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ABSTRACT

The symposium from which these papers were taken dealt with the processes and problems involved in developing a fully collaborative relationship among the federal government (specifically, the National Institute of Education), the Research and Development Center for Teacher Education at the University of Texas at Austin, and the Austin, Texas, Independent School District. The processes are described and analyzed by major representatives of each of the participating partners. The action research conducted cooperatively in the Austin schools was intended to allow each of the partners to create a powerful alliance for increasing educational effectiveness in classrooms while remaining fully accountable to their respective constituencies. These papers focus on the roles and primary concerns of each set of actors and on the responsibilities of project management in fostering the development of an effective research team. (Author/DS)

A Federal Institute, A University R&D Center, and a School District Join Forces: The Processes and the Problems

A Symposium presented at the annual meeting of the American Educational Research Association in New York City, April 4-8, 1977.

ON THE CARE AND FEEDING OF COHABITATING PRACTITIONERS AND RESEARCHERS

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Presented as introductory paper in a symposium entitled "A Federal Institute, A University R&D Center, and a School District Join Forces: the Processes and the Problems," at the annual meeting of the American Educational Research Association held in New York City, April 4-8, 1977, Program Session 22.16.

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Abstract

The symposium which this paper introduces is addressed to the processes and problems involved in developing a fully collaborative relationship between the federal government, a university-based R&D Center and a public school district in planning and conducting action research programs in the schools. The processes are described from the perspective of major representatives of each of the participating partners reflecting their intention of creating a powerful alliance for increasing educational effectiveness in classrooms while remaining fully accountable to their respective constituencies.

This introduction describes briefly the encumbrances from past failures to make such cooperative endeavors work. It focuses on the roles and primary concerns of each set of actors and the responsibilities of project management in fostering the development of an effective team.

On The Care and Feeding of Cohabitating Practitioners and Researchers

OLIVER H. BOWN
Research and Development Center for Teacher Education

This symposium is entitled, "A Federal Institute, A University R&D Center, and a School District Join Forces: the Processes and the Problems." Present today are representatives of each of these organizations. I know that each of them intends to tell it like it is from their perspective, and I believe you will find the blend of perspectives interesting and somewhat provocative. It is easy for any of us to spin out rhetoric which attests to the importance and joys of true collaboration between researchers and practitioners. It is a great deal more difficult to achieve in reality. After hearing the presentations, you may decide that the symposium title should have been, "Seventeen Good Reasons Why You Can't Get There From Here." We hope not since the latter title does not suggest our conclusion. We will lay out those seventeen reasons--and perhaps a few more--but we do intend to get there.

We are fully aware that our collaborative endeavor is not unique. Similar collaborative efforts in many forms and for varying purposes are underway in every part of the country. We are gratified to see that a number of reports on such efforts are represented in the program of this annual meeting.

We are reminded of Dick Schutz's editorial in the Educational Researcher last May in which he made a clear and important differentiation between "research on schools" and "research in schools." The project in which we are reporting today is clearly dedicated to research in schools, not by excluding the university researcher, and his or her too frequent obsession with publishable results, however trivial, significant at the .01 level. Rather, we are working to combine the federally provided resources and long developed capability of our university-based Center with those resident in researchers, administrators,

and practitioners within the school to the end of mounting the most powerful possible attack on one of the highest priority practical problems of the district--more effective education for low SES students. Today, we will focus on the collaborative relationship which is the vehicle for this attack.

One of the first things that the Director--or more appropriately, the Coordinator--of this kind of effort ought to learn is to say as little as possible in the interest of allowing the principal actors in this highly dynamic and open-ended drama to speak for themselves. My colleagues have been generous in considering my needs for care and feeding by allowing me a few minutes to comment on their needs--as I see them.

We are indeed blessed by the federal government through our immediate partnership with program officers who have worked with us over several years and even show strong signs of "staying put" for a while longer. As a result, they know us well -- our strengths and limitations. They do their homework and know our work substantively and operationally. They are accountable people to their own chiefs within the Institute and the bureaucracy beyond it. They also feel professionally accountable to the field of education and will go to bat only for R&D work which they believe will contribute significantly to it.

Their need for care and feeding is satisfied principally through keeping them informed and involved as a given program evolves. It is easy to assume an adversary stance with those who control the funds, but it is important to transcend that position if true partnership is to be achieved. They need to know where we are and were we're going. When we tell them like it is, they listen. They are also free to speak and do so with little hesitation. I think they know we listen, but without placing the undue burden on them of following their advice blindly. They are "good guys" and they are tough. We hope to do our part in keeping them that way.

Our school partners have also worked with us over many years, and this

helps. On the other hand, it guarantees very little. As Freda will point out in her paper, every school year is a new ball game, and what we did last year or over the last ten years in demonstrating our capacity for collaborative work does not help much in a new program with a new set of actors at the district and school level.

Our school partners need from us clear evidence that we understand how their system works. Their first job is to keep the schools running, and we can easily be seen as another intrusive element which can easily interfere with that job rather than supporting it. We inherit much of the bad reputation of "university people" who don't really know what life is like in schools but who are hell-bent on changing them. Changing this adversary relationship where they stand in the way of our getting the research data we need for our publications to a fully collaborative partnership is a tough job. It has to go on at every level of the complex organizational structure of a large district. They need to know that we'll stay with what we start with them. They need to know that we are clearly aware of reality constraints and opportunities, of their principle concerns, as we mutually build a constructive role for R&D as a synergic force in their operations.

We are blessed with researchers on our staff who have been deeply involved in the fire of action research in classrooms for many years. They understand that collaboration is an endless series of daily acts which respect equal partnership in joint undertakings rather than a flag to be saluted annually with glib rhetoric. They, in turn, need a measure of real appreciation for tackling the R&D job where it's toughest--and most needed. They need the patience that it takes to build collaboration in complex settings supported with requirements for reasonable productivity which can make a real difference in the long run. Sometimes they need protection from well-meaning colleagues who call for tighter designs, greater control and 17 times as much useful data.

We turn now to the principal actors.

FEDERAL ROLE AND INTEREST IN PRACTICAL PAY-OFFS FROM RESEARCH INVESTMENTS

by

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Prepared for presentation at the American Educational Research Association's Annual Meeting on April 4-8, 1977, in New York City

Abstract

Isolated research, conducted by Federal agencies, or individual researchers is not as effective in implementing educational improvement as a well-integrated program among government, theoretical researchers, and local schools. In order to reduce Federal intervention in local school affairs, Federal agencies should work in a cooperative manner with universities and local schools as the National Institute of Education does with the University of Texas Research and Development Center for Teacher Education and the Austin Independent School District.

It has frequently been a claim of the general educational establishment (local ed. agencies & higher ed. institutions) that the Federal government is not responsive to the needs of educational practitioners. The Feds are "sometimes" described as being one of two types of beings, neither one conjuring up too positive an image. We are either classified as being " interventionists" who rigidly and unilaterally enforce unreasonable regulations and infringe upon local preogatives, or we are classified as "isolationists" who exist in a vaccum far removed from reality and contaminated by the incestuous interaction of other isolated feds. To these isolate Feds, another popular cry goes, might be added the input of those horrible "theoreticians" and "researchers" who only further contaminate the efforts through their surrealistic participation.

As a Fed, my first reaction to those claims was I suppose, a defensive one. I knew that I didn't sit around trying to find 999 ways to devour or destroy the well-being of our Nation's students and I didn't appreciate anyone implying that I did. As a former secondary school teacher, continuing student, part-time college lecturer and with a bit of school-based administrative experience behind me, how could I, along with many of my colleagues of similar backgrounds, be accused of operating in a vacuum?

The situation seemed to call, therefore, for role clarification on my part in terms of how the Feds can work more effectively with outside institutions and agencies. As I went about doing that, I began to realize the reasons for what I had felt to be unfair criticisms.

Initially, it is not enough to have been a school teacher, administrator, college instructor, student or other related roles you might mention. The world of education, propelled by factors such as collective ba gaining for teachers, technological advances, and life-style changes, and as a microcosm of the world in general, has been changing so rapidly that unless you are there now it is extremely difficult to grasp the true meaning of what is taking place. Although you, if you're not on the "firing lines" today, can be helped by vicarious experiences such as books, articles, even discussions with practitioners, you may still find it an almost insurmountable task to completely understand school and university functions today because your personal frame of reference is probably, at best, dated and, at worst, inaccurate and inappropriate. You don't have to have been away ten or twenty years for this phenomenon to occur: today, 2 or 3 years can constitute the same eternity.

I would not, of course place only the Feds in this possibly uncomfortable situation, but also legislators, state depart-

ment officials, parents, community representatives and even schools and university personnel, when you consider how little universities' staff may know about schools and vice-versa. None of us can easily understand or appreciate the realities of any of the others without some type of current, direct exposure.

The primary question for establishing an effective federal role in educational research, it seems to me, thus becomes: What is the best way to ensure this current and direct contact with the appropriate educational institutions in order to maximize the use of resources and the educational benefits? In order to do this it does not take a quantum leap of logic to realize that we must develop working relationships incorporating all the concerned constituents if we are to accomplish what we wish to accomplish. Again, logic would tell us that this purpose can best be served if we relate to one another on an "advocacy" basis as opposed to in an "adversarial" fashion. Unfortunately, a pre-set of adversarial attitudes has many times already been established and that first has to be condemned and razed before a new positive structure can be built.

