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To facilitate the dissemination of information about new practices in education to the school systems of Massachusetts, a proposal is outlined for the establishment of a communications network to be operated by the State Department of Education. Five stages of development are incorporated in the dissemination plan: (1) Search for information on new instructional practices, (2) selection of innovations by independent advisory board, (3) evaluation by teams of respected Massachusetts educators, (4) dissemination by both mass and personal means, and (5) demonstration in appropriate settings in various regions. The proposal is based on the assumption that the Massachusetts State Department of Education, as advisor and consultant, can contribute significantly to the improvement of education by selecting, evaluating, and disseminating innovative practices in education which show promise of solving major instructional problems. (JK)

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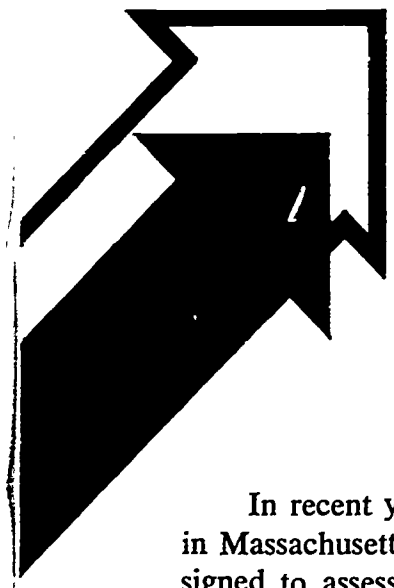
A PLAN FOR

CURRICULUM INNOVATION

IN MASSACHUSETTS

How one state proposes to break the curriculum development lag

Richard O. Carlson
Owen B. Kiernan



Foreword

In recent years an increasing number of surveys have been undertaken in Massachusetts as well as in sister states. For the most part these were designed to assess the dimensions and effectiveness of the educational enterprise. Although most of the studies were conducted by members of the profession, the one from which this document stems was carried out by two businessmen. Specific reference is made to the Moor-Saltonstall Report which was completed in the summer of 1965.

Among other findings the authors noted the indefensible lag in disseminating information concerning better practices. With few exceptions curriculum innovation appeared to be a process reserved for the more affluent school systems. Additionally, State Departments of Education which were in the most strategic location for real leadership in this effort, were neither underwritten nor staffed adequately for such a purpose.

To determine what might be done under appropriate circumstances, a small grant was obtained from the Boston Safe Deposit and Trust Company. To guarantee at least two points of view in the research project, a university professor and a chief state school officer were chosen as collaborators. They hold no brief for the uniqueness of the plan described herein, nor do they defend its adaptability in every situation. It is felt, however, that even the most elementary design is worthy of trial in the attempt to break the curriculum development lag.

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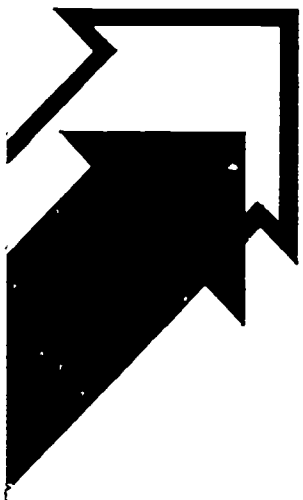
September, 1966

Diffusion of New Educational Practices in Massachusetts



I

Diffusion of Educational Innovations

Until recently the field of education, unlike such fields as agriculture and medicine, has lacked financial support and large scale organized effort in the pursuit of promising new solutions to pressing educational problems. Education is now coming of age, however. In the past few years the federal government has dramatically entered the field of educational development through the creation of research and development centers, regional educational laboratories and supplementary centers. All of these new enterprises (plus others receiving government support) are active in one way or another in the stream of events leading to the adoption of new educational practices.

These pages contain a proposal whereby the Massachusetts Department of Education can extend its significant involvement in this stream of events. We will urge that the Department adopt a plan for the diffusion of information about promising new educational practices to the schools of the Commonwealth of Massachusetts.

