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A POST-DOCTORAL TRAINING PROGRAM ININSTRUCTIONAL RESEARCH (SEPTEMBER 1, 1966-AUGUST 31, 1967). FINAL REPORT.

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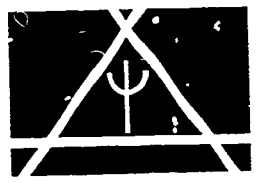
A 1-year postdoctoral training program in instructional research was conceived and implemented by the staff of Teaching Research, a Division of the Oregon State System of Higher Education. Five educational administrators were selected as resident fellows in the program designed to increase the number of educational researchers who can address themselves to relevant questions and pursue them empirically. The instructional components of the program were (1) involvement in an ongoing research program which related to the personal interests of the resident, (2) a technical seminar which dealt with the philoso"hy of science, the theory and operations involved in measurement, design, analysis, etc., (3) a professional seminar which dealt with the leading research and theoretical developments in education across the nation, and (4) preparation of a research proposal which could be submitted for funding. Evaluations by staff and residents indicated that the major strengths of the program lay in the opportunities for individualized training and in the productive colleague relationship which existed between staff and residents. Residents will continue to be engaged in research activities at their parent institutions; 4 of the 5 research proposals prepared were accepted for funding. Appended are publicity materials, outline of program content, entrance test, summaries of residents' backgrounds, and their individual program appraisals. (JS)



A Post Doctoral
Training Program
in Instructional Research

H. Del Schalock
Training Program Director

TEACHING RESEARCH
A Division of the Oregon State System
of Higher Education

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Monmouth, Oregon

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U.S. DEPARTMENT OF
HEALTH EDUCATION AND WELFARE

Office of Education
Division of Research Training
and Dissemination

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INTRODUCTION

This document describes a USOE sponsored post-doctoral training program in instructional research that extended through the period September 1, 1966 - August 31, 1967. The program was conceived and implemented by the staff of Teaching Research, a Division of the Oregon State System of Higher Education, Monmouth, Oregon, and served five (5) post-doctoral fellows. The aim of the program was to increase within the profession of education the number of researchers who can address themselves to questions of maximum relevancy to the profession and pursue them empirically. The assumptions on which the program was built were:

(1) The number of qualified educational researchers is unequal to the demands of the educational research task, and expansion of the science of education awaits the recruitment and training of additional research personnel;

(2) Holders of advanced degrees in education should represent one of the major sources of research personnel in education, but their background of training is often such that they are ineffective at this level. Advanced degrees in education are often professional degrees rather than research degrees, and the orientation and training of those which hold them is more often instrumental than scientific;

(3) While the above is true, there is still a relatively large number of persons involved in professional education that have had research training and want to become involved in research, but for one reason or another have not had the opportunity to do so within their present circumstance. While these people may require up-dating in research design and methodology, and may need opportunity to clarify research interest and commitments, it is likely that if given the opportunity to break their present circumstance and obtain the needed updating they would move to become active researchers;

(4) An increasing number of persons in disciplines related to education, for example psychology and sociology, are entering the field of educational research. While this is seen as a constructive development, steps should be taken to sensitize them to the structure and problems of education, for their research often emerges from the theoretical structures of their parent-discipline and their findings often are more relevant to these disciplines than they are to educational practice;

(5) A post-doctoral research training program in instruction would be significantly strengthened if cross-fertilization could take place between education-based and discipline-based researchers oriented to the instructional process. It was anticipated that in such an arrangement persons from education would sensitize discipline-based researchers to some of the realities, intricacies and problems central to organized education, and that researchers from the basic disciplines would sensitize education-based researchers to strengths which disciplinary research can bring to the field of education.

The objectives of the program were:

(1) To develop in each research fellow a generalized "research posture";

(2) To help each fellow clarify his own research interests; and

(3) To provide each fellow with the competencies needed to pursue the research program dictated by his interests.

CANDIDATE IDENTIFICATION AND SELECTION

The procedures established for the identification and selection of candidates were of a nature which permitted the task to be accomplished within a relatively short period of time. Notification of the approval of the Post Doctoral Program was received April 13, 1966, and it was felt that the selection process should be completed by June 10 at the latest. Since some time was required for procedures to be established, there was approximately one month in which to develop announcements, circulate them, obtain application materials, screen applicants and make final decisions as to candidates. In order to accomplish this task within the defined time period, the usual procedure involving circulation of announcements, etc., was modified.

Two modifications were introduced: (1) all persons known personally to members of the Teaching Research staff to be interested in a post doctoral research training experience were contacted by telephone, and (2) all Deans of Instruction in the public and private colleges with an enrollment of 750 or more within the Northwest region of the United States, that is, within Oregon, Washington, Idaho, Montana, and Alaska, were contacted relative to the program by telephone. If inter-

est was expressed in the program by anyone from either of these two groupings a letter and a mimeographed statement describing the program more fully were mailed to them. In the case of the Deans of Instruction a sufficient number of statements describing the program were forwarded so that one could be circulated to all department chairmen and/or other interested staff.

Twelve personal acquaintances and 38 Deans of Instruction were contacted in this manner. A copy of the letter sent to the deans following the telephone conversations and a copy of the statement describing the program appear as Attachments 1 and 2.

The program also was made known through announcements by the U.S. Office of Education. Between April 13 and June 1, three inquiries about the program were made by persons who had heard of it through these means.

By June 1, the deadline for the receipt of applications, completed applications had been received from 11 persons. Of these, five were persons contacted as a result of personal acquaintance, five as a result of contacting Deans of Instruction, and one as a result of hearing of the program through U.S. Office of Education releases.

Five major criteria were applied to the selection of candidates:

(1) a research background adequate to permit their functioning in the program (defined operationally as equivalent to one year of research design, methodology, statistics, etc.),

(2) research interests which fit with ongoing programs within Teaching Research,

(3) evidence of professional productivity, either research or other,

(4) a personal commitment to research as a major professional activity, and

(5) an institutional circumstance which would invite or permit research activity upon the resident's return.

Five additional factors also were considered:

(1) balance of the candidates by disciplinary background,

(2) balance by depth of background in design, methodology, statistics, etc.,

(3) balance by geographic area (the project was written from the point of view of the program serving primarily the Western or Northwestern region of the United States),

(4) balance in terms of personality factors, and

(5) the likelihood that involvement in the program would make a difference to the candidate and that the candidate would make a difference in his institution.

Admittedly, the last two factors were difficult to assess, and for this reason did not play a dominant role in the selection process; they were felt to be relevant issues, however, and as a consequence were considered as far as available data would permit.

The selection process was broken down into decision steps which paralleled the criteria used in selection. In screening applicants upon their research background a simple yes-no decision was made. Of the eleven applicants two failed to meet the demands of this criterion and one was to receive his Ed.D. during the summer. Since this person's research training was so recent it was felt that he did not qualify for the program. Of the remaining eight candidates only seven survived screening on the second criterion. One candidate, a clinical psychologist from Oregon State University, wished to focus his research efforts on the concept of self and its relationship to the therapeutic process. While some work in self theory had been done at Teaching Research, the particular interests of this person seemed to move in a direction unrelated to those of staff members currently at the center. Since this particular applicant held a sabbatical leave for the coming year his exclusion from the program did not represent a hardship to him.

Selection according to the third criterion proved difficult in two ways: (1) defining that which was to be taken as evidence of professional productivity other than research or professional writing of a non-research kind, and (2) determining when research productivity constituted too much productivity, i.e., when the applicant did not seem to need what the program had to offer. Since the program was aimed at persons who were not active researchers, but only those who had the potential for research, it was felt that the inclusion of persons who were already involved in the research process would be a violation of the intent of the program.

With respect to the first issue, it was decided finally that any evidence of professional involvement above and beyond that minimally required in the pursuit of the position held would be taken as evidence of productivity. This included such activities as professionally tied community or state or national service, non-empirically based writing, supervision of graduate students, post-doctoral study, etc. With

respect to the second issue it was decided arbitrarily that persons who had published or presented to professional meetings more than five research articles in the past ten years, who were devoting at least a quarter of their time to active research at the moment, or who had held a major research grant from federal or other sources would be considered as being sufficiently involved in the research process to be ineligible for inclusion in the program.

Two persons were eliminated from the available pool of candidates on this last count, leaving only five candidates. Fortunately, all of the remaining five met the fourth and fifth criteria, and they did balance reasonably well with respect to discipline background, depth of background in research design and methodology, and geographic area represented. Also, so far as it was possible to determine, there was no need to eliminate any of the five remaining candidates on the basis of personality factors or the likelihood that the program would not make a difference in their lives.

The fact that there were only five firm candidates for the program eliminated the necessity, as specified in the proposal, of a personal interview before selection.

The five persons invited to participate in the program, and who accepted the invitation, were:

Dr. Wesley Caspers, an educational psychologist and dean of the department of education, Western Montana College, Dillon, Montana;

Dr. Armand Galfo, an educational administrator and assistant dean of the school of education, College of William and Mary, Williamsburg, Virginia;

Dr. Jesse Garrison, a curriculum specialist and professor of education and psychology, Oregon College of Education, Monmouth, Oregon;

Dr. Henry Reitan, an experimental psychologist and associate professor of education, Washington State University, Pullman, Washington; and

Dr. Stanton Towner, a sociologist and chairman of the department of sociology, Linfield College, McMinnville, Oregon.

A summary statement describing the background of training, interests, and the like is provided for each of these men in Attachment 3.

DESCRIPTION OF THE PROGRAM

The training program consisted of four major instructional components and two major support components. The instructional components included:

(1) involvement in an ongoing research program which related to the personal interests of the post-doctoral fellow;

(2) involvement in a "technical" seminar which dealt with the philosophy of science, the theory and operations involved in measurement, design, analysis, etc.;

(3) involvement in a "professional" seminar which dealt with the leading research and theoretical developments in education across the nation; and

(4) preparation of a research proposal which could be submitted for funding.

The support components included:

(1) a carefully planned three week period of orientation to the program, to Teaching Research as an institution within which to work and to colleagues, staff members and their respective families; and

(2) a "resident" seminar in which the post-doctoral fellows met by themselves to pursue their respective research and training objectives.

Program Setting

Teaching Research, a division of the Oregon State System of Higher Education, has at its disposal the diverse facilities of the entire unified system. The Division maintains its central offices on the campus of Oregon College of Education, and in addition has offices and laboratories at the University of Oregon, in Eugene, the University of Oregon Dental School, Portland, and Oregon State University, in Corvallis. The Teaching Research Laboratory on the Oregon College of Education campus includes most up-to-date technological developments now available to the field of education and has all the facilities necessary for motion picture, television, and other visual reproduction.

Also, the Division has direct access to computer and electronic data processing equipment through Oregon State University.

Teaching Research was organized by the Oregon State Board of Higher Education in 1960 to improve instruction at all levels of education without reference to subject matter area. In its seven years of existence the Division has completed more than 80 research projects and has grown in staff from two to more than 70 professional and support specialists. Today the Division maintains a comprehensive research program ranging from basic through developmental and demonstration efforts.

