A study conducted by the School District of Philadelphia and that city's Federal Reserve Bank, entitled "What Works in Reading," was used as a case study to determine what factors influence the translation of research findings into educational policy. The Philadelphia study, which examined variables associated with achievement growth in reading, received extensive nationwide media attention and was used by the Philadelphia school superintendent's office in the development of recommendations for changes in reading instruction. Analysis of the study's design and of the methods used in disseminating its findings resulted in the identification of ten factors associated with its being translated into educational policy: (1) identification of the clients affected by the study's findings, (2) vitality of the topic, (3) participant involvement, (4) technical quality, (5) reporting formats, (6) findings key to the decision process, (7) preparation of policy makers, (8) overcoming resistance, (9) the role of the ombudsman, (10) the role of the entrepreneur. Factors associated with research utilization in urban areas were also identified. (Author/BE)
RESEARCH AND EVALUATION IN URBAN EDUCATIONAL POLICY

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INTRODUCTION

Urban school district-based research and evaluation offices have grown rapidly, almost uncontrollably, since the advent of the Elementary and Secondary Education Act of 1965. The view that evaluation, as the process of providing information for decision makers, is vital to effective school system administration has developed simultaneously with increasing Federal involvement in education, particularly in urban areas. Although the overall recognition and expansion of the roles of educational research and evaluation should be viewed positively, such rapid development does not take place without complications.

Offices of research and evaluation should function as service agencies that aid decision-making and advance instructional practices in school districts. The provision of information, whether of a contextual, formative, or summative nature, presupposes that the information will be at least potentially useful. Its usefulness may depend on (1) the congruence of the information and the expectations of those for whom it is being developed (the clients); (2) the way in which it is communicated to various clients; and (3) the ability of those clients holding decision authority to base educational policy upon it.

That these factors are related is obvious. They may, in fact, be simplistically thought of as a paradigm in which the translation of research and evaluation findings varies according to the congruence of information and client expectations, and the communication of evaluation data. Though a useful framework, such a paradigm is much too skeletal to provide for an in-depth analysis of the factors that ultimately lead to the development of policy based upon research and evaluation findings.

The focus of this paper will be upon the identification and exploration of certain subliminal factors, and the interrelationships between them, which may ultimately account for the translation of research and evaluation findings into policy. I will attempt to isolate and examine those factors that relate to the translation of research and evaluation into educational policy. Though a theoretical framework may serve as a hypothetical structure, the problem will be examined through a case study. The forces related to the acceptance and utilization of information will be viewed in the world of practice, not theory.

Three major sections follow this brief overview of the paper’s structure. In the first, an actual case will be presented as a subject for analysis. The case study deals with a major piece of cooperative research completed in May of 1979 by the School District of Philadelphia and that city’s Federal Reserve Bank. The study, entitled What Works in Reading? was conducted over a three-and-one-half-year period, but sprang from earlier works dating back to 1971. The study’s historical and
political background will be discussed, as will the earlier root studies and their relationship to the present research. A general synopsis of the study and its key findings will be presented. Of particular importance to the focus of this paper, however, is the study’s impact and its degree of acceptance, both nationally and locally. It is this acceptance that relates directly to the translation of the study’s findings and suggestions into school district recommendations and policy decisions.

The section dealing with Analysis will attempt to explore why this particular study had great impact, while other, earlier attempts, did not. Planning for change, overcoming resistance, and building upon utilization factors will be viewed as part of an overall approach to educational development. Finally, factors leading to policy decisions will be explored in the concluding section.

WHAT WORKS IN READING?—A CASE STUDY

Background

The results of What Works in Reading? (a joint School District/Federal Reserve Bank empirical study in Philadelphia) were released in June of 1979. Though controversial, the study has sparked an enormous amount of national interest and attention. The purpose of this study was to determine what makes a difference in teaching children to read. Years of experience of many thousands of teachers have testified to the fact that no one, simple, magical solution could be expected. This study, therefore, attempted to identify the factors that contributed most strongly to achievement growth in reading. In particular, investigators were interested in appraising the relative merits of approaches to reading.

The study had its genesis in two independent efforts by the School District of Philadelphia and the Federal Reserve Bank of Philadelphia. As part of its ongoing research and evaluation activities, the Office of Research and Evaluation of the School District of Philadelphia had conducted several studies of reading practices in recent years. One study—of a single school that had demonstrated remarkable progress in reading during the course of one school year—was a post hoc attempt to describe the reading effort in as much detail as possible. It was largely a “fishing expedition” (Scheib and Comerford, 1972). The results were interesting, but served primarily as an impetus for a more intensive look at successful reading practices.

A more extensive study, involving fifteen “successful” schools, was conducted in 1974. This study involved interviews of administrators and students, as well as the examination of a number of school characteris-
tics. Though over eighty variables measuring these characteristics were examined, the results were again inconclusive. Variables that differentiated the schools studied from the other "less successful" schools in the system could not be identified.

At the same time, the Federal Reserve Bank of Philadelphia was conducting a study of its own. In 1975, it published a study of achievement growth in the Philadelphia schools, which utilized econometric techniques (Summers and Wolfe, 1975). This effort was reviewed extensively, especially by economists, but was criticized from within the School District of Philadelphia. Objections were raised on both technical and social grounds. After a period of heated interaction, it became evident that the School District had no intention of utilizing this study for policy development or decision-making purposes.