A very recent effort of the Commonwealth in facilitating the adaptation of the public schools to present needs was the recommendation by the Commissioner and the creation in 1962 of a Special Commission to make an investigation relative to improving and extending educational facilities in the Commonwealth. The Commission which produced what is known as the "Willis Report" was not unmindful of the need for planned change. In regard to educational inventions and changes, the Willis Report states:

"It is supremely important for every local school to make its own deci-

sions on the substance of curriculum changes. It is supremely important for every local school to make such decisions freely and with full information. Since the State Department is desperately short of the resources it needs to bring full information about curriculum innovations to local schools, far too many local schools are limited in deciding what to teach and how. Many teachers and administrators are far too busy to keep up with educational developments; even those who find time to read about them may not have a chance to see them in action. In fact many local people depend on textbook salesmen for much information about the wider world of educational change. While such sources of information are clearly to be preferred to none at all, their commercial biases are inescapable and their fullness questionable. An orderly, disinterested, comprehensive, and permanent flow of educational information to schools is essential. It should come from the State Department of Education."

Thus the need for the dissemination of information about educational innovations was set forth in the Willis Report. Because of the greatly expanded efforts of the federal government in the area of planned educational change, however, the need for information of this type is even greater now than it was a few years ago. As germane as the Willis Report is, the proposal to be advanced here finds immediate roots in a management study of the Massachusetts Department of Education carried out in 1965 by Edgar Moor and Robert Saltonstall. The Moor-Saltonstall Report brought down a number of recommendations from among which the following is of singular relevance:

"School systems repeatedly requested a source of information on educational researches and innovations. The professional magazines are now filling the gap to some extent. But the school systems contacted were all eager for dependable, up-to-date information on what other schools are doing in Massachusetts and elsewhere. . . ."

To fill the information gap, the Moor-Saltonstall Report recommended that a study be undertaken which resulted in a proposal which would give direction to the Department of Education for the dissemination of information about promising educational practices.

A proposal of the order called for by the Moor-Saltonstall Report is presented in the following pages. Our proposal is based in part upon ideas contributed by officers of the Massachusetts Department of Education and superintendents of school systems in the Commonwealth. These ideas, together with others gathered from a variety of sources, have been incorporated into a framework of theory, validated knowledge, and assumption in formulating our proposal. We begin by outlining this framework.

In developing a system for diffusing information on improved educational practices, we have been guided by a considerable body of validated knowledge and theory on the diffusion of innovations. One such piece of information is that the adoption of promising new solutions to educational problems proceeds through several stages. Research in a variety of fields has

shown that the following stages can usefully be distinguished: (a) awareness, (b) interest, (c) evaluation, (d) trial, and (e) adoption.

At the awareness stage, the potential adopter has simply been exposed to some information about the innovation. The potential adopter may have a particular problem in mind when he first encounters an innovation. Research would tend to suggest, however, that the more likely situation is one in which an innovation happened on "by accident" suggests problems in the adopter's situation to the solution of which the innovation could be applied.

The potential adopter's behavior is definitely purposive at the *interest stage*. He actively seeks information about the proposed improvement in practice. *Where* he seeks this information and *how* he interprets it once gathered are determined in part by characteristics of the potential adopter and of his school system.

The potential adopter at the *evaluation stage* weighs mentally the possible advantages and disadvantages of the innovation, as he decides whether or not to give it a trial. The potential adopter will probably seek advice from his peers at this stage as a check on the soundness of his thought on the matter. One can consider this stage as a kind of "mental trial." Because the potential adopter is unsure of the results of the innovation, he will seek the advice of his peers as reinforcement for his own views.

At the *trial stage,* the potential adopter may use the innovation on a small scale to determine its potential usefulness in his own situation in anticipation of possible complete adoption. At this stage, the potential adopter may seek specific information about the method of using the innovation. The results of the "trial run" will, of course, be very important in the final adoption-rejection decision.

At the *adoption stage,* the potential adopter considers the results of the trial and decides for or against continued use of the innovation.

Research on mass communications clearly indicates that different sources of information are employed by potential adopters at different stages in the adoption process outlined above. Impersonal information sources (mass media) are most important at the awareness and interest stages and personal sources are most important at the evaluation stage.

The reasons for the heightened importance of mass media at the *awareness* and *interest stages* would include the superior accessibility of mass media, and their ability to convey large amounts of information at a relatively low cost. As has been indicated above, however, during and after the critical *evaluation stage* in the adoption process, potential adopters turn to personal sources of information. Several reasons for the importance of personal communication at this stage can be suggested:

(1) Because personal communication makes possible a two-way exchange of ideas, it enables the communicatee to obtain clarification or additional information about the innovation from the communicator.