Teaching Research operates as an independent Division within the Oregon State System of Education and attempts to cooperate with all institutions in the State System. Dr. Jack V. Edling directs the Division and is responsible directly to the Chancellor of the System. Dr. Edling is advised on operational matters by a seven-member Directorate and on financial matters by the Division Fiscal Officer, Mr. Patrick Mahoney.

The Directorate is composed of the Directors of the seven units which constitute the organizational structure of the Division. Four of the units are concerned with programs of research and comprise the core of the Division, while three units serve to provide the necessary support required by the Research Units. Since Teaching Research has undergone major revision since the proposal was submitted for the present project, the four research units will be described briefly.

The Basic Research Unit. This unit has as its primary responsibility the determination of the laws governing the teaching-learning process, as they apply to the development of psychomotor, cognitive, and affective outcomes, and the constraints governing the application of these laws to individual and group paced instruction. To realize this responsibility, three major functions are generated by the Unit: 1) pure research activities which lead to the specification of variables to be manipulated in the primary research task, e.g., learner characteristics, setting characteristics, classes of instructional strategies, properties of instructional stimuli, 2) evaluation of existing educational practices, and 3) the development of the measurement tools that permit all of the above to take place.

The Contextual Research Unit. This unit has as its primary purpose the application of that which has been learned from basic research to the improvement of instruction in the learning situation. Its concern is the development of more effective and efficient instructional materials, tests, procedures, and systems, combining them into the best possible learning experience for learners of all types.

The Demonstration Research Unit. This unit was organized within the past year and has as its purpose the conduct of both short and long term training institutes, demonstration of new products of research and dissemination of the research findings of the Division.

The Policy Research Unit. This unit also was established within the past year and has as its focus research and development in education policy, organization, and administration. These factors either facilitate or impede change and improvement in any part of the instructional system, and therefore need to be continually or periodically changed.

Instructional Components in the Program

Approximately one-half of a resident's time was committed to involvement in an ongoing research program, leaving one-half of his time free for participation in other facets of the program. When broken down into its various parts, committed time for each resident amounted to approximately four days per week. This included an estimated two and one-half days devoted to ongoing research, one-half a day to a technical seminar, one-half a day (bi-weekly) to a professional seminar, and one-half a day to a residents' seminar. This left each resident one full day per week of uncommitted time to use as he saw fit. Figure 1 contains the reserved time broken down by daily schedule.

	Monday	Tuesday	Wednesday	Thursday	Friday
A.M.		Residents' Seminar			
P.M.	Technical Seminar			Professional Seminar (Bi-weekly)	

Figure 1. Weekly schedule of reserved activities.

All resident activities were scheduled around the three time blocks reserved for the seminars. Scheduling in relation to the ongoing research activity remained flexible so that only the unreserved time blocks would be used for research purposes.

The Research Experience. Central to the residency program was the involvement of each resident in one of the ongoing research programs at Teaching Research. The experience could be one of two kinds: (1) tying to a project as a regular half-time staff member, or (2) tying to a project but while with it realizing personal research directions through the extension of the project, replicating it with some modification, etc. In either case, there was in all instances a fit of the resident's general research interests with the direction of or the possibilities within an ongoing project.

The question of fit between resident and project was not a one-way affair, however, for the project director and the director of the program within which the project stood had to be willing to accept the resident within the project. Thus, when a decision as to project identification had to be made at the end of the orientation period (see below), each resident entered into discussion with the appropriate project and program directors in order to determine whether it would be feasible for him to tie to the project of his choice. It was at this time that the resident had to indicate whether he wished to become a regular member of the project staff or to bring his particular interests to the project through an extension or reformulation of it. While no resident was denied an opportunity to work within the project of his choice, the nearness of the project to completion, the work load of the project director, the opportunity for a meaningful, multi-faceted research experience, the feasibility of incorporating a resident's personal research interests within the project, etc., dictated to some degree the extent to which the resident was free to determine his own program of research within a particular project.

In all cases the research experience of the residents was supervised by the project directors under whom they worked. As with all other personnel at Teaching Research, while involved in or with a project residents were responsible directly to the project director and indirectly to the program director under which the project centered.

Whether a resident chose to become a project member or whether he chose simply to tie to a project in the pursuit of his own interests, it was expected that he be involved in all aspects of the research process. This included experiences in conceptualization, design, collection of data, analysis, and write-up. The rationale for this expectation was threefold: (1) it would provide concrete meaning to the seminar experiences, (2) it would guarantee an exposure to the realities of all aspects of the research process, and (3) as a consequence of this kind of exposure it should contribute to the decision on the part of each resident as to the extent to which he wished to direct his life to the research process.

Two additional values were expected to come from involvement in an ongoing research program: (1) it would provide a primary source of identification for the resident while at Teaching Research, and (2) it would provide a major source of research exemplars. In light of current research on imitative behavior, the provision of good models was thought to be one of the most productive training conditions that could be brought to the program.

The Technical Seminar. As the name implies, the technical seminar was the component of the program designed to provide the competencies needed to pursue a full scale research program. It also was intended to contribute significantly to what was termed a "research posture," that is, the set of values, attitudes, beliefs and working procedures that educational researchers tend to have in common.

As initially planned, the technical seminar was to follow a carefully ordered, relatively exhaustive schedule of content throughout the year (see Attachment 4). It was also designed in such a way as to be personally relevant to each resident, i.e., to tie to his immediate research interests and level of training, to utilize concrete, ongoing research involvement as a point of reference, and to base placement in and progress through the seminar on carefully developed criterion assessment procedures. From this point of view, assessment was to a) provide information that permitted the tailoring of the program to each individual in terms of where he was when he entered it; b) provide the monitoring of progress that was being made toward the realization of specified objectives in order to adjust the program as needed; and c) determine the consequences of the program over an extended period of time. Used in this way, assessment was to serve primarily a guidance-corrective function rather than a judgmental or evaluative one.

As it turned out, the seminar was quite different than planned. Primarily, it became less structured, though in some respects the content also was altered. During the orientation period the residents were given the opportunity to react to the proposed seminar, as they were all aspects of the training program, and it was their opinion that 1) they already possessed many of the competencies that the seminar was designed to provide, 2) they were not particularly inclined toward becoming involved in a highly planned, closely supervised "course" in research procedures - especially during the first month or two while they were trying to clarify their own research interests and fit them to the ongoing research program at Teaching Research, and 3) in view of the heavy involvement in an ongoing research program and the number of other seminars planned the technical seminar should also be held bi-weekly.

Toward this end the seminar was held only every other week and was directed during the fall term toward the comparability of research design and methodology in education, the behavioral sciences (psychology and sociology), the biological sciences (ecology), the physical sciences (physics) and medicine. These seminars were led by persons representing these various disciplines. During winter and spring terms, staff members from Teaching Research led the seminar on the topics that were planned for the seminar originally (see Attachment 4).

The Professional Seminar. The professional seminar was the component of the program designed to facilitate the clarification and/or extension of research interests, and to facilitate the development of a research posture through the provision of exemplars or models. These functions obviously dovetail with contributions from other components of the program, but it was expected that the professional seminar would contribute most powerfully to these two general aims of the program.

The content of the seminar involved contact on a bi-weekly basis with leading research and theoretical developments bearing upon the educative process. Central to the planning of the seminar was first-hand contact with the people most closely identified with these developments. Program schedule called for twenty such seminars, ten to be led by persons outside of the Teaching Research staff, five by Teaching Research staff and five by the residents themselves. Each of the seminars was scheduled for a full half day. The ten seminar leaders from outside of Teaching Research and their respective topics were:

Seminar Leader	Topic
Dr. Clark Abt, Abt Associates, Inc.	Learning games
Mr. Hall Sprague, Western Behavioral Sciences Institute	Learning games
Dr. Meredith Crawford, Human Resources Research Office	Training program development
Dr. Harry Silberman, System Development Corporation	Computer-assisted management
Dr. Howard McFann, Human Resources Research Office	Training program development
Dr. Peter Winters, Stanford University	Computer-supported economic games
Dr. Earl Hunt, University of Washington	Computer simulation
Dr. George Kneller, University of California, Los Angeles	Technological revolution in education

Dr. Irving Sigel, The Merril-Palmer Institute of Human Development and Family Life	Piaget and education
Dr. Jim Finn, University of Southern California	Educational technology

The five seminars offered by the post-doctoral residents were:

Seminar Leader	Topic
Dr. Armand Galfo	"The Post-Doctoral Fellowship: Some Personal Reflections"
Dr. Wesley Caspers	"Instant Refry: Video-Tape Feedback and Human Learning"
Dr. Stanton Towner	"The Task Ahead for Teaching Research in Higher Education"
Dr. Henry Reitan	"Cognitive Styles"
Dr. Bud Garrison	"Self Concept, Personal Values and Teaching Style"

Participation in the weekly Directorate meetings of the Teaching Research Division during the period of time in which the Division was undergoing a basic reorganization substituted for the five seminar topics that were to be presented by Teaching Research staff.

The Preparation of a Research Proposal. One of the major outcomes of the program was to be the development by each resident of a research proposal of a scope and quality that permitted it to be submitted for funding. This was seen as the most concrete means of facilitating the residents' involvement in a program of research when he returned to his parent institution. There was no set channel through which the proposal was to be developed, although the most likely channel was the research experience. It was possible, however, that the proposal could come from some other line of activity. Independent of its source, the project director with whom a resident worked was responsible for helping the resident shape his proposal.

Support Components In The Program

Two features of the program that were central to its success but which played a supporting role to the instructional components were the orientation program and the residents' seminar.

Orientation. Since the unusually strong influence which the first encounter with a new experience gives to subsequent feelings about that experience, the initial encounter with the program was as critical to its success as any other component within the program. Four areas of concern were central in planning program orientation: a) the many

features of the program with which the residents had to become acquainted, for example, the specific objectives of the program, its content, its structure, and its constituents, b) the relationship of the program to the Teaching Research Division, c) the relationship of residents to one another, to members of the Teaching Research and OCE staffs, and to programs within Teaching Research, and d) orientation as a family to a new schedule and a new community.

The objectives of the Orientation period are listed in Figure 2, and the schedule of events pursued during the first three weeks to accomplish them appear in Figure 3.

The Residents' Seminar. As implied by its title, the resident seminar was a period of time set aside each week in which the residents could meet as a group to do whatever they, as a group, felt most critically needed doing. Often this involved the pursuit of content encountered in the technical seminar, ideas encountered in the professional seminar, the designing of a research proposal, or simply reflecting informally upon the program. The direction of the seminar was left entirely in the hands of the residents themselves. At no time were staff present in the seminar.

The intent of the seminar was twofold: (1) to provide a continuing opportunity to establish and maintain an identity as a group, and (2) to provide experience in dealing personally with the demands, frustrations and satisfactions that come with the research enterprise, and in helping others deal with them. It was anticipated that as each resident returned to his parent institution this would be an important competency to have, both in relation to his own program of research and in facilitating the research programs of others.