Although I do not assume that such an adversarial attitude existed previously among the parties who are discussing this project before you today, I do believe that what has evolved

here offers a good example of the kinds of relationships that must be established if we, and I mean all of us here are to succeed in our mission. It has, first of all, not been a unilaterally determined effort by any stretch of the imagination. Early planning has involved the commitment of school, university and federal officials for every step on the path. Of high interest to the Feds, for example, is not only whether or not this particular body of research can be transferred for practical use in the Austin schools but, also, whether or not we will be able to have a better grasp of the processes which impact upon the group decision-making that will be taking place throughout the project. In other words, if we can work together effectively, what are the commonalities in this setting that allow us to do so and are they perhaps generalizable to other settings for other working relationships? The roles of Gene Hall's group and that of Ollie Bown as Director of the Center will be especially crucial in providing in-depth and overview information on these processes. What will occur among the school cast of players as they sort out their priorities, relate those to the capacities of Freda Holley's research and evaluation unit and those of the Texas R&D Center, and what discoveries can all of us make about the successes and failures which will inevitably arise from this matching of resources and needs? Of course, the critical element may be the question of how useful specific teacher,

student and contextual research can be in helping to address some of our school's major problems of the day. Through the constant input of person's such as Carolyn Evertson and her colleagues, who have actually been conducting that research in other school settings on a smaller scale, we can be assured of maintaining the integrity of the research designs in the co-operative setting and we can also have direct access to the developers to aid in the accurate interpretation of the results. At the same time we will not be vulnerable to some of the old cries of incestuousness as far as these interpretations are concerned, because the developer's inputs will be complemented (and, one could imagine, at times contradicted) by the results of others conducting parallel research efforts in other reality based settings. We cannot and will not allow a structure to exist which permits any of the involved individuals, institutions or agencies to withdraw exclusively into its own limited frame of reference. Each has a valuable contribution to make on the basis of its own experiences, knowledge and skills but these contributions must be considered in view of the context provided by all participants in the project.

The federal role, therefore, is, first, to understand and relate to, the situation being faced by the other involved parties. By "relating to", I mean trying to consider <u>their</u> priorities in delineating the Federal priorities. We are all

after the same end: achieving educational and personal growth among the student and staff. We must step out of, if in fact we are in, the role which often entraps small minds: that of putting personal recognition or dominance above the successful completion of our tasks. I sincerely believe we will not be sidetracked into extended disagreements over who will "control" a part of the project but, rather, will focus on ways in which each of us can "contribute" to those parts. Only through that type of approach can we really hope to get to the "payoffs" that are not endemic to just Federal government or university or school but are generic to all of these units.

Although I will leave it to my associates to describe in more detailed fashion how the project will relate to their specific needs, I would like to go back to the "payoffs" point for a final, and I believe extremely important, comment. Perhaps the biggest payoff we could receive (and sticking with my contention that they really are generic payoffs, I would define "we" as all of us) would be the chance to get a better shot at beginning to address what I feel is one the most legitimate concerns and criticisms that has been directed toward educational research is recent years. That chance would be to try to make some collective sense, in an actual school setting, of the range and mass of what is coming to be a considerable quantity of instrumentation, research designs,

observational techniques, data analysis procedures and implementation theories. Although a great deal of developmental effort has gone into these areas in the last 5-10 years, we still find ourselves without any idea of a gestalt that might be workable in a practical setting. We keep producing "new", and I use that word advisedly, methods for producing, organizing, analysing, and interpreting data without ever stepping back to see what it is we have and how it can best be applied. Lest you think that it is only non-researcher types such as teachers and administrators who are concerned about this, I recall that the last of many occasions on which I have seen this topic addressed was in a report of the proceedings of a session of the recently-established (coincidentally by NIE, of course) Institute for Research on Teaching at Michigan State. The participants included persons other than researchers but I was most struck by the reaction of the researchers themselves to some of the reports of the present state of the art in teaching research. After hearing all of the diversity and depth being summarized, several of the researchers, and I believe I recall Barak Rosenshine as one of the speakers, were extremely concerned that we now seemed to be covering old ground again and simply calling it by new names. In what I would view as a sincere effort to police their own activities, these researchers were suggesting that there is a great need to move to some type of synthesis of what we presently have and see what type of directions this accumulation can provide.

Let's not re-invent the wheel by going back and finding out more information on something about which our existing results tell us there is no good reason to pursue any longer.

Although I would in no way want to discourage well-conceived and contextual new research efforts, in great depth and considering a wealth of new combinations of variables, I would propose that a working relationship such as the one which is developing between the Austin schools, the University of Texas R&D Center and the National Institute of Education offers at least a somewhat unique opportunity for getting at the gestalt of all that we have. Even though I also would not for a second claim that we will get any magical answers from the project, the combination of syntheses to be done before project implementation, the constant reminder of a real school setting, the expertise that will be utilized, and the caution that I am sure all will exercise to avoid premature acceptance of research findings as panaceas, will help all of us to begin to seriously consider the cumulative worth of all our efforts and where we need to look in the future.

A greater payoff is hard to imagine!

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The Public School R & E Unit Looks at Research, Researchers and School District Needs

Freda M. Holley

Austin Independent School District

Paper presented at the annual meeting of the American Educational Research Association, New York, April 1977

Foreward

This paper is one of several papers prepared for a symposium dealing with a jointly developed and carried out project between an urban school district, a university Research and Development Center, and the National Institute of Education to investigate and perhaps try to remedy a major need identified by the local school district. This need was the achievement of low-socio-economic students.

The Public School R & E Unit Looks at Research, Researchers, and School Distric : Needs

Freda M. Holley

Austin Independent School District

Public school districts, at least the larger urban districts with whom I am most familiar, are no longer hospitable places for researchers to visit. This is true for a number of reasons:

- The administrators in today's public schools are on the average better trained than ever before. There are more Ph.D.'s around and administrative preparation programs often include research or evaluation training. Thus, we are inclined to screen out a lot of poor research proposed.
- Increased accountability pressures mean that activities of internal evaluation offices have either been initiated or stepped up. We are testing more kids, more frequently. We are interviewing or sending questionnaires to more teachers and administrators. We are observing in more classrooms.
- Those same accountability pressures have brought increased federal and state agencies data collection from the local agencies. These and the requirements stated above mean that teachers, principals and administrators are not likely to welcome any unrequired extra data collection efforts.

- Long years in which far too much of the research conducted in public schools had major problems began to pay off in generally negative attitudes toward research projects. Such problems included a lack of relevance of research to school needs and interest, often naive or poor quality designs, poor implementation by often badly trained student testers or research assistants and finally a frequent failure to ever report back on results to the system or to individual participants. These problems are captured in my favorite quotation from researchers shown in Table 1. These satirize some of the very real problems encountered in dealing with researchers.
- Finally, the family privacy act has imposed some administrative burdens in connection with research upon the schools and placed a legal spectre in the background. For example, the fact that we must maintain with student records a record of access by researchers is a big administrative burden with which most of us have yet to learn to cope.

The net results of these problems are illustrated in Table 2. Very little research by external persons occurs in our school system today.[1]

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[1]For the individual researcher interested in improving his chances for getting approval, a practical article to read is: Robert J Nearine and Earl F. Hughes. Public School Research: Some Problems Which Are Often Not Considered. CEDR, 8, No. 2 (Summer 1975), pp. 22-24.

Table 1

Out of the Mouths of Researchers: My Favorite Quotes

1. Oh, but I only need to get about 100 teachers to fill this out before Friday! (Today is Wednesday.)

2. It only takes 3 nours of the students' time.

3. Well of course if you were familar with the latest studies on locus of control, you'd know how very important this is to education.

4. Control group? Why?

5. Six weeks for approval! My thesis is due before then.

6. The purpose of my study is to prove that peer tutoring is a good technique.

7. You mean the principal was upset because the testers wore cut-offs to do the testing?

8. Well, really, my 300 word research proposal is much more complete than your 3-page application. The committee would understand my research project much better if they read the full proposal.

9. The mathmegenic factors can be subtly conceptualized by a CPR analysis conducted through a five-way...

Table 2

EXTERNAL RESEARCH APPLICATIONS
Austin Independent School District

YEAR	ESTIMATED NUMBER OF INITIAL CONTACTS (PHONE OR VISIT)	NUMBER OF FORMAL APPLICATIONS	NUMBER APPROVED FOR IMPLEMENTATION (THROUGH JAN. 1977)
1976-77 through Feb. 1, 1977	200	17	7
1975-76	225	23	15
1974-75	250	54	34
1973-74	250	75	55

I hear from my colleagues in similar positions around the country, that these numbers are not unlike those to be found in other school systems.

Not all researchers, of course, have performed badly in our schools. The R & D Center for Teacher Education at the University of Texas has long enjoyed a good relationship with the Austin school system. They have carefully worked through the years to avoid the kind of problems wrought by other researchers in the system. To be specific they have:

- Treated the school staff as collaborators due respect.
- Trained their data collectors in appropriate school behaviors.
- Reported personally to teachers and provided our evaluation office with complete reports, raw data where it could be used in our work, and copies of published work.
- Served as informal resources. When, for example, a board member asked me what the research says about the effects of male teachers at the elementary level on boys' achievement, I had ready advisors to whom I could turn for quick answers.
- Collaborated on small projects where we needed help.
- Carried out high-quality research.