In late October of 1975, the Superintendent of Schools of Philadelphia and the President of the Federal Reserve Bank of Philadelphia were invited by the Deputy Mayor of Philadelphia to meet with him to discuss the recently released Federal Reserve Study. Both brought members of their staffs to the meeting. The discussion that morning focused on what, if any, followup to the findings and recommendations of the Federal Reserve Bank report was being planned. A considerable amount of promise in the methodology and implications for longer range policy decisions was discerned in spite of School District comments critical of certain of the technical procedures of the report.

An agreement was reached whereby the Office of Research and Evaluation of the School District and the Research Department of the Federal Reserve Bank would meet to discuss the development of a followup study utilizing, as a base, the methodology employed by the Federal Reserve Bank, but integrating within it the concerns and learning priorities of the School District. Shortly after this meeting at City Hall, the Executive Director of the Office of Research and Evaluation and the Research Officer and Economist of the Federal Reserve Bank met to discuss the possibilities for a new study.

Key staff members from both the Federal Reserve Bank and the School District met in a series of half-day work sessions to plan the study. At the outset, the tone was cordial but guarded, and the meetings were negotiating sessions as much as planning meetings.

Reasons for earlier disagreement quickly became evident. The nature of various school variables had to be clarified. In addition, differences in statistical terminology were a barrier. At one point, a staff member familiar with both multiple regression analysis and analysis of variance was brought in to "translate" the terms and concepts used.

As the work sessions progressed, they brought with them a heightened awareness of each other's world. Eventually, a genuine mutual respect developed. Given what had occurred in the past, this understanding and regard were sine qua non for the implementation of this study.
Overview of the Study

Some schools are more successful than others in terms of reading achievement growth from one year to the next, and in terms of annual level of achievement. Why does one school have a higher score than another? Why do some students perform better than others? By collecting measures of possible reasons, one might be able to discriminate among reasons by virtue of their degree of association with the measure of success. In short, it is possible to compute the multiple regression between the achievement measure (the dependent variable) and the estimated measures of the hypothesized reasons (the predictors or independent variables).

This study was a search for those variables that are associated with changes in achievement growth, and an attempt to describe the associations in terms of socioeconomic conditions, educational inputs, and peer group characteristics. The cliche “correlation does not mean causation” is an appropriate caveat. However, in the world of educational policy, decisions must be made on the basis of the best available information. Therefore, policy implications were the end product of this study.

Schools were picked for the study by rank-ordering all elementary schools by their overall average reading scores (1975, grades 1-4) and their overall gain scores (1974-1975, grades 1-4) in reading. Ten schools at the top of both lists and ten at the bottom of both lists were selected. Five schools in the middle of both lists completed the sample of 25 schools.

Though pupils in this study were from the 25 selected schools, the study involved facts about individual pupils. It was the individual pupil who was the subject of this study. All of the fourth grade pupils in the schools selected were in the study. Fourth grade was chosen because it is the grade in which a large drop in test scores is typically observed; it is the highest grade which is found in all elementary schools; and the ability to read at that grade is importantly related to a student’s subsequent progress.

Information was gathered for the study by teams made up of the staff of the Office of Research and Evaluation and of the Division of English/Reading Language Arts Education. These teams visited the schools involved and interviewed the principal, the teachers, the reading teachers, and the reading aides. A total of 25 principals, 25 reading teachers, 94 classroom teachers, and 68 reading aides were interviewed. In addition, team members gathered large amounts of information from each pupil’s records.

All of this information was checked and double-checked for accuracy and then placed on a computer file. One hundred sixty-two variables about each of the 1,828 pupils made up the computer file on which the study was based. Later, various combinations of these separate items of
information increased the total number of variables about each pupil to 245.

Five kinds of variables about each pupil were gathered:
1. Variables about the principal of the pupil's school.
2. Variables about the reading teacher in the pupil's school.
3. Variables about the pupil's classroom teacher.
4. Variables about the pupil's school.
5. Variables about the individual pupil.

Once all of the information about each pupil was placed on computer tape, a random sample of 25 percent of the pupils was removed from the file and put aside. This was kept as a cross-validation sample, which allowed the results to be double-checked.

Over 500 multiple regression equations were run on the large (75 percent) file. This involved trying out many different combinations of facts (equations) about the pupils in order to determine which combination was most closely related to gains in reading scores. After the equation that seemed to be most closely related to gains in reading scores was found, it was used on the cross-validation (25 percent) file. Findings that were the same in both cases could be reported with some confidence; those that were not, could be presented for discussion and further study.

Key Findings

The rationale for the study was based in part on the notion that adding to the existing body of knowledge concerning successful practices in reading was only partially useful. The wealth of research in reading has resulted in the layering of both old and new ideas upon one another. Little attention has been paid to removing the irrelevant or unproductive. Since such excess baggage is often detrimental to instruction and costly in terms of resources, What Works in Reading? attempted to identify variables that both did and did not make a difference in reading achievement.

