THE COMPARATIVE PERFORMANCE OF SUPPORT PERSONNEL WITH SYSTEMS APPROACH INSTRUCTION AND ELEMENTARY SCHOOL COUNSELORS AND TEACHERS

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ABSTRACT

THE COMPARATIVE PERFORMANCE OF SUPPORT PERSONNEL
WITH SYSTEMS APPROACH INSTRUCTION AND
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By

David Allen Cavins

This study investigated the feasibility of training laymen as support personnel for the counselor as one possible solution to the problem of personnel shortages in the counseling and guidance profession.

The purpose of this experiment was to test the effects of short-term systematic training on the performance of laymen and teachers in the tasks of 1) group standardized test administration, 2) summary of student cumulative folders, and 3) observation of individual student behavior.

Instructional materials were developed for this study using techniques adapted from the "systems analysis" approach. A group of twelve laymen and twelve elementary school teachers received systematic instruction during three different and separate three hour meetings which were completed within a two week period. After instruction participants were given opportunities to practice these three tasks in the schools.

The two groups receiving training were compared with control groups of equal size as well as a group of twelve elementary school counselors who were used as a criterion group. Laymen subjects were volunteers from the local community responding to invitations to participate. Of those accepting the opportunity to be involved, twelve were given the training sequence with another twelve laymen taking only the post-test at a later time. The twenty-four participating teachers were randomly selected from sixty eligible first through sixth grade teachers working in the district in which the experiment was conducted. The treatment group was

established through random assignment. The twelve counselors involved in the study represented all of the elementary school (K-6) counselors working near the site of the study.

A post-test was constructed to measure performance in each of the three tasks studied. Each test had two parts so that performance could be assessed in different ways, and each test contained forty items. These tests simulated the activities used during instruction or practice, but different procedures, forms, and materials were used. The sixty subjects selected for this study took the entire test of 120 items two months after the end of the instruction period, and two weeks after the final practice opportunity.

The scores achieved by the participants taking the test were analyzed using the analysis of variance for repeated measures statistical technique. Tests were performed to determine the "F" ratio and critical values were established at the .05 confidence level to examine findings related to total treatment main effect and interaction effect. Additional calculations were done by using the Scheffé method for multiple group comparisons to determine exactly where significant differences existed.

The major implications resulting from the research were as follows:

1. Laymen without training would be considerably less capable of performing selected routine or clerical tasks than would either teachers or counselors, or laymen with training.

2. With short-term systematic training, lay personnel could be trained to perform routine and clerical tasks so as to do them equally as well as either counselors or teachers.

3. Short-term systematic instruction in the performance of test

administration and cumulative folder tasks would not prepare teachers to perform these tasks any better than teachers without training, counselors, or laymen with similar training.

4. Teachers with instruction in observation, when presented with simulated observations using video-tape media with direct applicability to their daily classroom situations, would be able to perform significantly better than teachers without training, counselors, or laymen with training.

5. Counselors with graduate preparation and experience in performing the selected tasks would be no more effective in the performance of these tasks than either teachers or laymen with specific training.

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CHAPTER I

INTRODUCTION TO THE STUDY

Rationale

Support personnel for the counselor has recently emerged as a controversial issue demanding professional attention. The term "support personnel" is one of a variety of labels, such as paraprofessional, subprofessional, counselor aide, guidance assistant, etc., which has generally been used to identify one who: 1) lacks certification in guidance and counseling, 2) lacks a generalized background or theoretical base of knowledge of the field, 3) works under the direction and supervision of a certified professional, and 4) performs selected tasks which are delimited from the role of the professional.

Professional acknowledgement of support personnel was recently given by the American Personnel and Guidance Association (1967) with a published policy statement entitled "Support Personnel for the Counselor: Their Technical and Non-Technical Roles and Preparation." This statement clearly identifies suggested guidelines for the use of support personnel.

Justification for support personnel is related to two critical problems facing the guidance and counseling profession. The first is the need to decrease severe personnel shortages while still maintaining appropriate standards and qualifications. The second is to insure that functioning counselors have the time and opportunity to practice and implement the skills developed in their specialized training programs.

Several reasons are often cited for the existence of personnel shortages. A recent examination of the field offers ample evidence that many factors contribute to this situation (Stiller, 1967). The

professional association has recommended a two year preparation program for counselors. This, predictably, will increase the demand upon already crowded counselor education programs. Increasingly, states are requiring "institutional endorsement" from an approved training program as a prerequisite to counselor certification. Federal legislation is creating new or additional positions for counselors both in and outside education. Ratios between counselors and students, established earlier, are seen as being inadequate to meet existing demands and needs. The role of the counselor continues to be expanded to include a greater variety of tasks and responsibilities. Acceptance of guidance services at all levels of education from pre-school to junior college to graduate school have increased the need for guidance personnel. Seemingly, the profession has oversold its product.