This last factor has been extremely important since through the high-quality work that we saw them performing, our respect for them as researchers was earned.

The final aspect of the situation of public schools with respect to research today is that there is also a greater appreciation for the need for some very fundamental basic research. In the minds of educators, this need is not likely to be phrased in research terms unfortunately.

The need is more like a kind of underlying woe in a generation that has been through the wringer of innovation. It is communicated in such expressions as:

- "I really don't know what to do now. I've tried everything."
- "The brochure says this program is the answer, but the last one said the same thing. I want your opinion, is this program really going to work?"
- "Programs aren't the answer!"
- "Well, tell me what will work!"

In other words, innovation in a general sense has not delivered what it promised while the needs of students as learners have not disappeared. Many students still don't learn to read, poor children still learn less than their wealthier counterparts, kids are still emotionally maladjusted in some educational and social environments.

For me, at least, all this translates into needed research that will enhance educator's capacities for working on these problems.

This represents my view of the background from which we attempted to bring the school system and the R and D Center closer together. It appeared that collaborative work of a major nature might at this point benefit both our organizations. It might permit us to gain research resources for an area of great need in our district on the one hand, and the R & D Center to gain good access to a data source for research on the other hand. The area we have chosen to collaborate on is the achievement of lower socio-economic students. It will probably be some time before we can determine whether this benefit to both organizations will be fully realized.

Certainly, however, we are becoming acutely aware of some of the difficulties of such collaborative relationships. One of the outcomes we hope to achieve from this project is a better understanding of these difficulties. For the rest of this paper, I would like to explore what I believe are some fundamental organizational problems from an internal view on the school side that must be overcome if the relationship is to flourish with consequent benefits to us both. This is not a trival detailing, I believe, because these organizational characteristics may well be exactly the same ones encountered in working out any cooperative agency relationships. City, state, federal or mental health agency/school district interfaces will all have similar problems to overcome.

The school organization is in a constant state of flux.

Many descriptions of school bureaucracy leave the impression that they are static hulks incapable of change. I maintain that they are almost exactly the opposite; today, they are systems in almost constant flux. The flux is both apparant and invisible. It is rather like seeing water in a glass as a solid and then seeing it under the microscope teaming with life.

An organization, as we all know, exists at two levels: formal and informal. The organization chart is the visible sign of the formal organizational. In our district, which is I believe not atypical, this chart has changed rather drastically each of the six years in which I have worked in the system. It has usually changed because of major upheavals in or blows to the organization: A court order mandated more minority administrators, budget restrictions meant positions could not be filled, key figures retired or moved.

People in the system rarely catch up with the organization chart. I still receive communications aimed at a function I had four charts back. This chart, in fact, often stays in draft form so long that when the final version is printed it is already out of date.

The informal organization is, of course, entirely people-based. This real structure of the organization depends on the competence of the holder rather than the office. And these competent people, in particular, seem to come and go even more rapidly than others. During this school year we lost our school board president, a dynamic leader who resigned to run for mayor, and our director of secondary education, a charismatic person who was our most intellectual administrator. The dents they left in the informal structure seem almost incalculable.

A cooperative research project that has any potential for improving a system has to impact the organization and work within it. Figuring out how to do so with a system in such flux is no easy problem.

Power is avoided and coveted.

Those with power in any organization are always targets, but in today's insecure administrative world the problem is acute. Resources of any kind are likely to be viewed as power. Thus, a cooperative relationship of this type which represents a resource will arouse enmity by its very existence. Securing cooperation from other necessary people will be dependent upon the resolution of this problem.

Today's school system is likely to be a place of dispersed rather than centralized authority.

With teacher unions, principal coalitions, community pressure groups, parent organizations, and specialized interest groups authority in a school system is vastly dispersed. We often say that the only true power today rests with the student; he can opt to tune out. Real power in education tends to be at the base of the organizational pyramid and informally distributed upward.

This dispersal of power means that solidly designed research in a school system cannot be mandated. When the research organization becomes in any way a system adjunct it faces the same problem. Points of possible sabotage to research designs are too many to control.

This means that points of influence are also dispersed. To impact the system, many different power points must be accessed and influenced. The time this takes is likely to wear down the best of researchers long before all the points are covered.

Dual administrative regulations are a burden.

The bane of existence for most of us is the administrative trivia associated with organizational life. Job advertising approvals, appointment forms, requisitions and purchase orders, memorandum sign offs, payroll forms and so on ad infinitum. Many of these are likely to be multiplied by dual organizational requirements. As trivial as these things are, we estimate that they require about 20% to 30% of the time of the top level staff in the Office of Research and Evaluation.

School district priorities are year-to-year.

School systems are really annual operations. Things have to be begun and finished within the year. Thus, most evaluation offices depend heavily on annual evaluation reports. The timelines of many major research projects by contrast run to three years: one year to plan and collect data, a year to analyze, and a year to write it all up. For us in public school evaluation , these activities all collapse into one year.

Partly because of the flux in the system, a study that takes three years may well have lost its audience before it is completed.

Calendars do not coincide.

There are also slight differences in calendars that make interrelationships difficult. University calendars have breaks where we don't, and we have breaks where universities don't. This is further complicated by the professional meeting calendars within school districts. I have become convinced that there are enough different professional organizations, each with week long meetings, that the whole school administration could never be all assembled at one time: AASA, AERA, ASCD, NEA, NAAP, NSBA, TSTA, etc., etc. Sometimes it seems we all meet each other only in passing. When similar university affiliations are added to the list, assembling the key people necessary for joint communication or decision making is magnified more than twofold.

Where joint funding is involved one further calendar difference is a problem. Our budget year begins September 1; funds for the R & D Center portion of the project arrived much later in the year.

Our budget year will end while the project's budget year continues. Joint project funding of personnel with such misalignment would be very nearly impossible.

Organizational function can be a barrier.

Most organizations, although constantly in a state of flux, tend to be fairly rigid about function as it is currently defined. Our district has a staff development unit, for example, and although an aspect of the current project requires staff development functions, our office tends to be careful about our activities in that area.

The R & D center has specific areas of research interest. Needs in the cooperative project may lead off into quite different areas.

Unless flexibility can be created in meeting these demands on both organizations, the total productivity of the project could be reduced.

School district staff view research with skepticism or as "fascinating."

Educators in general are not information users; they are accustomed to behaving in accord with intuition and hunches. Thus, research or evaluation information is likely to be received with one of two attitudes. Either they regard it as invalid because it and its methodology are suspect, or they view it as "fascinating," but having little relevance to their practical world. In either case translating research findings into educational behaviors will not be an automatic process.

By the same token, school staff have difficulty either in translating their own problems or concerns into researchable questions or in seeing research as a valuable tool in solving their problems.

Viewed from either direction this general lack of transfer from educational practice to research will present communication difficulties at every step of any cooperative project.

Communication is always a problem.

Researchers and educators do tend to speak different dialects and have consequent difficulty in communication. When we hire new university graduates into our office, it usually takes six months to two years to retrain them such that they can write reports that minimally communicate to school staff. Some never make it.

The R & D Center, because of their past experience, has been remarkably sensitive to this problem and have avoided most difficulties in this regard. One aspect of the problem that we have encountered, however, is the internal knowledge we have about "ticking" words to be avoided. For example, you don't say "classroom management" to one administrator because of its negative connotations to him in connection with an internal project. This knowledge is not easily transferred.

The lack of knowledge of school staff about essential research terms is simply an obverse of the communication problem. If educator's knowledge of research can be improved, communication and practice might also be improved.

Data bases are likely to be incompatible.

A big motivator to cooperative projects is increasingly the extensive longitudinal computerized data bases being aggregated by urban school districts.

Studies on these bases such as those carried out by the Federal Reserve Bank - Philadelphia school system are just a beginning. As school districts get better classroom process data to match these student bases, we can learn more about resource learning relationships. In our compensatory program evaluations this year, we are adding program markers, instructional time, time-on-task and other process measures to our student data base.

Matching up this data base to the R & D Center base will be essential. However, huge translation procedures may be required in this process because of different computers in the two institutions and because of different base procedures. Match-up may even be impossible unless careful planning steps are taken.

Summary

Our cooperative effort is still in its infancy. The potential payoff from this relationship is obvious, but how rewarding it will turn out to be for either institution will depend on how successfully these issues and other issues that will undoubtedly arise are resolved. One major intent of our project, as I understand it, is to document and consider some of the adjustments that our organizations must make in this relationship. I believe the ten problems in the interface that are outlined here represent significant areas that must be dealt with. Hopefully, the ensuing year will lead us to details on at least some possible means of aligning these areas.