Variables That Made a Difference.

1. Some things about the pupil seemed to make a difference:
   - The better the pupil's attendance, the more the reading score increased.
   - The fewer unexcused absences, the more the reading score increased.
   - Pupils who attended kindergarten seemed to gain more than those who did not.
2. Some things about the principal seemed to make a difference:
   - Where principals had experience in the field of reading, the pupils achieved more.
   - The more often the principal observed in the classroom, the more the pupils achieved.
3. Some things about the school seemed to make a difference:
   - When schools had more professional support staff per pupil, the pupils achieved more.
   - Pupils clearly achieved least in K-6 schools, most in K-7 schools, and in between in K-8 and K-5 schools.
4. Some things about the classroom teacher seemed to make a difference:
   - Where teachers had fewest absences, the pupils achieved more.
   - Where teachers had more than one year experience teaching fourth grade, pupils achieved more.
5. Some things about reading instruction seemed to make a difference:
   - Pupils taught by the linguistic basal approach achieved distinctively more than pupils using other reading approaches.
   - The more minutes a week of sustained silent reading, the more pupils achieved.
   - The fewer reading aides per week, the more pupils achieved.
   - Where teachers felt that, if given a choice, they would pick the same reading program again, pupils achieved more.
   - Pupils in larger classes (up to 35) gained more than those in smaller classes (as few as 24).
   - Pupils in classes taught in small group/whole class combination achieved more than pupils who were taught individually only, in small groups only, or as a whole class only.

Variables That Made No Difference. Though a number of things were found to make a difference, most did not. Certain of those variables that did not make a difference were emphasized because, in the past, they had been considered important. It was found that the following things did not affect pupil achievement:
   1. The number of times a pupil had moved since starting school.
   2. Being bused to relieve overcrowding.
   3. The amount of administrative experience the principal had.
   4. Whether or not the principal had a doctorate.
   5. The number of years the principal had been in the school.
   6. Whether the pupil came from a low or high-income neighborhood.
   7. Whether the school had more or fewer pupils from low-income families.
   8. The race of the teacher.
   9. The number of years of experience of the teacher.
   10. The number of graduate courses in reading and language arts taken by the teacher.
   11. The number of minutes a day of reading instruction.
   12. The time of day reading was taught.
13. The professional preparation and experience of the school reading teacher.

Policy Implications. The following actions were recommended based on the findings of this study:

1. Establish an outreach program to assure that as many children as possible have a kindergarten experience.
2. Explore the expansion of the use of the linguistic basal reading approach.
3. Consider the establishment of a special task force to explore programs for, and develop intervention studies of, the lowest achieving pupils.
4. Develop or modify programs or policies to minimize pupil and teacher absenteeism.
5. Develop or modify programs or policies to increase the amount of teacher time that is spent in direct instructional contact with pupils.
6. Develop or modify programs or policies to increase the amount of time principals spend observing in a classroom.
7. Explore the development of programs to increase reading knowledge and experience for potential principals prior to their appointments.
8. Explore reasons why the K-7 organization seemed to be associated with the greatest amount of pupil gain, and K-6 the least.
9. Consider mandating a policy of a daily sustained silent reading period in all schools.
10. Initiate discussions with appropriate governmental officials directed toward the modification of current regulations to permit the allocation of Federal resources on a pupil specific basis.

The Study's Impact

The very day the study was presented at a public Board of Education meeting in June of 1979, it began making news. Though purely of local interest at first, it was the subject of a wire service story featured in the Los Angeles Times the following week. By mid-summer, over a thousand inquiries had been received.

Local television and radio stations broadcast stories on the results of the study, with both of the all-news radio stations producing feature reports and four others taping brief interviews with the major authors. The three major daily metropolitan newspapers published extensive stories, each focusing on a somewhat different aspect of the study, but all covering the major findings.

The Inquirer emphasized the "common pedagogical wisdom" of the study's results in its lead:

What seemed obvious in the days of the little red school house has been confirmed by results of a major reading study released.
yesterday by the Federal Reserve Bank and the Philadelphia School District. Basically, the study shows that children learn to read more easily in relation to the quality of time they spend with their teachers (June 26, 1979).

The Bulletin also focused upon the contact between students, teachers, and principals:

The overriding principle of the study—a deceptively simple one, according to its authors—is that the most effective reading teachers are those who maintain the closest and most continuous contact with their pupils and school principal (June 25, 1979).

However, it picked up on the term "short links" utilized in the Board presentation:

"You need direct, short links—that's the payoff," said Anita A. Summers, a former Federal Reserve Bank economist and now a professor at the University of Pennsylvania's Wharton School. "When you introduce extra links, you're reducing effectiveness with diversionary tactics."

The Daily News accentuated the cooperative nature of the study, and in doing so, anticipated a key utilization factor:

Three years ago, when the Fed issued a study that suggested improvements to aid the learning of city school students, the Board of Education ignored the study because it was considered to be the work of outsiders (June 25, 1979).

Following the initial local media coverage and the wire story filed by the Associated Press, a number of major educational periodicals reported the study's results. Education USA, the most widely circulated weekly education newsletter, devoted three of its eight pages to it. The lead article, "New Study Finds What Worked in Reading," focused upon the more potentially controversial findings and emphasized both what made no difference as well as what worked. A second article of the "analysis" variety was also published.