Traditionally it has been thought that these shortages could best be eliminated by increasing training opportunities in counselor education programs. However, with such a wide gap existing between supply and demand, other alternatives need to be explored. The dilemma of finding suitable solutions was confronted in a conference entitled "Government-University Relations in the Professional Preparation and Employment of Counselors (1965)." Throughout the reported proceedings, considerable discussion was devoted to the potential of using subprofessional personnel to assist the functioning counselor. Several recommendations of that conference were related to attempts to structure the development of support personnel as one means of decreasing personnel shortages.

Additional justification for the use of support personnel is based upon an examination of the duties of counselors in public schools as they attempt to meet the expectations of others. Counselors in the

field frequently complain about the aspects of their job that are routine and technical and which do not require the skills resulting from graduate preparation and training. The problem is the discrepancy which often exists between the expectations of the counselor upon leaving graduate school and the actual confrontation with the reality of the job once he is employed. The possibility exists that the role of the counselor on the job could be analyzed so as to make a distinction between those tasks which demand specific skills taught only in a counselor preparation program and those tasks which could be performed by one who does not possess such skills or training.

The concern of the American Personnel and Guidance Association (1967) for the emergence of support personnel is properly directed toward the two critical areas of role and preparation. In developing the rationale for support personnel for the counselor, the Association is concerned about the "systematic programming of support personnel roles" and urges an "examination of the published policy statements which outline the role and functions of professional counselors before we can determine the duties of support personnel (p.858)." The policy statement includes an extensive list of activities which would appear to be appropriate tasks for support personnel. Two areas of involvement are identified as "direct helping relationships" and "indirect helping relationships." An examination of the activities listed indicates that support personnel ought to be able to assist the counselor in both extending services to larger numbers of students and in improving existing services.

The Systems Approach to Training

As indicated in the American Personnel and Guidance Association

(1967) policy statement, "The work of support personnel tends toward the particular...characterized by more limited theoretical background and specialization in one or more support functions (p.859)." Consequently, training opportunities ought to be limited to a method designed to teach for the task. A procedure for instruction applicable to this kind of technical task training might be a "systems analysis" approach. Thoresen has summarized the background of this movement and indicates that "the term 'system analysis' and alternative labels such as systems approaches, man-machine systems, system engineering and operations research, has been widely used in such fields as business management, applied physics, military training, environmental planning, and space sciences for over a decade to describe ways of conceptualizing problems and devising solutions." He argues that there are definite implications and a specific relevance for the utilization of this approach in the training of counselors. Support personnel might also profit from such instructional programs.

Several features of the systems approach could be modified and applied to a desirable method of training support personnel. In designing training programs for support personnel it would be necessary to think of the entire sequence of training as a "system." The total system would include all of the instructional components necessary to meet the predetermined objectives of preparing support personnel to successfully perform all of the tasks that would be assigned to them on the job.

In designing such a system several critical steps would have to be accomplished. It would be necessary to determine exactly which tasks would be included. A task analysis would have to be done on the role of the counselor. This would necessitate establishing a priority list of

functions currently being performed by counselors, and delimiting those tasks for which support personnel could be trained. High priority functions would remain in the counselor's role; i.e., counseling, consulting, etc. Low priority tasks, which others could be trained to perform as well as counselors, would make up the list of tasks to be included in a support personnel training system.

Once the list of tasks were established, it would be necessary to specify the objectives to be accomplished through instruction based on the performance which would be expected of the participant in successfully accomplishing the task on the job. Objectives for task performance would be sequentially organized within the total system beginning with the least difficult or complex and moving to the most difficult.

The final step would be to design "instructional systems"[1] which would accomplish the stated objectives. Included in the preparation of instruction would be a procedure to prepare a participant to gain: an initial awareness to the overall process which includes orientation, purpose, directions, and behavioral objectives for the specific task; presentation of knowledge; an opportunity for self-evaluation to gain immediate knowledge of the results of learning; the utilization of simulated experiences to gain additional knowledge of the results of performance; and situations for practice and supervision.

