DOCUMENT RESUME

ED 079 187 SO 005 901

AUTHOR Persell, Caroline Hodges
TITLE Training for Research in the Sociology of Education.
PUB DATE Feb 73
NOTE 18p.; Presented at the Annual Meeting of the American Educational Research Association, New Orleans, Louisiana, February 28, 1973

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS Course Descriptions; *Educational Objectives; Educational Programs; Educational Researchers; *Educational Sociology; *Experimental Programs; Higher Education; Professional Training; Project Training Methods; *Research Skills; Skill Development; Speeches; *Training; Training Objectives; Training Techniques
IDENTIFIERS *American Educational Research Association

ABSTRACT

An experimental sociological research training program at Columbia University is described and analyzed. Two broad objectives of the Columbia Program are defined: (1) to bring sociological perspectives to bear on educational theory and problems, with emphasis on discovering and codifying the methodological approaches most suitable for investigating educational systems from a sociological viewpoint; and (2) to prepare researchers who are qualified to undertake major administrative responsibilities as directors of large-scale research projects, research programs and research institutes that focus on education. Focus of the paper is on description of the program which was designed to attain these objectives and on determination of the effectiveness of the program. The following aspects are examined: (1) recruitment and selection of trainees, (2) structure of the program, (3) content of the program, (4) personnel, and (5) evaluatio and implications. (Author/SHM)

BIBLIOGRAPHY

Orville G. Brim, Jr., Sociology and the Field of Education. New York: Russell Sage Foundation, 1958.

Neal Gross, "The Sociology of Education," in Sociology Today, Robert K. Merton, et al. (Eds.). New York: Basic Books, 1959.

Caroline Hodges Persell, "The Quality of Research on Education: An Empirical Study of Researcher and their Work." Unpublished doctoral dissertation, Columbia University, New York, 1971.

Sam D. Sieber, "Training for Research in the Sociology of Education, Progress Report #1." New York: Bureau of Applied Social Research, 1966a. Mimeo.

_____, "Training for Research in the Sociology of Education, Progress Report #2." New York: Bureau of Applied Social Research, 1966b. Mimeo.

_____, "Annual Progress Report of the USOE-Supported Research Training Program." New York: Bureau of Applied Social Research, 1971. Mimeo.

Harriet A. Zuckerman, "Nobel Laureates in the United States: A Sociological Study of Scientific Collaboration." Unpublished doctoral dissertation, Columbia University, New York, 1965.

TRAINING FOR RESEARCH IN THE SOCIOLOGY OF EDUCATION

Caroline Hodges Persell
New York University

February 1973

INTRODUCTION

In the last decade a number of multidisciplinary programs for training educational researchers have been developed. In this paper I will describe and analyze one such experimental program, namely the USOE-supported research training program in the Bureau of Applied Social Research (BASR) and the Department of Sociology of Columbia University. The Columbia program began in September 1966 with nine trainees. Three trainees are currently receiving terminal year support. Sam Sieber of Columbia University and the BASR has directed the program since its inception.

I was in the Columbia program from 1966-1971 (supported as a trainee for two years and independently supported for three years). Hence my description and analysis draws heavily upon my own participation, observation and notes. In addition, I have studied the Training Director's progress reports, the seminar notes and reports, and had numerous individual conversations with the Director and with other trainees during the past eight years.

As stated by the Training Director (Sieber, 1971, p.1), the program has two broad objectives:

> (1) to bring sociological perspectives to bear on educational theory and problems, with emphasis on discovering and codifying the methodological approaches most suitable for investigating educational systems from a sociological viewpoint; and

(2) to prepare researchers who are qualified to undertake major administrative responsibilities as directors of large-scale research projects, research programs and research institutes that focus on education.

What type of program was designed to attain these objectives, and how effective is that program? This paper will focus on these two questions, even through we do not have the type of comparative evidence that would demonstrate the relative effectiveness or ineffectiveness of this program. We will examine the following aspects of the Columbia Program: (1) recruitment and selection, (2) structure of the program, (3) content of the program, (4) personnel, and (5) evaluation and implications.

RECRUITMENT AND SELECTION

Trainees were recruited from the pool of entering and already enrolled graduate students in the Department of Sociology at Columbia. The Training Director participated in the selection of entering students for financial aid, and thereby identified potential candidates for the Training Program. The criteria for selection of trainees were the following: Graduate Record Exam scores; academic grades; letters of reference; course papers; an interest in education as a sociological specialty; a demonstrated or strongly expressed interest in empirical research; and an intention to fulfill requirements for the Ph.D. degree. Several of these criteria were determined from application materials, while interests and intentions were ascertained by the Training Director's personal interview with candidates. Through discussion with other members of the faculty who participate in the allocation of financial aid, a list of candidates

for the program was drawn up. These students were then contacted by the Training Director for a screening interview. The Training Director made his decision on the basis of interviews and written application materials. (Sieber, 1971, p.2).