The Education USA articles created an enormous demand for the report. By the end of the summer, over three thousand inquiries had been received. The "Newsfront" section of the first Phi Delta Kappan of the new school year (September 1979) featured the study in an article entitled "What's the Best Way to Teach Reading? Here's a Surprise." As a result, two thousand additional requests were received within the next eight weeks.

Perhaps the major impact of the study, however, was the appearance of a document entitled A Blueprint for Academic Achievement, which was erroneously viewed by many as a companion to the report. Two months prior to its release, the Superintendent anticipated the Blueprint in comments reported by Education USA:

Philadelphia Schools Supt. Michael P. Marcase praised the researchers for their "significant findings," which, he said, would result in
"specific recommendations" to the Board of Education for major changes in reading instruction... (July 2, 1979, v26, n43:8).

A Blueprint for Academic Achievement

The Blueprint, as the document came to be known, was a 22-page draft document transmitted by the Superintendent of Schools to his Executive Cabinet for review, discussion, and refinement. The Superintendent's charge to his Cabinet was to "forge a blueprint for action" that could be presented to the Board of Education by December 1979.

The Blueprint was developed largely as a result of a charge to the School District's Office of Curriculum and Instruction to study "the problems of raising achievement, particularly in schools with greatest need." Unbeknownst to the authors of What Works in Reading? the report of the Curriculum Office was integrated with the research study by other members of the Superintendent's staff. The result was an unexpected though pleasant surprise to the researchers, for the Blueprint had, indeed, drawn heavily upon their work. In his introductory memorandum, the Superintendent stated:

I have read in-depth the research report, What Works in Reading? I believe it can prove to be one of the most significant reports on reading achievement in the recent history of public education, and I have included several of its recommendations in this document (1979:3).

Actually, ten of the Blueprint's 36 specific recommended actions flowed directly from What Works in Reading? with an equal number at least tangentially related to the study. The text of the Blueprint often mentioned the study directly. For example, the section of the Blueprint dealing with the importance of the principal's leadership in the school states:

Nowhere was this proven more graphically than in the research report, What Works in Reading? which reported conclusive, statistical evidence that significantly more reading achievement took place in schools where the principal took a direct, active part in putting together the reading program and where the principal spent a good portion of his or her time in the classroom monitoring and motivating reading instruction (1979:6).

In the section devoted to system-wide standards in curricular areas, the Blueprint refers to:

...one of the most powerful findings of the recent research, What Works in Reading? was the superiority of the basal linguistic approach to reading instruction. This method produced far more achievement growth than did any other form of reading instruction in the fourth grade in the Philadelphia public schools (1979:12).

And in discussing the need for direct instruction:

What Works in Reading? also found that the kind of classroom
organization that produced significantly greater achievement growth than any other was an organization where the teacher taught the whole group part of the time, then broke the class into clusters for small group instruction.

Still another major finding was the benefit of silent reading which, according to the research, produced significant reading achievement growth (1979:15).

The specific actions recommended by the *Blueprint for Academic Achievement* directly traceable to the findings and policy implications of *What Works in Reading?* included the following:

1. The Office of Staff and Leadership Development, with the help of the Office of Field Operations and the Office of Curriculum and Instruction, will recommend to the Superintendent of Schools, by December 1, 1979, procedures to establish an executive institute for principals, focusing exclusively on leadership development in the instruction of basic skills (1979:7).

2. Principals will reserve the time during the instructional day to visit classrooms and other school areas where student activity is taking place (1979:9).

3. Wherever possible, central office and district office meetings involving principals are to be scheduled when students are not in attendance at school (1979:9).

4. The Office of Curriculum and Instruction will report, in detail, to the Superintendent of Schools its evaluation of the basal linguistic approach to teaching instruction, together with its recommendation why this approach should, or should not, become the School District of Philadelphia's basic approach to the teaching of reading. This recommendation will be made by December 1, 1979 (1979:12).

5. Office of Curriculum and Instruction establish several teams of supervisors with expertise in improving basic skills instruction using inter-disciplinary approach. Teams will establish consistent on-going relationship with low achieving schools and initiate detailed plan for staff development emphasizing basic skills instruction in all curricular areas (1979:14).

6. Principal will use local and Central Office resources to continually emphasize the importance of direct instruction. This emphasis will be implemented by the principal's frequent visits to observe classroom activities (1979:15).

7. Aides will be used less in instructional roles and more in non-instructional areas like roll taking and other classroom management responsibilities (1979:15).

8. The Office of Curriculum and Instruction will report to the Superintendent of Schools, by December 1, 1979, its evaluation of the whole group/small group classroom instruction process and why it should, or should not, become a standard form of reading instruction in our elementary schools (1979:15).

9. The Office of Curriculum and Instruction will develop instructional processes in the basic skills, particularly in reading, utilizing significantly more silent reading than is now the custom (1979:16).

10. The Task Force on Absenteeism will report to the Superintendent of
Schools, by December 1, 1979, its recommendations for significantly decreasing teacher absenteeism (1979:16).