The support personnel training system would also need to provide for experiences related to work with the school counselor in the job setting of the school. Consequently, the "system" of the school would

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[1] An instructional system has been defined by Smith (1966) as "an integrated set of media, equipment, methods, and personnel performing efficiently the functions required to accomplish one or more training objectives (p.1)."

have to be considered in dovetailing the learning of specific tasks with application of learned skills in on-the-job experience. Such a situation would offer graduates of the training system the best chance for successfully meeting the criteria included in the objectives established for the training sequence.

Statement of Need

This investigation is designed to focus on a systematic method to prepare support personnel to perform selected tasks deleted from the job of the professional counselor which are intended to improve the efficiency and effectiveness of guidance services at the elementary school level.[1] The data gathered in this study ought to offer implications related to the role and preparation of support personnel. This knowledge ought to be of value to:

1. functioning counselors who are concerned about the frustrations encountered when faced with unrealistic demands on both time and energy,
2. supervisors of counselors who are seeking methods to extend and improve guidance services to students,
3. school administrators who are constantly seeking ways of coping with financial conflicts between need and the ability to pay,
4. officials in State Departments of Education who are expected to be knowledgeable about innovations in the field and methods of improving services,
5. counselor educators who are currently training future counselors who might be faced with the direction and supervision of support personnel in new jobs,
6. university personnel who are interested in designing programs to prepare support personnel.

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[1]The term "elementary school level" will refer to grades kindergarten through six for the purposes of this study.

Statement of Purpose

The purpose of this investigation is to evaluate the effectiveness of lay personnel in the performance of three selected tasks after having undertaken short-term training. The tasks are: 1) administration of standardized group tests, 2) summation of meaningful data from individual student cumulative folders, and 3) observation of individual student behavior.

Assumptions Upon Which the Study is Based

A basic assumption critical to this investigation is that, despite the lingering discussion about the role and function of the elementary school counselor, it is accepted that guidance services are an important and necessary component of elementary school education, and that there is a common "core" of duties expected of one responsible for this service. It is further assumed that the job of those accepting this responsibility, in this case the elementary school counselor, can be analyzed so as to differentiate between those activities that require intensive professional preparation and tasks which could be performed by one with limited training. With the development of a role for support personnel made up of tasks which are not dependent upon highly specialized or theoretical knowledge, it would follow that systematic instruction could effectively be applied directly to job performance.

In a counselor preparation program it is recognized that a large percentage of time and coursework is directed toward gaining proficiency in the process of counseling, either with individuals or with groups. This is only one component of an overall guidance service. Counselors on the job often find that demands for other kinds of service decrease

the amount of time a counselor has to devote to the counseling service. The appropriate use of support personnel is dependent upon the assumption that practicing counselors do in fact desire assistance with routine or technical tasks so that more of their time can be devoted to the use of the professional skills of counseling or consulting for which the major portion of their specialized training is intended.

Teachers are included in this investigation because of the vital role they have in providing effective guidance services. Many guidance oriented tasks fall within the domain of the classroom teacher. Counselors often express the need to involve teachers in in-service education so that they can work cooperatively together in the endeavor of providing students with a conducive environment for learning. It is therefore assumed that teachers could profit from systematic instruction in the performance of certain guidance tasks.

The decision to compare the performance of lay personnel and teachers after training to counselors and other teachers who did not receive specific instruction was based on the assumption that counselors and teachers had exposure to some instruction in the areas selected for examination during the course of their preparation. If applicable instruction were not available during their formal education, then it was assumed that experiences on the job would provide teachers and counselors with opportunities to perform the selected tasks.

Hypotheses

Five groups of equal size will be involved in this study. A group of twelve laymen and a group of twelve elementary school teachers will receive systematic instruction in three tasks. Their scores on a post-test constructed to measure performance in each task will be

compared with the post-test scores of laymen and teacher control groups and with a group of elementary school counselors.

The hypotheses to be tested are listed below in the "null" form.

H_o - 1: There will be no significant differences found among groups when total treatment main effects are analyzed.

H_o - 2: There will be no significant interaction differences found between treatment groups and repeated measures in this experiment.

H_o - 3: There will be no significant differences among groups when comparing the scores on a post-test measuring performance in the administration of standardized group tests.

H_o - 4: There will be no significant differences among groups when comparing the scores on a post-test measuring performance in the summation of information from student cumulative records.

H_o - 5: There will be no significant differences among groups when comparing the scores on a post-test measuring performance in the observation of individual student behavior.

