A gap exists between educational research results and new educational programs. In the absence of either an increase in the supply of professional change agents to fill this gap or a proliferation of applied development centers, it is the researcher, or the professor, who must, along with teachers and administrators, utilize research to engineer solutions to educational problems. This case study shows that individual professors can be effective in helping to bridge the gap between research and practice. (Author/DE)
IMPACT OF RESEARCH FINDINGS AND RECOMMENDATIONS IN URBAN SCHOOL DISTRICTS: A CASE ANALYSIS

by

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We might point with pride to the increase during the past few years in competition for space in professional journals, in scholarly papers presented at national meetings of learned societies, and in the impressive number of in-house publications of university-based institutes and R & D centers that reflect the growth of the practice of educational research.

A real sense of accomplishment, however, is lacking in terms of our efficiency in translating the fruits of our research into viable educational programs. While it is true that not all research has immediate practical significance, or indeed should have, it is also true that within all the research specialties represented here today there exist a wealth of theoretical formulation, empirical findings, and attendant generalizations which could conceivably benefit the practitioner.

Unfortunately, the findings and recommendations of distinguished scholars appear to have little effect on the organizational behavior of people in schools. Indeed, one might comment that the only real benefit of published research has been its usefulness in aiding specialists in organization to study the homeostatic mechanisms of urban school systems.

In an attempt to assess where the blame lies, professional researchers have tended to point to the classroom teacher or school administrator. According to one representative critic:

"A twenty-five year lag between research findings and their application is commonplace in our schools, and some studies never receive proper consideration. This situation suggests that teachers are unaware of educational investigations made by competent scholars, unwilling to apply the outcome of research in the schools, or unable to put the knowledge into effect owing to inadequate facilities and restrictive administrative policies."

Notwithstanding the desirability of having teachers, as well as more of our colleagues, read and contemplate the professional literature, our current experience with the well advertised suppositions of cancer researchers and their effects on the incidence of smoking should make us somewhat pessimistic with regard to the possession of information and its effect on behavior, even in the face of an undesirable and ultimate consequence.

Our experience has led us to question the assumption that it is the
lazy or disinterested practitioner who is retarding the advance of progress. A perusal of the content of journals which conceivably could be of value to the teacher or school administrator leads one to question their usefulness. Oftentimes contradictory, written in, shall we say, a highly stylized language and usually devoid of suggestions for the application of generalizations stemming from research findings, the journal article offers little to the practitioner.

This gap between the "knowledge producer" and the "knowledge user" was well documented by Horvat in a paper delivered to the Collegiate Association for the Development of Educational Administration. In developing his argument he cited two important statements of Guba's which are germane to this discussion.

1. "There is a tremendous gap between knowledge production and knowledge utilization that cannot be spanned either by the producer or by the utilizer himself, or even by these two acting in concert, at least in the typical situation. New mechanisms and agencies, using special techniques, are required to perform this bridging or linking function.

2. "Knowledge (in the form of theory or research findings) is at best only one of a number of input factors in any practical situation. No practical problem can be solved using knowledge alone --- a whole host of economic, social, political, motivational, cultural, and other factors must be considered."

The second point is well taken and we cannot quarrel with it. Too many times have we seen desirable procedures or products shelved because they required a readjustment of power relationships or because they ran counter to commonly held values and beliefs and hence were not politically acceptable. Conversely, we have seen reorganizations carried out and hardware or administrative procedures introduced under the mantle of science and progress as a means of attaining purely political objectives.

It is with Guba's first point that we take issue, not because we disagree with the quality of his argument but because of the improbability of the attainment of his proposed solution. We cannot wait for "new mechanisms and agencies." Those agencies that have been created to span "the gap" have assumed roles for themselves that, curiously enough, resemble university graduate centers rather than the educational counterpart of Western Electric. There is a clear need, however, for action -- for someone to bridge the gap -- now!

