Twenty-six Maryland public school administrators and state education department personnel, who had current or expected responsibilities for some aspect of educational research, completed a training program designed to upgrade their research competency. The instruction, conducted through the University of Maryland Bureau of Educational Research and Field Services, comprised 16 three-hour sessions of lectures, seminars, and practicums held once a week from September through January 1967. Stress was in content areas of educational research: (1) problem identification, (2) proposal development, techniques, and design, and (3) statistical tools for evaluation. One especially successful aspect of the program was the opportunity for participants to prepare proposals for research projects which were subsequently submitted for group analysis. Another worthwhile outcome was the working relationships established among members of the state education department, the local school systems, and the University of Maryland staff, who can continue to serve as a source of consultative and technical advice. Trainees agreed to continue the program through a follow-up seminar to meet monthly from September through June. It will aid participants in keeping abreast of research developments through discussion, field visits, and other activities. Publicity materials are appended to this report. (JS)
Appendix B

FINAL REPORT
Grant No. 1-6-068785-1803

A SPECIAL TRAINING PROJECT FOR SELECTED
EDUCATIONAL RESEARCH WORKERS IN MARYLAND
PUBLIC EDUCATION AGENCIES

DATE OF REPORT:
April 1, 1967

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research
A SPECIAL TRAINING PROJECT FOR SELECTED EDUCATIONAL RESEARCH WORKERS IN MARYLAND PUBLIC EDUCATION AGENCIES

Grant No. 1-6-068785-1803

Program Director: Dr. Richard K. McKay

Instructional Dates of Program:
September 15, 1966 - January 26, 1967

The training program reported herein was conducted pursuant to a grant from the Office of Education, U. S. Department of Health, Education, and Welfare. Grantees undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment of the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Division of Research and Development,
Maryland State Department of Education
Baltimore, Maryland 21201
I. Orientation of the Program

The grant program completed by the Maryland State Department of Education may be classified as a Special Training Project for Educational Research. It was carried out under the leadership of the Maryland State Department of Education with the cooperation of the Bureau of Educational Research and Field Services, the University of Maryland, and Maryland local school systems. The instructional program of the Project was subcontracted to BERFS (see above), the University of Maryland.

Instruction began on September 15, 1966, and continued for fifteen subsequent Thursdays, ending on January 26, 1967. Each Thursday session was three hours long.

The Trainee Group

The Project was designed to meet the needs of selected participants from Maryland local school systems and the Maryland State Department of Education. Participants were selected by the State Superintendent of Schools, in conjunction with the Director of the Division of Research and Development, and recommendations from local school systems electing to participate in the Project. To be selected, participants were required to meet the following criteria of eligibility:

1. Participants had to be chosen without discrimination on the grounds of race, color, or national origin, in compliance with P.L. 88-352, Title VI.
2. Participants had to be professional staff members of a local public school unit or of the Maryland State Department of Education.

3. Participants had to have completed a college-level course in statistics or tests and measurements.

4. Participants had to have current or expected responsibility for some aspect of educational research, whether developing, advising about, or disseminating such research.

5. Participants had to be approved by the State Superintendent of Schools, and for individual participants from local systems, by the local superintendent.

6. Participants had to be willing to work within the administrative framework of the Project, attend sessions regularly, complete readings and assignments, and participate fully in seminars and practicums.

The Objectives

The stated program objectives were the following: The Special Training Project for Educational Research shall take a group of trainees who are producers or potential producers of research and:

1. Give them a series of experiences designed to strengthen their understanding of the nature of educational research in a public school setting.

2. Give them guidelines and techniques for efficient use of the burgeoning literature of educational research and materials related to such research (e.g., indexes, compendia of research; information about federal government programs of education, etc.).

3. Give them a series of experiences which will broaden their understanding of problem identification in educational research as well as current and emerging techniques of behavioral science research (e.g., experimental designs and special methods such as computer applications).

4. Give them a series of experiences to increase their skills in developing, writing, and evaluating educational research proposals worthy of funding.