Scope and Limitations of the Study

This study is a direct result of developmental work being done in a federally funded project under Title III of the Elementary and Secondary Education Act of 1965. The project was initiated to examine the feasibility of training support personnel (originally labeled "para-professionals") to work with elementary school counselors and has been operative since August, 1967. The procedure for training stipulated in the initial proposal was not entirely satisfactory although it had successfully been utilized during the first year of operation as well as the first phase of the training given to the group selected for the current school year. With the awareness of the possibilities and potential in a "systems approach" to training, instructional units were written in several areas and field tested on the personnel involved in the current

training program. This procedure was determined to be superior to the traditional method and it became desirable to test experimentally the effectiveness of the systematic instruction. The design of this investigation resulted.

Since the personnel selected for the training program had been involved in supplemental training and in the development of the instructional units, it became necessary to solicit volunteers to take the systematic instruction in the three selected areas. Although using project personnel would have been preferred, it was decided that the necessity for evaluation overshadowed the disadvantage of using volunteers. Care was taken to insure that the situation for the volunteers was as close as possible to what it would have been for project trainees.

The criteria for selection and the geographic location of the project limit the extent to which results are applicable. The eligibility of persons for training was dependent upon the possession of a baccalaureate degree. This criteria was established because of the availability of persons with high educational levels in the affluent communities from which they were selected. It is recognized that only in geographic locations comparable to those of the suburbs north of Chicago, Illinois, will there be the availability of abundant numbers of persons with baccalaureate degrees who will be anxious to provide service to others. The volunteer laymen selected for inclusion in this study met the stated selection criteria and were a homogeneous group of women with school age children who shared many common experiences such as involvement in various organizations and volunteer work in a variety of settings. They were very similar to the groups which had been selected for project training.

The fact that federal funds were available to develop a training program could be viewed as a limitation. The salaries for counselors, the school psychologist, and the school social worker resulted from involvement in the project and the ratios of professionals to students was exemplary. Release time was easily arranged for the participation of professionals in training and supervision. These situations would probably not be available in other school systems and might jeopardize their acceptance of the results of this study.

The tasks which have been selected for examination narrow the scope of this investigation. The decision concerning the areas for training was based on a desire to include representative activities which either counselors or teachers would perform in the absence of support personnel. Tasks which are identified as "indirect helping relationships" and which are intended to improve guidance services were chosen because it was felt that they could be most easily applied in other locations.

Due to the complexity of evaluating performance, and the innovativeness of the systematic instruction, it was not possible to utilize existing standardized instruments in measuring the results of this experiment. A post-test was constructed to assess performance skills in the three areas. The instrument was administered to students involved in graduate preparation in guidance to gain reliability data and to do an item analysis so that necessary modifications could be made, prior to using it in the experiment.

Definition of Terms

The following terms are defined on the basis of their use or relevance to this investigation.

Laymen Personnel: A person who possesses a baccalaureate degree, and who was selected as a volunteer for training to gain proficiency in three tasks that are typically assumed by an elementary school counselor.

Elementary School Counselor: A person who is employed on a full-time basis with the responsibility of providing guidance services at the elementary school level (K-6), and who has certification from the Office of the Superintendent of Public Instruction, Springfield, Illinois.

Elementary School Teacher: A person who is employed on a full-time basis with the responsibility of conducting classroom instruction at the elementary school level (K-6), and who has certification from the Office of the Superintendent of Public Instruction, Springfield, Illinois.

Instructional Units: A procedure to prepare a participant to gain a specific skill through: an initial awareness to the overall process which includes orientation, purpose,directions, and behavioral objectives for the specific task; presentation of knowledge; an opportunity for self-evaluation to gain immediate knowledge of the results of learning; the utilization of simulated experiences to gain additional knowledge of the results of performance; and situations for practice and supervision.

Systematic Instruction: The process of combining a series of instructional units in a sequential arrangement so as to prepare participants to gain performance skills which can be evaluated in terms of individual effectiveness.

Tasks Included in this Investigation: Those activities selected as representative of appropriate functions of persons who would be trained as support personnel for the elementary school counselor, and which include:

Group Standardized Test Administration - to administer make-up tests to those students missing the original administration or to give the tests to students new to the district with no test data available.

Summation of Pertinent Data from Student Cumulative Record - to synthesize the kinds of data representing the student's patterns of academic growth and adjustment recorded in the cumulative folder.

Observation of Individual Students - to follow a structured observation form and record on the form descriptive data obtained from observing an individual student in the classroom, physical education class, recess, and/or in other school situations.

