THE RESEARCH UTILIZATION CONFERENCE: AN ILLUSTRATIVE MODEL

Ronald Lippitt

Center for Research on the Utilization of Scientific Knowledge

This is a summary report of two brief research utilization sessions conducted for the U.S. Office of Education in response to a request for a two-hour micro-demonstration of the procedures of a research utilization problem solving process.

The participants, school administrators and Office of Education officials, were seated around work tables for six or seven. They were asked to act as teams of school administrators involved in considering the problem of whether and to what degree they should involve youth and parents in the policy making and operation of the school system.

Introductory Orientation

With so much ferment for change in educational systems these days, it is puzzling just how to go about identifying the needed resources to plan and carry out significant change efforts. There are several kinds of resources.

1. First, there is research based knowledge about the learning process and many aspects of functioning of school systems. This knowledge has been developed by teams of researchers all over the country in a variety of studies and projects which have produced important knowledge. Usually the questions focused on have not been the same as those the school administrator, or the teachers, or the parents have been asking. But much of the knowledge seems somehow to be relevant if it could be pulled together, summarized and looked at in the right way.

2. Then, in many educational development projects across the country there are innovative practices which have been developed to cope creatively with confronting practical teaching problems. Most of these innovations have not become visible or are not available in terms of documentation. It is quite unclear what would need to be done to adopt or adapt them appropriately to one's own local situation.

3. And, in addition, a great variety of diagnostic inquiry tools have been developed to provide a basis for fact-finding and evaluation of the particular efforts toward innovation in any school system. These methods are usually not available, and often some type of consultation would be needed to help in the use and the analysis of the methods and the data.

4. Also, within easy reach of most school systems there are a variety of manpower resources which would be of great value in introducing and supporting significant improvements in the school system. But these manpower resources are usually not identified, and the school system is incapable of finding or using them.

The Center for Research on the Utilization of Scientific Knowledge at the University of Michigan is focusing on the study of the ways in which such resources of knowledge, practice, and manpower can be identified and actively linked to users in such a way that significant utilization will take place.
As the accompanying diagram indicates, there are in general two sources of resources. (See diagram) Many resources need to be identified and "brought in" from outside of the school system. These resources may be in the form of research knowledge, documented innovations, a directory of manpower resources, or diagnostic and evaluation instruments. We have illustrations of all these types of retrieval projects at CRUSK. Some of the exciting basic problems for research are to discover ways in which knowledge generated elsewhere can be assessed in terms of relevance to one's own local situation; ways in which research findings can be translated into usable generalizations; ways in which innovations can be documented so that potential users are able to do a high quality job of adapting the model to their own operating situation.

The second type of knowledge resources already exist within the system and must be retrieved by appropriate diagnosis of the goals, needs, resistances and readiness for change of the participants within a school system. Other projects have developed procedures for identifying innovative practices within the system and also directories of internal resources persons relevant to various types of helping needs.

Our experiences indicate that knowledge utilization is a continuous part of the problem solving process, rather than coming in at some particular point, such as the beginning or the end of problem solving activity.

After reviewing these ideas and the meaning of the conceptual diagram which provides a schema for the knowledge utilization process we moved on to a micro-experience with the knowledge utilization process. The process flowed as follows:

**Locating and Retrieving Relevant Knowledge**

In this case the research utilization agent (me) without a request from a particular school system, made the assumption that many school administrators were faced with a common problem of uncertainty about parent and youth participation. Therefore, he retrieved from the ERIC Center at the University of Michigan, and from his own research files, some thirty studies which seemed to be exploring questions relevant to the school administrators' decision problem. From the summaries of these studies the consultant derived some eighteen generalizations which seemed to him to provide a valid and condensed summary of the significant themes of the findings of these studies. If a longer problem solving period had been available, such as a two or three day conference, a much fuller review of the studies could have been utilized and a much wider search for relevant findings could have been made. The generalizations utilized in this demonstration are attached at the back of this memorandum.

