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Role Perceptions of Educational Administrators and Researchers Relative to Implementation of Research

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The movement of research findings from the university to the public school has historically been slow. A random sample of educational researchers and school superintendents were surveyed to determine (1) how superintendents and educational researchers actually perceive responsibility for implementation of research findings, and (2) if the results correspond to those uncovered by Dykman in his study of research and management in business. The subjects were asked to respond to four statements concerning administrator-researcher relationships, using a four-point, agreement-disagreement scale. The four statements are (1) separate-functionalist (one need not understand the processes, objectives, or environment of the other), (2) communicator (administrator needs to understand methods and language of researcher), (3) persuader (researcher needs to understand administrator and his methods), and (4) mutual-understanding (administration and research cannot be separated). The responses indicated that (1) both administrators and researchers show strong support for the mutual-understanding position, (2) the perceptions on all positions are similar, and (3) administrators with research experience and researchers with administrative experience are very similar in their perceptions. (HW)



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ROLE PERCEPTIONS OF EDUCATIONAL ADMINISTRATORS AND RESEARCHERS RELATIVE TO IMPLEMENTATION OF RESEARCH FINDINGS

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and

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Prepared for delivery at the 1969 Annual Meeting of the American Educational Research Association, Los Angeles, February 5-8, 1969

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## ROLE PERCEPTIONS OF EDUCATIONAL ADMINISTRATORS AND RESEARCHERS RELATIVE TO IMPLEMENTATION OF RESEARCH FINDINGS

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#### PROBLEM:

During the past several years various segments of the educational community have expressed concern with the slow movement of research findings from the university to the public schools (e.g., The Center for the Advanced Study of Educational Administration and the National Institute for the Study of Educational Change). Many different variables can be hypothesized as contributing agents, and the whole problem quickly becomes quite complex. The complexity of the problem, however, cannot be used as an excuse to avoid an examination of it. The need for more rapid implementation of research findings is quickly approaching a critical stage. The assumption that research findings, once published, will somehow become new practices in the public schools is erroneous. It just doesn't happen. Yet it is not adequate to admonish harried administrators to stop all else and begin reading research publications and to start implementing every new idea they come across. Change for its own sake is not the answer.

One of the roles of the researcher is to propose changes which will increase the results that can be obtained from some segment of the school system. The administrator authorizes the implementation of changes in the system and must stand accountable for the results. Since both want to increase the "payoff" of the system, their roles should be seen as mutually complimentary. Yet, each exists in a separate world with a myriad of daily problems and pressures which must be taken into account when approaching a decision situation.



The gap between research and administration with regard to the implementation of research findings is not the sole prerogative of education. In fact, it exists in every field where research is being conducted. One such field is business. The business community faces a "problem of implementation" in relation to the findings of operational research and management no less real than that existing in education. This study, in fact, duplicates some aspects of a study conducted in this field by Dykman (1) based upon concepts developed by Churchman and Schainblatt (2) in an article in Management Science. Churchman and Schainblatt (3), in examining activities which were appropriate in bringing about effective implementation relationships between scientist and manager in business and industry, identified four concepts, or positions, which are relevant to this general topic. These positions are:

The Separate-Functionalist - is probably more in-tune with reality than with the way either administrators or researchers feel the ideal relationship should be. It rests upon the supposition that both professional groups work in their own "world" with few links or channels of communication with the other.

The Communicator - underscores the fact that the language of the researcher may be alien to the administrator. This position statement places the burden for understanding upon the administrator. In other words, it is his responsibility to learn the language of research.

The <u>Persuader</u> - this position forces research into being responsible for ferreting out the needs of administrators and then doing something about them.



<sup>(1)</sup> Dykman, Thomas R., "Management Implementation of Scientific Research:
An Attitudinal Study", Management Science, Vol. 13, No. 10, June, 1967.

<sup>(2)</sup> Churchman, E. W., and Schainblatt, A. H., "The Researcher and the Manager: A Dialectic of Implementation", Management Science, Vol. 11, No. 4, February, 1965.