Other Aspects of the Program

Informal Experiences. In addition to the components of the program which have been reviewed thus far participants had opportunity to take advantage of a wide range of other experiences which may have contributed to their growth as potential researchers. These included staff contacts within the Teaching Research Division and Oregon College of Education generally, seminars or visiting lectures at any of the educational institutions within the Willamette Valley, attendance at professional research meetings and auditing of formal course work. By-and-large, the residents were encouraged to take part in these kinds of experiences; the only limit placed upon them was that it not interfere with involvement in the residency program per se. Conflict of interest is always a difficult matter to define, but as a point of reference the conflict of interest statement which guides policy at Teaching Research was made available as a guide in this matter.

Prior to Arrival at T.R.

1. Provide a statement describing the participants within the program;

2. Provide a statement describing the T.R. Division and the various projects which were underway within it;

3. Provide a statement describing the content and schedule of the orientation period.

First Week on Campus

1. Contact with the physical facilities at T.R. and O.C.E. generally, and assignment of offices;

2. Initial contact with other residents;

3. Initial contact with T.R. staff;

4. Initial contact with ongoing research at T.R.;

5. Contact of residents' families with each other and the families of the T.R. staff.

Second and Third Weeks on Campus

1. Establish working relationships with other residents;

2. Establish working relationships with T.R. staff members;

3. Develop familiarity with ongoing research programs at T.R.;

4. Choice of research project within which to work.

Figure 2. Objectives of the Orientation Period

EVENT	SCHEDULE									
	Monday		Tuesday		Wednesday		Thursday		Friday	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Week 1 (Sept. 5 - 9, 1966)										
Laboratory and campus tour, and assignment to offices			X							
Staff meeting for all T.R. personnel and residents; introduction of staff and review of ongoing programs				X						
Social hour for all T.R. staff and residents				X						
Meeting with director of the resident program: orientation to the year					X					
Meeting with senior staff at T.R.: clarification re: ongoing research programs						X				
Free time							X	X	X	X
Dinner for residents and their wives, and the T.R. directorate										X
Week 2 (Sept. 12 - 16)										
Meet individually with program directors and their staffs to discuss in depth the projects within a given program	X	X			X	X			X	X
Free time			X	X			X	X		
Week 3 (Sept. 19 - 23)										
Meet individually with program directors and their staffs to discuss in depth the projects within a given program	X	X			X	X				
Free time			X	X						
Decisions as to research project within which to work							X	X	X	X

Figure 3. Schedule of Events Within the Orientation Period

Office and Living Arrangements. The residents were officed together as a group, with close access to members of the Teaching Research staff. So that recognition could be given to their special identity, their office area was identified as associated with the post-doctoral residency program. Each resident had a separate desk and limited access to dictation equipment and secretarial help. Each resident also received help in locating housing before arriving on campus.

Assessment of Research Competencies Upon Entering the Program. When planning the post-doctoral program, it was anticipated that extensive assessment procedures would be used, both at the time of entry to the program and as the residents moved through it. This was based on the commitment of Teaching Research generally to a) fitting instruction to the learner, b) the utility of defining program outcomes behaviorally and c) the necessity of using criterion performance measures to determine when program objectives have been reached. Toward this end a rather elaborate test was developed to assess entering competencies (see Attachment 5). Upon discussing the total program with the residents, however, the decision was reached to reduce some of the structure that had been built into the program, and, as a consequence, plans for systematic assessment procedures were dropped. The two days that had been set aside for assessment in the first week of the orientation period were scheduled as free time.

An Illustration of Program Operation

Applicant A, in response to a brochure announcing the program, directed a letter to Teaching Research inquiring of a place in the program for a person of his qualifications. In his letter he stated his interest in research and that he had a fair background in design, methodology and statistics. He indicated also that he was not particularly interested in pursuing research full-time, but that he would like to bring himself to date with respect to research developments in the field and get a program of research planned or outlined which he could pursue when he returned to his present position. He also indicated that he had been teaching full-time since receiving his degree and had had no time or encouragement to develop a research program. A request was made for an application form.

Following receipt of his letter, application materials were forwarded to the applicant. These included a request for transcripts, a summary of research training and experience, a summary of publications, papers read, etc. as a measure of productivity, a statement as to what it was that he wished to accomplish during the year, and three letters of recommendation written from the point of view of assessing the candidate's present research interest and competency and the probability of his contributing at the research level in the future.

When all application materials were available for all candidates (March 15, 1966), all program directors at Teaching Research and the training program director selected the five fellows from the pool of applicants who seemed most promising and who provided the balance desired in the program. Applicant A was accepted, and so notified; arrangements were then made for his housing and transportation.

Fellow A, with four others, arrived on campus September 1. The first week was spent in general orientation meetings, and the next two weeks were spent rotating between the (at that time) three major research units within Teaching Research. Approximately two days were spent with project staff in each unit. At the end of this time Fellow A declared a primary interest in the basic research area and chose to work on a project dealing with teacher self evaluation. As such he became a full participating member of that particular project staff. In this capacity he was involved in instrumentation, the collection and analysis of data, writing, and the reporting of results at a professional meeting.

Coordinated with his project responsibilities were other program responsibilities. Throughout the year Fellow A took part in the technical seminar, the professional seminar, and the residents' seminar. He also was responsible for developing a research proposal. This was done within the area of video tape feedback as a facilitator of learning and came as an outgrowth of his work with the teacher self evaluation project. The proposal was submitted to the U.S. Office of Education on July 1. Also on that date, the program terminated for Fellow A and he returned to his parent institution.

EVALUATION OF THE PROGRAM

Three kinds of evidence are available at this time as a basis for assessing the effectiveness of the research training program. These include 1) a subjective evaluation by the director of various aspects of the program; 2) written evaluations of the program by residents at the end of their training; and 3) research proposals, papers, and other products developed by the trainees which reflect in some measure the contribution of the program. Each set of evidence is reviewed separately. In reading these data, however, it should be recognized that they provide only preliminary evidence of the success of the post-doctoral training experience. A more meaningful evaluation will be possible only over a period of years subsequent to the completion of training. Such an evaluation is planned and will be accomplished in light of base line information which residents supplied during the first weeks of the program.

Appraisal of the Program by the Director

Six aspects of the program are evaluated: 1) the soundness of its objectives; 2) the relevance of its content; 3) the adequacy of its staff; 4) the quality of the trainees; 5) the effectiveness of its organization; and 6) the adequacy of its budget.

Objectives. The training objectives and the assumptions on which the program was based were realistic. Particularly impressive was the way in which individuals with varied backgrounds "fit," both socially and intellectually.

Content. Though the five residents shared a common core of experiences during the course of training, their involvement in the program for the most part was highly individualistic and personal in nature. In a real sense the "content" of the program varied for each resident. Within this context, however, two aspects of the program seemed to be of most value: 1) the informal interchange between residents and between staff and residents, and 2) participation in ongoing research programs. This view was supported throughout the year by the informal feedback from residents and it was reinforced by their formal evaluation of the program (see below). While the seminars were of some value in exposing the residents to issues, substantive information and new directions in the field they were not as relevant a force in the program as they might have been had they been more systematically pursued or had the program been at the graduate level.

Staff. The small number of participants and their involvement in ongoing research projects permitted a fair amount of individual attention from staff members, but I think not as much as either the staff or residents desired. In large part this was a consequence of the interaction of two factors: (1) the lack of staff time budgeted to the training program, and (2) the peculiar features of Teaching Research which demand that as an agency it essentially support itself. This latter condition requires maximum attention of staff to writing and the research process, and unless staff time is purchased for training purposes this kind of involvement is seen essentially as overload. T[illegible] while Teaching Research staff were sufficiently committed to the p[illegible] doctoral training program to substantially give of themselves to it, it did represent somewhat of a hardship. This would be alleviated in our case h[illegible]d funds been available to cover some released staff time for the program.

Within this limitation, however, the plan for involving staff and residents jointly in the research enterprise worked well.

Trainees. While extremely diverse, the backgrounds and interests of the residents were highly compatible. They related well with each other and to staff at Teaching Research generally. The residents appeared to be bright, able people with good background in research design and methodology, and were deeply committed to involvement in educational research. They contributed appreciably to the continued growth of Teaching Research staff through their involvement in the seminars and research projects, and through informal contacts. Selection of participants was also successful from the point of view of the residents fitting well together socially and intellectually. This fact resulted in a general climate which was conducive to learning, and personal contacts were made which will endure for many years.

Program Organization. By and large the structure of the program as originally planned, that is, all of the major elements of the program and their sequencing, were retained during the course of the program. While some of the specific activities planned within this structure were not followed as closely as anticipated in the initial proposal (cf. p. 10) the general organization given the program proved to be functional and I think effective. As the program actually operated I think it can best be characterized as one which maximized individuality, flexibility, and informality.

A year of study was probably sufficient to provide these residents with the stimulation, direction and sharpening of research interests and skills needed to prepare them for future research roles. All seemed to have accomplished that which they had hoped to accomplish during the year, and four of the five were able to return to their institutions with funded, ongoing research programs. In my judgment

at least these four men are likely to actively pursue educational research efforts in the years to come. The fifth resident is more likely to engage in instructional systems development than research but this does not mean that his contribution to education will be less. These predictions, of course, remain to be tested, and subsequent evaluations of the consequences of the program will do so.

Facilities and resources at Teaching Research seemed well suited for the training program. Residents also made use of other facilities within the state system of higher education, such as the libraries of the two universities. An office was provided for the residents, with a desk and office materials for each, within easy access to staff offices. Sharing of a large office area for the five residents tended to create group unity, facilitate the flow of ideas, and promote informal relationships which proved to be important elements in the training program. Participants found no serious difficulties with respect to housing or commuting.

Budget. Generally speaking, budgeting for the program was adequate. Resident stipends, travel allowance, and the $1,000.00 provided to Teaching Research for each resident enabled the program to function well. The one budgetary limitation encountered from Teaching Research's point of view was the lack of monies to release staff time to give to the program. As indicated earlier, this may be a problem that is peculiar to Teaching Research, since we are essentially an independent research rather than a training agency, but it would still seem wise to allocate funds for the release of at least the program director's time. While I am sure that post-doctoral training programs do not require the intensive staff involvement of pre-doctoral programs, they do require time and involvement, and monies should be made available in the post-doctoral programs to cover it.

Appraisal of the Program by the Residents

During the final week of training each resident was asked for a formal evaluation and review of the program. These are rather detailed statements and as such only a summary of them will be included in the body of the report. The full statements are appended to the report, however (see Attachment 6), and their reading is strongly encouraged. The responses given are thoughtful and constructive, and anyone planning another post-doctoral training program should have access to them.

One aspect of the evaluation required ranking the various components of the program in terms of the value which they had to the resident. The results of this ranking are summarized in Table 1.