Overview

A general discussion related to the significant aspects of the investigation is presented in Chapter I. Included are the rationale, statement of need, statement of purpose, assumptions upon which the study is based, general research hypotheses, scope and limitations of the study, and definitions of terms.

A review of the literature appears in Chapter II. This survey is a report on literature about elementary school guidance services, role and function of the elementary school counselor, the development of the concept of support personnel for the counselor, and the application of a systems approach as a method of designing instructional programs in education.

Chapter III includes the procedural developments that occurred during the study. Discussion is directed toward information about the selection of subjects, a description of the sequence, requirements and expectations during the short term training program, a specific discussion of the systematic instruction method used in training, an explanation of the development and construction of the instrument used as the post-test, and data collection and analysis procedures.

The results of the analysis of data is found in Chapter IV. A discussion of the comparison of post-test scores between the five

groups included in the study is presented and the research hypotheses stated in the study are evaluated.

In Chapter V, a summary of the study, conclusions, and implications for future research are discussed.

CHAPTER II

REVIEW OF LITERATURE

Three specific topics were examined in the review of the literature related to the development of this study. First, it was necessary to establish a rationale for the use of assistants to the counselor in an elementary school guidance service. Literature was studied which discussed the development of guidance services at the elementary school level, the evolution of the theoretical role of the counselor, and the actual duties which were expected to be included in the implementation of services in elementary schools. Second, with the realization that elementary school counselors needed assistance, literature about the concept of support personnel for the counselor was investigated. Professional debate and discussion on the issues and concerns related to the use and training of support personnel were reported. Finally, attention was focused on a method to be used in the actual training of support personnel. Literature was studied which discussed the adaptation of a "systems analysis" approach to instruction, as one method which had potential for training procedures.

Elementary Counselor Role - Theoretical

In examining the literature related to the implementation of guidance services in elementary schools, it was found that there was agreement on the need for services at this level and a general consensus on the focus or perspective which ought to exist. It was also apparent that there was a diversity of opinions on how to best utilize the time and effort of the professional responsible for the implementation of services.

In a historical critique of the elementary school counseling

movement, Faust (1968) has focused on the role of the counselor and has traced this evolution through three stages. The initial role of the elementary school counselor was "traditional" and was influenced by the guidelines established in secondary school guidance programs and school psychology. During the 1950's "neo traditionalists" placed a greater emphasis on working more closely with the teacher, modifying services to be more appropriate for elementary school students, and becoming more concerned about the prevention of problems. The current stage has seen the counselor accept a "developmentalist" role and become more concerned with the whole child and the learning climate in which the student operates, rather than with specific problems or crisis intervention.

Further evidence of the general acceptance of a developmental viewpoint was found in the ACES - ASCA Joint Committee Report (1966). Concern for the student's learning environment and more work with teachers and parents were identified as the primary responsibilities of elementary school guidance specialists. This report indicated that the role and function of the elementary school guidance specialist ought to be divided into the three processes of counseling, consultation, and coordination.

This influential statement helped to solidify agreement within the profession that elementary guidance must be developmental, rather than remedial or adjustive; broad-based, rather than narrow in scope; coordinated with the total school program, rather than highly specialized; continual, rather than crisis-oriented; and future, rather than past-oriented.

There was less agreement noted when the guidance program was translated into the elementary school counselor's actual job description.

The tendency of spokesmen in the literature was to emphasize either counseling or consulting as having major priority in providing service.

Advocates who favored placing a major emphasis on individual or group counseling relationships saw the need to modify or change behavior directly. Meeks (1967) felt that the counselor ought to help children meet developmental tasks and solve behavioral or learning problems resulting from inadequate self-concepts. Blocher (1968) indicated that counselors could help students to become more effective in dealing with the environment. The student's need to gain personal integrity, achieve a greater sense of identity, and find purpose and direction were tasks identified by Peters (1968) that could be accomplished by the counselor. Van Hoose (1968) would have the counselor become involved in non-threatening counseling relationships so that students could learn to see themselves and their environment realistically and positively by focusing on relationships with others.

The viewpoints cited above were representative of the kinds of activities a counselor would perform if he placed a high priority on the counseling process. It would be difficult to find fault with such goals, but even more difficult to translate them into objectives which could be evaluated. One of the problems facing counselors who emphasize direct counseling relationships with students is that of demonstrating to the administration, parents, and teachers at the elementary school level that the results of these practices are commensurate with the time and effort involved. Such a problem may be related as much to financial and personnel shortages as to a criticism of the process.