ANALYSIS

As demonstrated in the previous section, What Works in Reading? was not just another piece of research. Unlike many studies that are politely accepted and then shelved to gather dust, this study has already had an impact. The extent of that impact and the ultimate level of utilization remain to be seen. It is evident, however, that What Works in Reading? has succeeded as a catalyst for change where other such efforts have failed. Why?

There are a number of possible answers to that question, with no single explanation alone accounting for the difference. My own participation in the study and in the process of its explanation and implementation lead me to suggest four possible reasons for the study's impact: (1) it maximized outside involvement while establishing internal ownership, (2) it took a proactive approach to planning for change, (3) it attempted to minimize resistance to change, and (4) it attempted to build upon factors associated with research utilization.

Ownership

From the outset, great care was taken to establish the study as one undertaken by the School District, with assistance from the Federal Reserve Bank, not the converse, as had been the case in the previous study, Which School Resources Help Learning? In spite of its potential utility, the previous study had virtually no local impact because it was viewed as the work of "outsiders," unfamiliar with both education and the school system. The problems encountered in that first study were aptly summed up in an Inquirer feature on the role of the "outsider" economist:

That report was attacked from all sides. She was an outsider, her study uninvited. So, she puts it, "the institutional wall went down." Her suggestions were ignored. As a result of that report, said Michael Kean, research director for the city schools and a critic of the 1975 study, "a good deal happened, but not in Philadelphia." That experience was not forgotten, however:

"What I learned," Ms. Summers says, "was when you come as a total outsider to the system, the wall is... nearly impenetrable. People coalesce against the outsider" (June 30, 1979).

In order to avoid the problem, Kean and Summers carefully planned the nature of the cooperative effort that was to ensue. Not only was the study's ownership to be associated with the School District, but the District's Office of Research and Evaluation took great care to involve...
other key individuals and organizational divisions as well.

From the initial conceptualization of the study, the Office of Curriculum and Instruction, particularly its Division of Reading/English Language Arts, were heavily involved. The Associate Superintendent for Curriculum and Instruction and the Executive Director for Reading/English Language Arts actively participated in the formulation of the problem and the preliminary study design. As the work progressed, the Division of Reading/English Language Arts became even more involved, with its Executive Director and several of her key assistants playing major roles in identifying the critical variables to be studied, designing the instrumentation, and helping to define the parameters of the effort.

The actual data collection procedures were cooperatively handled by supervisory staff members of both the Office of Research and Evaluation and the Division of Reading/English Language Arts. The nature of such a joint endeavor amazed the former "outsider," according to the Inquirer:

Mrs. Summers was amazed by the ease of gathering data this time. For her earlier study, with economist Barbara Wolfe (now at the University of Wisconsin), of children in 150 schools, Ms. Summers "went up and down, knocking on school doors, asking for the data and getting stonewalled all along the way. That data came from sweat, lots of sweat." It took her a year and a half to get the facts.

This time, it took the school district three weeks. "I almost fainted," said Ms. Summers (June 30, 1979).

A final collaborative effort took place shortly before the results were publicly released. The Associate Superintendent for Curriculum and Instruction and the Executive Director of Reading/English Language Arts and her staff were provided with draft copies of the report and asked to review them. Their comments were shared during the course of two face-to-face meetings, and in virtually all instances their suggestions were integrated within the text of the final document.

Hence, the ownership of the study could be truly ascribed to both the School District's Office of Research and Evaluation and the office responsible for the programmatic area (reading) being examined.

Proactive Planning

The approach discussed in the preceding section is exemplary of the proactive approach to planning associated with the study. "Proactive" is used in contrast to "reactive." A common misconception is that planning, by its very nature, must be proactive. The fact is, however, that a considerable amount of planning is undertaken in response to stimuli rather than for catalytic purposes. The proactive approach to planning anticipates the reaction to a situation and develops a desirable positive alternative response to it. The principal architects of the What Works in
Reading? study attempted to employ a proactive approach to planning from its outset.

A variety of potential problems were identified during the course of the authors' initial meetings, and each was dealt with as if the success of the entire study depended upon its resolution. A host of problems were identified. Areas ranging from finances, scheduling, and personnel allocation, to political reaction, protocol, and technical verification were all considered. In the end, this attention to detail seemed to produce handsome results.

Among the financial problems confronted were the lack of separate funding and the need to secure in-kind contributions of resources. Scheduling became a particularly critical problem, especially within the arenas of data processing support and school-site data collection activities. The majority of the potential political and protocol-related problems were dealt with in a manner similar to that described in the preceding section. Involvement and constant progress updates proved the key to such concerns.

Perhaps most crucial was the attention paid to the planning of the release of the study's results. Here the "outside" partner in the study—the Federal Reserve Bank—was used as a neutral party in convening a press briefing prior to the formal public presentation. The Superintendent of Schools had, of course, already been briefed, and the study had been placed on the agenda of the meeting of the Board of Education to be held the following Monday.