**Review of the Research Generalizations**

During a brief reading period the participants reviewed the eighteen statements and were asked to raise questions on issues of clarity, any challenges to the validity, or generalization-range of any of the findings. They were also invited to propose any additional generalizations which seemed to them to be important and relevant from their knowledge of the field.
Making Implication Statements

One member of each worktable acted as a recorder while the total group developed statements of implication or derivation which seemed to them to follow from any of the research findings. These statements were to derive directions for change or action which seemed to be implied by the findings. Often, as groups begin this task, they have difficulty making a distinction between free associations to action ideas, and actual derivations from one or more of the findings. Usually it is important to help each table test themselves after they have derived their first few statements. At the end of the fifteen minute derivation period, each table reported to the others the one or two implication statements they felt represented the most significant insights and derivations from their table.

Projecting Images of Potentiality

It is fairly typical and natural, when ideas about directions for desirable change are stimulated, for participants to be flooded by ideas and feelings about the difficulties of change, the pain and resistance which would be encountered, the energy which would be required, etc. One reason for this preoccupation with "problem feelings" is that there is a lack of concrete images of the rewarding potentialities of achieving goal situations. Therefore, at this stage in the problem solving process we asked each individual, by himself, to get on a magic carpet and fly two years ahead over their own school system, making observations of what was going on. They were asked to select from a two day observation period, observations of four incidents or episodes that made them feel very pleased with the way things had developed in regards to participation of youth and parents in the school system. These observations were to be very concrete, putting in quotation marks the things they overheard being said, and describing in detail the behaviors which they observed. Two of the episodes were to be of interactions between administrators, teachers, and students, and two were to be interactions between parents and school personnel. After about ten minutes of private meditation, participants at each table shared their images of desirable achievement and in discussion they selected the two most exciting images of potentiality to report out in a brief report period.

Brainstorming Alternative Possibilities for Action

During this period, with one of the members recording on a newsprint sheet, each table was asked to brainstorm all the alternatives they could think of for possible lines of action which might lead in the direction of their preferred images of potentiality. The rule was that there was to be no challenging of anybody's ideas but only questions of clarification, and no stopping for discussion. In ten minutes, each group had achieved a good list of fifteen to twenty-five ideas for alternative actions.

Selecting Preferred Courses of Action

Each table was asked to develop the criteria they needed to use for arriving at a judgement about the one or two most effective or appropriate courses of action from all those they had thought of. This meant that each group became involved in discussing issues of feasibility, significance,
readiness, budget, necessary manpower, training, and other criteria. After they had generated criteria, they were asked to apply them in the selection and amplification of one or two most preferred alternatives for action among all the alternatives they had brainstormed.

Exploring the Force Field of Planning and Action

In a final discussion period, the table teams were helped to look at the beginning of the process of planning for change. They were helped to list the driving forces and restraining forces of a diagnostic force field. In other words, they were helped to list all those factors they could think of which might represent restraints or barriers to change in the direction of their preferred program of action. They were helped to see these as factors that might be within individuals or within the relationships between individuals or in the social system in which they are embedded. Then they were helped to identify the types of resources and support which might be mobilized to begin and maintain action in the desired direction. They were helped to see how this planning activity could move them ahead to making decisions about first steps of action, the organizing for action, involving the needed resources, development of the necessary training activities, planning of the needed feedback and evaluation activities that would provide continuous guidance for the change effort which would be involved.

SUMMARY COMMENTS

This micro-experience seemed to be enough to demonstrate the types of crucial linkages which are necessary between research knowledge and action strategies following from derivations from that knowledge.

It seemed necessary and possible to point out in the summary review of the session that various types of knowledge could be retrieved and utilized at various points in this problem solving activity. For example, the retrieved documentation of innovative practices could be fed in at the point where alternative possibilities for action toward the desired goals were being worked on, and retrieved information about available human and other types of resources could be fed in at the point where planning for change is being activated. It is also possible to point out that another whole body of basic knowledge becomes relevant for retrieval work at the point where planning for change begins. At this point the basic knowledge about planned change and resistance to change and the strategies and tactics of initiating and implementing change become a relevant body of knowledge for derivation work if a more complete program of knowledge utilization is to be conducted.