(2) Personal communication may be more effective in the face of resistance or apathy on the part of the communicatee.
(3) As well as facilitating the transfer of ideas, personal communication is likely to influence *behavior.*
(4) Greater credibility will be attached to personal communication when the source is known and trusted.

This final reason for the importance of personal communication can be easily understood in relation to one important characteristic of change in educational practices, namely the uncertainty prevailing in situations where educational change is contemplated. Research data on the merits of educational practices, where they exist, are frequently weak and conflicting. The variables which would be used to describe the worth of an instructional practice are many and their measurement is difficult. A number of research studies support the generalization that potential adopters depend more upon their colleagues when considering new practices under ambiguous situations than under more clear-cut circumstances. Thus we might expect that the school superintendent who is considering a new instructional practice—the non-graded elementary school, say—will be strongly influenced by the judgment of his professional peers as he seeks reinforcement for his tentative opinions through personal interaction with other superintendents.

Necessarily, the scope of our proposal has limits. It intends to facilitate the accomplishment of a single task, the dissemination by the Department of Education of information bearing on important new practices in education to the school systems of the Commonwealth. Furthermore, the communications network has been designed for a single purpose. There is no intention that it be used for handling day-to-day inquiries for information from local school systems. This is a problem separable from that which we have set out to solve.

Perhaps some extension of the ideas presented in the above paragraph will clarify our formulation of the problem. The proposal set forth herein has been developed from the assumption that the Department of Education can contribute significantly to the improvement of education in the Commonwealth by the careful selection, evaluation, and dissemination of innovative practices in education which show promise of solving major instructional problems. We assume it is better to diffuse quality information on a few major innovations than it is to increase the number of innovations disseminated with consequent dilution of quality. Thus we will propose that the Department apply its prestige and a modest proportion of its resources (perhaps $1 out of every $5,000 spent on public education in the Commonwealth) to a dissemination operation which promises over a period of years to chart the way for important new curriculum departures in the Commonwealth. It is important that the communications network which we propose be conceived as providing for the fulfillment of just this single, but supremely important,

function for Commonwealth education. Care would have to be exercised that the network not be burdened by more "routine" communications from the Department to local school systems.

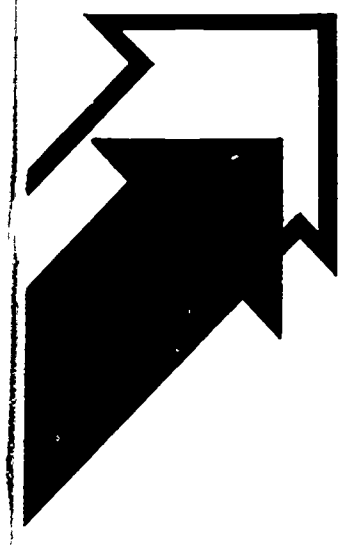
Finally, the proposal rests on the assumption that the relations of the Department of Education to local school systems should continue primarily to be that of adviser and consultant.

These fragments of knowledge and assumptions, taken together, suggest that a plan for the dissemination of information about promising educational innovations should:

(1) provide, in addition to an extensive description, an evaluation of the innovation by persons who are known personally and respected by the potential adopters. Those performing the evaluation should not be connected with the innovation in a manner that would cause potential adopters to believe they were biased.
(2) provide easy access to both mass and personal sources of information.
(3) provide readily accessible demonstration in ordinary settings.
(4) provide for direct involvement in the dissemination system of as many potential adopters as possible.
(5) concern itself with relatively few but major innovations.
(6) make it possible for potential adopters to arrive at informed decisions while leaving them free to accept or reject the innovation.

How would the success of the diffusion plan outlined in the following pages be evaluated? Two possibilities suggest themselves. The plan could be evaluated on a basis related to the number of adoptions by local school systems of each new instructional practice about which information has been disseminated. Alternatively, the plan could be evaluated on a basis related to information acquired by local school systems on each new instructional practice handled by the diffusion network. Of course, these bases for evaluation are not independent. The relation between information acquired and adoptions by local school systems would be significant. Our position, nevertheless, is that the plan's success should be judged on the information made available to local school systems, only indirectly by the number of adoptions. This follows from our position that the Department's responsibility in relation to decisions on curriculum ends with informing, stimulating and consulting.

