American Education has suffered from its inability to communicate and gain wide adoption of educational improvements. Since the National Institute of Education (NIE) will be judged in terms of the degree to which educational practice is improved, it must assume responsibility for the implementation of new findings. Thus, NIE must conduct a three-pronged operation. First, it must analyze and remain sensitive to user needs, without becoming captive to the users' immediate desires at the cost of abandoning long-range basic research. Second, NIE must continue its research and development activities. Finally, the Institute must oversee the dissemination and utilization of the products of its research. This will require research on strategies for effecting the diffusion and implementation of new ideas, cooperating with other educational agencies, and extra funding for these post-research and development activities. It appears that the best way to insure the smooth development of innovations from need analysis to implementation is to make the same group responsible for an entire project from inception to completion. This will require the integration of both personnel and functions to a greater degree than has previously existed. (PB)
Dissemination Activity of NIE
DISSEMINATION ACTIVITY OF NIE

American education has been plagued by the inability to communicate and gain wide-scale adoption of new or improved educational concepts, products, and practices with any predictability or regularity. Rather, worthy innovations in education have been implemented only on a token scale. One might conclude that change in education is serendipitous and overtakes us more often than we bring it about.

The legislative history and enabling legislation require the National Institute of Education to make certain that the results of its educational research and development not only contribute to the basic knowledge of learning, but also insure that new and improved educational practices are implemented in American education.

The research and development mission of the National Institute of Education is clear and the outcomes of its activities will be diverse and numerous. But it will not be upon the diversity or quantity of its products that the NIE is judged. Rather, its performance will be evaluated in terms of the quality of what is produced and the number of its outcomes that achieve large-scale practice. If NIE is to be judged in these terms, then it must be allowed to assume responsibility for the acceptance and implementation of its R&D outcomes and alternatives.

Although compelling arguments can be made for the close agency and user relationships, high risk R&D ventures must not
become a captive of the user. The experience and exposure of the users tend to make them short-sighted and parochial. The insatiable user needs and service demands frequently drive out the basic research activity. Conversely, abdicating responsibility for utilization or failure to thoroughly explore the users' situation places the R&D agency outside of the practitioner's world. The greater the isolation of the R&D agency from the users' situation, the less likely that the R&D outcomes will gain wide-scale utilization.

As a result of insufficient evidence on the effects of differing dissemination strategies, the National Institute of Education will undertake basic research and development work on alternative ways of implementing R&D outcomes and new alternative practices.

The diverse nature of the users of NIE's outcomes provides ample argument against any single dissemination mechanism. Some of the possible results of NIE programs include: Improved products or practices, major alternatives to existing products or practices, new knowledge or information, and new laws or constitutional change. The consumers of NIE research and development outcomes include:

Scholars at universities who utilize outcomes for continuing research, and/or communicate and interpret outcomes for others.

Influencial observers who seek or become aware of new products or practices and evaluate them for recommended action by policy and decision makers or apply pressure for their adoption, e.g., teachers, professors, consultants, associate and assistant superintendents.
Policy and Decision Makers who have been assigned the formal role of adopting, modifying or rejecting new practices or products, e.g., school boards, legislators, superintendents, college presidents.

Implementers who are charged with the responsibility of carrying out the decisions made by policy makers, e.g., principals, teachers, curriculum directors, budget officers.

Practitioners who accept or are charged with the responsibility of using the new practice, e.g., teachers, administrators, aids, clerks.

Recipients who receive benefit or are negatively affected by the installation and practice of the new product or practice, e.g., students, parents, communities.

No single strategy for implementation will be sufficient. NIE must command a variety of implementation strategies to be capable of achieving the specific purposes of its research and development. To meet its diverse program objectives, skilled personnel will be necessary for need analysis and determination of dissemination strategies as well as for the research and development activity. For example, the expertise necessary to assess, research, test and deliver a curricular innovation may involve totally different expertise and skills than are required to deliver an alternative method of allocating fiscal resources in a school system.

The strategy and channels used for affecting wide-scale adoption of a new educational practice or product must vary in accordance with the type of product and role of the players from first awareness to implementation. Effective communication and implementation for a product can occur only when mechanisms, channels and agents are identified as appropriate for the given
product and the role of every player at each stage of the diffusion process.