Table 1. Summary of residents' responses to Item 1 of the final evaluation form (see Attachment 6). This represents a ranking of selected program experiences in terms of their personal worth to the resident.

Program Experience	Tallies*	Average Rank
1. Informal interchange with fellow post-doctoral residents	(3,2,1,1,1)	1.6
2. Experience on project research or own research	(1,1,7,2,1)	2.4
3. Informal interchange with staff at Teaching Research	(4,6,1,1,2)	2.8
4. Staff response to or help with research ideas, skills, etc.	(2,4,3,3,5)	3.4
5. Attending organizational or administrative meetings at Teaching Research	(7,3,5,5,3)	4.6
6. Participating in seminars	(6,8,3,4,5)	5.2
7. Meeting and/or discussion with visitors, consultants, guest lecturers, etc.	(8,5,5,6,4)	5.6
8. Travel to conferences and visits to other institutions	(5,7,9,7,1)	5.8
9. Informal interchange with other professional staff at OCE or other institutions	(9,9,8,8,4)	7.6

*A rank of 1 represented greatest value

It will be seen from these data that the residents consistently ranked the on-line research experience and the opportunity for informal interchange amongst themselves and the staff of Teaching Research as the most valuable aspects of the training program. Formalized activities and interchange with persons outside of the research center, with the exception of one resident, tended to be of lesser value.

While these data are relatively clear-cut, the interpretation which one gives them is not. For example, was the high ranking assigned the research and informal interchange a function of the inherent value of this kind of activity for post-doctoral fellows generally, or was it a function of a relatively unique combination of residents, staff and program? Also, might the high ranking given these activities reflect more nearly the value that staff placed upon them, and thereby the greater care and attention given them, than their inherent worth in a post-doctoral fellowship program? While it is likely that the rankings reflect both "error" factors it is the studied opinion of both the staff and residents that there is inherent worth in such relatively unstructured learning experiences, and that any post-doctoral program should see to their maximal inclusion.

The residents were asked not only to rank the various aspects of the program in terms of their relative worth but to give the rationale for their ranking as well. Three residents did this (see Attachment 6). Because these statements are relatively short and clear, they are reproduced in full.

Garrison:

The group of people taking part in the program were mature professional people. The optimum setting is one that is stimulating and inviting but not compelling. We needed a chance to contemplate, to question and to establish relationships before we "got busy." Some of us, perhaps all of us, would have done poorly in a program with heavy schedules, deadlines and requirements.

Within the group there were fascinating differences in experience, point of view, and convictions. As soon as we lost the tendency to be defensive (unfortunately all too common in higher education) we had many long, trying, and exceedingly beneficial discussions. This type of study can be "allowed to happen" but, as I see it, only in the setting described above.

The staff impressed me as having achieved some measure of the open, honest quality described before we arrived on the scene. We met with little defensive behavior in our early

meetings. Perhaps this also might be a prerequisite to the exchanges which I found so valuable.

The greatest limitation was that specific staff time was not provided. This meant that the post docs needed to seek out people and ask for time and aid. I'm sure most of us were hesitant since the people with whom we wished to visit were busy.

Towner:

I felt I had come to live for a year in a family that spoke a foreign language, and that had "cousins" all around the country they referred to familiarly. The PDK meeting in Berkeley where I was able to see some of these cousins in action, and so became more than names, was like therapy. I felt much less out-of-it thereafter. I had to score "staff response to or help with research ideas" further down the ranking. But this was largely a result of my lack of seeking help after a few feeble attempts failed to find anyone with a general interest and enthusiasm that paralleled my own. I know the staff of TR well enough to be perfectly confident they would have gladly helped me anytime I came for help.

Reitan:

If I were to rate the 9 activities they would all rate well above the average professional experiences and learning activities in which I had engaged prior to the post-doctoral year. In my opinion, the opportunity to be immersed in the activities of an organization whose raison d'etre is research is essential for this kind of a post-doctoral experience. To me the opportunities to interact with the professional staff at T.R. were of inestimable value. The willingness to share ideas, the desire to be helpful were characteristics shared by the senior staff which were unique to my experience.

The seminars were most provocative and provided content for highly profitable independent study and discussion with the other post-doctoral fellows as well as the senior staff.

I felt the learning experiences provided were the most exciting and positive in my rather lengthy educational career.

The residents also were asked to respond to three additional questions:

1. List the specific activities in which you were involved during the course of the year (with the exception of the technical seminars), why you chose to engage in them, and what you gained from each.

2. List the specific achievements or accomplishments that came from the year's experience, and sketch briefly the influence that you think each will have on your subsequent performance as an educational researcher and/or professional educator.

3. Discuss generally the meaning which the postdoctoral residency experience has had for you as an individual and as a professional in the field of education. In this connection compare the contribution of this experience with other educational experiences which you have had.

While the responses coming from these questions are too lengthy to reproduce verbatim (see Attachment 6), they nevertheless need to be summarized. Toward this end, comments representative of those reflecting the contribution of the year to the residents are listed below. Responses to questions 1 and 2 are reviewed in the next section.

"Much better prepared to teach courses in research and to guide graduate student research." (Galfo)

"I have gained proficiency and knowledge in areas of research design, statistics, and measurement." (Reitan)

"I've been helped to gain deeper and more honest insights into research and, in general, into science methodology." (Garrison)

"I have seen a research organization in operation, learned something of the quality of research that will be funded... and learned something of the mechanics of getting proposals funded." (Towner)

These statements tend to support the conclusion that the program was at least partially successful in achieving its major objective, namely, increasing research skills and knowledge of the participants. Some additional comments by the residents which reflect training outcomes include:

"My goal was to prepare an acceptable research proposal that will allow me an opportunity to direct some research in my field of teacher preparation. I feel that I had the time and opportunity to do my best. One could hardly ask for more." (Caspers)

"I'm prepared to carry out some research of my own which hopefully will result from one or both proposals I have prepared." (Galfo)

"I approach my present position with far less trepidation than I would have experienced a year ago. I can think of no year's experience that could have been more beneficial for the assumption of my present position." (Reitan)

"In essence the program was a confirmation of the motive that led me to apply...." (Caspers)

Appraisal of the Program in Terms of Research Proposals, Papers, Activities and Other Products

Central in the design of the program was the idea that each resident would return to his campus with a proposal ready to submit for funding. Somewhat contrary to expectations, only two of the five residents actually met this criterion, and only one of the two proposals submitted was funded. The record of proposal related activity is better than this sounds, however. The resident who had his proposal funded (Dr. Galfo) prepared two formal proposals but submitted only one, and the resident whose proposal was rejected (Dr. Caspers) was invited to resubmit. Another resident (Dr. Reitan) prepared a proposal for a state-wide research and development program in community college education for the State of Washington and was invited by the University of Washington to head it. Still another resident (Dr. Garrison) prepared a research proposal early in the year, submitted it to the Northwest Regional Education Laboratory for support, obtained the funds requested, and carried the project out during the course of the year. The fifth resident (Dr. Towner) decided against the preparation of a formal proposal during the course of the year and directed his energies instead to the development of a multi-media based, "self-instructional" course in social psychology. Surprisingly, the production of proposals was unrelated to length of time in residence, for both men producing proposals were in the program only 9 months.

In addition to the concrete outcomes reviewed above, residents engaged in a variety of other activities and projects. These should also be considered in evaluating the contribution of the program. One resident found time to conduct a fairly exhaustive review of the literature on media research and research on college teaching as an adjunct

to the basic self-instructional course in social psychology that he prepared. Another resident participated in the U.S.O.E. sponsored CORD project among smaller colleges in the state, helped in a study at Oregon College of Education on student attrition and developed materials for and assisted in the conduct of a research project at Teaching Research. Finally, a fourth resident spent most of his time on a teacher self-evaluation study in Corvallis, participating in the videotape recording of approximately 30 teachers, became involved in a project at the Northwest Regional Education Research Laboratory and visited several institutions involved in "micro-teaching" or videotape evaluations. The fifth resident spent literally all of his available time on the study of self-confrontation and its effect on teaching behavior.

SUMMARY EVALUATION

Major Strengths of the Program

The major strengths of the program lay in (1) the freedom which it permitted individual participants; (2) the "colleague" relationship which existed between the staff and residents; (3) the rich environment of ideas brought by both staff and residents to the seminars and informal gatherings; (4) the encouragement and help offered residents in the pursuit of their own interests; (5) the remarkable compatibility both among residents and between residents and staff; and (6) the opportunity provided each trainee to gain first hand experience on individual research projects.

Major Weaknesses of the Program

It was difficult to provide a program sufficiently broad in scope to accomodate the background and interests of all participants. In most instances, however, this condition was seemingly satisfied. A second potential weakness of the program lay in the fact that the great majority of experiences encountered by residents during training occurred within Teaching Research. It is possible that greater breadth could have been achieved with additional outside experiences. The program was not without such experiences, however. Residents visited other institutions in the West, attended national conventions, and met visiting lecturers.

Over-all Evaluation of the Program

A strong program. By all available evidence it met the needs and expectations of the residents and it met the objectives that staff had assigned it. With more staff time and money it could have been stronger, particularly in the areas of staff consultation and the seminars, but all-in-all the program must be judged successful.

Recommendations for Improving the Administration of Post-Doctoral Programs

1. Increase the number of post-doctoral training programs to the point where at least 50 fellows could receive training each year. Within this recommendation I would also argue for an emphasis upon a) "re-training" persons who have a strong interest in doing educational research but who have become enmeshed in a teaching or administrative

situation which makes the pursuit of research difficult, and b) bringing persons into the program from related disciplines. The rationale for both emphases is spelled out in the present report.

2. Provide some funds for the release of staff time to the program. While post-doctoral residents do not require the same kind of attention as graduate students, they do nevertheless require attention, and it is somewhat unreasonable to assume that full time research or instructional staff can give that which is needed without reimbursment.

SUMMARY DATA AND REPORTS

1. Publicity. See Attachment 1 for a description of publicity procedures. Attachment 2 describes the announcement released for recruitment purposes.

2. Application Summary

a. Approximate number of inquiries from prospective trainees (letter or conversation)	50
b. Number of completed applications received	11
c. Number of first rank applications (applicants who were well-qualified whether or not they were offered admission)	10
d. Number of applicants offered admission	5

3. Trainee Summary

a. Number of trainees initially accepted in program	5
b. Number of trainees enrolled at the beginning of program	5
c. Number of trainees who completed program	5
d. Categorization of trainees	
(1) Number of trainees who principally are elementary or secondary public school teachers	0
(2) Number of trainees who are principally local public school administrators or supervisors	0
(3) Number of trainees from colleges or universities, junior colleges, research bureaus, etc. (specify)	5

4. Program Director's Attendance

a. What was the number of instructional days for the program?*	183
b. What was the percent of days the director was present?	25%

5. Financial Summary (Approximate figures)

	Budgeted	Expended or Committed
a. Trainee Support		
(1) Stipends	$67,806.72	$60,816.21
(2) Dependency Allowance	-0-	-0-
(3) Travel	2,193.28	2,193.28
b. Direct Costs		
(1) Personnel	3,000.00	2,920.45
(2) Supplies	781.00	835.33
(3) Equipment	-0-	-0-
(4) Travel	1,000.00	1,087.78
(5) Other (Payroll Assessments)	219.00	145.35
c. Indirect Costs		
TOTAL	$75,000.00	$67,998.40

*For two candidates there were 247 instructional days.