THE CONCERNS-BASED PERSPECTIVE OF THE COLLABORATION BETWEEN AN R&D CENTER AND TWO SCHOOL SYSTEMS

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THE CONCERNS-BASED PERSPECTIVE OF THE COLLABORATION BETWEEN AN R&D CENTER AND TWO SCHOOL SYSTEMS

The Procedures for Adopting Educational Innovations (PAEI) Project has analyzed collaboration between the R&D Center of the University of Texas at Austin and two school systems. The analysis is based on the concerns of the individuals and the normative concerns of the organizations involved, determined by use of the seven Stages of Concern (SoC) in the Concerns-Based Adoption Model (CBAM). One school system (A) had intense Stage 2 Personal and Stage 3 Management concerns and was inner-oriented, while the other system (B) had Stage 5 Collaboration and Stage 6 Refocusing concerns and was outer-focused. Initial contact with both systems was similar, involving Stage 5 administrators. However, in School System A, movement was slow, with the entire fourteen months devoted to clarifying tasks, while in System B, nine of the fourteen months were devoted to actual research. System B, however, tends to overuse findings and become impatient with the limited scope of collaboration. The research raises questions about collaborating with different types of organizations and what the role of an R&D Center should be in the collaborative relationship.

THE CONCERNS-BASED PERSPECTIVE OF THE COLLABORATION BETWEEN AN R&D CENTER AND TWO SCHOOL SYSTEMS[1,2,3]

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The previous authors have shared with you three different perspectives on the challenges and rewards of a federally funded R&D Center collaborating with a large city school system. Joe Vaughan ("Federal Role and Interest in Practical Payoffs from Research Investments") provided the federal perspective, while Ollie Bown talked about and shared with you the R&D Center perspective, and Freda Holley, in very colorful ways, described how researchers are viewed within the realities of the public school system. Freda also pointed out many of the realities of being a school-based evaluator.

In this paper, we would like to share with you some issues and questions

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[1]We need to point out at the beginning of this paper that it was written to stimulate discussion among our colleagues in schools, R&D Centers, and at the federal level. The questions to be raised are tough but need to see the light of day.

[2]Premeeting draft of a paper presented at the annual meeting of the American Educational Research Association, New York, April 7, 1977.

[3]The research described herein was conducted under contract with the National Institute of Education. The opinions expressed are those of the author and do not necessarily reflect the position or policy of the National Institute of Education, and no endorsement by the National Institute of Education should be inferred.

we see as the documenters of the R&D Center collaborative efforts with various school systems. In doing this, it needs to be kept in mind that there is some role conflict since not only are we documenters of the collaborative effort, but we are also an active participant in the collaborative process from our research perspective.

When thinking about the collaboration of a federally funded R&D Center with a school system, we are reminded of the often described story of the three blind men and their first encounter with an elephant. One man, feeling the trunk, thought it was a water pipe. The second thought it was a fan from holding the ear; and the third thought it a throne after feeling the broad side of the elephant. Depending upon the agency that the observer resides in, the perceptions and descriptions of the R&D Center/school system collaborative effort can sound like very different creatures, none of which may very validly describe an elephant.

There is another version of the story that has four blind men encountering an elephant. The fourth man, after walking round and round the elephant and feeling its sides, exclaims, "It is something with no beginning and no end."

This fourth man probably came closest to describing the feelings of us who have attempted formalized inter-institutional collaborations. Whether or not an R&D Center/school system based collaboration represents an African elephant with large ears or an Indian elephant, or a white elephant, seems to depend not only on the perspectives of the individuals that are involved in the collaborative effort, but also upon the overall norms of each of the collaborating institutions.

In this paper, we would like to reflect upon our experiences in documenting the collaborative efforts between one R&D Center and several different school systems. We plan to raise several issues as well as some questions that we see. We think that there are several policy level questions that need to be

grappled with by all of us. These questions will not be comfortable to face or easy to answer. Some implications may not be pleasing. However, if we are to continue encouraging more intimate and intensive collaborative relationships between formal organizations, then we need to be ready to admit that some are likely to make strange bedfellows.

One of the difficulties in attempting to grapple with issues in relation to collaborative efforts is attempting to hang on to the phenomenon long enough to understand it and then to be able to use it as a basis for asking questions. We think that we can offer a conceptual framework from which to describe these dynamics. We would like to propose the concept of "concerns" as a framework. In the next section of this paper, the concerns concept will be described. Then, concerns will be applied to the actors and institutions involved in a collaborative effort. Then, if we are able to hold the dynamics of the collaborative relationship still long enough, we will raise some questions.

The reader needs to be advised that this is some fresh chinking in terms of how to conceptualize and think about a collaborative relationship and that, in many cases, we may be overly stereotyping what we know to be a much more complex world. The real world is certainly filled with more clear-sighted and empathic individuals and organizations than those that we will describe here. However, for the sake of discussion, let us proceed to develop the conceptual basis, describe some different collaborative relationships, and raise some implications and questions that need to be faced.

The Concept of Concerns

The concerns theory was developed out of pioneering research by Frances Fuller in the 1960's. In this research, Fuller (1969) identified in student teachers and inservice teachers a developmental sequence to the kinds of "concerns" that they had about teaching. In general, this concept of concerns

progresses from student teachers initially having concerns that are unrelated to the teaching tasks and their teaching role. As teachers become concerned about teaching, their initial concerns tend to be self-oriented with questions such as: Where do I park my car? Can I control students? and, Do I know enough to do the job?

Later on, task concerns become more intense with teachers being concerned about the time it takes to prepare for lessons and to get materials and instruction organized and presented. Ultimately, Fuller theorized that experienced teachers will have more impact concerns. Impact concerns focus upon students, student learning, and how the teacher can improve him/herself as a teacher.

In Fuller's research, she determined that roughly 64 percent of preservice teachers' concerns were in the self and task areas, with roughly 64 percent of inservice teachers being in the task and impact areas. Fuller found that, in general, although concerns are not entirely sequential, with increasing experience, more impact concerns would be observed and fewer self and task concerns would be expressed.

One implication for preservice and inservice teacher education is that there are many concepts and procedures that may not be "relevant" to inexperienced teachers and perhaps many of these items should be delayed in presentation until teachers' concerns have shifted more toward impact.

Recently the Procedures for Adopting Educational Innovations Project at the Texas R&D Center has expanded and generalized the concept of concerns to educational change. The conceptual basis for these studies is the Concerns-Based Adoption Model (Hall, Wallace, & Dossett, 1973; Loucks & Hall, 1977). In the Concerns-Based Adoption Model, one of the key dimensions that is a focal point for understanding change is the Stages of Concern About the Innovation (SoC) that an individual exhibits as he/she is involved in implementing a change. Three years research have initially verified that seven Stages of Concern exist

and that they can be associated with various product and process innovations (Hall & Rutherford, 1976; Rutherford, 1977). These seven Stages of Concern are defined in Figure 1.

In terms of our purposes here, we would propose that researchers, school-based personnel, and the "feds" all have identifiable Stages of Concern about the "R&D Center/school system collaborative effort" that can be clearly associated with the definitions outlined in Figure 1. In fact, it appears to us that, depending upon the Stages of Concern of these individuals, the collaborative effort will take on a very different set of dynamics, a very different set of tasks, and the productivity of the collaborative effort will vary greatly.

Further, for the sake of discussion, we would propose that formal organizations can be characterized according to the nominal concerns of the organization members. Whether the normative concerns of an organization are determined by a simple arithmetic averaging of the Stages of Concern of all of the individuals or whether it is shaped by key influential persons is open to hypothesis testing. For the sake of discussion in this paper, we are suggesting that an R&D Center/school system collaborative effort can be characterized according to the concerns of the individuals and the normative concerns of the organization.

Characteristic Concerns of Researchers, School Personnel, and "Feds"

In her paper, Freda Holley described various kinds of "classic" comments that she has heard from researchers. We think that it is possible to also document classic school system personnel responses and classic "fed" responses to various aspects of a collaborative R&D effort. We would propose here that the concerns model can be applied to provide a way of structuring these classic commentaries and that, depending upon the Stage of Concern of the various individuals in relation to the collaborative effort, the characteristic comments

Figure 1. Stages of Concern About the Innovation.*

0 AWARENESS: Little concern about or involvement with the innovation is indicated.

1 INFORMATIONAL: A general awareness of the innovation and interest in learning more detail about it is indicated. The person seems to be unworried about himself/herself in relation to the innovation. She/he is interested in substantive aspects of the innovation in a selfless manner such as general characteristics, effects, and requirements for use.

2 PERSONAL: Individual is uncertain about the demands of the innovation, his/her inadequacy to meet those demands, and his/her role with the innovation. This includes analysis of his/her role in relation to the reward structure of the organization, decision making and consideration of potential conflicts with existing structures or personal commitment. Financial or status implications of the program for self and colleagues may also be reflected.

3 MANAGEMENT: Attention is focused on the processes and tasks of using the innovation and the best use of information and resources. Issues related to efficiency, organizing, managing, scheduling, and time demands are utmost.

4 CONSEQUENCE: Attention focuses on impact of the innovation on students in his/her immediate sphere of influence. The focus is on relevance of the innovation for students, evaluation of student outcomes, including performance and competencies, and changes needed to increase student outcomes.

5 COLLABORATION: The focus is on coordination and cooperation with others regarding use of the innovation.

6 REFOCUSING: The focus is on exploration of more universal benefits from the innovation, including the possibility of major changes or replacement with a more powerful alternative. Individual has definite ideas about alternatives to the proposed or existing form of the innovation.