Sufficient evidence exists which indicates that the most major innovative efforts result from the vision of a few men who develop the concept into reality and follow it through development and into the field where it is installed.¹

If the research and development activity sponsored by NIE is to meet its mandate, then the management and organizational structure, regardless of the difficulty, must find a way to integrate both by function and personnel, the responsibility for need analysis research, development, dissemination and utilization. The delicate balance of all the functions and personnel can allow practice to influence needed research efforts and priorities and allow research and development to influence practice.

Once a program plan has passed the tests of quality, significance and implementability or practicality, it may be designated as a program to be developed, and those who did the planning will be given the work assignment to carry on the development. Rather than shifting the responsibility of a funded program from one group of people to another, the initial group awarded the program will be responsible for it as it progresses through the planning stages (problem analyses, need and cost effectiveness) to research and development activities, and to implementation stages (communication, delivery, utilization). No program will

¹Project Hindsight, Department of Defense.
be funded until its design contains appropriate mechanisms for utilizing the outcomes.

Continuity of staff assignment to different development stages will probably increase the likelihood of implementation of the results of NIE work, but it does not insure that there will be a near-term wide-scale improvement in education. Even though new alternatives may result from the NIE's work, their impact on American education will require the ability of NIE to involve and utilize other agencies, bureaus and departments when they can specifically contribute to the planning, program and utilization objectives of the NIE.

Regardless of the agency disseminating the R&D outcomes, the cost of wide-scale implementation of a new alternative is usually much greater per year and extends over a much longer period of time than the cost of research and development. Consequently, a commitment to insure wide-scale delivery and utilization of created, developed and tested outcomes will demand funds far in excess of that necessary to support only the research and development activities. (See Figure I)

The National Institute of Education will need to work with other agencies and seek additional funding if it assumes principal responsibility for the communication and utilization of its products. For the National Institute to undertake alone the full effort of need analysis, research and development, and dissemination and utilization, it would within a few years find its entire budget consumed by maintaining user needs with little or no new monies left for basic research or development. In doing such, it would
"A" Represents approximate decision point whether to fund program

"B" Represents approximate decision point whether program will be disseminated, i.e., scale of effort, strategies and channels

Prior to point "A" and after point "B" represent periods of greatest shared operation with other agencies, bureaus, departments, associations, SEAS, LEA'S and private, and public institutions.
also duplicate existing services in other agencies. Conversely, if the NIE becomes solely dependent upon another agency, or abdicates its principal responsibility for need analysis, research and development, dissemination and utilization, it can become captive, dependent and/or impotent depending upon the other agencies' ability and willingness to perform the needed services.

Assuming principal responsibility for all major functions, the NIE must prevent need analysis and installation efforts from driving out the research and development activities. Consequently, the National Institute of Education must actively explore and establish with agencies for cooperative agreements, sub-contracts and the purchasing and selling of needed services and products.

Therefore, during the planning stages (which will include analysis of cost effectiveness and preliminary utilization strategies), i.e., assistance from other organizations will be engaged by means of sub-contracts, buy/sell, and cooperative agreements. This assistance will be sought from the Office of Education (i.e., NCES, NCEC, Renewal Centers, et. al.), NSF, NIH; NIMH; professional societies and public and private enterprise. At the conclusion of the planning period and when a program is funded for R&D, other agencies may be involved in this effort.

As the R&D effort progresses, the appropriate means of disseminating and utilizing the effort's results must be finalized. In making this selection, the nature of the R&D outcome and the particular user must be considered. The channels and mechanisms
may include, but not be limited to, commercial publishers, various learned societies, associations, extension agents, renewal sites, etc., and might also involve limited copyrights, selling, releasing, sub-contracting and cooperative agreements.

The definition of NIE's specific responsibilities to and relationships with other agencies and departments must await actual NIE program commitments. In prematurely assigning functions to other agencies, NIE could become captive of another agency, or lose the authority necessary for designating responsibility to the agency or group most capable of meeting program demands.