Our major thesis is that in the absence of an extraordinary increase in the supply of professional change agents an unanticipated prolifera-
tion of applied development centers it is the researcher himself or his surrogate, the professional consumer and transmitter of knowledge (the professor) who must act in concert with teachers and administrators in utilizing the fruits of research to "engineer" the solution of vexing educational problems.

It is not that we feel that the professor has too much time on his hands. Our colleagues are busy reading, teaching, writing and generally carrying out their professional functions. Our personal reflections, however, have led us to question whether or not our own activities are actually having any impact on the practice of education in fun city --- laugh if you will. It occurred to us that, of the many roles the professor is expected to assume, that role which is interstitial between producers and consumers of knowledge is the one most critical at the present time if school organizations are to become more effective in meeting their complex problems.

Bennis, Argyris, Miles and others have pointed out that there are essentially two strategies in attempting to improve the effectiveness of organizations:

1. **Work activity changes:** In schools these typically include the introduction of such things as new curricula, programmed instruction, new ways of grouping classes, and electronic scheduling of classes.

2. **People changes:** The emphasis here is on the development of freer, more authentic interaction between participants in the organization. The supposition underlying this strategy is, of course, that this process is a prior condition to the release of the full potential of the participants --- their energies, their creativity, their ingenuity. Although the history of attempts to improve schools abounds with examples of efforts to institute changes in work activity, our own interest is especially upon this second technique. It is our feeling that interventions designed to develop the adequacy of school staffs to cope with their own problems in an increasingly effective way have great potential power for change and have been largely overlooked as possible answers to contemporary educational crises.

As professors of Educational Administration in the City University of New York, viewing the educational scene in our urban environment, we are aware that "crisis" seems to be an increasingly appropriate appellation for contemporary situations. From our vantage point it seems self-evident that many of the conventional responses of the administrative hierarchy of the City schools, which may formerly have been highly ef-
fective, are now of relatively low potency in meeting current social and educational challenges. City school administrators, drawing upon their time-honored repertoire of techniques with increasing vigor and determination, are themselves discouraged by their inability to break through the problems with fresh answers and significant results. The swift on-rush of change seems to be producing a psychological and even physiological state not unlike that which we experience when we jet from our familiar surroundings to a dramatically different culture. Indeed, it is speculated that we may be observing, not culture shock, but a remarkably similar phenomenon described as future shock.\(^6\)

Perhaps we can be forgiven, perhaps not, but we felt that we might, in a small way, have something to offer in this situation. We were anxious to show that theory and research, so often associated with the abstract, do have some utilitarian value. We were interested, too, in exploring the practical problems of stimulating and guiding effective change in New York City schools. Thus, in 1965, we were looking for an opportunity to work directly with public school personnel on a change-oriented project.

Every casual observer knows that New York City is a very difficult place in which to produce meaningful change. Its size, its numbers, its complex bureaucratic organization, its deeply entrenched interests -- these and more -- stand in the way. In working with the public school system there is an additional syndrome which presents special problems to the professor who is interested in trying out some of his ideas. This is typified by the gap -- one could properly say antagonism -- between the researcher and the school practitioner. A view commonly held by school personnel in New York City, based on their perceptions from experience, is that professors come to the school situation in a judgmental frame of mind prepared to be negatively critical. Not a few practicing school administrators in New York City feel that their profession has been harrassed, harangued, and belittled in the public press by reports of studies and surveys conducted by professors in the name of research. Often these efforts have led to little real change. Some professors are seen as having profited professionally by releasing exposes to the press rather than by using the fruits of their research in a constructive way in the schools. There is, in short, a serious lack of confidence on the part of many New York City public school personnel regarding the motives,
the intent, and even the ability of the professor as he seeks to stimulate and guide change in the schools.