In addition to formal criteria, two other factors affected the recruitment of trainees. One factor was the prestige of the Program within the Department and the other was the scarcity of fellowships for graduate students.

Since there were more graduate students than available fellowships or assistantships in the sociology department, the Training Program was able to be selective in its appointments. Thus the students in the program were above average academically. The size of the stipends and the high caliber of the students in the Program helped to offset the generally low prestige of sociology of education in the Columbia Department of Sociology. (Prior to the Training Program, sociology of education was not offered in the Department).

Just as the relative prestige of a program in a department affects recruitment, the scarcity of fellowship funds impinges on selecting trainees for a program. As other fellowships for Columbia graduate students began drying up, the department would sometimes urge the Training Director to support a particularly promising student, regardless of the student's interest in doing research on education. To the extent that this influence brought some of the best students into the Program, it benefited the other trainees and further enhanced the Program's prestige. It also created an oppor-

tunity for converting uninterested students into sociologists of education. Where these two positive outcomes did not occur, these contextual pressures served to push the Program away from its objectives. At Columbia there were so few cases and so little data that it is impossible to draw conclusions about this particular problem. I suspect that this issue would arise in any situation where fellowship resources were scarce, however.

In short, the case of Columbia shows the importance of stated formal criteria in selecting trainees, but also suggests that certain contextual characteristics such as the relative prestige of a program at a particular school and the scarcity of other fellowships may affect the recruitment process.

STRUCTURE OF THE PROGRAM-

The Columbia Program is characterized by integration and cooperation, both within the seminar and in relation to its context. One of the integrative aspects of the Program is a weekly training seminar, where beginning and advanced students regularly meet together.

The value of having a structure that is not age-graded is illustrated in the way the seminar members help prepare each other for comprehensive oral exams. These orals have traditionally been a major hurdle in the path to a Columbia Ph.D. in sociology. Many students not integrated into a training program postpone taking orals for two, three or even four years after they have completed the first two years of course work. In the Training Program seminar one or two sessions a year are devoted to giving practice orals to students

about to face their examiners and to having successful candidates report back after the experience. They describe what it was like, what type of studying was most helpful, what types of questions were asked. This opportunity provides institutionalized rather than haphazard anticipatory socialization. It also serves to make successes more visible than failures. At Columbia generally the horror stories were more evident than the success stories. By having a seminar of beginning and advanced students together, younger students see models close to themselves who are passing orals, doing dissertation research, successfully defending their dissertations, thus giving them a much clearer and more positive sense of what the career of a graduate students is than they would otherwise have.

A necessary condition for the success of such a seminar seems to be having a cooperative rather than a competitive ambiance in the seminar. Two features of the Columbia Program served to minimize competition and a third enhanced cooperation. First, unlike other courses at Columbia, students received a pass/fail grade rather than a letter grade in the training seminar. Thus no one gained by having someone else do poorly. Second, everyone in the program who worked conscientiously was assured of continued fellowship support through their fourth year. Because the rewards of grades and money were equal for all and the pie was large enough for everyone to get their piece, trainees could afford to cooperate rather than compete with each other. The cohesiveness and cooperation of the seminar group was enhanced by the common tasks that they had to overcome, particularly since those obstacles were imposed by a structure outside the

seminar. The tasks included the department's language, mathematics, comprehensive examination and dissertation requirements. The excellence of any particular student benefited the group, both through the expertise that students shared with the group, as well as through the enhanced prestige of the group by virtue of a member's performance (since most faculty members and at least some other students knew who was in the Program).

Another important aspect of the Program is the informality and accessibility of the Training Director. Unlike other Columbia faculty members who are in their offices two hours a week, with their doors closed, the Training Director is in his office with an open door eight or more hours a day, usually seven days a week. He is willing to drop what he is doing and talk at length with students about their research or their careers. After the first weeks of seminar even beginning students call the Director by his first name. Discussions begun in seminar or in the office often continue later in the local West End bar, where other faculty or BASR researchers join the Director and students in their lively discussions. This type of informal socialization contributes a great deal to the development of sociological sensibilities in budding researchers. (For a discussion of some of the processes of this informal socialization in the development of natural scientists see H. Zuckerman, 1965).