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*Original concept from Hall, G. E., Wallace, R. C., Jr., & Dossett, W. A. A developmental conceptualization of the adoption process within educational institutions. Austin: Research and Development Center for Teacher Education, The University of Texas, 1973.

one hears will v. ..cordingly. In Figure 2, the various Stages of Concern are listed and at attempt has been made to quickly classify classic comments that we have heard and documented from the various actors in collaborative efforts. The blanks in the figure don't represent where there aren't concerns; all we were attempting to do was to provide a sampling of typical concerns at these various stages. We are not going to argue that every illustration has 100 percent validity, just that the idea provides a basis for discussion.

Depending upon which class of concerns you hear from your partners in the R&D collaboration, we suspect that the function of the collaborative effort and the activities that comprise the collaborative effort will vary accordingly. We suspect that attempting to establish a collaborative relationship with individuals who have Stage 0 concerns will not move very fast or very far at all. Many of us have experienced the equivalent of the "feds'" Stage 0 commentary, and one very quickly concludes that further follow-up with this particular agency is not likely to result in funding.

Stages of Concern of Organizations Involved in Collaboration

In attempting to develop some way of communicating some of the processes and issues that we have observed as we have been documenting collaborative efforts between organizations, we have taken what may turn out to be a presumptuous leap. Only further research and dialogue will let us know for sure how bad a leap it has been.

For the sake of discussion, however, we think that we can distinguigh and characterize organizations based on the normative concerns of its members. For example, an organization with a norm of hign Stage 5 concerns would have more of a readiness for collaboration than would a low Stage 0 Awareness organization (Co.laborate? Why would we want to collaborate?). We suspect that, depending upon the concerns and norms of an organization, the substance, tasks,

Figure 2. Representative statements of individuals at different Stages of Concern about a formal collaborative relationship.

	SoC	School Person	R&D Researcher	Federal
0	Awareness	Refers to reseachers as "all of you in your cubicles"	"The bureaucracy stifles any chance of doing anything important."	"Have you talked to any foundations yet?"
1	Informational			"I need to know more about what you are proposing."
2	Personal	"Well, you just don't understand how decisions are made and all of the people need to be involved - up and down and across the system."	"The data is still in the computer. I don't have that analyses completed."	"I am responsible to the taxpayers (re: Congress) to make sure they get their money's worth. I need to know what the deliverables will be."
3	Management	"We need to have at least 2 weeks advance notice to schedule a meeting to involve all the necessary people."	"School people don't understand what it takes to do good research."	"I don't understand why you don't have your money - the FCR went to Contracts 3 weeks ago."
4	Consequence	"I'm concerned about the effects this will have on our teachers, students, and parents."	"I am only concerned about the 4 other people in the world who can understand my research and why it's important."	"The pay off for kids is what is important."
5	Collaboration	"You have some neat ideas we can use - let's share."	"Let's join forces and see if we can do more."	"All these agencies need to work together."
6	Refocusing	"I want to change your ideas and include some ideas of my own."	"Instead of us keeping our same roles, let's change places for 6 months and see what the other part lives like."	"The word is that the White House is going to propose a new initiative in...."

activities, rate of accomplishment, and satisfactions of an R&D Center/school system-based collaborative effort will vary, sometimes dramatically. To illustrate, we have identified two school systems with which the R&D Center has had extensive collaboration. These school systems had approximately the same characteristics in terms of initial point of entry, and the school systems represent districts of approximately the same size. They are located in different geographic areas of the country, and as far as we know, there is no extensive communication and contact between the two school systems. However, approximately the same time interval, twelve to fifteen months, has passed since initial efforts to establish a collaborative project were started. We have been documenting the collaborative effort in both sites.

One school system can be characterized by intense Stage 2 Personal and Stage 3 Management concerns (School System A). The second school system (System B) is characterized by Stage 5 Collaboration and Stage 6 Refocusing concerns. The first school system is "Inner Oriented," while the second school system is "Reaching Outward."

School System A

> The Stage 2-3 school system is characterized by its strong attention to the immediate present and its focus on self. Because the line of command is not clear, decision-making evolves as a day-to-day intra-crisis operation. Authority is lying around, but individuals protective of themselves are reluctant to risk picking it up. The administrators in their ill-defined authority roles do not explore long-range goal-decisions, and they spend their time firing and hiring principals and ordering desks. Twenty-four hours is the accustomed lead time for calling a meeting. Lack of internal communication reduces possible collaboration so that they do not talk with each other, much less communicate about innovations or with innovators. When principals were asked if they ever talked to other principals about directions or ways to change their roles, they responded that they hadn't thought of doing that.
>
> The inner-orientation to self and short-range goals is reflected in the personal lives of the system administrators as well: the school board president en route to a larger political berth, leads the board in setting priorities but does not provide leadership for vigorously pursuing those priorities; the superintendent, appearing to be settling in

to the community for the rest of his superintending years, does not activate personnel or resources which might support his administrators (and which might raise tax dollars); similarly, the assistant superintendent, quite close to retirement, does not risk losing control by permitting different processes or products to be introduced; the community, while it complains about school practices and policies, is distressed over a tax base of uneven structure, and is quite reluctant to give confidence or increased financial support to a system which operates in survival-type behaviors.

School System B

The Stage 5-6 district is accustomed to a regular and rigorous review of curriculum content areas with anticipated revisions, additions, or substitutions. The community expects it, and to teachers, it is a way of life. This can happen without debilitating trauma because there is a decision-making system and organizational structures which accommodate it. Delegated decision-making and shared responsibility exists down the administrative line, so that it is not uncommon for the superintendent to be informed after the fact, and decisions which are made and accepted "stick" after they've been negotiated, even though there may be changes in the superintendency or board.

Because the internal organs function successfully and personnel are mature and secure in their roles, planning for the future is the modus operandi. Planning ahead in their collaborative mode means looking for what is "out there" which might be better than what is being used. This actualizing staff goes to national meetings, presents papers, elicits contacts, is in touch, educates itself about what is available. The superintendent has publicly promised to move on in five years, assuming anything he can do for the district can be accomplished in that time and can permit new blood to be infused in the system. The concerns of this outer-focused district are directed toward collaboratively solving problems and investigatively planning for instructional improvement.

It should probably be added that both districts are located in aesthetically appealing, recreationally attractive, academically stimulating (both have colleges and universities within the districts) environments. They are large districts with low profile industrial and governmental businesses forming the tax base.

Some of the key areas for contrasting these two school systems, based on our case study documentation, are summarized in Figure 3. Collaboration with

Figure 3. Distinguishing Characteristics of Two School Systems Independently in Collaboration with one R&D Center.

Characteristics	Stage 2-3 Inner-Oriented	Stage 5-6 Outward Oriented
Point of initial contact	Stage 5 concern director of evaluation who saw great potential for research findings to really have an effect on kids.	Stage 5 concern staff developer who eagerly bought research findings and wanted to apply.
Impact of policy issues	System policy issues constantly cause ripples across the plans. Changes in: 1) superintendency 2) board membership 3) court decisions (desegregation) All result in having to re-think goals and moves.	Policy issues don't affect as directly: 1) budgeting 2) new superintendent - changes mean little in terms of altering operational project.
Meeting Characteristics		
Topics	Point of entry (where, how, who, sequence) attempting to clarify tasks, defining territory. Strategy planning for entry and developing the system's ownership with individual proprietors.	Initial agreement on strategy quickly developed, meetings since have focused mainly on tactics of operation, coordination and planning new future directions.
Who	Mainly research department, then superintendent, school board, staff developers, principals, coordinators, teachers, curriculum directors.	Mainly staff developers, principals and teachers. No superintendent, no board. Assistant superintendents and evaluation office minimally informed.
Time Line	12-15 months of developing plans and initial entry.	In 15 months strategy accepted - 3 studies under way for 9 months in 50 schools.

Figure 3, Continued.

Characteristics	Stage 2-3 Inner-Oriented	Stage 5-6 Outward Oriented
Outcomes, Satisfaction, Frustration	Movement is slow. Will something happen, is an ongoing question. Are we wasting our time? Getting project ownership established in one more potential bottleneck is major source of satisfaction.	School system has started establishing policies that are based on collaborative research. We see immediate school-based application of research findings. A concerns, school staff tend to grea[illegible]y over extend applications observed and with sincerity and innocence rush off with your ideas to share with others.
R&D Center Role	Having to lobby, sell, validate ourselves and work. Touch here with each individual personally and collectively.	Seen as credable experts that are willing to share. Information given to one person gets to other key people.
Personnel	Don't share. Each person must be approached individually, personal concern oriented.	District people funtion with collaboration concerns, always sharing, communicating, and developing ideas, actions.
Decision Making	Undetermined, we still don't understand how or if decisions are made. There don't appear to be any formal or even informal communication channels that can be relied upon.	Clear cut decision making with much responsibility for decisions shifted down the chain of command. Communication up and down the system is reasonably efficent.

one of the school systems, School System A, is weighted by the system norms that reflect intense Stage 2 Personal and Stage 3 Management concerns. Many of the school system staff are extremely preoccupied with allocation of power and the perceived amount of power that they, their competitors, their peers, superiors and subordinates have in relation to their own. The attempts at collaboration are constantly disrupted with perceived shifts in school system policy and changes or potential changes in personnel roles. The objectives of the effort aren't clearly understood and attempting to develop consensus-based decision-making consumes all of the energy.