The professor's ability comes into question partly because he is viewed as a dilettante who need not face the full range of nitty-gritty problems which make the New York City schools so very difficult to administer effectively. The school principal can, understandably, view himself as an elite individual uniquely qualified by virtue or having passed, over the years, a series of examinations so exhaustive and rigorous that not more than a handful of professors in the entire world could even hope to pass. That handful would be limited to those few professors who have had extensive work experience in New York City schools. The New York City school system is a relatively closed one which tends to see its problems as distinctively unique and capable of being understood only by "insiders." It is this homeostatic phenomenon which we were especially interested in exploring precisely because of the defense it erects against agents of change.

In this chronology of the three steps we have taken to learn our trade as change agents, the first opportunity arose with the so-called "More Effective Schools" (MES). This, very briefly, was a demonstration project which has been invented by a joint committee comprised of representatives of the United Federation of Teachers (UFT), which is local chapter number 2 of the American Federation of Teachers (AFL-CIO), and representatives of the administrative hierarchy of the school system. The committee's task was to recommend a program to produce more effective elementary schools. The recommendations focused on making basic changes in four areas:

1. Pupils and curriculum
2. Personnel
3. School plant and organization
4. Community relations

More specifically, it thrust some important changes upon the 21 schools designated to participate. Among them were:

- heterogeneously grouped classes with a maximum size of 22;
- the assignment of four teachers to every "cluster" of three classes;
- the assignment of a large number of specialists, supervisors, and school aides to each school;
- a pre-kindergarten program;
- a stepped-up community relations program.

One of the important staff changes was the assignment of five Assistant Principals to each MES school. Their responsibilities were primarily...
ly supervisory, thus creating the possibility of developing a significantly different role for the AP. In the typical elementary school the AP has been so overburdened with a host of chores, many of them clerical, that it is an accepted fact of life that he has time only to perfunctorily perform an essential minimum of supervision of instruction. In the MES situation he would be supervising perhaps a single grade and would have adequate time to do the job reasonably thoroughly. The challenge would be to develop an approach to supervision which would make maximum use of the new and, by conventional standards, almost lavish assignment of personnel in the attempt to make the MES schools actually more effective.

During 1965-66, the Brooklyn College faculty in Educational Administration and Supervision launched a one year in-service institute for the AP’s of the More Effective Schools which had been planned cooperatively with the MES administration. 10 In retrospect it seems obvious that in this effort we tended to do, ourselves, the thing which we knew best -- teaching, in a rather conventional sense. The 105 AP’s were divided into groups, with each group organized into a series of five two-hour seminar sessions. Lectures, case studies and roleplaying, plus discussion, were the principal teaching techniques utilized. While it was our impression that the overall impact of the Institute was favorable, we became increasingly concerned about the extent to which it was actually affecting change in the schools themselves. Careful appraisal of discussions with the AP’s, plus observations in the schools, led us to realize that we were not taking into full consideration the organizational setting in which these people were working. Frequent statements seemed to indicate either that (a) the AP’s superordinate, the principal, held certain role perceptions which limited the AP’s latitude, or (b) there was, in the schools, a climate which limited the effectiveness of the AP’s. We then thought that exposure to prominent researchers would stimulate learning, and promptly arranged a conference for the assistant principals and principals in which two of the nation’s luminaries in the area of organizational behavior agreed to participate.

The format of the conference featured talks by these professors, one on organizational climate and one on informal organization, which were followed by discussions. It readily became evident that, firstly, this exposure did achieve its objective of stimulating the conferees to
acquire new knowledge and insights, and, secondly, it served to reinforce
the practitioner's antipathy for the "ivory tower" researcher. This may
be viewed as unfortunate because it reduced the likelihood that the re-
search concepts being presented would be accepted as having practical val-
ue in the practice of school administration. Indeed, one professor, wide-
ly acclaimed for his original work in organizational climate and leader
behavior, responded to a principal's plea to go to the schools and ex-
perience first hand the realities of life there by saying that it was not
necessary for him to get into the "muck and mire" of the schools in order
for him, as a researcher, to know reality. To many of the practicing ad-
ministrators present this was taken not only as reinforcement of their
perception of the researcher as an ivory tower dweller, but also as a
declaration of class distinction in a situation that should call for
collegial relationships between professor and practitioner.