When the major portion of the counselor's time was to be devoted to the process of consultation, the intent was to use his skills to

create behavioral changes in students in an indirect manner. Grams (1966) felt that since development was significantly influenced by the environment, the guidance worker ought to consult with staff and parents to make the school and home more facilitative for learning and individual development. A viewpoint expressed by Eckerson (1966) and Smith and Eckerson (1967) indicated that many elementary school children would not be able to benefit from the counseling interview and would need counselor intervention to alleviate problem situations. Dinkmeyer (1968) felt that the counselor ought to help the teacher understand the effects of his behavior on the children, the dynamics and purposes of the child's behavior, and the consequences of the transactions between student and teacher. In a book emphasizing the consultative function, Faust (1968) advocated that the greatest hierarchial function of the counselor would be to concentrate on improving the ability of teachers to create more effective learning climates, and, in so doing, help the greatest number of children.

Critics of those who place a high priority on a consultation process indicated that these counselors tend to lose contact with children and become too evaluative, uninvolved, and external to the real needs of students (Patterson, 1969). Limitations of this procedure occur when the counselor tends to generalize too much and does not take into account the personal factors involved in each situation. The apparent advantage in this emphasis would be the visibility of the process. The counselor is seen as one who is interested in teachers and who is working to attempt to change or modify undersirable situations.

The major implication found from the review of this literature was that the "experts" felt a counselor, in providing elementary school

guidance services, would need a great wealth of background information and highly sophisticated skills. It would seem that if a counselor had been trained to perform effectively the tasks suggested by these authors, he would need to spend all of his available time in either a counseling or consulting relationship with student, parents, teachers, or administrators.

Elementary Counselor Role - Practical

It would be fair to assume that counselors realize what they ought to be doing on the job and that they ought to be allocating a majority of their time to either counseling or consulting. It also would be fair to assume that most counselors would not be able to achieve the ideal due to unanticipated events in the job setting. In an effort to examine this problem, studies were investigated which attempted to assess the role and function of the counselor operating on-the-job. Survey instruments were distributed to teachers, administrators, and counselors soliciting their opinions and impressions of the actual situation in the school setting. Results tended to concur with the positions described in the previous section. However, a far greater variety of activities were included in these surveys which broadened the scope of the counselor's role to include many tasks of an indirect or ancillary nature. The performance of these additional tasks tended to prevent the counselor from functioning exclusively in the ideal theoretical role.

In a survey of public and parochial school teachers, Riccio and Wehmeyer (1961) reported that the surveyed teachers expected a remedial and preventative guidance service with the counselor working with problem students to change undesirable behavior. McDougall and Reitan (1962), questioning elementary school principals in three northwestern

states, found they favored specialized services rather than curriculum guidance for all students. Also, opinions focused on the need for individual counseling, consulting with parents, and identifying students with special talents or specific problems.

Similar results were found by Hart (1961) who surveyed teachers and "experts" (i.e., authorities used as judges) and asked them to rank order 41 items felt to be components of the elementary school counselor's role. The functions given highest priority by both groups were counseling problem students, interpreting pupil data to parents and staff members, and holding conferences with parents about pupil problems. Brown and Pruitt (1967) reported that the 992 Indiana teachers responding to a list of 71 guidance functions felt that the counselor should deal with individual students and small groups, and perform organizational or administrative functions related to the guidance program.

A study seeking the opinions of teachers, administrators, and counselors in California regarding the elementary counselor's role was conducted by McCreary and Miller (1966). In this study, the demanding tasks of counseling and consulting were identified as the most important activities. Of specific interest were the differences found in the counselor's rank order of functions according to importance compared to actual time devoted by these counselors in practice. The authors described these findings in relation to needed improvements and stated that:

> Another area for potential improvement is that of record keeping - clerical work which both principals and counselors rated as least important in the list of functions, but on which the average counselor spends more time than on administering the guidance program, arranging for community and intradistrict referrals of pupils, and conducting research studies (p.498).

Daldrup (1967) studied the relationship between the way counselors

reported allocating their time and the way they would prefer to use their time. This study was a follow-up of a survey of secondary school counselors taken by Tennyson (1958). It was found that counselors had remained stable over a period of years as to how they divided their time, despite many favorable factors which would have allowed them to act more as they would ideally have chosen. One conclusion reached in this research was that "when studies are conducted on the actual and ideal role and function of the school counselor, it is found that the respondents feel an obligation to perform a wider range of duties than they have time available for (p.303)."