<sup>(3)</sup> Ibid. Churchman and Schainblatt, pp B-69--B-70

The <u>Mutual-Understanding</u> position rests on the premise that both administrator and researcher know their jobs coupled with an appreciation for the needs, means, objectives and restrictions of the other.

It will be noted that these concepts range from the position which sees administration and research as essentially separate functions; through to that advocating having the administrator develop an awareness of the problems of the researcher; to that which reverses this position and feels it is the responsibility of the researcher to understand the problems of the administrator; and finally to that position which maintains that both administrators and researchers have a joint responsibility in the development of sensitivity to the problems and needs of each other. These relationships, of course, are optimal, and as such probably never approximate the real world. Additionally, their discussion treats the administrator-researcher relationship as a discrete unit detached from institutional or organizational realities. Dykman, however, felt that this approach to the implementation problem was at a high enough level of abstraction to overcome the limitations imposed by the above considerations.

As an extension of the concepts developed by Churchman and Schainblatt,

Dykman (4) carried out an attitudinal study on two groups: forty-five managers

and forty-five individuals working primarily in the area of operations research

methods. Dykman used a series of four statements each of which was designed to

represent one of the four concepts developed by Churchman and Schainblatt. Dykman

developed his four statements (see Appendix A) to represent, on a mutually ex
clusive basis, each of the four concepts. His study, however, encountered evidence

of the willingness of his subjects to support two or more of the statements at

the same time. Both the administrators and researchers used in his study had a



<sup>(4)</sup> op. cit. Dykman, p B-613

tendency to link the COMMUNICATION or PERSUASION positions with the MUTUAL-UNDERSTANDING one. Additionally, Dykman found that the MUTUAL-UNDERSTANDING position failed to achieve any more agreement than did either of the two previously mentioned. While the amount of agreement that the MUTUAL-UNDERSTANDING position did receive from both researchers and administrators was significantly more than would have been expected by chance alone at a .05 level of significance ( $x^2 = 8.467$ , d.f. = 3), Dykman had anticipated that this position would receive by far the greatest response agreement. He posits that the interpretation given this position by his subjects accounts for its failure to receive the anticipated response. Dykman poses two possible interpretations to the MUTUAL-UNDERSTANDING position; it would appear that his subjects were responding to the first definition, and as such were in part rejecting it.

- 1. Self-analysis is necessary for both administrators and researchers so that each may understand the unconscious factors which influence the decisions of the other.
- 2. Trust and good communications between research and administration lead to viable relationships without resource to an understanding of the unconscious motivations of each other.

This paper is an application of the four concepts concerning relationships between scientist and manager to the field of education. In essence, it seeks to answer the question: do the perceptions of educational administrators and researchers differ with respect to the responsibilities each has in the implementation process? If both of these groups can agree on responsibility, all problems of implementation are not going to be solved. Better understanding of such responsibilities or roles might, however, open up new avenues of access.



This study, then, is explicitly concerned with:

- (a) determining the way chief school administrators (superintendents) and educational researchers perceive responsibility for implementation of research findings, and
- (b) determining if the responses uncovered by Dykman in his study of operational research and business management correspond with those uncovered in a survey of school administrators and researchers.

#### PROCEDURE:

A survey instrument was developed for use in this study containing four position statements similar to those used by Dykman, but with slight modifications in wording to fit education. Comparability of position statements was maintained so that the results of the two studies could be analyzed to ascertain if the attitudes of researchers and managers in business and industry carry-over to the world of education. These four position statements were felt to be mutually exclusive (a position also maintained by Dykman). Four response choices were available for each of the statements: strongly agree; agree; disagree; and strongly disagree. A neutral response category was purposely omitted in an effort to force a choice. The four statements actually used in this study are reproduced below.

- A. Separate-Functionalist: The educational researcher's job is to generate workable solutions to problems facing the educational community. The implementation of new techniques is solely the responsibility of the administrator. It is NOT necessary for either of these professionals to understand the processes, objectives, or environment of the other.
- B. Communicator: If solutions to educational problems are to be properly implemented, the MOST important requirement is for the administrator to acquire more understanding of the methods and language used by the researcher. Conversely, a detailed understanding of the administrator by the educational researcher is neither required nor necessary.