Our next attempt at involvement came the following year, during
1966-67, during which we were involved with the MES principals in a
year-long institute. Taking advantage of their interest in organiza-
tional climate, which had been stimulated by our earlier efforts, we de-
cided to eschew the conventional teaching patterns and conferences in
favor of a data-feedback strategy similar in nature to the procedures
described by Miles. The basic data-gathering technique we used was
the Stern-Steinhoff Organizational Climate Index, a questionnaire which
was applied to the teachers in the 21 MES schools. The analysis and in-
terpretation of this survey was fed back to the principals for their study
and reactions. This feedback process was the central aspect of this in-
service institute.

While this effort seemed to be more meaningful to the participants,
and therefore a better learning experience for them, we gathered some
practical "nuts and bolts" learning of our own which, we expect, will
make us more effective change agents in the future. For example, it
turned out that we were very naive regarding the UFT and the effect it
can have on such activities. In asking the MES teachers to respond to
the OCI questionnaire, we were repeating a process that we had used suc-
cessfully in another city and was in use in school districts throughout
the country. In New York, however, we found ourselves in a position
wherein the school principals (who are non-union) had asked for the data
to be furnished by the teachers (who are unionized). We soon learned that researchers who do not first seek the cooperation of the UFT in New York City can be in difficulty when it comes to getting even a modicum of cooperation from the teachers. A second phenomenon that we discovered was the difference it makes when data is fed back to principals in (a) situations where superordinates are not present, and (b) situations in which superordinates are present. In our case we were dealing with 21 school principals and an administrator in the MES program. When our organizational climate data and analysis were first fed back to the principals, the administrator was unable to be present due to illness. The tenor of that meeting was excellent -- discussion was stimulating and fruitful, there were many insightful questions asked, and it appeared to be an optimal learning situation. At the second feedback session, however, the administrator was not only present but was the first person to open the discussion and, as it happened, took a rather dim view of our data. Picking up the cue at this point, the principals dutifully got into line and, contradicting their original behavior, seemed to be in competition to see who could belittle the concept the most.

After these Institutes our concern continued to be focused on the "behavior gap," i.e., we wanted to move away from teaching about organizational climate, away from mere description, and closer to methods through which such information and concepts would become relevant to our learners. We wanted it to be meaningful to them. It was not, we felt, that school personnel need to know about organizational climate per se, but that they begin to search for what they can do to improve existing conditions.

A more recent attempt, our third, to develop for ourselves a useful role as change agents in New York City's public schools took place in the context of the School-University Teacher Education Center (SUTEC). This is a federally-funded, five year joint project of the New York City Board of Education and the Department of Education of Queens College of the City University of New York. It is actually a demonstration project in Public School 76, located in Long Island City in the Borough of Queens. It is intended to demonstrate the best possible urban elementary school programs that can be developed through the cooperative efforts of (1) the school system, (2) the college, and (3) the community. The school structure itself was built specifically for SUTEC; it provides housing for
the college staff involved in the project as well as for the regular school staff. The personnel involved in the project were very much aware of the need to develop effective interaction between the people in the living system of the school organization. They were also cognizant of the fact that their project creates stresses and challenges to effectiveness simply by putting the two staffs of the school (school staff and college staff) together, not only territorially but in a collegial sense that had not previously been experienced.

Drawing upon our experience, we made sure that four conditions were present as we became involved in SUTEC. We have learned that in New York City, at least, these are crucial to the success of the temporary social system created by our presence in the school.