More evidence on the need for persons with specialized training and skills was gathered by Muro and Oelke (1968) by refining the 150 item instrument which had been used earlier by McDougall and Reitan (1962) with elementary school principals. The more recent study included teachers as well as principals identified in the state of Georgia. The results supported the earlier research indicating that the activities of counseling, identification of special needs, testing, in-service, and coordination services were valuable, but found that teachers felt remedial work, student activities, and research should be given more priority.

Role and function studies are of interest, but have little value except for identifying apparent discrepancies and possible trends which could lead to future changes. These studies offer some information about the status of the profession, and can provide a beginning point for program development or further research. However, the results of such studies are inconclusive because surveys rarely provide enough information to determine the context in which activities are defined.

Need for Task Analysis

The dilemma which is the crux of the role problem was adequately stated by Muro and Oelke (1968).

> It would seem improbable, for example, that a single individual labeled as a 'guidance specialist' could in reality be prepared to perform adequately in all the areas that were perceived as being valuable in the elementary schools (p.199).

Each of the survey instruments used in the research reviewed on the elementary school counselor's role identified a multitude of activities which had been considered as possible functions to be included in a total elementary school guidance program. However, once it was acknowledged that teachers and administrators wanted and needed counselors in elementary schools and would prefer that the highest priority be given to counseling and consulting functions, there was little discussion directed toward priorities to be assigned to the other related functions.

The most obvious void in the literature on the role of the counselor, either theoretical or practical, was the lack of effort to confront the total spectrum of counselor functions to develop a priority list of the tasks to be accomplished. A procedure ought to be developed which would definitively examine all of the jobs necessary in a total service. These tasks then should be listed from high to low in relation to degree of difficulty and level of educational preparation. Upon completion of this analysis, it then would be possible to assign personnel with different levels of training to perform the listed tasks.

A conceptual framework has been suggested by Brough and Bergstein (1967) which could help counselors make these analyses and establish priorities with appropriate allocations for each task. A school system could be analyzed in relation to a hierarchy of needs much like Maslow's

suggested needs in personal development. In this structure there would be a continuum from a low order level of needs to higher order needs, and movement to the next level would be possible only after fulfillment of the lower order need.

In the structure suggested by Brough and Bergstein (1967), guidance was on a lower need level than counseling, and within the guidance level were several sub-levels which also represented priority needs. These authors stated that:

> Lower order needs tend to have a cluster of characteristics including 1) great time consumption, 2) more involvement in routine and clerical tasks, 3) high priority in necessity of completion, and 4) high tangibility of results...the tasks within the lower order needs could be, and perhaps should be, the responsibility of subprofessional personnel (p.195-196).

It could be hypothesized that the profession is caught in an arrested stage of development where counselors are spending too much of their time performing low order needs which prevents them from successfully accomplishing needs of a higher order. Upward movement to the next level will be dependent upon the ability of counselors to analyze more adequately the tasks for which they are responsible, and assign tasks which do not demand their special skills to others who could be trained to perform them adequately.

The process of task analysis as suggested by Mager and Beach (1968) could be adapted to the preparation of personnel to assist the counselor. Once a job description is stated and the tasks which must be performed to complete the job are known, then specific training can be designed to teach for the required tasks. The rationale for determining which tasks should be assigned to support personnel would then be based on job and task analysis as they relate to levels of training. The

ideal situation would be achieved when the list of duties which must be performed in a total service are ranked in a priority order, so that those tasks requiring graduate school counselor education preparation are performed by counselors, and duties which are not dependent upon such educational requirements are performed by persons (support personnel) who have specific training for these tasks.

Need for Support Personnel

As early as 1964, the Professional Preparation and Standards Committee of the American Personnel and Guidance Association under the leadership of McDaniels (1965) felt it was necessary to take a position relevant to "the preparation and role of counselor aides or others who may perform certain guidance and counseling activities but who have not completed a program of professional preparation (p.538). The work of this committee finally led to the adoption of a policy statement by the American Personnel and Guidance Association (1967). This professional endorsement offered an appropriate perspective for the use of additional personnel within the profession. Specifically, the committee stated:

> It is the position of the Association that appropriately prepared support personnel, under the supervision of the counselor, can contribute to meeting counselees' needs by enhancing the work of the counselor. The appropriate use of such personnel will facilitate the work of the counselor and make the total endeavor more effective (p.858).

In a discussion of the use of support personnel, Carlson, Cavins, and Dinkmeyer (1969) suggested that this term would be preferable to such labels as paraprofessional,subprofessional, counselor aide, guidance assistant, etc., in describing one who "1) lacks certification in guidance and counseling, 2) lacks a generalized background or theoretical base of knowledge of the field, 3) works under the direction and

supervision of a certified professional, and 4) performs selected tasks which are delimited from the role of the professional (p.22)."