As the details of our plan are unfolded, it will become clear that the services which it proposes to offer will be more valuable to some school systems than to others. The resources available to certain systems, for example, may enable them to provide for themselves many services which we suggest that the Department undertake. On the other hand, many school systems may lack the resources to implement certain practices although they may wish to do so. In these instances, we expect that the Department will make its resources available in such a way as to facilitate implementation of the desired change.



II

A Plan for the Diffusion of Educational Innovations in Massachusetts

In the operation of the dissemination system, five functions must be provided for: (a) search, (b) selection, (c) evaluation, (d) dissemination, and (e) demonstration. Each of these functions will be considered briefly at this point. Then we will proceed to a detailed examination of the manner in which these functions can be incorporated into the structure of the Department of Education.

The *search* function comprises those activities involved in acquiring information about new educational practices. Information sources of some importance to the search operation would include, among others, the university-based research and development centers, national curriculum study groups and regional educational laboratories (as they come into existence).

Because we are concerned with the dissemination of relatively few, but major innovations, provision must be made for the *selection* of innovations. Furthermore, this selection should be carried out under auspices somewhat independent of the Department of Education. This follows from our assumption that the Department will continue its existing relationship with school systems, i.e. in an advising and consulting capacity. On the other hand, the selection process would have to be closely integrated with Department operations to facilitate the dissemination of results.

The innovations which are selected must be *evaluated.* The evaluation should be carried out by investigators who are neutral with respect to each innovation, thus insuring impartial judgment. Furthermore, the judgment of the investigators should carry weight with school people in the Commonwealth. This suggests that the investigators be chosen from among the ranks of Massachusetts educators and be well respected by their professional peers.

continued on page 10

Proposed **PLAN** for Dissemination of Inform

I SEARCH

for information on new instructional practices

SOURCES, such as

1. University Research & Development Centers
2. National curriculum study groups
3. Title III and Title IV centers
4. ERIC-Educational Research Information Center
5. Field Officers—Dept. of Education

II SELECTION

by independent Advisory Board

Bureau guided by ADVISORY BOARD of outstanding Massachusetts professional educators, plus representatives of higher education, commerce and industry.