The education writers of the city's major newspapers and all-news radio stations were invited to a luncheon at the Federal Reserve Bank; so were members of the newspapers' editorial boards. The study was presented carefully and non-technically, with no limit on the time taken to answer questions. Each person present had agreed in advance to a "gag rule" until after the study was released publicly. Copies of the study were distributed, and all participants departed from the briefing far more knowledgeable than they would have been had they merely heard What Works in Reading? reviewed at a public Board of Education meeting. Each member of the fourth estate also had three days to review the document and to prepare a story for "immediate" release the following week.

The results were gratifying, both in terms of coverage and accuracy. A particular dividend was the editorial attention paid to the study, and the support provided by the editorial writers. For example, the Bulletin noted:

Johnny's—and Jane's—reading difficulty is a perennial question batted around by educators and parents. The "what works" study, therefore, ought to be required reading in educational circles in our region and Washington. It might change some outlooks, and funding patterns, for the better (July 6, 1979).
The *Inquirer* even acknowledged the special briefing:

They conducted a rather low-key briefing at the bank several days before their report was formally presented to the Board of Education and made public. *What Works in Reading?* is the title of the report but its findings have potential impact on school budgets as well as on classroom techniques (July 13, 1979).

Before cautiously endorsing the concept and the potential follow-up:

This study is not the last word, of course, on why Johnny can or can’t read, but it should stimulate new discussion about educational methods. It also should spur critical examination of old concepts about how to spend the school tax dollar (July 13, 1979).

The hoped-for results were, indeed, achieved.

**Minimizing Resistance**

Resistance to change was identified in a previous section of this paper as a force to be contended with in planning for the translation of research and evaluation results with educational policy initiatives. The ownership, involvement, and communications strategies already described in this section doubtlessly helped serve to reduce some of the expected resistance. Two other related approaches may have also had a positive effect.

Almost immediately following the formal public release of the study, its principal authors began making presentations to a large number and variety of audiences. Almost every group requesting a presentation has been serviced, and though some of the audiences have been antagonistic to selected results, the vast majority have appreciated the researchers’ “take it to the people” approach. “It’s as if you really want us to understand the study,” one participant commented. “I thought research was supposed to be more technical.”

In addition to the “traveling road show” dissemination strategy, in-depth central office discussions were initiated. The Superintendent of Schools had promised at the time of the study’s release to appoint a select committee to consider follow-up action. Close coordination between the Superintendent’s Office and the Office of Research and Evaluation resulted in the appointment to the Committee of a broadly representative group of individuals. Organizations such as The Home and School Association, the Council of District Superintendents, Association of School Administrators, Federation of Teachers, as well as key programmatic and supportive service personnel, formed the nucleus of the committee. Though the group has moved slowly in considering the myriad options before it, its work has been both deliberate and productive.

The authors of the study attempted to be just as deliberate in their attempt to minimize the technical condescension and egocentric prescription that so often permeate major studies. Wherever possible, the
authors cautioned their readers that the study was not a panacea and that they must bear in mind:

- This study was conducted only on fourth graders. It is not likely that fourth graders are completely different from all other grades, but one should be careful in thinking that all of the findings would be exactly the same for first graders or twelfth graders, for example.
- Educational programs in schools are ever changing. This study was conducted during the fifth year of the District Reading Programs. Some of the things found to be of no importance at that point might possibly have been of critical importance during the first year or two of the program.
- This study suggested what combination of things made a difference in reading achievement. It did not tell why. To try to find out why, additional studies of a different kind would be needed.
- As conditions change, as the reading program changes, and as suggestions from this study are tried out in the schools, it would be important to repeat this study in order to find out something about the impact of these changes on reading achievement.

The authors indicated that the findings presented were the ones that seemed most pertinent, and on which it was possible for the school system to take action. The findings were the result of intensive investigation using sophisticated mathematical techniques. As such, it was suggested that they should certainly be given serious consideration and thought.

There is, however, no guarantee that implementation of recommendations based on these findings would cause any miracles. There are too many things involved to make any such guarantee. These findings are, however, the best information available at this time. Even without guarantees, it is better to be guided by such information than to try to make decisions in a vacuum (Kean 1979:12).

Not only did the researchers add qualifiers and disclaimers where they deemed them necessary and appropriate, they even attempted to anticipate some of the key questions relative to the impact of certain methods or problems upon higher and lower achieving students. Anticipation of the public's concern led the authors to include in the report, for example, that:

- The lowest achieving pupils did better if they were in higher achieving schools.
- The linguistics basal reading approach was more beneficial to middle and higher achieving pupils than other reading approaches, but the reading approach utilized did not make any difference for the lowest achieving pupils.
- Unexcused absences were equally harmful to higher and lower achieving pupils.
- Having attended kindergarten was equally beneficial to higher and lower achieving pupils.
Utilization Factors

One of the principal foci of this paper is the question, Why do certain research and evaluation reports have impact upon decisions while others do not? Brickell and Aslanian's recommendations for the communication of research data, and those of Alkin et al. on factors affecting utilization, seem to apply to this case study. Though no attempt was made to tailor the means of reporting the study's results to fit Brickell and Aslanian's recommendations, the level of congruence is remarkable, as detailed in Figure 1.