ATTACHMENT 1

Letter to Deans of Instruction Relative to Candidate Identification

May 1966

Dear_____:

This letter is a follow-up to our telephone conversation in which I cutlined the postdoctoral residency program in instructional research that has been awarded the Teaching Research Division, Oregon State System of Higher Education. You will recall that the program permits five postdoctoral fellows from education and disciplines supportive of it to spend a year at the Teaching Research Division, regular salaries paid, while preparing themselves to pursue upon return to their parent institutions a program in instructional research. The program is designed to let them clarify research interests, sharpen research competencies, and begin the development of a research program of their own.

As I indicated to you in our earlier conversation, we at Teaching Research feel that this program represents an unusual opportunity for colleges and universities interested in instructional research to get such a program under way. Although this announcement is very late, you may still know of someone on your staff who would make a good candidate for the resident program. If so we would be pleased to receive his application.

In thinking of possible candidates, we would like you to consider persons in psychology or sociology or other related disciplines, as well as persons in education. The residency program is founded on the premise that education research needs to adopt some of the rigor that characterizes research in the basic disciplines, and that it needs to build upon the factual and theoretical foundations of those disciplines. We also believe, however, that people in the basic disciplines have much to take from educators. To implement this kind of interdisciplinary cross-fertilization, the program has been designed to bring together scholars from both education and the basic disciplines.

I have enclosed several copies of an announcement of the program which describes its content, residency stipends, application procedures, and the like. I would appreciate it if you would circulate these within your staff and encourage interested persons to apply.

Thank you for your consideration.

Cordially,

H. D. Schalock
Research Professor

ATTACHMENT 2

Announcing for 1966-67

A POSTDOCTORAL RESIDENT PROGRAM IN INSTRUCTIONAL RESEARCH

Teaching Research Division
Oregon State System of Higher Education
Monmouth, Oregon

INTENT OF THE PROGRAM

To increase the involvement of educators and persons from related disciplines in instructional research by

- providing a year in residence at a research agency which concentrates on instructional problems
- providing an opportunity while in residence to clarify research interests, sharpen research competencies and develop a program of research which can be pursued upon return to parent institutions.

CONTENT OF THE PROGRAM

Involvement in one or more of the ongoing research programs at the Teaching Research Division. Programs cross-cut all levels of the educative process, from pre-school to higher education. Some examples of major programs of research at Teaching Research include:

- classroom simulation
- discovery learning
- modification of learner attitudes through mass media
- application of motion pictures to test methodology
- development of an observational methodology for the study of the instructional process
- design and testing of a computer based test development system
- design and engineering of instructional sequences

Participation in a weekly seminar in design, methodology and analysis problems central to instructional research

Participation in a monthly symposium in which personal contact with active researchers and theoreticians in education and fields relating to education is provided

Assistance in the development of a personal program of research, including the preparation of research proposals suitable for funding

Opportunity for informal, continuing contact with staff at Teaching Research and other postdoctoral fellows.

RESIDENCY APPOINTMENTS

Appointments will match annual salaries, or four-thirds of academic salaries, and provide an allowance of $500 per dependent. Reimbursement for domestic travel at the rate of 8¢ per mile also will be allowed for one round trip between the place of residence and Monmouth, Oregon.

WHO MAY APPLY

Holders of the doctoral degree in education or supportive disciplines (e.g., psychology, sociology, anthropology) who wish to pursue instructional research, and who show promise as researchers.

HOW TO APPLY

Submit a statement describing academic and professional experience

Submit a statement outlining reasons for applying for a post-doctoral fellowship in instructional research, and the kind of experiences most desired while in the residency program

Submit three letters of recommendation descriptive of potential as a productive researcher

DIRECT ALL APPLICATION MATERIALS OR INQUIRIES TO

Dr. H. Del Schalock, Research Professor
Teaching Research Division
Oregon State System of Higher Education
Monmouth, Oregon

APPOINTMENTS WILL BE MADE BY JUNE 10, 1966

ATTACHMENT 3

A Summary of the Background and Interests of the Candidates Selected for the Postdoctoral Fellowship

NAME:

Dr. Wesley Caspers, Age 47
Dean of Education
Western Montana College
Dillon, Montana

PROFESSIONAL BACKGROUND

B. S. 1940, Superior State University, Superior, Wisconsin; Major: Chemistry and Physics; Minor: Biology and Mathematics. M.A. 1950, University of Minnesota; Major: Education. M. S. 1952, California Institute of Technology. Ph. D. 1956, University of Minnesota; Major: Educational Psychology; Minor: Educational Administration.

Two years as a high school science, mathematics and music teacher - one in Northwood, North Dakota, and one in Cashton, Wisconsin; one year as junior high school instructor in science and mathematics at the University of Minnesota laboratory school; one year as public school superintendent in Lyle, Minnesota; one year as instructor in elementary and secondary education at Hamline University; one year as coordinator of professional laboratory experiences at the University of Minnesota laboratory school; five years as professor of education and director of professional laboratory experiences at Friends University, Wichita, Kansas; and professor and dean of education at Western Montana College from 1957 until the present.

INTERESTS

Primary interest in the improvement of college instruction. Within this broad area, interest has focused upon the contribution of motion pictures, television and video tapes to the educative process. A program of research is currently being planned which focuses on the effects of using video tape in the evaluation of student teaching. An interest also lies in the use of sociometric devices in the assessment of student characteristics.

LENGTH OF RESIDENCY APPOINTMENT

9 months

FAMILY

Married, with three children; one teenage daughter and two sons.

PLACE OF RESIDENCE WHILE AT TEACHING RESEARCH

Corvallis, Oregon

NAME:

Dr. Armand J. Galfo, Age 39
Assistant Dean, School of Education
College of William and Mary
Williamsburg, Virginia

PROFESSIONAL BACKGROUND:

B. A. 1949, University of Buffalo; Major: Chemistry and Mathematics.
M.Ed. 1952, University of Buffalo; Major: Science Education.
Ed.D. 1956, University of Buffalo; Major: Secondary School Administration.

Six years as chemistry teacher and chairman of the science department, West Seneca Central School, New York; one year as research associate, Western New York School Study Ccuncil, University of Buffalo; one year as chemistry teacher and curriculum consultant, Dade County Public Schools, Miami, Florida; and assistant and now associate professor of education and director of secondary school student teaching, College of William and Mary from 1958 until present; 1965 until now assistant dean, school of education.

INTERESTS:

Primary interest on the place of television or video tape recording in teacher training programs, and in the development of a methodology to determine the effects of curriculum change in the teaching of science and mathematics in the secondary schools. Accompanying these research interests is the desire to become more competent in teaching courses in research design and methodology and in guiding graduate students in the pursuit of their thesis research.

LENGTH OF RESIDENCE APPOINTMENT:

9 months

FAMILY:

Married, with two teenage sons.

PLACE OF RESIDENCE WHILE AT TEACHING RESEARCH

Monmouth, Oregon

NAME:

Dr. Jesse (Bud) Garrison, Age 42
Professor of Education
Oregon College of Education
Monmouth, Oregon

PROFESSIONAL BACKGROUND

B.A. 1947, Central Washington College of Education, Ellensburg, Washington; Major: Science; Minor: Math. M.Ed. 1952, Washington State University, Pullman, Washington; Major: Education; Minor: Psychology. Ed. D. 1957, Washington State University; Major: Curriculum; Minor: Psychology. Additional course work taken at Columbia University.

Four years as an elementary teacher, AV consultant and teaching principal at Sunnyside, Washington; four years as an elementary school principal in Pullman, Washington; three years as associate professor in education, Northern Illinois University; two years as laboratory school principal at Oregon College of Education; and for the past six years professor in education and psychology at Oregon College of Education.

INTERESTS

Primary interest in teacher education. Within this general area, three lines of interest predominate: 1) the value commitments held by students when they first enroll in teacher education and their relation to performance in a teacher education program; 2) the extent to which these value orientations can be modified, and the procedures which can bring such modification about; and 3) the extent to which a college can functionally organize its teacher education program around individual differences within its students, and the difference it makes in the educational outcome of the program if the curriculum is so individualized.

LENGTH OF RESIDENCY APPOINTMENT

12 Months

FAMILY

Married, with three teenage daughters

PLACE OF RESIDENCE WHILE AT TEACHING RESEARCH

Monmouth, Oregon

NAME

Henry Reitan, Age 46
Associate Professor of Education
Washington State University
Pullman, Washington

PROFESSIONAL BACKGROUND

B.A., Concordia College, Morehead, Minnesota. Major: Biology.
Ph. D., University of North Dakota, Grand Forks, North Dakota.
Major: General - Experimental Psychology.

Six years of teaching experience in biology at the high school level in Minnesota, and coach of the basket ball team; one year of teaching science and social science in junior high school, and director of the band; two years as an instructor in general psychology at the University of North Dakota; six years as assistant and associate professor of psychology at the University of North Dakota; six years as assistant and associate professor of psychology at Valley City State College, Valley City, North Dakota and director of student personnel; and assistant and associate professor of education at Washington State University from 1957 to the present.

INTERESTS

Primary interest in the development of learning patterns or learning strategies in children and their implication for the instructional process. Closely tied to this interest is an interest in the relationship between learning strategies and the concepts of intelligence, creativity, and cognitive style.

Another interest centers on the contribution of the elementary school counselor to the educative process, and the differential effects of elementary school counseling when the counselor assumes differing functions.

LENGTH OF RESIDENCY APPOINTMENT

Twelve months

FAMILY

Married, with one child in the primary grades

PLACE OF RESIDENCE WHILE AT TEACHING RESEARCH

Monmouth, Oregon

NAME

Dr. Stanton B. Towner, Age: 40
Associate Professor of Sociology and Chairman of the Department
Lindfield College
McMinnville, Oregon

PROFESSIONAL BACKGROUND:

B.S. 1944, University of California; Major: Sociology. Worked towards a Junior College Teaching Credential, 1947-49, U.C.L.A; Major: Education and Sociology. M.A. 1955, University of Southern California; Major: Sociology. Ph.D. 1957, University of Southern California; Major: Sociology. Survey Research Summer Institute, 1962, University of Michigan.

On staff at Linfield College since 1956; chairman of the department of sociology since 1959. Instructor in general sociology, Portland Continuation Center, 1965-66.

INTERESTS:

Primary interest in improving the effectiveness of high school and college level instruction, particularly as it applies to sociology as a discipline. Of special interest within this more general area is the relationship of enthusiasm on the part of an instructor to instructional effectiveness.

