. This insight has recently been strongly emphasized with regard to the training of researchers:

"Everything we have found points to the fact that course work, formal examination requirements, and anything else that could be standardized concerns what is ancillary in research training. What is of essence is getting the student into a research environment and having him to research with the criticism, advice, and encouragement of others who suffer the same pain and enjoy the same rewards... Research is learned by doing and taught mainly by contagion. Research must first begin on if there is to be research training."

It stands to reason that practitioners can best sense how researchers and curriculum developers view complex phenomena, and how this posture of inquiry and experimentation is something they could bring with them to the classroom, from sustained contact. Since our human resources are limited and therefore relatively few practitioners can be involved in these interchanges, a type of selectivity must prevail which is largely absent in the second corner: there one selects opportunities; here one selects and grooms individuals.

Though small and selective, our projects or aspects of projects which draw heavily on this definition of dissemination are, as we conceptualize them, inevitably drawn toward the other two corners of the triangle. For one thing, the training of cadres of practitioners in new approaches, new methods of collaboration, and new ways of using resources can have a multiplier effect as the trainees begin to have impact on their schools and communities. The various small projects thus become incorporated into our larger strategies for inducing system-wide changes. For another, the information flow which we contribute to other R & D institutions can include descriptive and evaluative material about these models for school-
university interaction. One of the recurrent problems in bringing research to bear on practice, or for that matter making the university educator genuinely helpful to the practitioner and vice versa, has been to find organizational forms which facilitate this exchange; in that sense, our intensive dissemination efforts are tryouts of things that could be done elsewhere.

Each of our efforts at intensive dissemination is differently constructed, with different and appropriate techniques for evaluation, so that in a relatively short time we should be able to examine and assess a variety of combinations. In the Interdisciplinary Teams Project, a group composed of both researchers from different fields and highly skilled practitioners, "tailor-made" to meet the needs of a particular school's problem, chosen for its national or regional significance, go to the school for up to a year of close work with staff members. In the Teacher-Researcher Project, practitioners capable of thinking very analytically "critique" papers prepared by members of the research staff, each member presenting concepts and findings from his field of special interest which may be useful in the classroom. The teachers add insights and further implications from their own experience, and the papers undergo another round of revisions. In the Harvard-Boston Summer Program, teams of Center staff and Boston teachers work on curriculum planning for Boston's proposed Model Sub-System. All three of these projects obviously involve a good deal of information flow, but each is also cast as a situation designed to evoke critical evaluation rather than acceptance. Moreover, the emphasis is not on what is known, but on what is known that might be useful, since the goal is after all to intervene in the developmental process, not just to say how things develop. Since the best way to distinguish what causes something, from what is correlated with it, is to manipulate situations complex enough to approximate the reality in question, such intensive dissemination encourages both interest in relevant research done elsewhere, and the re-thinking and re-designing of projects undertaken at the Center. As Siebert and Lazarsfeld have pointed out,

"Discussions of research and development often assume that ideas about action develop only when research is completed. The current emphasis on 'linkage roles' for the transformation of research into practice reflects this assumption quite clearly. But very often, concern for implementation is present throughout the research operation and substantially affects the way in which the research is conducted. Recommendations for action begin
to take shape in the research process through the selection of key variables and through the handling of these variables in a certain manner.\textsuperscript{17}

Professor Gerald S. Lesser's Research Course for Teachers initiated in 1966 provides still another model for interaction: that of the researcher explicitly guiding teachers in using research techniques appropriate for problems which the teachers themselves have selected for study and implicitly leading them toward a more experimental approach to what goes on in the classroom, whether or not they are conducting a "study" of that particular phenomenon. Since conventional teacher training often does not lead the beginning teacher to view himself as an investigator and explorer of behavior, perhaps a role for the researcher in encouraging this conception can be formulated as a result of our experience in this and the other projects.

The training of twenty-six "teacher-liaisons" in the Summer Institute gives us an additional tentative design which could, if successful, be duplicated elsewhere. Here, instead of close contact with a few researchers or curriculum developers, the teachers were exposed to a panorama of visitors during six weeks of training while concurrently their intensive experience occurred as they met in groups for T-group with highly skilled leaders and all together for strategy and planning. With a small central staff and the time commitment of no more than a few hours from any one project director or major researcher at the Center, we have thus been able to train agents of change in more than twenty schools in six communities. As in the Lesser project, emphasis is on the changes the teacher sees as crucial in his school, not on some particular content or curriculum which Harvard wishes to distribute.

All these pioneering projects offer a rich opportunity for in-process evaluation:

"Scholars in education should turn their attention to various means of joining research and service through concurrent evaluation. For example, demonstration projects should be observed systematically in order to gain insight into the modifications which occur in educational designs when implemented. Other reasons for research in connection with action programs are: to develop new research tools for measuring events during implementation (i.e. not only after implementation,
as is customary with the psychometric school of evaluation), to help change agents cope with unforeseen developments by reference to data being collected and to theories of innovating and rates of diffusion or acceptance of new practices; and to learn more about the social constraints in educational settings which cause rigidity.  

As indicated some pages earlier, we feel it appropriate to evaluate most of our attempts at system-wide change mostly in an informal manner, and to draw, as we are able, on the growing body of research on change and the planning of change. However, with the smaller intensive dissemination efforts in the third corner of the triangle, more rigorous attempts at assessing what is happening are in order. By rigorous, however, we do not necessarily mean quantitative. Since at this stage of our knowledge, it is not possible to list in XYZ fashion all the variables we wish to study, and since many of the changes and interactions of interest take place as thought processes and responses to events, means of evaluation such as astute log-keeping, before-and-after interviews by psychiatric consultants, in-depth observation by participant observers, and informal on-the-scene assessment as schools are visited are prominent in our thinking. However, these do not preclude more formal means of making comparisons and measuring changes once we are convinced that certain dimensions are more meaningful than others.

More could be said about the location of various other projects on the dissemination triangle. In general, however, the locus of our efforts is somewhere between the second and third corners: that is, between dissemination defined as the effort to induce large-scale change by a wide variety of activities, and dissemination defined as intensive effort to transmit skills and approaches to selected groups of practitioners. Some projects are mainly in the latter corner, but have other implications; some projects are genuinely in between; many activities which are not formal projects are in the second. All programs are drawn toward the information-flow corner insofar as spread of information to a receptive audience is an appropriate activity; however, no projects are wholly there. For instance, the newsletter, Ideas in Practice, is designed with goals in mind that are clearly "second-corner" (two-way flow of information, changing the image of Harvard, etc).

With this mixture of programs and thinking about dissemination, and with the conceptual clarity facilitated by keeping one's definitions straight, we hope continually to re-phrase and re-think vital questions about dissemination and the role of R & D centers in relation to their unique potentialities.
FOOTNOTES


4. Personal communication from Dr. Joseph C. Grannis, formerly a member of the R & D Center staff, now Associate Professor and head of the Division of Instruction at Columbia University Teachers College. Dr. Grannis' R & D Center project, Case Studies of Children's Thinking about Social Phenomena (Monograph Number 1, Center for Research and Development on Educational Differences, Harvard University, 1967), is an example of our strategy of working back and forth between generalizations and corrective instances.

5. The Cooperative Project on Educational Development (COPED) is a project for the exploratory development of models of planned change to improve educational systems, sponsored by the U.S. Office of Education. It is coordinated with National Training Laboratories and eight universities are involved.


7. Siebert and Lazarsfeld, p. 352.

8. Ibid., p. 345.