**Figure 1**

<table>
<thead>
<tr>
<th>Brickell and Aslanian's Recommendations</th>
<th>Reporting the Results of <em>What Works in Reading?</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Brevity</td>
<td>Eight-page Summary utilizing bullets to highlight major points, plus a four-page Digest of Results listing the findings according to each sector.</td>
</tr>
<tr>
<td>Placing most technical material in appendices</td>
<td>Regression results and means and standard deviations included in tables at end of the report. A separate Technical Report developed to answer technical questions and concerns.</td>
</tr>
<tr>
<td>Timelines with respect to decision makers expectations</td>
<td>Information released according to the specific planning and decision-making needs of the administration.</td>
</tr>
<tr>
<td>Use of entirely non-technical language</td>
<td>Econometric and educationese &quot;translated&quot; into common language, understandable by lay and professional personnel alike.</td>
</tr>
<tr>
<td>Provision of public presentation material to amplify the executive summary</td>
<td>Multiple copies of the study's summary, instead of large graphics, disseminated at the outset of each public presentation.</td>
</tr>
</tbody>
</table>

The series of eight factors affecting utilization cited by Alkin et al. also bear a high degree of similarity to the concerns taken into considera-
tion by the researchers in planning, implementing, and disseminating the results of the study. The foregoing discussion of ownership, proactive planning, and minimizing resistance to change demonstrates the attention paid to (1) setting pre-defined boundaries, (2) orienting information users, (3) the approach of the study team, (4) the study team's credibility, (5) organizational structure and relationships, (6) contextual/environmental forces, (7) report content and style, and (8) the needs and expectations of decision makers.

The Urban Factor

Although each of the above factors is important, none is necessarily unique to planning within the urban educational milieu. The experience associated with the Philadelphia Study, however, was certainly unique in terms of both process and impact because it was nurtured and grew in an urban context. What, then, are the principles that make educational planning in urban areas unique? I believe they fall into four broad areas:

- **Scale.** The sheer magnitude of urban problems provides more fertile fields of inquiry than might normally be expected. In addition, there are greater availability of information and greater number of potential subjects. Typically, cities are studied with greater frequency and, as a result, larger quantities of data are often readily available. This is also true of the variety of problems associated with urban living and the number of agencies responsible for maintaining information about urban dwellers.

  Large urban areas tend, also, to be associated with greater flexibility in identifying innovative approaches. Urban school systems are more likely to secure meaningful support from business groups, civic groups or local foundations, all of which may have more direct stakes in the schools than school districts where resources and encouragement are more typically a Rotary Club luncheon or an American Legion achievement award.

- **Resources.** Offices of research and evaluation are more prevalent in larger urban school districts than elsewhere, although recent research has shown that such offices are spreading rapidly. Urban areas typically contain more specialists with the training and experience necessary to staff such offices. In addition, the size of the school district and the resultant reporting requirements often necessitates the maintenance of such an office. Without an existing organizational structure and an individual designated as responsible, large-scale research projects simply cannot be carried out.

  Greater and more specialized non-school resources also tend to be available in urban areas. In the case of the Philadelphia Study, the School District's partner was the Federal Reserve Bank. Large universities, businesses, and non-profit organizations with interests in education are more commonly located in cities than elsewhere.

  Greater variety of dissemination possibilities exist in cities than
elsewhere. Local electronic media are critically related to the ultimate impact of studies like the one described in this paper. Though non-urban areas have newspapers and local radio stations, the mass coverage accorded by multiple local TV stations and all-news radio stations, not to mention large-circulation daily newspapers and neighborhood weeklies, plays a pivotal role.

**Complexity.** The complexity of the urban scene most certainly affects the way in which educational planning takes place. The heterogeneity of the constituencies served is perhaps the major consideration. Such heterogeneity often creates widely varying expectancies and needs. As a result, differing solutions are necessary. The greater number of solutions, the more complex the systems for developing the solutions. Hence there is a greater demand for information and planning.

The political diversity of urban issues adds to the complexity. Diversity means there is less chance for the achievement of a ready consensus. Therefore, the market for studies of the type described in this paper may be better in urban environments.

**Economics.** America's poverty population is more heavily concentrated in urban areas than elsewhere. The needs of urban dwellers are numerically greater and tend to create great strain upon the cities' limited resources. This may create a demand for greater efficiency and productivity, which, in turn, may produce a ready market for potential adoption and utilization of research and evaluation findings.

In urban areas, school system finance is frequently controlled, at least in part, by agencies other than school boards. Very often urban schools are funded partially by the city government. As a result, urban school districts may be fiscally less self-determined and may have a greater need for information concerning successful practices. In addition, the way the school district spends its money will be more closely scrutinized by other agencies and by the local population.

Finally, urban areas reflect an economically diverse constituency. Diversity is the key, for it creates varied expectations in terms of the role of the public school system and the resources associated with it.

**CONCLUSIONS**

Examination of this topic, with its descriptive case study and analysis, has generated ten over-all factors associated with the translation of research and evaluation into educational policy. These ten factors certainly do not comprise a finite listing; they relate to the case studied here, but may not necessarily apply to all similar situations. Perhaps even more important, this listing may well represent only a fraction of the total range of such factors. The ten general areas are as follows:

1. **Identification of Clients.** It is important to single out the specific clients and client groups who are most closely associated with the
research being undertaken and most directly affected by any policy decisions likely to be developed as a result of that research. The expectations of the clients, as well as the type of information and services they require, are important considerations in focusing the research and evaluation process.