It is my belief that this type of research derivation conference or other similar types of knowledge utilization problem solving sequences provides one of the most significant settings and opportunities for basic research on the knowledge utilization process. It also provided one of the least threatening and most significant startup activities for entry into research and development relationships with a variety of social systems.
The situation: The school administrator and his staff are trying to think through the question of whether, and to what degree, students and parents should be actively involved in policy making, program planning, and program operation.

In order to think this question through they have asked help from an ERIC Center to scan for relevant resource knowledge that might help guide their thinking. The following generalizations from study findings and interpretive theory have been summarized.

In our limited conference time this afternoon we will work through a "micro derivation and planning process" as an example of the process involved in disseminating and utilizing knowledge inputs.

A Sample of Research Based Generalizations

1. A majority of high school students do not see student government as a significant channel of influence on the administration and operation of the school.

2. One study says the typical student is alienated from any significant contact with or commitment to the school as a community; another study of a different sample of high schools using different inquiry methods finds that superior students are highly involved, like their school and teachers, but their high involvement is "in the wrong aspects of life, i.e. getting good grades instead of having meaningful educational experiences... There is non-alienation in spite of triviality of work and powerlessness of role".

3. A significant number of student activists have high academic ability, a high motivation for education, and come from homes with liberal parents and high freedom of communication.

4. Negative attitudes toward school, teacher and learning are associated with low utilization of intellectual capacity in learning tasks.

5. There is a high relationship between self-perception of potency to influence one's environment and openness to learn from it (Douglas McGregor's generalization is: The child or youth is open to learning from the adult to the degree he perceives the adult as open to influence from him).

6. Perceiving self as barred from significant influence leads to two patterns of response, (a) withdrawal from involvement and commitment; (b) hostile attacks on the sources of power, either overt or covert.

7. In high conflict situations the conflicting persons or subgroups have a constriction of perceptual field so that they see few alternatives for action, and the more primitive alternatives of direct aggression are most available.
8. Voluntary involvement in decision making is highly related to degree of commitment to help implement the decisions or accept the consequences of the decisions.

9. To a significant degree the influential leaders in various segments of the peer culture are not involved in student government or other aspects of the official operating structure of the school.

10. Many teachers, particularly in lower socio-economic areas, see themselves as substitutes for inadequate parents and homes.

11. Large proportions of parents in most school districts do not see involvement in school programs as a relevant interest or possibility; few have ever had the experience of being asked to be involved in or connected with school operation.

12. Most school administrators and teachers do not see parents or students as relevant resources for collaboration in educational program planning and decision making.

13. Very few innovations have been attempted in the area of identifying, recruiting, and training youth power figures and parent power figures in the knowledge and skills of collaborative school planning.

14. The growing population of elder citizens are limiting the financial development of school programs by their voting against increases in tax support.

15. There is a high relationship between self-perceptions of power to influence and commitment of energy and responsibility to learn about issues, consequences, alternatives of deciding and acting.

16. The educational experiences of children, youth and adults almost never contain any curriculum offerings in training for social problem solving, conflict resolution, conflict management, the skills of creative compromise, etc.

17. The best predictions seem to be that the youth power movement will continue to move down from higher education to secondary and elementary education.

18. The increase in leisure time and earlier retirement means that an increasing number of competent, vigorous elder citizens, male and female, have more time for volunteer work of some kind in the community.
KNOWLEDGE UTILIZATION MODEL FOR EDUCATIONAL CHANGE

SCIENTIFIC - may draw on - THE PROCESS - may draw on - KNOWLEDGE OF
KNOWLEDGE

 THEORY

Research Findings

Methodology

Identifying a Concern

Diagnosis of the Situation

Formulating Action Alternatives

Feasibility Testing of Selected Alternatives, Including Training and Evaluation

Adoption and Diffusion of Good Alternatives

may result in new scientific knowledge

may result in new knowledge of the setting