III EVALUATION

by teams of respected Massachusetts educators

Ad hoc teams from all over state to

1. Plan strategy of evaluation
2. Make site visits
3. Discuss and report
4. Be available for consultation

IV DISSEMINATION

by both mass and personal means

1. MASS MEDIA—Printed and TV including reports, lists of sources of information, etc.

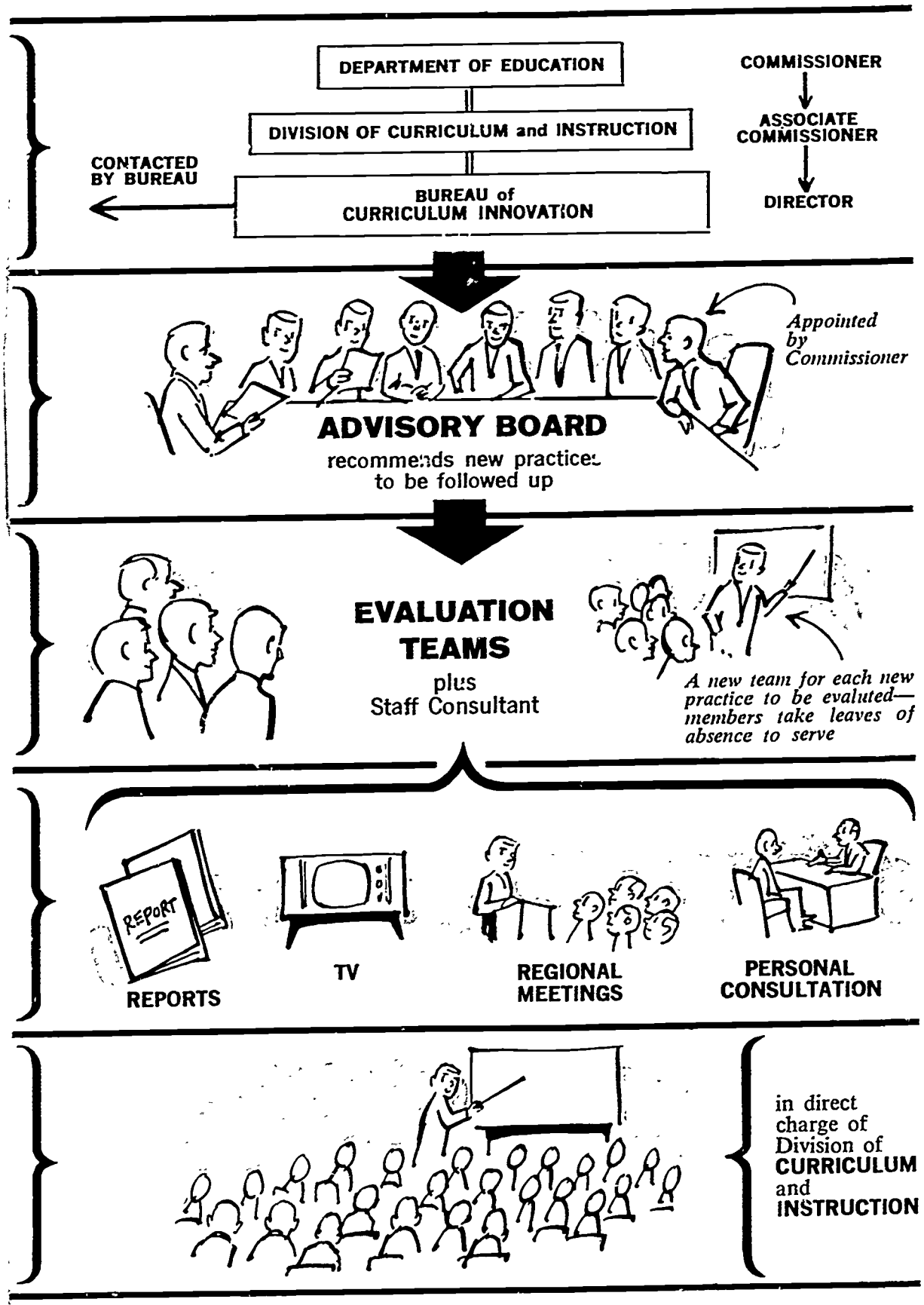
2. PERSONAL—contacts with members of Evaluation Teams, Councils, and Regional groups.

V DEMONSTRATION

in appropriate settings in various regions

Demonstrations in each region using ordinary educational settings (except mobile centers for technological innovations).

nation on **NEW** Instructional **PRACTICES**



Once selected and evaluated, the innovation must be reported upon and these results *disseminated* throughout the Commonwealth. In the designing of means to effect the dissemination operation, both mass and personal sources of information must be provided for.

Finally, each innovation which has received a favorable evaluation should be *demonstrated* in appropriate settings for potential adopters of the new practice.

We recommend that a separate Bureau be created in the Department of Education to manage the dissemination plan. The matter of the placement of this Bureau in the Department will be considered later in this report. The Director of the Bureau would have responsibility for the first four functions in the diffusion process, i.e. search, selection, evaluation and dissemination. Each of these functions will now be considered in some detail.

1. *Search.* The Bureau would establish relations for the purpose of uncovering innovations, with such sources of information on instructional innovations as university research and development centers, national groups involved in curriculum development, and Title III and Title IV centers (Elementary and Secondary Education Act) as well as innovative school districts throughout the nation.

We anticipate, however, that the major source of ideas on new instructional practices available to the Bureau will be the Educational Research Information Center (ERIC). ERIC was established by the U. S. Office of Education in 1964 to "facilitate and coordinate information storage and retrieval efforts in all areas of educational research." Contracting centers throughout the United States, each of which is responsible for one area of research (e.g. vocational education, foreign languages), identify and abstract the most important studies. The contracting center sends these studies, together with their abstracts, to ERIC where they are indexed, transferred to *microfiche,* and stored. An automated information retrieval system facilitates ready access to the stored data. In its dissemination procedures, ERIC intends to make full use of existing channels, including state departments of education.

