A demonstration project concerned with children who were unable to function in the public schools provides the basis for a four-part action plan initiated to cope with this problem. This multiple entry strategy called for: (1) a special class; (2) work with the regular classroom teachers; (3) after-school projects to work with peers of these children; and (4) a special plan to promote parental participation. Evaluation concluded that this coordination of effort was a success. However, the schools dropped all but the special class. The author became convinced that the most significant target for change in education must be the procedures used by educators to identify relevant objectives and functional approaches to the problems. He describes several packages that can make process training available. He also describes three training consultant packages which focus on: (1) how to diagnose process learning needs; (2) how to design exercises for gaining competencies in process skills; and (3) how to conduct process exercises. (TL)
A few years ago I was involved in a demonstration project in the schools of a city with a population of about 250,000 people. This was part of an eight-year program of research and action carried on collaboratively by a nearby university and key youth socializers of this community. The demonstration project that I worked on was concerned with "in-betweeners." The in-betweeners were children too young to be out of school in any legitimate capacity, but having and causing too much difficulty for the schools to contain them. The desire was to find ways to involve these children constructively in a public school program that was realistic.

This desire involved us in what I would now call a complex problem of educational engineering. We extensively reviewed research and theory about this issue. Some of the research we reviewed had come from the community we were working in. We gathered additional data about the children we would be working with, the schools in which they were involved, their families and the larger community. We spent time identifying pertinent information from our mountains of data. But, having the facts does not provide the solution.

I believe that a critical step in turning knowledge into actions that can produce results is that of deriving implications from the knowledge. This amounts to looking at information and saying in effect, "if that's true, what are the operationally defined objectives which are implied? What kinds of specific results are we after?"

With clear objectives in mind, we were able to begin engineering kinds of solutions that could achieve them. We now returned to research and to collecting more information from the action setting to get a clear diagnostic picture of the forces and factors that would have to be influenced in creating our solutions. In this project for in-betweeners, we arrived at a four-part action plan. We called it a multiple entry strategy. It called for a special class, work with the regular classroom teachers on things they could do with the children, after school projects to work with peers of these children, and a special plan of working with parents.

Three simultaneous approaches were taken to evaluating this demonstration project. Clinical psychological data was collected throughout the program. Analysis indicated that some clinical gains were made as a result of the project. Extensive data was collected through the conduct of each of the four action parts of the project. Each of the four approaches showed its worth in being able to contribute to needs of the in-betweeners. A basic research study was conducted to explore the multiple impact of these efforts on the lives of the in-betweeners. The results indicated that coordination of effort was at least as important as the best impact of any single approach. In short, the demonstration project was a success.
At the beginning of this project, key school officials had assumed that the only necessary intervention in dealing with in-betweeners would be to put them in special classrooms. Our joint retrieval and review of data indicated that much more was necessary. Our efforts to carry out a multiple entry strategy proved their potential for significant impact. Yet, at the end of the demonstration, the schools dropped all approaches except their initially identified one of operating special classes.

My understanding is that this is par for the course for demonstration projects in youth socialization. I became convinced that the most significant target for change in education needed to be the procedures used by educators to identify relevant objectives and take a functional approach to engineering feasible solutions. Problems in terms of discrepancies between the way things are, and the better ways they could be will always exist. Good products exist that aren't being used. A different set of processes is the product we most need to achieve at this time -- processes that get us where we want to go with predictable success.

My next opportunity to work on this issue came in a venture titled, "The Cooperative Project for Educational Development." Seven universities and the National Training Laboratories formed a consortium to work with approximately 25 school districts in attempting to study and create procedures for planned change. The level of funding for this venture was abortive from the outset. Some progress was possible in identifying and creating instrumentation and data gathering and processing techniques to study variables of dealing with change in school settings. But, studying change demands involvement in the action and funds for the action side were initially limited and eventually non-existent. One major breakthrough on the action side was accomplished and is continuing to carry forward in my work at the Northwest Regional Educational Laboratory (NWREL). This is the work to create materials to mass diffuse training in a research utilizing problem solving process for teachers. It has expanded to increasingly clear understandings of what is involved in diffusing process training. This, again, is being turned into materials that can make process training available.