In addition to its favorable interpersonal features, the Training Program is positively affected by its location in the Bureau of Applied Social Research (BASR) at Columbia University, where the Training Director is a staff member. The Bureau has a program in education research, headed by the Training Director, which includes

a number of large-scale studies of education. In addition to the clerical, data-processing and library facilities of the Bureau, therefore, the trainees have daily access to professional staff who are doing research on education. Moreover, when openings occur for research assistants, the trainees are given priority and strongly urged to participate. A major responsibility of the Training Director is either to recruit trainees on staff projects or to help them develop proposals for funds for their own research at the Bureau. In either case, the Training D. rector continually monitors their work.

Besides benefitting from the BASR's staff and facilities, trainees are in contact with a variety of outside educational agencies, as a result of their current research activities. While none are "located" in these agencies for an extended period of time, several are regularly in contact with researchers in other agencies (e.g., R&D Centers, State Departments of Education) and with local school personnel; another has extensive relationships with the USOE-Edcuational Opportunity Grant division and with colleges; and two others have worked extensively in Indian high schools, sought advice from educational researchers at Teachers College (Columbia), University of Alaska, Berkeley, and elsewhere, and obtained data from the Bureau of Indian Affairs. Other trainees have done research in cooperation with the Center for Urban Education; Teachers College, Columbia; the Washington, D.C. school system; the American Edcuational Research Association; the Research Training Branch, USOE: and the Bureau of Social Science Research, Washington, D. C.

In brief, in both its interpersonal structure and its relationship to relevant organizations, the Training Program is designed to maximize learning and to provide opportunities for trainees to practice the roles they are preparing to play in their future careers.

CONTENT OF THE PROGRAM

We can organize the substance of this Program into five major components. These are: (1) Knowledge of sociological research on education; (2) Study of the processes and procedures of actual researchers; (3) Methodological experiments designed to suggest what is gained or lost by various methodological approaches; (4) Development of important research skills; and most importantly (5) Research apprenticeships culminating in the student's own independent research. We will briefly consider each of these components.

When the Training Program began, the Director felt that students needed some perspective on research in the sociology of edcuation. In order to teach students to recognize areas of needed research by themselves, for example, the Director suggested that they investigate the research literature, rather than passively reading summaries of the state of the field. They began by ascertaining what ideas for future research had been noted by Brim (1958) and Gross (1959), and then examined the Sociological Abstracts to see if those problems had been treated in subsequent research. The trainees doubted that the Abstracts would provide accurate information about the articles. This exercise furnished an opportunity to note the importance of taking short-cuts in research that promised to be much less expensive in time and effort; and the seminar compared the estimated cost of

going to the original articles with the estimated cost of using the Abstracts. It was clear that the latter procedure was vastly superior in terms of cost-analysis; but the question of external validity still perturbed the trainees.

An exercise was therefore arranged for a future session: half the trainees would read articles and half would read the corresponding abstracts; they would write down their impressions for the research from their individual source (article vs. abstract); and they would compare their impressions. In the words of the Training Director, "This turned out to be a useful exercise for several reasons: it made us recognize the limitations of the Abstracts (which are frequently used for similar purposes of content analysis), it led to a discussion of the value of comparing cheaper and costlier measures before deciding which to adopt, it helped us to design the content analysis and, in the case of one of the articles, it led to a lengthy discussion of an important research finding." (Sieber, 1966a, p.3).

Second, the Training Program seeks to study in depth the processes and procedures of actual researchers. Trainees interview directors of completed and continuing research projects with respect to decisions they made in the course of their research, with an effort to determine the rules or basis they used in making their decisions. Thus another pedological approach in the seminar involves the dissection of living research studies.

Third, the Training seminar conducts methodological experiments to gain new understanding of the values and limitations of various methods. One such experiment was an exercise in the comparison and integration of field work and survey research. One of the researchers

at the BASR was directing an evaluation study of the Urban Corps in New York City. In that program college "internes" were placed for summer jobs in various city agencies. The evaluators had two kinds of field notes on the various agencies and had questionnaire data from the student internes. The trainees were instructed to study thoroughly the field notes on two different city agencies, and then to select items from the questionnaire which they felt were susceptible to prediction on the basis of the field notes. Specifically, they were to select those items th.. would (1) differentiate agencies according to the success of their interne programs, and (2) to predict the modal response of the Urban Corps internes in the two agencies, on each of the selected items. The evaluator then presented the actual distribution of survey responses. Comparing predicted with actual r`sponses disclosed that the inability to predict was due to (1) lack of information in the field notes, (2) irrelevancy of certain items to predicting the success of the agency's internship program, or (3) failure to draw out the implications of the field notes. The field notes tended to provide global statements about agencies, and did not give the distribution of responses found in the survey results. By showing the areas of knowledge in which field work and survey work did and did not overlap, as measured by the incidence and the accuracy of predictions, the exercise demonstrated the distinctive contributions of each technique and suggested ways the two sources of information might be integrated.