- C. Persuader: What is MOST needed for effective implementation of empirical solutions to administrative and teaching problems is a better understanding by the educational researcher of the administrator and his methods. A detailed understanding of the researcher by the administrator is neither required nor necessary.
- D. Mutual-Understanding: In fact, administration and research cannot be separated. Before there can be effective implementation of solutions to educational problems, the primary condition required is a mutual understanding of the needs, means, objectives and restrictions which affect the creative processes of BOTH those engaged in educational research and school administration.

Stratified random sampling techniques were used in the selection of both school administrators and educational researchers to be surveyed. The American Educational Research Association Directory, 1967-68, was the source from which research personnel were drawn. Geographical stratification (in order to include representatives from all areas) was accomplished by grouping the states into the seven regional classifications used by the Gallup surveys (5). The sample itself was developed by determining the number of A.E.R.A. members per state, developing a percentage of the total membership, and then proportionally picking the sample size. This breakdown is illustrated in Appendix B.



<sup>(5)</sup> New England: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut

Middle Atlantic: New York, New Jersey, Pennsylvania, Maryland, Delaware, West Virginia, District of Columbia

East Central: Ohio, Michigan, Indiana, Illinois

West Central: Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas

Southern: Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, Texas

Rocky Mountain: Montana, Arizona, Colorado, Idaho, Wyoming, Utah, Nevada,
New Mexico

Pacific: California, Washington, Oregon, Hawaii

For the selection of administrators, school districts were stratified geographically (as above) and then by enrollment data; districts with enrollments of 6,000 or more and suburban districts adjacent to metropolitan areas were included for sample selection. Appendix C portrays the number and percentage of school districts resulting from such a categorization.

As determined before the study was conducted, a confidence level of .90 with a .05 degree of accuracy would require a sample of 260 educational researchers and 222 chief school administrators. A questionnaire return of 60.7 per cent and 52.7 per cent, respectively, hinders the drawing of conclusions with that much percision; but it would be hoped that the response patterns reported in this study will not be considered as irrelevant, but rather taken as trends to which consideration must be given. This is especially true since the trends were very definite.

The questionnaire was mailed in May of 1968; returns were processed the summer of 1968. A copy of the cover letter accompanying the questionnaire is reported in Appendix D, and the survey instrument itself is reproduced in Appendix E.

#### RESULTS:

A percentage breakdown of the response patterns to the four statements by administrators and researchers is presented in Table I. The proportional difference between general agreement and disagreement toward the four positions is quite wide. The MUTUAL-UNDERSTANDING position was obviously perceived as the pivotal statement; educators surveyed for this study strongly gravitated toward it. It is interesting to note that administrators registered more general agreement with all four positions than did the researchers. The response patterns for both groups are basically the same, though it will be noted that the researchers



expressed a somewhat larger amount of disagreement to the MUTUAL-UNDERSTANDING position. Response distributions for both administrators and researchers differ significantly at a .01 level from what have been expected by chance alone. (Administrators -  $x^2$  = 310.202, d.f. = 9; and Researchers -  $x^2$  = 25.236, d.f. = 9).

TABLE I

PERCENTAGE RESPONSE PATTERNS,
ADMINISTRATORS AND RESEARCHERS

| Positions                | Number | Strongly<br>Agree | Agree | Disagree | Strongly<br>Disagree |
|--------------------------|--------|-------------------|-------|----------|----------------------|
|                          |        |                   |       |          |                      |
| Separate-Functionalist   |        |                   |       |          | 50.1                 |
| Administrator.           | 117    | .8                | 5.1   | 35.8     | 58.1                 |
| Researcher -             | 158    | .6                | 3.1   | 29.1     | 67.0                 |
| Communicator             |        |                   |       |          | 04. 3                |
| Administrator            | 117    | 7.6               | 17.0  | 41.0     | 34.1                 |
| Researcher               | 158    | 3.7               | 14.5  | 49.3     | 32.2                 |
| Persuader                |        |                   |       |          |                      |
|                          | 117    | 4.2               | 20.5  | 45.2     | 29.9                 |
| Administrator Researcher | 158    | 4.4               | 16.4  | 49.3     | 29.7                 |
| Mutual-Understanding     |        |                   |       |          | 0                    |
| Administrator            | 117    | 75.2              | 22.2  | 1.7      | .8                   |
| Researcher "             | 158    | 60.7              | 29.1  | 8.8      | 1.2                  |