5. Give them a review of statistics and guidelines for their use and application to educational research.
II. Description of the Program

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<th>Number of Sessions</th>
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<th>Activities</th>
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<td>OVERALL EVALUATION OF THE PROJECT: IMPLICATIONS FOR THE PARTICIPANTS</td>
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Course Descriptions

Introduction to the Project

One session at the beginning shall be held to provide an orientation to and an overview of the Project. The format includes the presentation of a keynote speaker from the field of educational research as well as discussion groups. Emphasis will be placed on the "philosophy of research"—what research is, why it is important, the relationship between data and decision, and so on.

Seminar I: The Nature, the Literature, and the Identification of Problems of Educational Research

A series of five lecture-discussion sessions to provide the participants with an understanding of the nature of educational research with reference to public school settings. Included are guidelines and techniques for access to the literature and resources of educational research. Various facets and techniques of problem identification in educational research will receive special attention. Seminar I is designed to implement objectives 1, 2, and the first part of 3 as noted above.

Practicum I:

Five sessions of laboratory experiences and small group activities for the application of principles, concepts, and techniques suggested in Seminar I. This Practicum will include research problem identification for local school units. As well, the Practicum will provide reasonable bases with which to assess the learnings of Seminar I.

Seminar II: Proposal Development and the Designs and Techniques of Educational Research

A series of six lecture-discussion sessions to provide the participants with current and emerging techniques of behavioral science research as they apply to educational problems. Types of experimental designs, their applications and limitations are included. As well, special methods of computer applications will be stressed. The lectures and discussions, supplemented by Practicum II (see below), should move toward the goal of having participants develop, write, and evaluate educational research proposals worthy of funding. Seminar II is designed to implement objectives 4 and the second part of 3.
Practicum II:

One field visit to a computer center such as the University of Maryland for the purpose of seeing computer applications and resources firsthand. Five additional sessions of laboratory experiences and small group activities for the application of principles, concepts, and techniques suggested in Seminar II. The Practicum provides reasonable bases with which the staff can assess the learnings of Seminar II.

Seminar III: The Statistical tools of Educational Research Evaluation

A series of three lecture-discussion sessions to provide the participants with a review of statistics with guidelines for their use and applications to educational research.

Practicum III:

Three sessions of laboratory experiences and small group activities for the application of principles, concepts, and techniques suggested in Seminar III. Activities will include some practice with statistical techniques in data analysis and formulation of appropriate inferences from such analyses. Tasks will be given which require the participants to apply learnings from Seminar and Practicum III to problems relevant to Seminars and Practicums I and II.

Summary

The overall program of the Special Training Project comprised sixteen three-hour sessions. Each session was further divided into lecture, seminar, and practicum components. The time allotment of components within each session varied according to the objectives for that session. Once the program proposal had been approved, there were no major changes in the instructional plan.
III. Evaluation of the Program

Viewed broadly, the Special Educational Research Training Project may be evaluated as having successfully achieved its objectives. If the Maryland State Department of Education were to sponsor another such project, the organization and implementation would be very similar to the one just completed. For the latter we provided texts for the participants out of State funds. We do believe, however, that since we did not request Federal funding for participants' stipends, the cost of the texts should have been supported with grant funds.

We think that the following are especially worthwhile (though certainly not the only) outcomes of the Project:

1. The Project brought the Maryland State Department of Education research staff in contact with members of local school systems who have responsibility or high interest in research problems.

2. The Project provided a chance for members of local school systems to become acquainted with State Department of Education and University of Maryland staff who can serve as a source of consultative and technical advice to them.

3. The Project provided a chance for members of local school systems who have similar interests and responsibilities in research to become acquainted with one another in a professional setting.

4. The Project provided a chance for participants to prepare written proposals for research projects of interest; each proposal was subsequently presented before the seminar for group critique.

The major weakness of the Project consisted in not having enough time to follow up the many research interests of the participants. There always seemed to be more leads to follow than time.
available to pursue them.