In contrast, collaboration with School System B, which can be characterized as having dominant Stage 5 Collaboration and Stage 6 Refocusing concerns as its norm, is action-oriented. Issues relating to shifts in superintendencies, policy decisions relating to budgetary matters, and other aspects of upper level administration activity do not disrupt or retard the development of the collaborative effort. Decision-making and communication is clear and quick.

In both school systems, the point of initial contact with the R&D Center was similar. Contact was made with Stage 5 concerned individuals in the middle to upper administrative levels. Both individuals were highly active professionals and seen as both official and unofficial opinion leaders within their school systems. They both have intense Stage 5 concerns in terms of attempting to collaborate within the school system, as well as being concerned about collaboration with outside agencies. Both see the R&D Center as having resources and findings that will have important applications in areas of their responsibilities within their school systems.

The collaborative effort after the point of initial entry takes on a very different saga in each institution. We think this is because of the difference in the normative concerns patterns of the two school systems. In School System A, there have been about the same number of meetings and about the same number

of personnel involved as in School System B, but the topics of the meetings are dramatically different. In School System A, over the entire twelve to fifteen month period of the collaborative effort, the meetings have been devoted to attempting to clarify tasks, attempting to determine how to enter the school system to formalize the effort. There have been extensive analyses of the various power brokering individuals and others who have to develop ownership in the collaborative effort before it can move. There has been a great deal of analyzing and strategizing to determine exactly which individuals and groups of individuals need to be involved, which ones need to be circumvented, and which ones need to be coopted. The work of Mat Miles and his associates (Sullivan and Kironde, 1976) has certainly been useful in attempting to determine how to move within the school system and its invisible confines.

In contrast, in School System B, the initial agreements were established very quickly about the overall goals of the collaborative effort, its scope and sequence. These decisions were all made at the upper middle management level with the advice and consent of superiors and subordinates. The emphasis of the meetings since the first four months has been upon the tactics of operation, designing, delivering, and collaborating in the actual R&D activities and providing feedback to the various active participants. Within three months of initiating the collaborative effort in this school system, three studies were underway involving fifty schools within the school system.

Back in School System A, under the umbrella of the collaborative effort, absolutely no data has been collected to date, and the data collection activities are so far off in the horizon at this point that it would not even be safe to venture a guess as to when actual data collection efforts might be initiated.

The outcomes of the two collaborative efforts as a consequence at this point would be seen as being quite different. In School System A, the movement is slow. There is still a very real question about whether anything can happen.

A great deal of researcher and school system personnel time as well as federal resources are being invested in an attempt to establish a working base and the necessary system ownership so that a collaborative R&D effort can be initiated. The satisfaction that has come out of this is well documented through one recently accomplished initiative that resulted in a key individual, who was blocking the collaborative process, being coopted into owning the effort. Now the project can proceed to the next decision point.

In contrast, in School System B, the policies of the collaborative effort were formally stated in the first four to five month period. The school system research activities have been underway for nine months, and there is satisfaction from the researchers' side in terms of how this school system so quickly capitalized upon and saw the benefits of the research concepts and findings. From the school system side, there is great satisfaction from being able to learn some new insights and better understand some work that they are involved with.

The frustrations of the collaborative effort in School System B come again from the dominant Stages of Concern of that organization. Since the norms of that organization and the individuals involved in the collaborative effort are at Stages 5 and 6, there is a constant push on the part of the school system personnel to ever expand, increase, and promote the research concepts and findings from the collaborative effort. They are constantly running away, innocently and sincerely enough, but over-promoting and over-selling the findings of the research, in many instances unwittingly without acknowledging the appropriate sources. On the school system side, the frustration comes from the researchers not being willing to move fast enough and into enough directions and to drastically increase and expand the scope of the collaborative effort beyond what they are already investing.

Some Implications and Questions

The above quick summaries and ideas are proposed as a way of looking at and developing the background and hopefully some conceptual handholds from which we can raise some questions about formal collaborative efforts. Let's begin with some implications and then move on to a series of questions.

Implications

1. Based on the concerns model it seems that you have to have your own house "in order" before you are likely to be able to be concerned about collaboration. It appears that not only for the individual, but also at the organizational level, if personal concerns are dominating, then it is very difficult to be able to organize oneself, to make the decisions, to clarify the objectives, to be able to communicate information and to be able to fully understand the issues that are involved in a collaborative effort, and to be able to grapple with these from a collaborative frame of reference. At the institutional level, a personal concern dominated organization seems to be so confused in its own brokering of power and making sure that no one else gets more power than you have yourself that collaboration is difficult. There are not establishable and shared communication channels within the organization or a sequence that can be followed to clearly and efficiently get simple decisions made. In contrast, an organization that has Stage 5 concerns appears to have, at least in our case studies, more clear cut communication channels and decision making channels and the concerns are definitely on establishing collaborative working relationships which allowed for data collection to begin much more quickly.

2. Depending on the system concerns, the emphasis of the collaborative activity will be different. The work of the R&D Center was quite different

in the two settings. In School System A, the work of the researchers for the first 15 months was on attempting to determine ways for developing system ownership, analyzing the power structure, the unofficial communication lines, and attempting to determine how to effectively get all of the key individuals organized and buying the concept, while in School System B the activity very quickly shifted from determining what the overall goals of the collaborative effort should be to the ongoing managing of the collaboration.

3. You have to strive to overcome your stereotyped image. It has been important for the R&D Center, especially in its work with School System A, to disassociate itself from the rest of the university community. The "professors" and being associated with professors is an extreme handicap when dealing with practitioners. It has been very constructive to disassociate oneself from the professor ranks by having the R&D Center label and having many staff who are not of academic stature. Stereotypes work in the opposite direction as was amply documented in Freda Holley's paper and in Joe Vaughan's paper. Everyone of the role groups has stereotypes of the others. In a collaborative effort it is important to work on deemphasizing stereotypes.

4. As an R&D Center, we need to pick our school systems knowingly in terms of their normative concerns level. If this hypothesis is verified with further documentation, a school system that has a norm of Stage 2 concerns will result in the collaborative effort taking on a very different time line and deliverable rate than will selecting a Stage 5 concern oriented school system. However, the Stage 5 concerns school system will present other difficulties. By being knowledgeable of the potential consequence of collaborating with different types of school systems, the R&D Center can better anticipate and facilitate the collaborative effort.

5. Entry is totally different depending upon the normative concerns

level of the organization. In a personal concerns oriented organization the important effort of the R&D Center was upon selling itself and demonstrating its capability, while in the Stage 5 norm organization there was immediate buying and owning of the R&D Center's capabilities, concepts, and findings, and the activity was oriented towards restraining applications of these findings within the school system context. The Center staff also had to be able to communicate quickly internally and to make quick policy and operational decisions in order to keep up with the fast moving school system. Collaborating with a school system that takes your ideas and runs with them is fine as long as they run in the "right" direction.

Policy Questions that Need to be Addressed

This whole discussion has been in an attempt to illustrate and contrast two drastically different collaborative efforts between an R&D Center and two school systems. Not all collaborative relationships are the same; as a matter of fact, very little is understood about how to establish and maintain working collaborative relationships between formal organizations. Several basic questions need to be asked about collaborative efforts between researchers and school systems that are well illustrated within these two contrasting cases. The answers are not simple, the questions are not clearly formulated and the consequences are not all that clear. However, these questions need to be grappled with rather than assuming that all is easy or clear and straightforward in developing a collaborative relationship between an R&D Center and a school system.

1. Should R&D Center researchers strive to establish collaborative relationships with all kinds of organizations? Should there be any distinctions made between attempting to establish collaborative relationships with Stage 2

concerns oriented organizations versus Stage 5 concerns organizations?

2. How do you move a Stage 2 concerns oriented district towards becoming a Stage 5 oriented district? This obviously is a research question. This is also a policy decision. Should the R&D Center have the responsibility, the authority, the right to attempt to manipulate a Stage 2 concerns school system towards some other stage?

3. Question 2 implies that it is possible to affect a change in the concerns norms of a user system. Is this possible? Further, is this the role of an R&D Center or of anyone else for that matter?

4. Is it worth it? In terms of what it takes to establish system ownership--the costs that are invested, dollar and personnel, the potential impact of research on kids, the potential for conducting more and better research--is the investment worth it? The risks are great. In both types of school systems it is possible to lose (e.g., a Stage 2 concerned R&D Center wouldn't do so well with School System B).

Should collaborative relationships be established with a Stage 2 concern oriented organization where so much time and energy is invested in just getting a foot in the door? For example, in an eleven month period with School System A there have been fifty-five meetings involving 309 person appearances and 356 person hours (see Appendix). If the answer to the question is that it is worth it in a Stage 5-6 organization and no, it is not worth it in a Stage 2-3 school system then there is an additional moral question. What, if any, is the responsiblity to the Stage 2-3 school system? Is the job of the federally funded R&D Center to continue to go to the "with it" school systems or does the federally funded R&D Center have some responsibility to help facilitate the development of new skills and capacities within school systems that are apparently having other kinds of concerns that are more pressing?