As was previously mentioned, the four position statements were designed to be mutually exclusive. Evidence was encountered, however, that a fourth of the administrators and nearly a fifth of the researchers hold the same strength of agreement for two or more of the positions. Of the administrators who expressed "strong agreement" with two or more positions, all included the MUTUAL-UNDER-STANDING classification in their selections; two-thirds of these respondents linked the COMMUNICATOR position with it. There also was uncovered a slight tendency to link the PERSUASION position with the MUTUAL-UNDERSTANDING one.



This is an interesting split coming from a group of administrators since the COMMUNICATOR implies the burden of responsibility for understanding is upon the administrator; the PERSUADER position reverses this stand. When administrators expressed just "general agreement" with two or more positions, there was a tendency to link the COMMUNICATOR and PERSUADER positions together. For those respondents who included the MUTUAL-UNDERSTANDING position in their selection (65%), there was a three-way split between linking it with the COMMUNICATOR, PERSUADER, and COMMUNICATOR-PERSUADER positions.

Researchers very seldom strongly agreed with two or more of the position statements; in fact, only four per cent did so. Among these respondents, the PERSUADER position is linked to that of MUTUAL-UNDERSTANDING in all but one instance. Administrators and researchers both displayed the same percentage (14.5%) of "general agreement" with two or more positions. Among researchers in this classification, there was a fairly even split into support for the following combinations: MUTUAL-UNDERSTANDING and COMMUNICATOR; MUTUAL-UNDERSTANDING and PERSUADER; and COMMUNICATOR and PERSUADER.

It's quite difficult to decipher which factors contributed to the acceptance of two or more mutually exclusive statements. It is impossible to know whether these responses were to the total statements or merely to certain sentences to which the respondent could agree. If the latter is the case, the capitalization and underlining failed to direct attention to the problem being posed by each statement.

Since this portion of the study corresponds to the one conducted by Dykman, results of the two will be compared before going on to a discussion of an additional aspect considered only in the present study.

1. The operational research personnel included in Dykman's study disagreed nearly 5 to 1 with the SEPARATE-FUNCTIONALIST position, while the



managers were fairly evenly split. Educational administrators and researchers both strongly disagreed with this position statement. Dykman postulated that in his sample, the possibility of movement from a research position to a managerial one, may have led his research respondents into being less willing to accept the idea that research and management functions are different. Since this sharp job distinction does not exist in education, and movement between research and management-type functions, regardless of job classification, is quite common, the need for some form of communication may be perceived as more useful by the practitioner in education.

- 2. The last three position statements (COMMUNICATOR, PERSUADER, and MUTUAL-UNDERSTANDING) all presuppose some degree of communication, and it would be anticipated that they would receive more agreement than the SEPARATE-FUNCTIONALIST position. This, in fact, occurred in both this and Dykman's study. However, Dykman did not achieve more agreement to the MUTUAL-UNDERSTANDING position than to the COMMUNICATOR and PERSUADER positions. Quite the opposite was discovered in this survey of educators. Responses on some questionnaires, in fact, commented that the results, that would be obtained, could be anticipated without recourse to a survey. Dykman also had anticipated an overwhelming agreement to this last position, but he did not receive it.
  - 3. Dykman found a willingness, on the part of his subjects, to not view the classifications as mutually exclusive. This same phenomena was observed in this study. The managers in Dykman's study had a slight preference for the COMMUNICATOR position, and the researchers for that of PERSUADER. Two-thirds of the educational administrators linked the



COMMUNICATOR position with that of MUTUAL-UNDERSTANDING. As far as researchers go, those who did agree with more than one position, split between the PERSUADER and COMMUNICATOR positions with no definite trend displayed. In the total sample, no preference by either group was expressed for one position over the other. Dykman felt that the trend he had discovered, while not significant, might indicate a tendency for researchers to regard their need to understand managers as most important, while managers expressed a great need to understand the researchers. However, those surveyed in this study expressed a strong tendency to support the MUTUAL-UNDERSTANDING position to the exclusion of the others; a finding not encountered by Dykman.