Further, since there were two sets of field notes on each of the two agencies, one written by a staff member of the Urban Corps (the client) and the other by a graduate sociology student, the

trainees were asked to note any differences between the client's self-study and the sociologist's field work, and to recall which effort was most helpful in their predictions. The purpose of this was to bring out any distinctive features of a sociological field study as contrasted with administrative "self-surveys", which are quite common in educational settings. The client's self-study contained a good deal of social bookkeeping, many value judgments, and rather sweeping recommendations, while the sociologist's notes contained many indicators of the quality of social interaction, but virtually no social bookkeeping or recommendations. In trying to gain an overall picture of the agencies, however, it turned out that both sets of field notes were necessary, which led to considerations of combining different field approaches. (See Sieber 1966a & b).

In addition to surveying the field of sociology of education, dissecting live research studies, and doing methodological experiments, the Training Program seeks to develop an array of other useful research skills including proposal writing, research administration, questionnaire construction, field study, coding, computer technology, analysis of quantitative and qualitative data, and writing and editing research reports. These skills are taught by doing the actual operations, either in seminar sessions or in the research component of the Program.

A singularly important feature of the Program is the way trainees actually conduct research studies during three or more years. They do this first as an apprentice on existing research projects, then for their dissertation they plan and conduct their own research studies. To illustrate, current trainees (including the independently

supported ones) have the following research responsibilities: (1) participant observation research on a new teacher organization set up to promote professionalism and preparation of a proposal to study socialization of beginning teachers; (2) research assistant on BASR project for evaluation of USOE Pilot State Dissemination Program; (3) co-project director, national evaluation of paraprofessionals in Follow-Through program (USOE); (4) research assistant on evaluation of Educational Opportunity Grant Program and Work Study Program (both USOE), (attends conferences with USOE personnel, interviews financial aid officers, works on sample design, data analysis, etc.); (5) analysing survey data on determinants of teacher satisfaction in suburban schools. Eight former trainees are now doing doctoral dissertations on such topics as: high school protest, its causes and management; teachers' definitions of success and failure of pupils; militance and education among coal miners in Appalacia; and adoption of innovations in urban high schools. Five Master's theses have been written on topics such as "American Indian Leadership and Secondary Education", "Relationships between Society and Education in Western Europe: 1945-1968", and "Measuring Educational Research Quality". Five doctoral dissertations have been completed. They are: "The Effects of Federal Aid to Higher Education on Social Inequality" (Published by Jossey-Bass as The Illusion of Equality, by Murray Milner); "A Study of Black Teachers in a Ghetto School System", (to be published by Praeger); "The Quality of Research on Education: An Empirical Study of Researchers and Their Work"; "Social Work: The Case of a Semi-Profession" (an article based on it has been published in The Semi-Professions and Their Organization, edited by Amitai Etzioni); and "Bureaucratization and Social Control". (Sieber, 1971).

In short, the substantive aspects of the Program serve to acquaint students with the field of education, develop their research sensibilities and skills, and culminate in their completing one or more major research studies.

PERSONNEL

In any description and evaluation of a social program it is essential to distinguish the structure and content of the program from the staff that is administering it. We have already noted the positions held by the Training Director, as well as his informality and accessibility. It is important to add that the Director of this Program has another very important characteristic. He is himself a working researcher. Thus he is constantly involved in designing, operationalizing, conducting, analysing and writing up research studies. It is rare to find one person who is willing to spend so much time with students and who also works very hard on his own research. Such an example may teach far more than any didactic seminar.

EVALUATION AND IMPLICATIONS

Perhaps the fairest way to evaluate this or any other social program is to compare the stated goals of the Program with the reported and observed outcomes. We can evaluate the outcomes of this program from at least four perspectives -- that of the Director, trainees, sponsors, and our own, as researchers.

In view of the trainees' extensive involvement in research throughout the Program, the Training Director is "highly pleased with the practicum". (Sieber, 1971, p. 12). Within the Program itself he feels that he has accomplished what he set out to do.