This question then cycles back to Question 3.

5. How much of the job of the researcher is to be a change agent for a school system? In terms of the funding of researchers and in terms of the skills of most researchers it is likely to assume that even within an R&D Center the right combination of skills and capacities to be an effective change agent is only going to exist in a very few individuals. Are we going to permit, or encourage them to become working change agents in some of the almost Machiavellian ways that are necessary to facilitate a collaborative effort? Who is going to be doing the research then?

In this paper we have attempted to describe briefly some of our documentation and to raise some questions. In order to do this we proposed that the concept of Stages of Concern about an innovation not only apply to individuals, but also can be used to characterize organizations. We recognize that a case study sample of two can certainly be labeled as a too small N. Acknowledging that these are limitations, the implications and questions that we have raised still count.

These questions are not simple, easy or clearly stated. However, they are questions that R&D Centers, school systems, and the federal government need to face as more and more attempts are made at collaborative efforts. Hopefully through discussions and symposia of this kind, these questions and others can be verbalized and grappled with. There needs to be some resolution that will lead toward better quality research and research findings more quickly being implemented in school systems across the nation where they can help teachers be more effective in helping kids to learn.

APPENDIX

COST -- IS IT WORTH IT?

From the experiences of one R&D Center establishing collaborative relationships with an "inner-oriented" school district, some pertinent facts related to time and personnel emerged. Over an eleven month period specifically labeled for "planning," fifty-five meetings were held. Three hundred nine appearances at the meetings accounted for an average of 5.4 persons per meeting. These meetings consumed sixty-six hours with a grand total of 356 person hours invested.

In terms of role appearances at meetings and communication activities, the time breaks out as follows:

	Role of Persons Attending	Times Persons in Role Attended
R&D Center	R&D Directors/Project Directors	78
	R&D Research Associates	40
	R&D Secretary and Business Manager	3
District	Superintendent	9
	Assistant Superintendent	31
	Director of Research/Evaluation	28
	Research/Evaluation Assistants	16
	Principals	8
	Federal Fund Planners	41
	School Board Members	22
	Staff Developer	1
	Instructional Coordinators	6
Outside	Consultants	4
Federal Agency	Project Director	3

While the district and the Center utilized 195 minutes of meetings to pursue developing closer ties for working together, the district spent 100 meeting minutes with middle level administrators in an effort to identify district needs. Seven hundred sixty-five meeting minutes were required to explore a topic and the roles in the task as the shared venture. Three hundred seventy-five minutes were needed to manage contract logistics and report on progress to the funding agency, 1,530 meeting minutes were consumed in endeavors to determine how to define the project and describe what the product would be, and 960 meeting minutes were expended for discussing how the product might be implemented -- the entry point and plan for impact in the district are yet to be finalized.

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SOME IMPLICATIONS FOR DOING SCHOOL-BASED RESEARCH[1]

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Footnotes to Author

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SOME IMPLICATIONS FOR DOING SCHOOL-BASED RESEARCH

There have been a number of recent efforts to combine resources and use a team approach in order to achieve the mutual goals of teachers, administrators, principals, educational researchers, and other school-based educational professionals. The team approach is both promising and probably cost effective. However, it is also true that such questions as precisely how these team efforts work, who has responsibility for different aspects of the effort, what relative status each team member has, and to which constituent groups they respond are questions which have been relatively unexplored in the past. This paper is presented from the point of view of a researcher who sees collaboration as necessary. We shall also present examples from R&D work.

One such effort to combine talents is being pursued at the Far West Laboratory by Betty Ward and Bill Tikunoff. Their approach is called an Interactive Model for Research, Development and Training in Teaching (Ward and Tikunoff, Note 1). The Model, which includes the researcher, teacher, and teacher-trainer as team members working to solve common problems, is intended to cut short the long delays in the traditional, linear Research-Development-Dissemination model. As Ward and Tikunoff say:

> The time lag between the inception of research and its utilization in the classroom is currently too great. Problems confronting schools today are of an immediate nature and cannot wait the eight to ten years it has taken to research a problem, develop a solution, and disseminate that solution so that it may be adopted in the schools. (Note 1, p. 8.)

These joint efforts will be explored in the future with a much greater sense of interest and even urgency. The fact that resources for educational research are diminishing has become almost axiomatic. This paper consequently does not propose to argue for the benefits of collaboration as such. While such benefits are self-evident, the assumptions and problems involved in initiating and carrying out a joint effort need to be further explored.

A primary question which has not been asked should be raised at this point: "Why is the researcher needed at all?" A strong case can be made for giving educational funds directly to school systems: individual districts could distribute funds according to their own most critical priorities and then establish their own research capabilities. With this kind of direct expenditure, one level of complexity would be eliminated by cutting out an intermediary agency between the administrative offices and classroom. Also, school districts could have increased impact on their priority problems and would have the authority to obtain greater cooperation from teachers.

As Holley (Note 2) has stated, administrators in today's school are better trained than ever before. She has also noted that increased demands for program evaluation and for teacher accountability are compelling school districts to conduct more extensive testing than previously, and that schools generally have received poor results from outside research studies conducted in their classrooms with their teachers and students. Perhaps the most powerful argument in favor of giving funds directly to school districts is that they have clearly defined the contexts in which they are most interested.

Outside researchers can do things that school district researchers don't have resources for--in fact, probably shouldn't do anyway, because it might be perceived as evaluation rather than research. Why then are outside researchers needed? Why should they be included in a collaborative effort? The most legitimate role that independent researchers can play within a collaborative team is that of the intermediary or broker. What probably will strike anyone who gives this problem careful consideration is simply that when school districts control research, they cannot protect their teachers by providing anonymity. Researchers who are in some way independent of the system can act as objective referees, or brokers, between the needs of the classroom teacher and the district's demands for accountability, for evaluation of teaching, and for effective education in the basic skills.

Only the outside research group can claim with justification that what is being tested is the effectiveness of a particular set of teaching behaviors or treatment program rather than the effectiveness of individual teachers. In addition to the breadth of scholarship and clarity of purpose which researchers bring to a collaborative effort, the genuinely unique brokering role means that researchers can provide services for others which others readily cannot provide for themselves. A narrow view of this role is that it protects the identity of teachers and makes the research process more legitimate. However, since the broker role has not been fully explored, it has a broader potential. On one hand, researchers can be responsive to the teachers' concerns in ways not possible to the school district. On the other hand, many of these concerns will be common

to most teachers, providing the research team with an important source for new research questions in teaching.

The presence of a brokering agent can have a significant effect on the smooth functioning of a school sytem. Teachers in recent years have grown suspicious of school administrations, feeling that administrators have goals and priorities which differ from theirs. Teachers often believe that they have little voice in district policy and that they are, in many cases, victims of the latest administrative mandates. Their suspicion that they are not being heard can be alleviated to the extent that outside researchers can maintain a confidential relationship with teachers, provide them with support and individual feedback, and yet provide the district with the basic, objective information needed for carefully thought-out decision making.

If we can assume, then, that the researcher can plan an important and unique role in a collaborative effort, the researcher's responsibilities must be considered. One important component of these duties is establishing relationships within the school district, both at the administrative level as well as at the teacher's level.

Administration and school-based educational staff: Researchers will find it necessary to lay some groundwork with school administrators, principals, coordinators, specialists, and area directors throughout the administrative heirarchy in order even to approach teachers in their classrooms. Administrative staff are frequently (and often justifiably) suspicious of the outsiders' motives, noting that researchers disrupt

schedules and classrooms often without producing anything useful for determining hiring practices or conducting inservice programs. Researchers must therefore lay a necessary groundwork by personal contact, by providing needed resources at critical times, by attending meetings which determine how business is to be conducted, and by providing frequent feedback about their work. Cultivating a mutually beneficial relationship requires time and, quite often, dedication on the part of the researcher.

Classroom teachers: If the teachers are not suspicious of the researchers visiting their classroom, they are likely to be at least vocal about finding little research of practical help to them. Researchers in a collaborative effort must be prepared to counter suspicion and even hostility with concepts, language and examples of clear, relevant research findings. Becoming known and credible, as well as taking on the role of "friend", have been clearly described by Everhart (1977) and should be thoroughly studied. In addition, researchers must continuously ask themselves if the suspicions held by teachers and administrators are justified: are they genuinely trying to provide the school system with useful data for decision making, or are they simply promoting research for the sake of publication in scholarly journals without considering the needs of the school district?

While building relationships within the school district, researchers must also remain "members of the country club" with their own constituent group and apply the standard methodologies in their field. The potential for conflict here is quite apparent. How can the researcher address the practical needs of teachers in such a way that the results of classroom

exploration can be used by the teachers and the district and can also be reported in a responsible manner to the constituent group of fellow researchers?

Researchers who attempt to use the classroom as a laboratory face several issues which must be considered when formulating and conducting research.

1. Appropriate research questions: In some instances researchers may formulate research questions which are irrelevant to the concerns of teachers or administrators or, even worse, in direct conflict with their concerns. Without an effective communication system among the collaborating researchers, teachers, teacher trainers, and administrators as to current research conclusions about effective teaching, there may be a conflict between the district's research priorities and those of the researchers.