LENGTH OF RESIDENCY APPOINTMENT:

9 months

FAMILY:

Married with four daughters: one married, three teenagers still at home.

PLACE OF RESIDENCE WHILE AT TEACHING RESEARCH

McMinnville, Oregon

ATTACHMENT 4

Content and Level of Objectives,
As Originally Planned, For The Technical Seminar

CONTENT	LEVEL OF OBJECTIVE		
	Exposure	Understanding	Performances
The choice of a research posture			
1. The concept of knowledge		X	
2. The history of knowledge	X		
3. Operations involved in the extention of knowledge		X	
4. A comparison of operations across disciplines	X		
5. Schools of scientific philosophy	X		
6. The specification of a research posture			X
The choice of that which is to be researched			
1. The range of choice	X		
2. Priority vs. interest as a guide to choice	X		
3. Probability of "pay off," as a guide to choice	X		
4. Values and the research process	X		
5. The specification of that which is to be researched	X		
The choice of questions to be asked in relation to that which is to be researched			
1. Questions of simple description, i.e., "What is?"		X	
2. Questions of relationship, i.e., "What is associated with what?"		X	
3. Questions of cause and effect, i.e., "What leads to what?"		X	
4. Questions of ultimate ends, i.e., "What ought to be?"		X	
5. The specification of questions to be asked in relation to that which is to be researched			X

CONTENT	LEVEL OF OBJECTIVE		
	Exposure	Under-standing	Perform-mances
The choice of research setting			
1. Natural settings, i.e., "field" research		X	
2. Contrived settings, i.e., "laboratory" research		X	
3. The specification of the research setting within which to pursue the questions asked			X
The choice of measurement			
1. The place of measurement in the extension of knowledge	X		
2. The theory of measurement			
a. the "power" of a measure		X	
b. the "dimensionality" of a measure		X	
3. The unit of measurement		X	
4. Approaches to systematic measurement in the behavioral sciences			
a. obtrusive measures		X	
b. unobtrusive measures		X	
5. Estimating the amount of uncontrolled variance in measurement effects			
a. reliability		X	
b. validity		X	
6. Maximizing the power of a measure within given limits of economy			
a. identifying sources of uncontrolled variance	X		
b. controlling sources of unwanted variance	X		
7. The development of the research instruments needed to pursue the questions asked within a given setting			X
The choice of design			
1. Identifying the universe about which one wishes to make statements			
2. Sampling the universe so identified			
a. the population sample		X	
b. the behavior sample			

CONTENT	LEVEL OF OBJECTIVE		
	Exposure	Understanding	Performances
3. Designing a study so that within a given level of economy the data will be maximally powerful and efficient			
a. through sampling efficiency, i.e., through random or stratified sampling, pairing, etc.		X	
b. through treatment variation, i.e., through multiple experimental and/or control groups, before-after designs, etc.		X	
c. through statistical control, i.e., through analysis of variance or covariance, multiple regression, multivariate analysis, etc.		X	
4. The specification of a design which will maximize the efficiency and power of the data being collected			X
<u>The generation of data</u>			
Collecting data at a pilot level and using it as a basis for generating a sufficient data pool to enable analyses to be run			X
<u>The choice of analysis</u>			
1. Statistical and non-statistical approaches to analysis	X		
2. The relationship between questions asked and statistics used		X	
3. The relationship between measures obtained and statistics used		X	
4. The relationship between design selected and statistics used		X	
5. The application of machines in analysis		X	
6. The analysis of data relative to the questions asked, the measures obtained and the design used			X

ATTACHMENT 5

The Test to Be Used in Assessing the Entering Research Competencies of the Post-Doctoral Residents

1) Describe the focus of your dominant research interest (each resident will have been asked to firm his thinking in his major area or areas of research interest before coming).

2) Specify in relation to this focus three research questions: (a) a question focusing upon simple description, i.e., "What is?"; (b) a question focusing upon a co-relational relationship between variables, i.e., "What relates to what?"; and (c) a question which focuses upon the cause and effect relationship between variables, i.e., "What leads to what?".

3) Specify the setting under which you would prefer to carry out research relating to each of the three questions; that is, specify whether you would prefer to do the research in a "natural" setting or a "contrived" setting. Indicate the thinking underlying your choice.

4) Specify the general class of measures which you would use in order to answer each of the three research questions, e.g., standardized tests, face to face observation, interview, questionnaire, etc. For each class of measure to be used indicate: (a) the features or characteristics of the measure about which you would require information, (b) the operations required in applying the measure, and (c) the operations required in readying for analysis the data which comes from the measure.

5) Specify the research design you would use in order to answer each of the three research questions. In speaking of the issue of design include reference to: (a) the universe about which you wish to make statements, (b) the sample of the universe on which you would base your statements, (c) the operations involved in obtaining your samples, and (d) the planning of the studies so that within a given level of economy the data would be maximally powerful and efficient.

6) Specify the analysis you would use in relation to each question, given the measures and the designs that have been used. With respect to each statistic to be used in analysis, indicate the rationale underlying its selection and the operations that are involved in its application.

ATTACHMENT 6

NAME: Wesley Caspers

AGE: 48

LENGTH OF TIME IN THE POSTDOCTORAL PROGRAM:

9 months

POSITION (AND DUTIES) IN THE YEAR PRIOR TO YOUR ENTERING THE POSTDOCTORAL PROGRAM:

Professor and Dean, Western Montana College
(Montana State System of Higher Ed.)

BACKGROUND OF TRAINING:

B.S. Wisconsin State University, Superior
M.A. University of Minnesota
M.S. California Institute of Technology,
Ph.D. University of Minnesota

POSITION (AND DUTIES) ANTICIPATED FOR THE YEAR FOLLOWING THE POSTDOCTORAL PROGRAM:

Professor of Education, Linfield College
Project Director, Linfield Research Institute

I. All of you have had a number of experiences in common while at Teaching Research. These are listed below. Please rank them in order of their worth to you.

Ranking*	Experience	Comment here as to how you would modify the experience if the program were to be carried out another year.
7	Travel to conferences and visits to other institutions	
3	Attending organizational and administrative meetings at Teaching Research	
5	Meeting and/or discussing with visitors, consultants, guest lecturers, etc.	
8	Participating in Technical seminars	Find out where your students are BEFORE you instruct! (Also after?)
2	Informal interchange with fellow postdoctoral residents	
6	Informal interchange with staff at Teaching Research	
1	Experience on project research or your own research	
4	Staff response to or help with research ideas, skills, etc.	Incorporate funds for staff time to postdoctoral fellows so that he* does not feel he is using the vital time of the staff.
9	Informal interchange with other professional staff at OCE or other institutions	

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* Rank from 1 (high) to 9; tie rankings may be used.

*not that any staff member ever gave that impression! (we just knew)

III. LIST THE SPECIFIC ACTIVITIES IN WHICH YOU WERE INVOLVED DURING THE COURSE OF THE YEAR (WITH THE EXCEPTION OF THE TECHNICAL SEMINARS), WHY YOU CHOSE TO ENGAGE IN THEM, AND WHAT YOU GAINED FROM EACH.

I devoted most of my time to "Project Teacher Corvallis" participating in the videotape recording of over 30 teachers, serving in all capacities from cameraman to director. My interest centered in the concept of teacher improvement and the unsolved problem of the criteria against which improvement might be measured.

The reason I selected this project is that I had submitted a very similar proposal from and for WMC. My proposal was rejected. In Corvallis I then was able to pursue the work much as I had envisioned it happening in Montana.

The opportunity to visit Stanford University also afforded information and an opportunity to evaluate the "Micro-teaching" research, utilizing the videotape recorder, underway at that institution.

I also visited the work in videotape recording of experienced teachers at Carmel, California.

Some involvement in assisting the Northwest Regional Laboratory at a clerical level gave me an opportunity to learn of their projects and problems in this same area of audio and video taping of teachers.

Finally I devoted most of two months to the preparation of a proposal to utilize the videotape recorder directly in the instruction of science pupils at the junior high school level.

What I gained throughout was the notion that there is power in the idea of audio and video feedback to learners and that very little research of any significance has been done in this area.

IV. LIST THE SPECIFIC ACHIEVEMENTS OR ACCOMPLISHMENTS THAT CAME FROM THE YEAR'S EXPERIENCE, AND SKETCH BRIEFLY THE INFLUENCE THAT YOU THINK EACH WILL HAVE ON YOUR SUBSEQUENT PERFORMANCE AS AN EDUCATIONAL RESEARCHER AND/OR PROFESSIONAL EDUCATOR.

It is difficult for me to separate this item from the previous one. My goal was to prepare an acceptable proposal that will allow me an opportunity to direct some research in my field of teacher preparation. I feel I had the time and the opportunity to do my best. One could hardly ask for more.

V. DISCUSS GENERALLY THE MEANING WHICH THE POSTDOCTORAL RESIDENCY EXPERIENCE HAS HAD FOR YOU AS AN INDIVIDUAL AND AS A PROFESSIONAL IN THE FIELD OF EDUCATION. IN THIS CONNECTION COMPARE THE CONTRIBUTION OF THIS EXPERIENCE WITH OTHER EDUCATIONAL EXPERIENCES WHICH YOU HAVE HAD.

In essence the program was a confirmation of the motive that led me to apply, a belief that education is in short supply of known relationships between teaching and learning. The public school system has pretty well solved the practical problems of bringing teachers and students together in workable situations. However, teachers are not adequately equipped for the responsibility of motivating and guiding the learner or for evaluating the effects of what they themselves bring into a situation where learning might occur.

The other educational experiences which I have had include participation as both student and professor at all levels of the formal school system. At the moment my feeling is that all this former experience has been too broad and that a return this year to some of the atomistic nature of research has been significant but that I need more experience, with precision, in specific learning tasks.

NAME: Armand J. Galfo

AGE: 42

LENGTH OF TIME IN THE POSTDOCTORAL PROGRAM:

9 months

POSITION (AND DUTIES) IN THE YEAR PRIOR TO YOUR ENTERING THE POSTDOCTORAL PROGRAM:

Associate Professor and Assistant Dean, School of Education, College of William and Mary, Virginia.

Taught courses in Methods of Teaching Science and Math and Research in Education.

BACKGROUND OF TRAINING:

B.A. Chemistry and Math
Ed.M. Science Education
Ed.D. Education Administration, all at University of Buffalo.

8 years, public schools in New York State and Florida, taught Science and was Head of Science Department.

POSITION (AND DUTIES) ANTICIPATED FOR THE YEAR FOLLOWING THE POSTDOCTORAL PROGRAM:

Associate Professor, teach undergraduate courses and direct Secondary Student Teaching Program - Graduate courses, including doctoral level in research.

I. All of you have had a number of experiences in common while at Teaching Research. These are listed below. Please rank them in order of their worth to you.

Comment here as to how you would modify the experience if the program were to be carried out another year.