It is clear that independent efforts to secure data on new instructional practices on the scale attempted by ERIC would be costly and unnecessary. On the other hand, supplementary sources of information of certain kinds would be desirable. In particular, we anticipate that field officers of the Department of Education might serve as an additional important source, particularly for new practices developed in local school systems within the Commonwealth.

The Bureau would use ERIC, as well as the other information sources, not only for the identification of new educational practices but also for the purpose of gathering as much information on each promising new practice as possible. This information is needed in the selection of those innovations which will be studied intensively.

Thus the first task in terms of the flow of the dissemination system is the identification of promising new practices and the assembling of adequate information about them. After new practices have been identified the next step is to select the most promising from among the many identified.

2. *Selection.* In selecting innovations for more intensive study and evalution, the Bureau would be guided by the advice of an Advisory Board. The principal criteria by which the Advisory Board would consider each practice brought before it are as follows:

(a) the extent to which the practice makes a significant contribution toward the solution of a significant instructional problem;
(b) the extent to which the practice is, at the time of decision-making, already in use in the Commonwealth; or, said another way, the extent to which the instructional *problem* to which the innovation is addressed is widespread in the Commonwealth.

We suggest that the Advisory Board be comprised primarily of professional educators with wide experience in pre-collegiate education in Massachusetts. In addition, we suggest there be some representation from higher education, commerce and industry in the Commonwealth. Members of the Board would be appointed by the Commissioner of Education.

We recommend that members of the Advisory Board be chosen from outside the ranks of the professional staff of the Department of Education. Professionals employed by the Department will make important contributions to the diffusion process at other points. Our recommendation follows from the premise that the Department will continue to act primarily as an advisor and stimulator in relation to possible adoption by local school systems of the innovations which are studied.

In the selection process it would be the responsibility of the Bureau to present to the Advisory Board material about promising new educational practices. The Bureau would be responsible for ordering the information about the innovation in such a way that the Advisory Board could efficiently select the most promising from among the many innovations. Thus the Bureau would prepare a complete description of each innovation and perhaps arrange for expert testimony to be given to the Advisory Board by consultants.

Innovations recommended for study by the Advisory Board must then be subjected to a systematic evaluation.

3. *Evaluation.* In evaluating instructional innovations, the Bureau would enlist the services of *ad hoc* evaluation teams. As their name would imply, one function of the evaluation teams is to perform a neutral evaluation of the innovations selected for study by the Advisory Board. Morever, the evaluation teams would be so organized that a group of informed school people, geographically distributed throughout the Commonwealth, is created as a "by-product" of the evaluation process. As will be shown later, this "by-

product" should contribute significantly to the *dissemination* function.

The responsibilities of each evaluation team would be as follows:

(1) plan strategy for evaluation of an instructional practice chosen for investigation by the Advisory Board prior to carrying out a site visit. The evaluation should be carried out within a framework of fundamental questions and principles. This point will be dealt with later in greater detail.

(2) undertake one or more site visits. The data gathered would be systematic, but it would be of a subjective nature.

(3) meet following the site visits for discussion and the preparation of a report on the innovation.

(4) the members of the evaluation team would be available for consultation in their regions on the new practice which they have evaluated. It is clear that evaluation team members, having studied a new instructional practice in depth, would be in a position to serve as consultants to school systems in their region considering the adoption of the innovation.

We suggest that each evaluation team be provided with the services of a full-time consultant who would be available to the team for the duration of the evaluation process. As the Department of Education develops a full staff in its Division of Curriculum and Instruction along the lines suggested by the report of the Willis Commission, the consultants will in all probability be available in the Department itself. This would facilitate the *demonstration* function, which will be discussed later in this report.

The members of the evaluation team should be well known and respected teachers or administrators in Massachusetts schools. Their judgments on new instructional practices should be capable of influencing the decisions of potential adopters. The team members should be selected in such a way as to achieve geographical distribution throughout the Commonwealth. Each member would be appointed by the Commissioner on the recommendation of the Director of the Bureau. In the usual case, a new team would be appointed to study each innovation selected for intensive evaluation.

The members of the evaluation teams would be given leaves-of-absence from their local school systems for the duration of the study, i.e. probably two or three weeks. The teams would be dissolved upon the conclusion of the study and the preparation of a report. The expenses of the team members would be paid by the Department of Education; their salaries, by the employing school system.