1. **We were invited in.** It appears to us that there is a phenomenon, in dealing with what amounts to problems of organizational health in schools, somewhat akin to that encountered in dealing with individual emotional and behavioral problems. The patient who is forced into therapy will receive no benefit from it. The patient must first recognize a need for help. In the same fashion, the professor who seeks out opportunities to test his concepts in the schools may well find it to his advantage to be patient and deal only with those who are ready to seek his help.

2. **We dealt with a vertical slice of the social system.** With all levels of the school's hierarchy involved, from the principal to the youngest teachers on the faculty, the result is a more realistic attempt to get a forthright confrontation of problems, facts, and issues.

3. **Teachers were paid for "extra" time devoted to the project.** As seasoned school-men, we brought with us to New York a number of expectations and procedures that we had used successfully many times before in suburban communities and smaller cities. We soon learned that today, at least in New York, not all of these are effective. We found, for example, that militant unionized teachers are not willing to give the time needed to fill out researchers' questionnaires. It appears that a necessary aspect of research financing is to have sufficient funds to "buy" time from those individuals from whom data are needed.

4. **The time for planning, communicating, and feedback was increased.** A practical problem for the professor who would be a consultant on problems of organizational effectiveness in a school is that of finding sufficient time to work with the teachers -- time to identify problems, search for alternatives, discuss behavior, analyze data, and plan next steps. In the SUTEC project, we find that a representative steering committee can be
helpful in this work without tying up the entire school staff. We are also beginning to understand the desirability of accepting a long-term view; it is helpful if the school faculty and the outside consultants are prepared to provide opportunities over a period of time for the interactive processes to develop and be productive.

At this point we would like to restate our original thesis, which is simply this: that the gap between researcher and practitioner may be filled by the university professor. We do not suggest that comprehensive programs and institutes for change, or applied development laboratories, or the creation or change agent positions in school systems are not desirable; indeed, they are sorely needed. But they do not now exist in sufficient number to create an impact on the educational enterprise nor does it seem likely, to us, that the situation will change in the near future.

Our position may be summed up by recalling a recent statement by David Fox who commented in the Urban Review that:

"I do not believe that researchers can maintain their traditional isolation from implementation by arguing that their function is to evaluate in an objective way, leaving to others the responsibility for implementation. We are working in such complex areas with such difficult problems of data interpretation that we must begin to insist upon the right to participate in the decision-making process when it involves the interpretation and the application of our own findings. We must recognize that we are studying an issue about which people are concerned. We have finally become social scientists in a vivid sense of the term. Since our problems and our data now have social, economic, and political implications, I feel that the intelligent researcher must insist upon being involved in the use of these data." 16

Fox was writing from the specific point of view of the researcher concerned with evaluation research, but his views may be generalized to the profession at large. Perhaps objectivity turns to disengagement when one is confronted with the "muck and mire" of reality.

Our experience has led us to believe that it is possible for individual professors to be effective in helping to bridge the gap between research and practice. Clearly a substantial degree of readiness on the part of both scholar and practitioner is necessary for such a cooperative enterprise.

We think this is one of the many interesting and satisfying facets of our own professional role and we heartily encourage others to share in this experience.


4. John J. Horvat. Ibid.


7. This comment on the New York City licensing examinations specifically circumvents reference to the level or power of the examinations.

8. Calvin Gross was the Superintendent of Schools who appointed the committee. Bernard Donovan had succeeded him by the time its recommendations were reported.


10. The Institute was financed by the Collegiate In-Service Institute Program of the New York State Education Department under a grant proposed by Professor Stephen H. Lockwood, Coordinator, Advanced Certificate Program in Administration, Brooklyn College.


12. For a description of the rationale and an application of this instrument, see: Carl R. Steinhoff. Organizational Climate in a Public School System. USOE Cooperative Research Program Contract #OE-4-10-225 (Project #S-083). Syracuse University, 1965.


15. Descriptions of the SUTEC Project may be obtained by writing to Dr. Thelma Adair, Co-Director, SUTEC, Public School 76, 36-36 10th St., Long Island City, N.Y.