Other than the item noted above about grant support for textbook purchase, the administration of the program by the United States Office of Education has been entirely satisfactory to us in terms of policies, forms and instructions, procedures, cooperation, and the like.

At the end of the Project, one complete session was given over to participants for their evaluation of its phases as well as its impact on them as they perceived it. In that discussion the participants stressed the particular value of the four outcomes noted above. Furthermore, all agreed that the Project should be continued in some way. Definite provisions have been made to make a follow-up evaluation with a questionnaire to the participants six months from the last Project session.

Additional follow-up for the Project will include an activity to be known as the Maryland Research Seminar. Comprising the original group of participants, the Maryland Research Seminar will meet approximately once a month from September through June for the purpose of hearing about topics of importance to research, holding discussions, and making field visits to research projects. The Seminar will sponsor and coordinate arrangements for speakers, site visits, and so on.
IV. Program Reports

Publicity

See Appendices D, E, and F for copies of items relating to the publicizing of the program.

Application Summary

a. Approximate number of inquiries from prospective trainees (letter or conversation) 37
b. Number of completed applications received 34
c. Number of first rank applications (Applicants who are well-qualified whether or not they were offered admission) 34
d. How many applicants were offered admission 34

Trainee Summary

a. Number of trainees initially accepted in the program 34
Number of trainees enrolled at the beginning of the program 33
Number of trainees who completed the program (i.e., who received our certificate of completion) 26

b. Categorization of trainees

(1) Number of trainees who principally are elementary or secondary public school teachers 1
(2) Number of trainees who are principally local public school administrators or supervisors 23
(3) Number of trainees from State education groups 9
(4) Number of trainees from colleges or universities, junior colleges, research bureaus, etc.  None

Program Director's Attendance

a. What was the number of instructional days for the program?  16

b. What was the percent of days the director was present?  100%

Financial Summary

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<th>Expended or Committed</th>
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a. Trainee Support

(1) Stipends  none  none

(2) Dependency allowance  none  none

(3) Travel  none  none

b. Direct Costs

(1) Personnel

   (a) Professional staff  $3,200  $3,200

   (b) Other staff  200  50

(2) Supplies  45  45

(3) Equipment  none  none

(4) Travel (Professional staff) @ .08 per mile  160  150

(5) Other

   (a) Consultants  300  200

   (b) Duplicating services  100  70

   (c) Computer time  500  20

b. Indirect Costs  none  none

TOTAL  $4,505  $3,735

-11-
NEWS RELEASE: 7:2
FOR IMMEDIATE RELEASE (All Maryland newspapers, radio, and television)

Dateline: July 12, 1966

MARYLAND RECEIVES GRANT FOR EDUCATIONAL RESEARCH TRAINING PROJECT

Dr. James A. Sensenbaugh, State Superintendent of Schools, announced today that the Maryland State Department of Education has received a grant from the United States Office of Education under Title IV of the Elementary and Secondary Education Act of 1965. The grant is in the amount of $4,914.00 and is to be used to support a special training project for selected educational research workers in Maryland public education agencies.

As a cooperative program among the Maryland State Department of Education, Maryland local school systems, and the University of Maryland, the Project comprises sixteen sessions of lectures and other types of meetings. The Project, which begins in September, 1966, will stress those skills and techniques needed by research workers in the Maryland public schools. Participants are being selected who are producers or potential producers of educational research, and who are professional staff members of public education agencies in Maryland.

The overall purpose of the Project is to enhance the understanding and improve the research skills of the participants. Dr. Sensenbaugh noted that local systems face growing responsibilities for developing sound research proposals stemming from increased State and federal participation in programs which make it imperative to widen the scope of local unit research potential. He added that the State Department of Education is very pleased to initiate the Project.
To the Superintendents of Schools:

I am writing to support Dr. McKay's appeal at the recent superintendents' meeting for you to recommend a participant from your school system for the Special Training Project for Educational Research which will begin the week of September 12, 1966. This project has been funded by the U. S. Office of Education and is designed to accommodate 32 representatives of the school systems and the State Department of Education. Texts and instruction will be furnished without charge to participants. The University of Maryland has assembled a team of four professors to provide the bulk of the instructional package.