2. **Vitality of the Topic.** There are a great many topics whose thrust is so tangential to the solution of a particular problem that they will seldom generate very much interest. A topic directly related to a highly visible problem may virtually insure that the results of the study of that topic will be carefully considered. In framing a topic for study, criteria such as importance, visibility, acceptability, and understandability should be reviewed.

3. **Participant Involvement.** This factor relates directly to the previous discussion of ownership. It is important to involve as many as possible of those groups who will likely be ultimately affected by the study. Involvement should be genuine, not merely "window dressing." Though this may lengthen the period of the study, it will pay handsome dividends in the long run.

4. **Technical Quality.** The technical aspects of the study (in terms of research methodology, appropriate measurement techniques, and careful reporting) must be beyond reproach. Wherever possible, the study should improve upon previous major works in the area. In addition, the use of multiple measures will greatly enhance the study's acceptability.

5. **Reporting Formats.** A variety of reporting formats is very necessary if a study's results are to be adequately communicated. Since most decisions are made by laymen, the basic report should be as nontechnical as possible and should always include an executive summary and/or abstract. In addition, an illustrated, popularized version tends to be very useful in communicating with the public at large, as is the use of multimedia materials such as slides, large graphics, etc. A full technical report should be available for that small group of individuals interested in the technical specifics of the study.

6. **Findings Keyed to the Decision Process.** Timing is all-important if research and evaluation results are to have genuine impact upon policy. In order to perfect such timing, it may be useful to attempt to determine the type of decisions likely to be made as a result of the study. Wherever possible, a study's results and recommendations for policy should relate to the general context of the school system and should be demonstratively cost effective and/or cost efficient.

7. **Preparation of Policy Makers.** Advance briefings for key decision and policy makers are of tremendous value. Briefings should include a nontechnical overview of the specific results of the study, the relationship of those results to the needs of the system, and the specific implications for policy that seem to spring from the study. Those studies actually "commissioned" by decision makers probably stand the greatest chance of ultimately having an impact.
8. **Overcoming Resistance.** The ability of the study team to anticipate potential problems resulting from their work will help reduce resistance. The degree to which resistance can be dealt with prior to its surfacing will, in the long run, minimize disruption of both the implementation of the study and the translation of its results into practice.

9. **The Role of the Ombudsman.** The designation of a member of the study team as ombudsman or trouble-shooter during the study's implementation will help reduce both resistance and misunderstanding. Such an individual should initiate dialog, not wait for problems to occur. The ombudsman should attempt to work with clients prior to, during, and after implementation of the study.

10. **The Role of the Entrepreneur.** Finally, the entrepreneurial role is an important correlate of policy decisions. This role may be played by either the individual(s) responsible for producing the research and/or evaluative information or the decision maker ultimately responsible for translating it into policy and acting upon it. If the policy maker exhibits entrepreneurial behavior, the researcher's role is considerably simplified. Since this is not typically the case, however, it is the potential impact of the researcher's entrepreneurial acumen that will be considered here.

Within the discipline of economic development, the entrepreneur is an individual who applies a new combination of resources and technology in productive activity to effect change. The resulting change, however, is rarely only economic. It is social as well, for economic change does not occur without social ramifications. There is a great deal of similarity between the roles and characteristics of the entrepreneur and the change agent. By either classification, such an individual has been the key figure in originally unlocking the doors of development in many of what are thought of today as the world's progressive nations. The entrepreneurial role is not only appropriate, but extremely useful in working toward the acceptance of research information and ultimately translating it into policy. In playing the role of the entrepreneur, the researcher cannot assume a neutral posture. He must, in fact, be a strong advocate of the utilization of the information he has developed and should approach his task with an eye toward its translation into policy from the outset. It is important to remember that advocacy of the utilization of data need not compromise objectivity in the conduct of research or evaluation.

Because he anticipates future possibilities, the entrepreneur becomes adept in long-range planning: McClelland has suggested that "The successful entrepreneur... is by definition someone who considers... alternatives and consequences before they actually happen to him" (McClelland 1961:237). Organizational skills also play an important role in the entrepreneur's success. He is generally equally skilled as an administrator and as an expert in public relations.

In conclusion, it has been said that "imitation is the highest form of flattery." In the case of research utilization, however, that saying might
well be revised to "institutionalization is the strongest indicator of success."

The *Blueprint for Academic Achievement* actually served to institutionalize the type of study that created much of the impetus for the *Blueprint's* initial development. That document's final section deals with "Evaluation as a Tool for Achievement Growth" and emphasizes that:

...it will be important for the Office of Research and Evaluation to conduct follow-up studies which examine the effectiveness of various changes made to improve school achievement. These studies should look at specific recommendations and compare various overall strategies implemented in schools. This suggests that proposed changes should be implemented in a systematic way so that the effectiveness of different strategies can be measured and compared.

In the final analysis, however, institutional acceptance is not entirely sufficient. It is institutional demand for decision information that is perhaps the single most vital factor in the translation of research and evaluation into educational policy.

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