We now have the beginning of packages that can give teachers explicit measurable competencies in performing rationale problem solving rational problem solving procedures. One such package which is currently available, is titled the Research Utilizing Problem Solving, or "RUPS Process." A package will be available in the fall for teachers on using system analysis and synthesis as a process for, "Planning how to get from here to there with predictable success." The RUPS package gives teachers skills in the overall process of problem solving, and specifically in the when, why and how of retrieving research findings and deriving implications as well as objective data gathering in their own classroom setting as part of engineering solutions that give results.

There have been times during the past few years when I've heard people say of these efforts that they are no different than what has been done in the past. I like to paraphrase the response of a second grade inner-city teacher from Detroit who went through the training and replied to such a comment from her district superintendent. She said, as I recall, "You're not listening. I have my data right here. I can show you that my second graders increased their ratio of spelling achievement and I can show why it was a problem and what the things were that we had to change."
In developing the packages we have been working on, we have found it necessary to be concerned with intra-personal and inter-personal processes as we create experiences for learning the more tasky processes such as RUPS and system technology. Thus, we have had to include exercises in these designs that focus on basic inter-personal communication skills and the skills of testing for and building trust between individuals to help each other in knowing that they are learning do-it behaviors.

Let me sum this up. Educators need additional procedures to those they have been using for identifying what is relevant to be learned and engineering relevant learning experiences. They won't use scientific knowledge until they use clear procedures that include the utilization of scientific knowledge. We are developing packages which can be used to help people use such procedures. We are also developing a higher order of packages concerned with the complexities of helping persons to learn process behaviors and skills. We are working on three such packages under the label of "Preparing Educational Training Consultants."

The first of these three training consultant packages focuses on how to diagnose process learning needs, adaptively design or create exercises for gaining competencies in process skills, and conducting process exercises. It includes a set of diagnostic exercises for involving members of a group in identifying process skills they wish to improve. It includes thirty standard exercises which can be adopted for use in training the group in such process skills as goal setting, decision making, utilizing resources of individuals or leadership functions.

The second training consultant package focuses on the skills of consulting with educators on their process learning needs. There are three parts to the second package. The first is concerned with a three dimensional diagnostic matrix. One dimension of the matrix is for identifying the level of human phenomenon central to the issue. Is it inter-personal, intra-personal, small group, organizational, community or societal? The second dimension is concerned with the life stage of that human system. The third dimension is concerned with the dynamic of the system. For example, is it a matter of goals, communications, means, skills, etc.? The second three dimensional matrix is for differential intervention. One dimension is concerned with the function which needs to be added or strengthened in making the intervention. Another dimension is concerned with the phase of change. The third dimension is concerned with the strategy, technique or procedure to be used in providing the intervention. For example, is the intervention a matter of suggesting a book be read, a workshop be attended, a different consultant be brought in, etc.? The third part of this second package concerned with consulting on training needs involves the training consultant in looking at himself. Given a personal style, what are the values and ideological basis for the individual being in the consulting role.

The third training consultant package we are working on focuses on basic knowledge and understanding of organizational development strategies. In the second package, a consultant temporarily works with the client system to add or increase the strength of a function needed to better achieve a goal. In the package on organizational development, the consultant works with the client system to increase its own ability to supply the function
for itself in the future. It builds self-renewing roles and functions into the system.

Leon Lessinger recently left the role of Associate Commissioner of the Bureau of Elementary and Secondary Education at the U. S. Office of Education. At the time of his leaving, Dr. Lessinger described the condition of public education in this country as mortal. He declared that the system as we have known it, might die. He believes that it should not die, but that it must, and should, change to survive. The needed change is a fundamental one. It is not simply a matter of new solutions. It is a change in the processes of arriving at solutions. Dr. Lessinger believes that process is the product we are after. I agree.