Your representative can be any professional in your system, including teachers, who:

1. has, or may have in the future, responsibility for some aspect of educational research, experimentation, or proposal writing,

2. has had a college course in statistics or tests and measurements,

3. will be released and desires to attend each of the sixteen training project sessions on Thursdays from 1:00 to 4:00 p.m.

We cannot overstate the values which can result from programs of this kind. Please give your attention to the following partial list of possible benefits:

1. the training and retraining of personnel to improve the general quality of research undertaken by local and State educational agencies

2. the stimulation of school systems to engage in research activities in order to assess their educational programs

3. the stimulation of educators to engage in research and to review research that will provide guidance in educational innovation

4. the assistance to local and State educators in handling growing responsibilities for developing and writing all sorts of project proposals

E-1
5. the improved articulation between units and individuals responsible for research and similar activities at the local and State levels, aiding local school systems to use the State Quality Improvement Project more readily and to obtain grants from other sources as needed, and improving the communication of research and experimental findings among the various Maryland school systems.

Please give this matter your careful consideration or reconsideration and let us hear from you within the next several days in order that participants may be selected and notified promptly.

Thank you for your cooperation.

Sincerely yours,
JAMES A. SENSENBAUGH
State Superintendent of Schools

S:M:b
cc: Dr. Richard K. McKay
1. The Project Director is Dr. Richard K. McKay, Director of the Division of Research and Development, Maryland State Department of Education; the Director of Instruction for the Project is Dr. James D. Raths of the Bureau of Educational Research and Field Services, the University of Maryland.

 (*For further information and inquiries, please feel free to get in touch with Dr. James B. League, Jr., Supervisor of Research (Projects and Proposals), Maryland State Department of Education, 837-9000, extension 8908.*)

2. The time schedule for the Project is as follows:

   a. Sessions will begin on Thursday, September 15, and will be held on consecutive Thursdays, from 1:00 p.m. through 4:00 p.m. with the following exceptions, when there will be no meetings:

      October 13, 1966
      November 24, 1966
      December 22, 1966
      December 29, 1966

      The final session will be held on January 26, 1967.

   b. Please note the exceptions carefully; if there should be any further changes required, you will be notified as quickly as possible.

3. The sessions will be held in Room No. 1004, the Board Room of the Maryland State Department of Education, State Office Building, 301 West Preston Street, Baltimore, Maryland, with the following exceptions:

   a. The first meeting, on September 15, will begin with a luncheon held at the Johns Hopkins University Faculty Club, the Homewood Campus. The luncheon will begin at 12:30 p.m. sharp, and the session will be held in the Club Library following the luncheon. For your convenience, we have attached a plan of the Homewood Campus.
b. One or two meetings are tentatively planned for the Computer Center at the University of Maryland College Park Campus. You will be notified in advance of these sessions.

4. Participants will be responsible for the following requirements of the Project:

a. Regular attendance with no substitution of alternates once the Project has begun.

b. Punctual attendance.

c. Completion of readings and other work as assigned.

d. Active participation in the sessions and practicums.

e. Participation in follow-up activities--such as questionnaires or meetings--which are integral parts of the Project.

5. The following textbooks are basic to the Project and will be provided for the participants:

A.P.A., Standards for Educational and Psychological Tests and Manuals.

Gage, A Handbook of Research on Teaching.

Kerlinger, Foundations of Behavioral Research.

Krathwohl, How to Prepare a Research Proposal.

Schoer, An Introduction to Statistics and Measurements.

Travers, Introduction to Educational Research.

6. The following textbooks are supplementary and will be available on a reserve basis at the Professional Library of the Maryland State Department of Education:

Anderson, Basic Computer Programming.

Ferguson, Statistical Analysis in Psychology and Education.

McCullough and Van Atta, Statistical Concepts.

Siegel, Nonparametric Statistics.