The responses of those administrators, who had had some experience in educational research, were broken out from the total sample, to see if this experience influenced perceptions toward the four position statements. Thirty-three per cent of the administrators fell into this classification. Table II compares these responses to those with no experience in educational research.

PERCENTAGE RESPONSE PATTERNS OF ADMINISTRATORS
WITH AND WITHOUT PRIOR RESEARCH EXPERIENCE

|                        |            | Strongly        |       |          |          |  |
|------------------------|------------|-----------------|-------|----------|----------|--|
| Positions              | Number     | Agree           | Agree | Disagree | Disagree |  |
| Separate-Functionalist |            |                 |       |          |          |  |
| No Research Exp.       | <b>7</b> 8 | 1.2             | 6.4   | 33.3     | 58.9     |  |
| Research Exp.          | 39         | <b>60</b> 60 60 | 2.5   | 41.0     | 56.4     |  |
| Communicator           |            |                 |       |          |          |  |
| No Research Exp.       | 73         | 10.2            | 1.2.8 | 42.3     | 34.6     |  |
| Research Exp.          | 39         | 2.5             | 25.6  | 38.4     | 33.3     |  |
| Persuader              |            |                 |       |          |          |  |
| No Research Exp.       | 78         | 2.5             | 20.5  | 43.5     | 33.3     |  |
| Research Exp.          | 39         | 7.6             | 20.5  | 48.7     | 23.0     |  |
| Mutual-Understanding   |            |                 |       |          |          |  |
| No Research Exp.       | 78         | 78.2            | 19.2  | 2.5      |          |  |
| Research Exp.          | 39         | 69.2            | 28.2  | ***      | 2.5      |  |



Using an Agreement Index derived by adding together the per cent of responses to the "strongly agree" and "agree" categories, several points can be brought out:

- 1. Those administrators with some research experience were less inclined than the total sample to accept the position that provides for no communication between researchers and administrators (SEPARATE-FUNCTIONALIST). It would appear that those without research experience were slightly more inclined to not view communication as an impediment to the successful implementation of research findings.
- 2. The administrators in this group are a little more inclined (5.1%) to accept the COMMUNICATOR and PERSUADER positions than those without this experience. These two positions imply the necessity for communication on the part of either the researcher or the administrator.
- 3. Nevertheless, both groups are in agreement on support for the MUTUAL-UNDERSTANDING position. This position implies that communication is a two-way street and both parties must accept responsibility for its success.

Response patterns of researchers with and without prior administrative experience was also broken out from the total sample and is reported in Table III.



TABLE III

PERCENTAGE RESPONSE PATTERN OF RESEARCHERS
WITH AND WITHOUT PRIOR ADMINISTRATIVE EXPERIENCE

| Positions              | Number                                  | Strongly<br>Agree | Agree | Disagree    | Strongly<br>Disagree |  |
|------------------------|---|-------------------|-------|-------------|----------------------|--|
| FOSICIONS              | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |                   |       |             |                      |  |
| Separate-Functionalist |   |                   |       | _           | 65.0                 |  |
| No Admin. Exp.         | 53                                      | 1.8               | 3.7   | 26.4        | 67.9<br>66.6         |  |
| Admin. Exp.            | 105                                     | <b>989 AA 989</b> | 2.8   | 30.4        |                      |  |
| Communicator           |   |                   | 10.0  | 49.0        | 33.9                 |  |
| No Admin. Exp.         | 53                                      | 3.7               | 13.2  | •           | 31.4                 |  |
| Admin. Exp.            | 105                                     | 3.8               | 15.2  | 49.5        | 21.4                 |  |
| Persuader              |   |                   | 10.0  | <b>50 0</b> | 33.9                 |  |
| No Admin. Exp.         | <b>5</b> 3                              | 1.8               | 13.2  | 50.0        | 27.6                 |  |
| Admin. Exp.            | 105                                     | 5.7               | 18.0  | 48.5        | 21.0                 |  |
| Mutual-Understanding   |   |                   |       |             | _                    |  |
| No Admin. Exp.         | 53                                      | 60.3              | 32.0  | 7.5         | 3.0                  |  |
| Admin. Exp.            | 105                                     | 60.9              | 27.6  | 9.5         | 1.9                  |  |