Ranking*	Experience
5	Travel to conferences and visits to other institutions
7	Attending organizational and administrative meetings at Teaching Research
8	Meeting and/or discussing with visitors, consultants, guest lecturers, etc.
6	Participating in Technical seminars
3	Informal interchange with fellow postdoctoral residents
4	Informal interchange with staff at Teaching Research
1	Experience on project research or your own research
2	Staff response to or help with research ideas, skills, etc.
9	Informal interchange with other professional staff at OCE or other institutions

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* Rank from 1 (high) to 9; tie rankings may be used.

II. OUTLINE THE RATIONALE UNDEPLYING YOUR RANKING IN I.

1. Plenty of instructional time and opportunities to get involved in research (such as Paulson's study of behavioral objectives).

2. Open door policy of everyone and good constructive criticism of ideas presented.

3. Postdoctoral Fellows "fit" together well both socially and intellectually in terms of interests (wide).

4. Teaching Research staff have an excellent working and social relationship with each other and made post docs feel "in".

5. Plenty of opportunity to travel and not rigid about allowing us to go.

6. Wish technical seminars could have been held just a bit more often, especially on certain topics such as those presented by Gordon and Beaird. But all in all, very good.

7. Okay and interesting, but pretty much old hat to those of us who have been involved in the "administrative wars."

8. & 9. Useful, but not vital.

III. LIST THE SPECIFIC ACTIVITIES IN WHICH YOU WERE INVOLVED DURING THE COURSE OF THE YEAR (WITH THE EXCEPTION OF THE TECHNICAL SEMINARS), WHY YOU CHOSE TO ENGAGE IN THEM, AND WHAT YOU GAINED FROM EACH.

1. Preparation of course work and materials for an advanced course in Research and Statistics -- My own inadequate preparation in this area plus a great interest -- professional growth and increased competence.

2. Preparation of two research proposals (one small grant and one large) -- interested in conducting research when I return to William and Mary -- gained much knowledge concerning preparation of proposals and also learned how team effort can be applied (received help and advice from many of the staff and postdoctoral people in shaping the proposals).

3. Preparation of materials and conduct of one of the research projects of Teaching Research Division -- got involved partially for selfish and partially for altruistic reasons; selfish - wished to learn all I could about real nuts & bolts of doing a project and did gain whole new insights that had never occured to me about mechanics of researching with teaching tools such as used in the AV project: altruistic - felt that I should do something for people who were doing so much for us, this really is probably still a selfish thing because I got a hell of a lot more than I gave.

4. Attended two conferences --

One a professional conference on research -- received much information but just as important, got to know other post docs better early in year.

Other, a conference of politicians and educators -- of tremendous interest to me since I have taught courses in history of education and curriculum development and have always included in those courses discussions of social forces which have shaped education and curriculum.

IV. LIST THE SPECIFIC ACHIEVEMENTS OR ACCOMPLISHMENTS THAT CAME FROM THE YEAR'S EXPERIENCE, AND SKETCH BRIEFLY THE INFLUENCE THAT YOU THINK EACH WILL HAVE ON YOUR SUBSEQUENT PERFORMANCE AS AN EDUCATIONAL RESEARCHER AND/OR PROFESSIONAL EDUCATOR.

I think I have really answered this question except for the last part and therefore will address myself to an attempt to project in terms of influences.

1. Am much better prepared to teach courses in research and to guide graduate student research.

2. Am prepared to carry out some research of my own which hopefully will result from one or both proposals I have prepared.

3. Hope to carry back with me some of the enthusiasm and "free-wheeling" methods of operating which seems to "nurture" the productive "nature" (sorry about that) of the Teaching Research Division.

V. DISCUSS GENERALLY THE MEANING WHICH THE POSTDOCTORAL RESIDENCY EXPERIENCE HAS HAD FOR YOU AS AN INDIVIDUAL AND AS A PROFESSIONAL IN THE FIELD OF EDUCATION. IN THIS CONNECTION COMPARE THE CONTRIBUTION OF THIS EXPERIENCE WITH OTHER EDUCATIONAL EXPERIENCES WHICH YOU HAVE HAD.

G R E A T ! No other experience can even compare in terms of professional, intellectual and even social growth. I've enjoyed every minute of it.

NAME: Jesse H. Garrison

AGE: 43

LENGTH OF TIME IN THE POSTDOCTORAL PROGRAM:

One year

POSITION (AND DUTIES) IN THE YEAR PRIOR TO YOUR ENTERING THE POSTDOCTORAL PROGRAM:

Professor of Education and Psychology, O.C.E.

BACKGROUND OF TRAINING:

BA Central Washington	(Science and Math)
MA Washington State	Elementary Ed.
EdD Washington State	Curriculum with Psych. minor

POSITION (AND DUTIES) ANTICIPATED FOR THE YEAR FOLLOWING THE POSTDOCTORAL PROGRAM:

Same as previous year

I. All of you have had a number of experiences in common while at Teaching Research. These are listed below. Please rank them in order of their worth to you.

Ranking*	Experience	Comment here as to how you would modify the experience if the program were to be carried out another year.
8	Travel to conferences and visits to other institutions	
6	Attending organizational and administrative meetings at Teaching Research	
7	Meeting and/or discussing with visitors, consultants, guest lecturers, etc.	
5	Participating in Technical seminars	
2	Informal interchange with fellow postdoctoral residents.	
1	Informal interchange with staff at Teaching Research	I would attempt to provide more staff time to work with Postdocs I.E. pay them.
3	Experience on project research or your own research	I would devote less time to a personal project - it limited my chances to relate to others.
4	Staff response to or help with research ideas, skills, etc.	
9	Informal interchange with other professional staff at OCE or other institutions	

* Rank from 1 (high) to 9; tie rankings may be used.

II. OUTLINE THE RATIONALE UNDERLYING YOUR RANKING IN I.

The group of people taking part in the program were mature professional people. The optimum setting is one that is stimulating and inviting but not compelling. We needed a chance to contemplate, to question and to establish relationships before we "got busy". Some of us, perhaps all of us, would have done poorly in a program with heavy schedules, deadlines and requirements.

Within the group there were fascinating differences in experience, point of view, and convictions. As soon as we lost the tendency to be defensive (unfortunately all too common in higher education) we had many long, trying, and exceedingly beneficial discussions. This type of study can be "allowed to happen" but, as I see it, only in the setting described above.

The staff number impressed me as having achieved some measure of the open, honest quality described before we arrived on the scene. We met with little defensive behavior in our early meetings. Perhaps this also might be a prerequisite to the exchanges which I found so valuable.

The greatest limitation was that specific staff time was not provided. This meant that the post docs needed to seek out people and ask for time and aid. I'm sure most of us were hesitant since the people with whom we wished to visit were busy.

III. LIST THE SPECIFIC ACTIVITIES IN WHICH YOU WERE INVOLVED DURING THE COURSE OF THE YEAR (WITH THE EXCEPTION OF THE TECHNICAL SEMINARS), WHY YOU CHOSE TO ENGAGE IN THEM, AND WHAT YOU GAINED FROM EACH.

I spent the greatest part of my time designing and carrying out a study of self confrontation and its effect on teaching behavior with a group of college students. I have felt for some time that philosophy (especially values) and psychology must come together in people. The outcomes showed highly significant changes in the students toward greater flexibility, sensitivity to students and adaptability or flexibility in carrying out teaching activities. In affect, the experimental group was less anxious and consequently more attentive to learners according to an analysis of video-tape records. I estimate that at least half of my time was spent in this activity with another large portion spent in discussions, study and other activities directly related to it. While the intensity and depth of this effort was exceedingly useful to me, I'm inclined to feel that I missed other important activities during the year.

My greatest gain was in developing some means of relating empirical evidence to intuitive evidence. I've been distressed for some time with the elevation of "science" to the absurd level which occures in some writing and discussion of the human condition. I'm sure that I've tended to react to this by discounting the methodology and the contributions of an empirical approach. I'm still deeply disturbed by the philosophical naivety of many "researchers" and planners (especially in the USOE) who apparently assume the data and knowledge are identical terms but assume I have developed a more valid viewpoint as a result of the years work in research.

IV. LIST THE SPECIFIC ACHIEVEMENTS OR ACCOMPLISHMENTS THAT CAME FROM THE YEAR'S EXPERIENCE, AND SKETCH BRIEFLY THE INFLUENCE THAT YOU THINK EACH WILL HAVE ON YOUR SUBSEQUENT PERFORMANCE AS AN EDUCATIONAL RESEARCHER AND/OR PROFESSIONAL EDUCATOR.

1. I have learned a great deal about utilizing tests, especially in the areas of personality and values. I hope to continue my study as well as to utilize this approach in my teaching.

2. I've been helped to gain deeper and more honest insights into research and, in general, into science methodology. This will certainly add quality to my teaching of educational philosophy.

3. I appreciate the need to assist students in relating content and course work to themselves and their lives. I see some form of "existential confrontation" as offering hope. I see further the need to be specific about "existential confrontation". It is my hope that I will be able to secure support to continue the exploration and development of this approach to learning.

4. I've gained considerable information in designing and measuring experimental activities. I feel I understand what is meant when we say it is a "new" effort to apply this powerful approach to human behavior.

5. I'm convinced that the science-art divergence in teaching represents a temporary condition. I'm also convinced that the psychology philosophy split is symptomic of the same divergence and will, in time, disappear. My future teaching and research efforts will hopefully be more inclusive of all factors relating to teaching behavior. I am hopeful that methodology will be developed to enable this to happen.

V. DISCUSS GENERALLY THE MEANING WHICH THE POSTDOCTORAL RESIDENCY EXPERIENCE HAS HAD FOR YOU AS AN INDIVIDUAL AND AS A PROFESSIONAL IN THE FIELD OF EDUCATION. IN THIS CONNECTION COMPARE THE CONTRIBUTION OF THIS EXPERIENCE WITH OTHER EDUCATIONAL EXPERIENCES WHICH YOU HAVE HAD.

The year represents the most valuable experience of my professional life. The setting was stimulating, supportive, extremely honest and permissive enough to allow for many personal decisions. The resource people had developed a high level of competancy which caused all of us to "scretch" at times. The relationships demonstrated trust, mutual respect, and an honest concern for all of the post docs.

The program here "fit" the group. Careful screening was apparently carried out to assure a mature and some what independent group. I'm sure that a program which listed more specific activities, more specific requirements and, in effect, more power might appear better on paper. As I see the emerging educational needs, they are for the kind of human relationships described at the end of the first paragraph. These cannot be built by imposed control nor can they be built by insisting on their importance.

It was an exciting and stimulating year. I feel sure that it will be reflected in my subsequent work for a long time.

NAME: Henry M. Reitan

AGE: 46

LENGTH OF TIME IN THE POSTDOCTORAL PROGRAM:

Twelve months

POSITION (AND DUTIES) IN THE YEAR PRIOR TO YOUR ENTERING THE POSTDOCTORAL PROGRAM:

Associate Professor - Educational Psychology, Washington State University

BACKGROUND OF TRAINING:

PhD - General and experimental Psychology

POSITION (AND DUTIES) ANTICIPATED FOR THE YEAR FOLLOWING THE POSTDOCTORAL PROGRAM:

Associate Director, Center for Development of Community College Education, University of Washington

I. All of you have had a number of experiences in common while at Teaching Research. These are listed below. Please rank them in order of their worth to you.