The trainees' reports support this positive evaluation by the Training Director. One writes that being part of a BASR evaluation of a pilot project for the dissemination of research information to local schools "is giving me the opportunity to be part of a large-scale research project from its inception, and thus gain experience in dealing with methodological, administrative and analytical problems connected with educational research". (Sieber, 1971, p.13). Another reflects that his experiences as a research assistant on two very different projects "have been invaluable in introducing me to social research techniques and ideas through actual participation in major studies". (Sieber, 1971, p.14). A third trainee concurs, "During my second year as a trainee... I began working on a study of the relationship of the educational experiences of Indian students to the development of indigenous leadership in two American Indian tribes. This project has provided me with the opportunity to become familiar with every stage of survey research. Under the guidance of the Program Director I have learned how to write questionnaires, conduct interviews, and code and analyze data". (Sieber, 1971, p.14).

A third perspective for evaluation is that of the sponsors of the Program. Judging from progress reports, written work produced by trainees and site visitations, USOE continued to support the Program from 1966 until 1972-1973. I have very little data on this perspective, however.

We have seen that the Training Director, trainees, and sponsor favorably evaluated the Program being examined here, but surely that is not surprising. What evidence would we need to convince a hard-nosed skeptic that the Program has accomplished its objectives? From

a single case study such as this we cannot get the necessary evidence to show that this Program is better than most in attaining its purpose. We can, however, use this case to formulate a research design that might be used to evaluate research training programs in general. In order to show that one type of training program is relatively more effective than another type, we need to have evidence on three classes of variables, namely, the recruits entering a program; the structure, substance and personnel of a training program; and outcomes of the program. As noted earlier, recruits differ with respect to their interest in educational research, their intellectual abilities, and their other personality traits. A given program varies according to its structure, cognitive and affectual content, and its context. All of those variables would need to be specified and measured in an evaluation of training programs. Personnel can differ according to positions held, behavior, and dedication. Outcomes may be reflected in the sentiments of the Training Director and the trainees and by the behavior of graduates, i.e., what they end up doing. The problem of evaluation, of course, is showing that it was the Training Program rather than the interests and abilities of the recruits or something else that determined the outcomes. Furthermore, the success of a program may depend upon factors beyond its scope, such as the opportunity structure faced by graduates. The effectiveness of one type of program vis a vis another one can be ascertained by the relative success of graduates, because we might be willing to assume the opportunity structure as a constant for all graduates of the same year.

Does this case study offer any insights that might be generalizable to other training programs? Analytically it seems probable

that the reputation of the department running the program helps in providing a pool from which to draw trainees, although a less prestigious department could recruit directly from undergraduate schools for a special program. Within a department, the relative prestige of the program is important for attracting and keeping good graduate students. As already noted, the prestige of a program is probably a function of the relative scarcity of fellowship support and of the reputation of the Program's director, students, and substance. The scarcity of stipends may raise the academic level of recruits but bring in some who are only marginally interested in education, depending on the vulnerability of the program to departmental pressure.

Given a pool of potential trainees, we need to know more about the predictive validity of various criteria for selecting candidates. It may be that such intangibles as energy, commitment, originality, or an integrated personality are more important for later success as an educational researcher than 50 or 100 additional points on the Graduate Record Exam. We have no systematic studies of what personal characteristics are the best indicators of future contribution to behavioral science research.

Besides stressing recruitment, we have noted the importance of the structure of this Training Program. That observation is consistent with other research on the training of researchers. Studies of the socialization of eminent scientists, for example, have shown that most had a close personal apprenticeship with a master researcher, and in that way they developed their research sensibilities. Structuring a training experience so this could occur is possible in many programs. Finding the people who are able and willing to serve as

exemplary models is more problematic.

The substance of a training program may be its most easily measured aspect. We can determine how much beginning trainees know about the field of education and about actually doing research studies, and compare that with what they know upon completion of the program. But knowledge alone cannot be considered a sufficient indicator of the success of such a training program, because without the desire and the opportunity to do research, the most knowledgable graduate adds nothing to our understanding of the process of education.

In a nutshell, the evaluation of any research training program hinges on the answers to two questions: What, and how well, do trained researchers add to our knowledge of education? How much of what they contribute is due to their having been in a particular research training program, and how much is due to other factors such as their own abilities, interests, personality, other training, and career experiences and opportunities? To answer the first question, we could devise a measure of educational research quality (such as the rating scales I developed at the BASR (1971), and use it to evaluate the research produced by former trainees. To answer the second question, we could develop a causal model of factors related to outstanding research, and use path analysis or multiple regression analysis to ascertain the relative importance of the various factors in explaining research contributions. (I am currently working on some models of this type, although they are not specifically for trainees).