One-hundred five researchers (66.4%), from the entire sample, reported administrative experience. Again, using an Agreement Index derived by adding together the per cent of responses to the "strongly agree" and "agree" categories, the following observations were made:

- 1. Those researchers with administrative experience are slightly less inclined to accept the SEPARATE-FUNCTIONALIST position than are those without this experience. Those administrators with prior research experience also responded in the same manner. It would appear that work experience in the opposite activity leads to a realization of the importance of communication between groups.
- 2. These researchers with administrative experience are a little more inclined to accept the COMMUNICATOR and PERSUADER positions than are



- those without this experience. This same observation was again made among those administrators with prior research experience.
- 3. Both groups of researchers expressed strong support for the MUTUAL-UNDERSTANDING position, though it received 3.9 per cent more disagreement among the group with the prior administrative experience.

#### CONCLUSIONS:

The movement of research findings from the university to the public school has historically been slow. This same problem of "implementation" also exists in fields other than education. In 1967, a study was conducted in the area of business which hypothesized that manager and scientist have different perceptions on responsibility for the implementation of research findings, and that this divergence of perceptions on responsibility creates a void that hinders the implementation process. This study replicates the one done in business in an effort to determine:

- (a) the way superintendents and educational researchers actually perceive responsibility for implementation of research findings, and
- (b) if the results uncovered in the business world correspond to those in education.

A random sample of educational researchers and school superintendents were mailed the survey in strument. Analysis of the responses indicates that:

1. Both administrators and researchers show strong support for the MUTUAL-UNDERSTANDING position. This amount of support far exceeds what would have been expected by chance alone. This can be taken as a positive tight that there does exist a deep awareness of the need for communication in order to step up the process of implementation of research findings in the public schools.



- 2. The study conducted by Dykman in the field of business did not uncover any stronger support for the MUTUAL-UNDERSTANDING position than for the COMMUNICATOR or PERSUADER positions. These two positions imply that one or the other (administrator or researcher) is largely responsible for seeing that ideas and knowledge are communicated to the other party. Educators see it as a mutual responsibility.
- 3. The perceptions of both educational administrators and researchers on all positions were very similar. This finding does not agree with the observations made in the Dykman study where those with managerial positions and those engaged in operational research had very different perceptions toward the same position statements. This, again, can be taken as a plus factor for education the awareness of the problem is a first step toward its solution.
- 4. Administrators with prior experience in research and researchers with prior experience in administration were found to be very similar to each other in their perceptions of the need for adequate communication. Both groups displayed support for similar positions beyond the level of agreement expressed by those lacking this experience. All respondents, again, expressed the greatest agreement with the MUTUAL-UNDER-STANDING position.
- 5. With both groups expressing a need for MUTUAL-UNDERSTANDING, there is hope that the process of implementing research can be speeded up.

  This study was not designed to try to uncover the methods which could be used to facilitate this process; rather, it was to ascertain the point at which such a process would have to begin. Given the awareness of the problem, the establishment of mechanism to facilitate the flow of communication appears to be now needed.



#### APPENDIX A

#### POSITION STATEMENTS USED IN THE DYKMAN STUDY

#### 1. Separate Functions:

The task of the scientist is to prepare as complete a plan as possible, taking into account as many aspects of the problem as possible and conforming to the standards of scientific research. The completed plan is then presented to the manager, whose responsibility it is to accept or reject what is proposed.

#### 2. Communication:

The likelihood of effective implementation of the results of scientific research to management problems may BEST be increased by a specific action on the part of the manager: he should endeavor to understand not only what the researcher does but why he does what he does. In this way the manager may react to the work to effectively serve his own ends.