We return now to the matter of the framework within which evaluations would be conducted, and begin by asking: To what kinds of questions should the evaluation teams seek answers? Our response to this question cannot be more than illustrative. Overall, we believe that the teams should address themselves to three broad questions.

The first question relates to the merits of the new practice. The teams

should make judgments of the extent to which the new practice is superior to that which it replaces or modifies. The teams should judge the relative advantages of the innovations. Naturally this means that it must be clearly understood exactly what the innovation is designed to do and the situations for which it is designed.

The second type of question to which the evaluation teams would address themselves is the extent to which the innovation is compatible with existing educational philosophy, values and practices.

Third, the evaluation teams should make judgments about the complexity of the innovations and therefore about the various kinds of costs involved in adoption. By costs we mean personnel and material costs. This question moves in the direction of considering such matters as teacher training, equipment and facilities.

There is no claim here that this list contains the information most needed in reaching an adoption decision. The kind of information taken into account by potential adopters of educational innovations is, to say the least, an area of knowledge that is underdeveloped. Our list is simply illustrative.

To this point we have considered the means of providing for the search, selection, and evaluation functions of this proposal for the diffusion of innovations. We turn now to a consideration of the dissemination function.

4. *Dissemination.* As was pointed out earlier in this report, a satisfactory diffusion network must provide for both mass media and personal sources of information. First, we will consider the provision of mass media sources of information. We can begin by pointing out that the reports of evaluation teams will provide part of the content to be conveyed by mass media. The report will provide answers to questions such as those outlined above, which have something to say about the merits and demerits of the new practice as well as the various kinds of costs necessitated by its adoption. Beyond this the mass media should convey a detailed description of the new practice, a sample listing of schools using the practice, persons to contact for additional information (members of the evaluation team and others) and Department of Education officials who will aid schools in working through the problems associated with the first use of the new practice.

In cooperation with the Division of Research and Development in the Department of Education, the Bureau should undertake two lines of study in relation to the dissemination of information on instructional innovations via mass media. One line of study would determine the kinds of information reported by mass media which are used by potential adopters as they consider adoption of new instructional practices. The outcomes of this type of inquiry will affect the data gathering and reporting activities of the evaluation teams.

The second line of study would relate to the nature of the medium employed in the mass communication of data on instructional innovations.

Whereas we expect that the Department will utilize printed communications in the early operation of this plan, we urge that experiments with television be undertaken as soon as such a step seems practicable. Data which would permit a comparative assessment of the effectiveness of the two media should be gathered and used in the formulation of mass communication procedures as the operation of the plan matures.

Our proposal depends heavily, but not exclusively, on the members of the evaluation teams to provide the personal contact which is important at the evaluation stage of the adoption process. Because they are drawn from all regions of the Commonwealth, and because they are known by and enjoy the respect and confidence of school people in their areas, evaluation team members will exert considerable influence on the judgments of professionals who seek their advice. Should they be enthusiastic about the new practice, members of evaluation teams will provide considerable impetus to the process of instructional change.

As experience is gained in the operation of this proposed plan, the most effective methods of arranging for the communication of information from personal sources will gradually become apparent. Certainly the use of existing channels will be important. For example, members of the evaluation teams may work through regional specialist councils of teachers, or regional groups of administrators. This matter should be kept under continuous review, particularly in the early stages of the plan's operation. Although we expect that several persons from each region will serve on each evaluation team, the consulting load on each team member upon his return to the local school district could become burdensome, unless attention is given to the optimum use of channels for such communication.

In the following section, a second important source of personal information, that of demonstration procedures, is discussed.

5. *Demonstration.* As has been indicated, adequate and convincing judgments about the merits of educational innovations are exceptionally difficult to achieve. The results achieved by new practices are difficult to measure. Not much by way of convincing material can be assembled given the current level of expenditure for this purpose. All of this is painfully apparent when one considers the wealth of "hard" information available to the county agent in making his case as he tries to "sell" a new practice to a farm operator as compared to the information available to the change agent as he tries to speak convincingly about a new educational practice.