Ranking*	Experience	Comment here as to how you would modify the experience if the program were to be carried out another year.
9	Travel to conferences and visits to other institutions	Fine as is.
5	Attending organizational and administrative meetings at Teaching Research	Due to exigencies of spring and summer proposal writing the divisional meetings were discontinued. This is understandable, however, I found them to be a fine learning experience and would urge that future post doctoral students have exposure throughout the year.
6	Meeting and/or discussing with visitors, consultants, guest lectures, etc.	Sometimes the communications procedure appeared to break down between headquarters and Swindel Hall but, all in all a fine feature.
3	Participating in Technical seminars	Probably earlier in the year and once a week.
3	Informal interchange with fellow postdoctoral residents.	The physical setting, planned release time and pacing was not just superior.
1	Informal interchange with staff at Teaching Research	As in the item above, a tremendous experience.
7	Experience on project research or your own research	When I accepted a new position at the University of Washington my project objectives changed from a personal project to planning cooperative research with various community colleges. The staff could not have been more helpful.

* Rank from 1 (high) to 9; tie rankings may be used.

Ranking	Experience	Comment here as to how you would modify the experience if the program were to be carried out another year.
3	Staff response to or help with research ideas, skills, etc.	Some research on in-service training packages is now being planned which will call on the services and facilities at Teaching Research.
8	Informal interchange with other professional staff at OCE or other institutions	Fine as is.

II. OUTLINE THE RATIONALE UNDERLYING YOUR RANKING IN I.

If I were to rate the 9 activities they would all rate well above the average professional experiences and learning activities in which I had engaged prior to the postdoctoral year. In my opinion the opportunity to be immersed in the activities of an organization whose Raison d'etre is research is essential for this kind of a postdoctoral experience. To me the opportunities to interact with the professional staff at Teaching Research were of inestimable value. The willingness to share ideas, the desire to be helpful were characteristics shared by the senior staff which were unique to my experience.

The seminars were most provacative and provided content for highly profitable independent study and discussion with the other postdoctoral fellows as well as the senior staff.

I felt the learning experiences provided were the most exciting and positive in my rather lengthy educational career.

III. LIST THE SPECIFIC ACTIVITIES IN WHICH YOU WERE INVOLVED DURING THE COURSE OF THE YEAR (WITH THE EXCEPTION OF THE TECHNICAL SEMINARS), WHY YOU CHOSE TO ENGAGE IN THEM, AND WHAT YOU GAINED FROM EACH.

I attended the meetings of both the Basic Research Division and the Contextual Research Division. They both afforded the opportunity for keeping abreast of ongoing research and/or theorizing in these areas. It was an excellent opportunity to gain insights into methodology and theory. In addition, the divisions were new enough to still have real doubts concerning roles and functions. This promoted much discussion and thus gave me a better understanding of various research dimensions.

I had the opportunity to help formulate some design for a San Diego Jr. High School proposal, and a proposal for a Center for the Planning for Educational Change as well as running some film test data at the computing center at O. S. U.

I helped Dr. Kersh with his CORD project - both the general project as well as the Biology unit and the O. C. E. games planning exercise. I gained a better understanding of the problems involved in gaining both intra and inter-faculty cooperation. I tried to read all new proposals as they were generated by staff. I felt this was highly instructional, especially since staff were always willing to explain the rationale behind a design or method.

I also helped the Dean of Students office at O. C. E. with a study of student attrition and aided several staff at O. C. E. in suggesting design and statistical models for master's candidates. I attempted to aid junior staff on various projects as problems arose. These activities were probably more ego enhancing than instructional.

During the year I had the opportunity to complete several research articles as well as one on methodology. I am currently working on research proposals for community colleges in the state. The proposals are being formulated to include the Teaching Research Division in either consulting or a joint initiator role.

IV. LIST THE SPECIFIC ACHIEVEMENTS OR ACCOMPLISHMENTS THAT CAME FROM THE YEAR'S EXPERIENCE, AND SKETCH BRIEFLY THE INFLUENCE THAT YOU THINK EACH WILL HAVE ON YOUR SUBSEQUENT PERFORMANCE AS AN EDUCATIONAL RESEARCHER AND/OR PROFESSIONAL EDUCATOR.

I feel that I have gained proficiency and knowledge in areas of research design, statistics and measurement. In addition, I am sure that I am much more aware of total effort needed to carry out meaningful research. My acquaintance with the senior staff has made me appreciative of the kinds of cognitive and conative factors which are prerequisite to carrying a research project to fruition.

I approach my present position with far less trepidation than I would have experienced a year ago. I can think of no years experience that could have been more beneficial for the assumption of my present position.

V. DISCUSS GENERALLY THE MEANING WHICH THE POSTDOCTORAL RESIDENCY EXPERIENCE HAS HAD FOR YOU AS AN INDIVIDUAL AND AS A PROFESSIONAL IN THE FIELD OF EDUCATION. IN THIS CONNECTION COMPARE THE CONTRIBUTION OF THIS EXPERIENCE WITH OTHER EDUCATIONAL EXPERIENCES WHICH YOU HAVE HAD.

The residency gave me the opportunity to update knowledge and skills but even more important to me, gave me the opportunity to be immersed in an organizational setting which had research as a prime purpose. Not only was the permanent staff highly competent but they also demonstrated an honesty and vigor that seem lacking in many educational institutions today. There was a spirited devotion toward the advancement of knowledge that provided new direction for me both personally and professionally.

Without doubt this was the most profitable educational endeavor in which I have engaged. The staff, facilities, and setting were all of the highest order. The planned mix of the three was superb.

NAME: Stanton B. Towner

AGE: 44

LENGTH OF TIME IN THE POSTDOCTORAL PROGRAM:

9 months

POSITION (AND DUTIES) IN THE YEAR PRIOR TO YOUR ENTERING THE POSTDOCTORAL PROGRAM:

Associate Professor of Sociology, Linfield College, McMinnville, Oregon
Sociology Department Head

BACKGROUND OF TRAINING:

AB Psychology, University of California at Berkeley
MA University of Southern California
PhD University of Southern California

POSITION (AND DUTIES) ANTICIPATED FOR THE YEAR FOLLOWING THE POSTDOCTORAL PROGRAM:

Same as previous year

I. All of you have had a number of experiences in common while at Teaching Research. These are listed below. Please rank them in order of their worth to you.

Ranking*	Experience	Comment here as to how you would modify the experience if the program were to be carried out another year.
1	Travel to conferences and visits to other institutions	
3	Attending organizational and administrative meetings at Teaching Research	
4	Meeting and/or discussing with visitors, consultants, guest lecturers, etc.	
3	Participating in Techniaal seminars	
1	Informal interchange with fellow postdoctoral residents	
2	Informal interchange with staff at Teaching Research	
1	Experience on project research or your own research	
5	Staff response to or help with research ideas, skills, etc.	
4	Informal interchange with other professional staff at OCE or other institutions	

* Rank from 1 to 9; tie rankings may be used.

II. OUTLINE THE RATIONALE UNDERLYING YOUR RANKING IN I.

I felt I had come to live for a year in a family that spoke a foreign language, and that had "cousins" all around the country they referred to familiarly. The PDK meeting in Berkeley where I was able to see some of these cousins in action, so they became more than names, was like therapy. I felt much less out-of-it thereafter. I had to "score staff response to or help with research ideas" further down the ranking. But this was largely a result of my lack of seeking help after a few feeble attempts failed to find anyone with a general interest and enthusiasm that paralleled my own. I know the staff of Teaching Research well enough to be perfectly confident they would have gladly helped me anytime I came for help.

III. LIST THE SPECIFIC ACTIVITIES IN WHICH YOU WERE INVOLVED DURING THE COURSE OF THE YEAR (WITH THE EXCEPTION OF THE TECHNICAL SEMINARS), WHY YOU CHOSE TO ENGAGE IN THEM, AND WHAT YOU GAINED FROM EACH.

Reading in the literature of educational research was maybe the most important activity I was involved in during the year. Reading, along with sitting in on discussions, was a prime need of mine - otherwise I should never have come to grasp the language and concepts of educational psychology. I would have remained "out-of-it."

I did a fairly exhaustive review of the literature on research on media use in education, and also on research on higher-education teaching. I found time to outline a basic course in social psychology to be taught by individual self-teaching in a multi-media carrel. The course had a thread of theory to tie it into a whole, unlike the conventional social psychology course, and the behavioral goal was to "create" students who "understood" in the sense of being able to apply their learning to simulated new situations. The reason this project did not result in a proposal is that the course materials had to be devised before the test of educational effectiveness of the teaching mode could be made. There just were no usable materials extant. I was ineffective in identifying sources of funding for the development of the course. I knew nothing of grantsmanship at the start of the year, picked up some knowledge along the way, and think I may be ready to move with success in obtaining support for the course-development phase of the social-psychology self-instruction multimedia laboratory project.

IV. LIST THE SPECIFIC ACHIEVEMENTS OR ACCOMPLISHMENTS THAT CAME FROM THE YEAR'S EXPERIENCE, AND SKETCH BRIEFLY THE INFLUENCE THAT YOU THINK EACH WILL HAVE ON YOUR SUBSEQUENT PERFORMANCE AS AN EDUCATIONAL RESEARCHER AND/OR PROFESSIONAL EDUCATOR.

I have seen a research organization in operation, learned something of the quality of research that will be funded by the USOE, and learned something of the mechanics of getting proposals funded. The value of this is that I may be an educational researcher in years ahead because I <u>can</u> get proposals written and funded.

I shall probably remain an educator at least part time. I have hopes of being more effective as such due to my familiarity with research on teaching at the college level, and due also to what I find from my own research on higher-education teaching.

V. DISCUSS GENERALLY THE MEANING WHICH THE POSTDOCTORAL RESIDENCY EXPERIENCE HAS HAD FOR YOU AS AN INDIVIDUAL AND AS A PROFESSIONAL IN THE FIELD OF EDUCATION. IN THIS CONNECTION COMPARE THE CONTRIBUTION OF THIS EXPERIENCE WITH OTHER EDUCATIONAL EXPERIENCES WHICH YOU HAVE HAD.

A small private college in a rather isolated community is a poor place to keep a feeling of membership in the "community" of behavioral science researchers. The postdoctoral residency made me aware of how much isolated I really was, a frightening experience, but also gave me the opportunity to catch up. Of course, my catching up was largely in areas tangential to my basic disciplines, sociology-social psychology. But my long standing faith in a scientific approach to understanding human social behavior has been confirmed.

No other experience since graduate school compares with this postdoctoral experience in revitalizing my interest and hope of doing research even in the face of a heavy nominal teaching load.