#### 3. Persuasion:

The <u>GREATEST</u> existing obstacle to effective implementation of the results of scientific research to managerial problems is the lack of researchers in really understanding the important issues facing the manager. The scientist, then, must come to understand the manager by sensing both what makes the manager what he is and what the manager is really trying to do.

#### 4. Mutual-Understanding:

Effective implementation of scientific design in the solution of managerial problems calls initially for an intellectual attack on the mysteries of BOTH management and science; it calls for an understanding of the politics of decision making on the one hand and an understanding of the creative process on the other.



# APPENDIX P AMERICAN A.E.R.A. MEMBERSHIP BY GEOGRAPHICAL REGION

1967-68

|                 | Number<br>of | Per Cent<br>of | Sample |  |
|-----------------|--------------|----------------|--------|--|
| Region          | Members      | Total          | Size   |  |
| New England     | 400          | 6.5            | 17     |  |
| Middle Atlantic | 1807         | 29.7           | 77     |  |
| East Central    | 1410         | 23.2           | 60     |  |
| West Central    | 633          | 10.4           | 27     |  |
| Southern        | 882          | 14.5           | 38     |  |
| Rocky Mountain  | 223          | 3.6            | 9      |  |
| Pacific         | 696          | 11.4           | 29     |  |
| Alaska          | 5            | <b>40</b> 40   | 1      |  |
| Hawaii          | 19           | .3             | 2      |  |
| TOTAL           | 6075         |                | 260    |  |



APPENDIX C

NUMBER OF SCHOOL DISTRICTS BY REGION
BROKEN INTO A.D.M. STRATUM\*

|                | Stratum #1 Stratum |      |     | :um #2 | #2 Stratum #3 |      | Stratum #4 |      | Stratum #5 |            | Suburban<br>Under 6,000 |      |
|----------------|--------------------|------|-----|--------|---------------|------|------------|------|------------|------------|-------------------------|------|
| egion          | No.                | 8    | No. | 8      | No.           | 8    | No.        | क्र  | No.        | 8          | No.                     | 8    |
| ew England     | ~~~                |      | 1   | 1.8    | 4             | 4.4  | 21         | 6.8  | 46         | 7.6        | 5                       | 3.8  |
| iddle Atlantic | 7                  | 28.0 | 5   | 9.4    | 4             | 4.4  | 56         | 18.2 | 147        | 24.3       | 59                      | 45.0 |
| ast Central    | 5                  | 20.0 | 4   | 7.5    | 11            | 12.3 | 43         | 14.0 | 88         | 14.5       | 43                      | 32.8 |
| est Central    | 2                  | 8.0  | 4   | 7.5    | 7             | 7.8  | 24         | 7.8  | 54         | 8.9        | 6                       | 4.5  |
| outhern        | 8                  | 32.0 | 25  | 47.1   | 36            | 40.4 | 90         | 29.3 | 162        | 26.8       | 2                       | 1.5  |
| ocky Mountain  |                    | ~~~  | 5   | 9.4    | 8             | 8.9  | 17         | 5.5  | 32         | 5.3        |                         |      |
| cific          | 2                  | 8.0  | 9   | 16.9   | 19            | 21.3 | 55         | 17.9 | 74         | 12.2       | 16                      | 12.2 |
| laska          |                    |      |     |        | ~~~           |      | 1.         | .3   | ~~~        | <b>~~~</b> |                         |      |
| waii           | 1                  | 4.0  |     |        |               |      |            |      | <b>W W</b> |            |                         |      |
| )TAL           | 25                 |      | 53  |        | 89            |      | 307        |      | 603        |            | 131                     |      |
| AND TOTAL 120  | 8                  |      |     |        |               |      |            |      |            |            |                         |      |

\* Stratum #1 - enrollment 100,000 and over Stratum #2 - enrollment 50,000 - 99,999 Stratum #3 - enrollment 25,000 - 49,999 Stratum #4 - enrollment 12,000 - 24,999 Stratum #5 - enrollment 6,000 - 11,999

Suburban districts adjacent to Metropolitan areas



#### APPENDIX D

Educational Program Management Center
Educational Development Faculty
College of Education
The Ohio State University
Columbus, Ohio 43210

May 1, 1968

#### Dear Researcher:

With the expansion of the availability of federal funds, research in the educational arena has increased at a tremendous rate. The slow degree to which public education is adopting and benefiting from results of recent research findings has, however, become a major point of concern.

