THE OFFICE OF EDUCATION COOPERATIVE RESEARCH PROGRAM
AND THE STATISTICIAN

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The U.S. Office of Education through its Cooperative Research Program provides financial support for investigators in colleges, universities, and State departments of education to conduct research of significance to education. The Program is general in nature in that it is not mission-oriented to any one particular aspect of education such as special education or technical education. It is concerned with all levels of education from preschool through graduate school and including adult education. Support is given to basic and applied research projects having potential significance for education. They can deal with the psychological foundations, the sociological foundations, instructional and curricular foundations, and the administration and organization of education.

Authorization for the Program is in Public Law 531 passed by the 83d Congress in 1954. The first appropriation of one million dollars was granted in fiscal year 1957. The size of the annual appropriations has steadily increased, with the amount for fiscal year 1965 being $15,840,000. With the current emphasis being placed on the role of education in our society, there is every reason to believe that the amounts appropriated for educational research will continue to increase in the coming years.

The U.S. Commissioner of Education employs the use of nongovernmental experts as consultants to assist in the evaluation of proposals submitted to the Program. The primary evaluations of the proposed projects in regard to their scientific merit are made by such consultants. The evaluative criteria fall basically into four categories. They are: (1) significance to education, (2) soundness of the research design, (3) adequacy of the personnel and facilities, and (4) economic efficiency.

Some of the basic and applied research projects, both experimental and descriptive, supported by the Program involve the development of statistical procedures as appropriate ones do not exist or involve the application of existing techniques that have not previously been applied in an educational context. Furthermore, projects whose primary objectives are the development of statistical methodologies can also be funded by the Program. The plans for such projects must be presented in an educational research frame of reference. Such projects are judged of potential significance to education on the basis that they will ultimately have the effect of improving educational research methods. Illustrations of projects supported by the Program are as follows:

1. Tate and Brown (13) at the University of Pennsylvania constructed tables for comparing percentages from small, related samples.

2. Norris and Hjelm (8) at George Peabody College for Teachers conducted an empirical investigation of the effects of non-normality upon sampling distributions of Pearson's r.

3. Solomon (9) at Stanford University received support for attempts to develop new statistical techniques for analysis of items in a test and of tests within a battery.

4. Stake (10) at the University of Nebraska performed a project aimed at generating sampling distributions necessary for discriminating between error and non-error multidimensional scaling factors.

5. Baker (1) at the University of Wisconsin received support for a project to empirically determine sampling distributions of item discrimination indices and the Hoyt Reliability Coefficient.

6. Harshbarger (6) at Virginia Polytechnic Institute received support for a study of statistical models applied to educational criteria.

7. Harris (5) at the University of Wisconsin has received support for a study involving the application of new methods of factor analysis to existing data on intellectual abilities and measures of motor skills and physical fitness.

8. Stanley (12) at the University of Wisconsin conducted a project concerned with the development and analysis of experimental designs for ratings.

A type of project which can be of inestimable value to educational research is one that consists of a critical review of the statistical methodologies which have been employed in research projects in a given educational area. Stanley and Beeman (11) conducted a Cooperative Research project in which they examined the statistical designs that were employed in research projects concerned with the education of the mentally retarded. They found certain serious weaknesses in the designs being used, and these findings together with their recommendations have had a beneficial effect on research in this area. Similar studies could be done in other areas.

The Program has also supported research and development projects dealing with data processing as applied to the field of education. Although such projects typically are situated in local institutional and regional settings and are of direct benefit to the institutions and regions, they must have enough uniqueness, in the sense

of adding to our general knowledge in the area of educa-
tional data processing, and generalizability that the use
of Federal research funds in supporting them can be justi-
fied. Some examples of projects supported by the Program
are as follows:

1. Lindquist (7) at the State University of Iowa has
   received support for developing instruments and
   procedures for collecting and disseminating educa-
   tional data on students, certified personnel, and
   school districts.

2. Grossman (4) of the California State Department of
   Education is receiving support for developing a
   model educational information system for pupil
   personnel and curricular services.

3. Carroll and Ellis (2) at Harvard University are
   investigating the development and use of educational
   data banks for research purposes.

4. Goodlad and Caffrey (3) at the University of
   California at Los Angeles received support for a
   status study of educational data processing.

Proposed research projects such as have been
illustrated in this paper are appropriate for consideration
in two programs of the Cooperative Research Program.
They are the Basic and Applied Research Program and the
Small Contract Program. The Basic and Applied Research
Program has no dollar or time restrictions. Individual
projects in this Program have been funded for less than
one thousand dollars and for more than one million
dollars. A typical project runs for two years receiving
a Federal financial contribution of about $25,000 per
year. Deadlines for the submission of proposals to the
Basic and Applied Research Program are September 1,
December 1, and March 1.

The Small Contract Program entertains proposed
projects requesting $7,500 or less in direct costs. There
are no deadlines for the submission of proposals to the
Small Contract Program.

Instructions for the preparation and submission of
proposals to the Basic and Applied Research Program and
the Small Contract Program of the Cooperative Research
Program may be obtained from the Director, Basic
Research Branch, U.S. Office of Education, Washington,
D.C. 20202. Inquiries concerning the appropriateness
of contemplated projects in areas such as those presented
in this paper may also be directed to the Director of the
Basic Research Branch.

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