Because of the difficulty of judging the results of an educational innovation, which, in turn, is due to the paucity of convincing data, the potential adopter is "on his own" so to speak. Accumulated experience would seem to indicate that one of the most convincing activities in which he can engage is an on-the-site visit to observe the innovation in use. It is for these reasons that demonstration of new practices has special significance in education. In some instances, innovations in instructional practices can be demonstrated

effectively outside the normal classroom setting. This may be true, for example, of certain items of instructional technology. In these cases, the Department might consider the use of mobile demonstration centers.

In the usual case, however, the site of a demonstration should duplicate in every aspect and as far as possible ordinary educational settings. Demonstrations in such cases are probably reduced in effectiveness when they fail in the reproduction of ordinary settings and circumstances. Therefore we recommend that whenever possible demonstration activities be carried on in the normal school setting in an operating school system. The Department of Education should make contractual arrangements with school systems to serve as demonstration centers. Added costs to the school system should be borne by the Department of Education.

For each innovation that receives a favorable review by the evaluation team the Department should arrange for its demonstration. A demonstration site for each innovation should be developed in each of the regions of the Commonwealth. If no school system in the region has incorporated the innovation into its regular program then the Department should provide incentives for one or more school systems to establish such a demonstration program. This implies that the Department should provide all the services and funds necessary for establishing the innovation and creating a center for demonstration. (No one system should serve as *the* demonstration center in a region.)

The demonstration centers should be more than places where one can observe. They should be ordered in such a manner that the pursuit of more knowledge about the innovation is facilitated. Thus, both the members of the evaluation team and personnel in the demonstration center should stand ready as personal sources of information about the specific innovation.

The demonstration function should *not* be a responsibility of the Bureau. Rather, it should be a responsibility of the curriculum specialists in the Division of Curriculum and Instruction. It is clear that these demonstration activities will require a heavy investment of time and professional skills on the part of the Curriculum and Instruction Division. It is important that, at this time, the Bureau disengage itself from the innovation which it has carried to this stage, whereupon the relevant specialists in Curriculum and Instruction Division assume major responsibility. The Bureau is then free to begin another cycle in the implementation of change in Massachusetts education.

In addition to creating and establishing demonstration centers we suggest that concurrent with the evaluation process the relevant specialists in the Curriculum and Instruction Division (one of whom is probably acting as a consultant to the evaluation team) prepare to help school systems implement the change.

In regard to the placement of the Bureau in the Department of Education, it is our recommendation that the Bureau be located in the Division

of Curriculum and Instruction. The Director of the Bureau would report to the Associate Commissioner of the Division of Curriculum and Instruction.

The responsibilities of the Division of Curriculum and Instruction were outlined by the Willis Commission; in part they read:

> *This division will undoubtedly be the largest in the Department. Every curriculum area . . . should have its own specialists. . . .*
>
> *These experts and their specialists have large and complex responsibilities for their areas. They must, first of all, keep absolutely current on the operating status of their specialty at every location in Massachusetts and within the state as a whole. . . .*
>
> *Each area specialist should keep up to date with all the new developments in his curriculum or medium wherever in the state or in the nation they may be. . . .*
>
> *The Division of Curriculum and Instruction should certainly supply teachers with the information, and perhaps access, funds and time, to see curriculum innovations at work under ordinary circumstances just like their own. . . .*

When this description of the responsibilities of the Curriculum and Instruction Division is compared with the description of the projected Bureau, it can be seen that the purposes of the Division and the Bureau are mutually supportive. In fact, their purposes overlap. The advantages which can be derived from this partial congruence of purpose can be seen in our earlier description of the various dimensions of the proposed diffusion system.

It might be argued that the responsibilities which we would assign to the Bureau could be assumed in general by the Division. Such a procedure, we claim, has definite disadvantages. The task of planning for change is one which all too readily can be neglected in the press of problems requiring immediate solution. Thus, in some measure the function of innovation must be "protected." We propose to do this by establishing a Bureau with responsibility only for disseminating information about promising new educational practices.

On the other hand, the Bureau will be heavily dependent on the resources of the Division of Curriculum and Instruction of which it is a part. The nature of this dependence has been shown in this report. Thus, our proposal has attempted to balance the need for protection of the function with the need for close cooperation with the specialists in the Division. Additionally, we assume that the services of the Division of Research and Development will be readily available to this Bureau and all other agencies within the Department. Although there is perhaps no final organizational solution to the problem, the establishment of a separate Bureau is, in our view, essential.