The attached survey questionnaire can be completed in a matter of minutes; it is seeking to identify perceptions on responsibility for the implementation of research findings. This "problem of implementation" has been looked at by business in the manager-scientist relationship. The application of some of these findings to the administrator-researcher relationship appears to be a logical extension. The purpose of this questionnaire is to secure data relevant to this point. We hope that you will be able to take a few minutes to complete the enclosed checklist.

A return envelope has been enclosed for your convenience. We would appreciate having your response by June 1, 1968.

Sincerely yours,

Desmond L. Cook, Director Educational Program Management Center

DLC/pab

Encl.



#### APPENDIX E

Educational Program Management Center
Educational Development Faculty
College of Education
The Ohio State University
Columbus, Ohio 43210

A SURVEY ON THE PERCEPTIONS OF EDUCATIONAL ADMINISTRATORS & EDUCATIONAL RESEARCHERS
Toward the Roles of Each in the Implementation of Research Findings

Below are four statements relative to the perceptions of chief school administrators (superintendents) and educational researchers toward the responsibility for implementation of research findings into school practice. Please respond to each of the statements by placing in the parenthesis before each statement the number corresponding to the following response terms. Be sure to put a number for each statement.

- (1) Strongly Agree; (2) Agree; (3) Disagree (4) Strongly Disagree
- ( ) A. The educational researcher's job is to generate workable solutions to problems facing the educational community. The implementation of new techniques is solely the responsibility of the administrator. It is NOT necessary for either of these professionals to understand the processes, objectives, or environment of the other.
- ( ) B. If solutions to educational problems are to be properly implemented, the MOST important requirement is for the administrator to acquire more understanding of the methods and language used by the researcher. Conversely, a detailed understanding of the administrator by the educational researcher is neither required nor necessary.
- () C. What is MOST needed for effective implementation of empirical solutions to administrative and teaching problems is a better understanding by the educational researcher of the administrator and his methods. A detailed understanding of the researcher by the administrator is neither required nor necessary.
- ( ) D. In fact, administration and research cannot be separated. Before there can be effective implementation of solutions to educational problems, the primary condition required is a mutual understanding of the needs, means, objectives and restrictions which affect the creative processes of BOTH those engaged in educational research and school administration.

Please answer the questions on the reverse side of this page.



### IDENTIFICATION DATA

| PLEAS        | E Co  | mp1e       | ete <u>All</u> Questions:                          |
|--------------|-------|------------|--|
| 1) M         | ain   | job        | responsibility at this time:                       |
|              |       | a)         | administration                                     |
|              |       | <b>b</b> ) | research   |
| 2) N         | iumbe | ar o       | years engaged in each of the following areas:      |
|              |       | a)         | administration                                     |
|              |       | ь)         | research   |
| 3) 1         | Vatio | oral       | professional membership: (check as many as needed) |
|              |       | a)         | AASA   |
|              |       | <b>b</b> ) | AERA   |
|              |       | c)         | Other  |
|              |       |            |  |
| <b></b> •- • | -     |            |  |
|              |       |            | SCHOOL DISTRICT COLLEGE OR UNIVERSITY              |
| Dist         | rict  |            | University   |
| Name         | :     |            | Name:  |
| Stat         | e:    |            | Dept.:   |
| Enro         | 11me  | ent:       | State:   |



#### REFERENCES

- Churchman, E.W., and Schainblatt, A.H., "The Researcher and the Manager: A Dialectic of Implementation", Management Science, Vol. 11, No. 4, February, 1965
- Dykman, Thomas R., "Management Implementation of Scientific Research: An Attitudinal Study", Management Science, Vol. 13, No. 10, June, 1967

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