In attempting to build such a communication system, the Texas R&D Center has shared recent research information with the local school district by preparing short summaries on selected topics for district personnel. These topics are based on questions which are both current in the field and relevant to the district's present concerns. In response to these summaries, the school district's Division of Educational Development and Director of Elementary Education prepared a list of eight researchable questions which the Division considered high priority areas. They have asked for research in these areas, and Center personnel began planning. The Center, which already has information on many

of these questions, and should be able to respond in such a way as to provide fairly quick feedback and credible, research-based answers. With communication of this type, it is more likely that district priorities and researchers' questions will become compatible.

2. Feedback to teachers and administrators: Part of the reason that school administrators and teachers feel that classroom research provides them with relatively little payoff is that they do not receive immediate or even moderately quick feedback. It is extremely difficult to analyze data, summarize results and write reports in time for administrators to use them for decision making or for teachers to use them for refining their teaching practices soon after data are collected. This is especially true if studies have large amounts of data which require fine analyses.

Since most districts plan priorities from year to year, developing ways to facilitate data communication for practical feedback may become a fruitful area for methodologists and data managers to explore. Some advances have, of course, already been made. Improved instrumentation and data handling procedures can reduce the time lag from years to months or even weeks. Some techniques have been developed such as machine scorable rating forms which cut tabulating time, coding sheets which can be keypunched and verified directly, and research designs which facilitate data processing immediately after collection. (Brophy & Evertson, Note 3, and Linsley, Note 4.)

However, the length of time from classroom research to reports for teachers and administrators is still escessively long. Most recent studies at the Texas Center, incorporating thousands of variables, have taken two or more years from initial conceptualization to usable reports. School-

based collaborative efforts require drastic improvements in feedback. Otherwise, the researcher loses credibility and research-based information is not as useful as it might be. Even in cases where the work is relevant, the long time lags between data collection and feedback of results can make the most pertinent findings irrelevant. Feedback that is delayed doesn't have the impact it might have had. Information available at the time when changes are being considered has more impact; frequently we hear from school administrators and planners such comments as: "If we had only known that last year we might not have endorsed multiple adoptions of reading, math, science ... programs," or "We might have planned a different use of supplementary monies."

3. The problem of two audiences: Besides the issue of apparently conflicting research priorities, the researcher undertaking a collaborative effort must recognize that the research work will address two distinct audiences: the constituent group of researchers and funding agency as well as the group composed of classroom teachers, principals, and administrators. Part of the problem of two separate audiences is a linguistic one. Because of the wariness with which many practitioners regard research, the researcher must be extremely careful to use clear, simple, mutually understandable language in communicating questions, techniques, and results. Conclusions framed in "researchese" will be neither understood nor acceptable. Since there are dangers in oversimplifying to achieve clarity, the research team needs leadership which is aware of this difficulty and which can communicate in clear, concise language without sacrificing accuracy.

However, there is another dimension to the problem of two audiences. This is the question of generalizability. On the one hand, the researcher should produce findings which generalize beyond the immediate setting and the researcher is trained to test ideas as opposed to testing people, so that important information advances the field itself. On the other hand, teachers may not need to generalize beyond their own classrooms unless they will be getting involved in teacher education. They expect useful information, practical help, and training in their own particular context. In a way, then, the researcher must view the classroom as a laboratory which will produce individualized feedback results for the teacher and the district along with generalizable findings for the research community.

Few teachers will verbalize as their primary concern the "improvement of the profession." Frequently their first questions are "How can I get these children into groups working independently while I spend time with other children?" or, more often, "How can I get through the day?" These are legitimate concerns, but researchers have had difficulty translating many of them into researchable questions. This problem diminishes to the extent that teachers' concerns are typical of teachers in general, but to the extent that they are unique, generalizing beyond them is a problem. For example, if the way in which the teacher gets through the day is an important concern, how does this affect our research paradigms? Researchers accepted the standard N = 30 as a minimum requirement; and an N of 1 or 2 has not been considered methodologically sound for reportable or generalizable research. In recent years, moves have been made toward more descriptive approaches whihc utilize ethnographic methods borrowed from anthropology and other social sciences which allow detailed anecdotal recording and detailed case studies to be used to discover phenomena which have eluded the

more conventional methodologies. Whether the researcher uses a descriptive appraoch or a more quantitive one or if he attempts a combination of the two he will face the critical problem of two audiences. This both linguistically and conceptually, affects the way we frame our research questions and the paradigms we choose.

Often researchers have avoided these issues--apparently irrelevant research questions, feedback to teachers and administrators, and dual audiences--by side-stepping possible applications of their findings. Too often, research reports end with a restatement of conclusions or suggestions for further research; very seldom do they end with suggestions for classroom application. The gap between the research report and the classroom application is a major problem which researchers must address. It is a gap that staff members at the Center are hoping to bridge through collaborative efforts with the district and its administrators, principals and teachers.

The Texas Center experience with a teamwork approach has provided some useful insights. Obviously, the partnership arrangement compels the researchers to be more responsive than ever to the primary group--teachers, administrators, and other school staff. This kind of collaboration goes far beyond periodic school observation and requires that researchers frame questions which are quite close to and may improve upon the questions teachers and administrators actually want answered.

There is, however, another side of the partnership issue: the constraints that administrators and teachers place upon the researcher. There can be many limits on generalizability of the research that may cause researchers to wonder if this effort is worth their time. Since researchers are trained to look for more global mechanisms beyond a particular context, perhaps administrators and teachers need to understand the reasons why

researchers ask questions which do not have immediate application or may not be pressing issues in that particular district. On the other hand, researchers may not have been conscious enough of district constraints and demands for immediate answers or instant "miracles" placed upon it by its constituency. One current example of such pressure is the push for development of teacher evaluation instruments. This pressure is present in spite of the fact that a sound knowledge base concerning effective teaching practice (although researchers now know more than they did several years ago) does not yet exist.

Such constraints and problems, once recognized, however, should not deter the researcher from joining forces with others in a fruitful effort. It is possible to improve feedback of usable results, to combine both the researchers' and districts' concerns in mutually satisfactory research questions, and to design programs that meet the needs imposed by the classroom context and the larger context of research.

The Texas R&D Center has attempted to address the research audience and the school-based audience. One example of this attempt is an experimental study which was designed to test the effectiveness of twenty-two specific principles emphasizing small group management and teacher responses to individual children. Two papers discussing the results of this study are Anderson, Brophy & Evertson, (Note 5) and Ogden, Brophy and Evertson, (Note 6).

The purpose of the study was to test the hypothesis that these twenty-two teaching behaviors, both individually and as a part of an integrated model, were associated with learning gains in first-grade students. The design of the study involved three groups of teachers, two experimental groups and one control group. In the experimental-observed group ten teachers received the treatment (they were instructed in the principles and agreed to use them) and were observed 15 to 20 times during the year. In the experimental-

unobserved group eight teachers received the treatment but were not observed in order to determine if observation modified the effects of the treatment. In the control-observed group ten teachers were given no special instructions but were observed 15 to 20 times during the year in order to measure natural occurrence of the principles and the effects of any alternatives.

A number of the principles were shown to be causally related to gain in the reading of first-graders. A list of these effective teacher behaviors were:

Transitions

1. Transitions which were quick and orderly with the students knowing where they should go next, what materials they needed, and how they should behave during the transition.
2. Group lessons starting quickly once the teacher and students were all in the group with minimal time spent in organizational tasks and getting the students' attention.

Seating

3. The teacher seated so that she could see the reading group and the rest of the class, and the students seated so that they could not see the rest of the class.

Beginning the Lesson

4. Teacher giving a short overview at the beginning of the lesson of the academic content to be covered.
5. Teacher supplying phonics clues to help the students figure out the new words when presented at the beginning of the lesson.

6. Teacher checking the studerts to make sure they understand the directions for completing assignments in workbooks or worksheets after she has explained or demonstrated.

Calling on Students

7. Selecting respondents by going in order around the group.
8. Discouraging call-outs.
9. Working with one child at a time rather than relying on many choral responses.

Responding to Students Answers

10. Getting a response of some kind from every student, and discouraging failures to answer.
11. When an answer was incorrect, staying with the student and giving clues to help him or her get the answer rather than giving it to him right away.
12. Limiting the total amount of praise, but giving very specific praise when it is appropriate.

Use of Time in the Reading Group

13. Teaching as long a group as possible--at least 30 minutes a day.
14. Spending time in a lesson format that allows every student much practice of skills by answering questions and receiving immediate feedback from the teacher which clarifies the reading process for them.
15. Spending some time in drills.

The results of this study and others like it can address the concerns of classroom teachers and also contribute an important knowledge base for

research in classrooms. The specific examples presented here are techniques which operationalize more general principles. For example, ordered turns and sustaining feedback are ways of predictably communicating expectations. For teachers, the suggestions about specifics are important in their first grade classrooms. For researchers, the findings suggest further study to determine the limits of generalizability.

The researcher can assume an important role in the team effort as a broker in school-based research efforts. Although there are many responsibilities which the researcher must face--some of them rather difficult--the researcher should find the broker role among collaborators both practical, stimulating, and meaningful.

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