The impetus for the consideration of support personnel by the APGA was provided by the U. S. Department of Labor in 1964. Money from the Manpower Development and Training Act was provided to university counselor education programs submitting proposals to prepare subprofessionals in an eight-week program followed by a four-week supervised work situation. Known as Project CAUSE (Counselor-Advisor University Summer Education), the object was to prepare personnel to work under the direction of employment counselors concerned with underprivileged youth in Youth Opportunity Centers in large urban areas.

An unfortunate development related to the enactment of CAUSE was that emotions clouded the essential issues and resulted in offering critics of innovation or rapid change a natural "scapegoat." Concern was voiced by Odgers (1964) that such a program represented a direct threat to the profession. Kackowski (1966) felt that there was a danger that the profession would become vulnerable to public pressure and administrative expediency if the federal government continued to initiate programs without considering professional recommendations. As Hansen (1965) assessed the situation, "The subprofessional in counseling is a federal innovation, an imaginative though hurried response to perceived shortages in the client services essential to pursuits of national potence and social equity (p.211)."

One significant development observed by McDaniels (1967) was that the true impact of Project CAUSE would be that of forcing counselor educators, counselors, as well as the public at large, to take a serious look at the concept of support personnel in a variety of settings.

Stiller (1969) identified the support personnel issue as a motivating factor for professionalization by indicating that:

> The advent of support personnel will not only delineate more sharply for counselors their professional and paraprofessional functions, but it will also force each counselor to move in one of three directions: 1) to attempt to block this movement, 2) to move into a support role himself, or 3) to sharpen his skills and competencies to move into a professional role (p.249-50).

The acceptance of the support personnel concept was found to be due to two primary factors. First, the profession acknowledged that there was a serious gap existing between supply and demand. The causes attributed to this problem were those of increased standards as well as increased numbers of positions becoming available in public schools, both because of a realization of the importance of such services and a greater need for service resulting from federal legislation.

Documentation regarding the need for additional personnel to meet current demand at the elementary school level has been gathered through several national surveys. Smith and Eckerson (1966), for example, surveyed a random sample of principals of elementary schools with over 100 pupils and requested information on "child development consultants" which included counselors, psychologists, and social workers. They found that 13,000 schools employed at least one consultant available at least one day per week for every 789 students. Additional results indicated that most of those principals having service available requested more, and that three-fourths of the principals who had no services expressed a need for service.

Van Hoose and Vafakas (1968) attempted to follow-up on the Smith and Eckerson survey to determine the number of functioning elementary school counselors by excluding both psychologists and social workers.

Their survey revealed that there were only 3,837 counselors serving in kindergarten through sixth grades. These figures were discouraging in light of the projections offered by Hitchcock (1965) that by 1970 there would be the need for 53,873 new elementary school counselors and that by 1975 the need would be tripled.

A different way of examining the demand for counselors was utilized by Howe (1968) in his report to the Advisory Council to the Education Professions Development Act. The procedure used was to request State Guidance Supervisors to estimate the need for counselors. Results indicated that by 1970 the percent of counselors needed above the present level was 48% in secondary schools and 542% in elementary schools, and that by 1975 these figures would be 67% and 764% respectively.

Projections generally were based on ratio figures recommended professionally; i.e., 300 to 1 for secondary schools and 600 to 1 for elementary schools. It is possible that with a different distribution of duties and with the advent of additional personnel, these ratios may not be as realistic or as necessary as they once were. However, these surveys have confirmed the fact that a critical situation exists which has led to the problem described by Kaplan (1967).

> As personnel shortage increases, many programs (and children) will suffer from the shortage of qualified personnel...This occurs because of the uncontrolled, stepped up competition for the limited pool of professional, qualified manpower (p.68).

The second factor influencing the acceptance of the support personnel concept was the need to find more efficient, economic, and effective ways to use the counselors who were already operating within the schools. By using support personnel, it was hoped that counselors could both improve and extend services to students. Assistance in routine and clerical tasks would release the counselor from these duties and would

make more time available for work with students, teachers, or parents. If support personnel were prepared to work in tasks which involved direct helping relationships, services could be extended to greater numbers of students.

The hope was raised by Gordon (1965) that the use of subprofessionals might raise professional standards by increasing services which had been either non-existent or minimal. In dealing with the concept of guidance for all, Hoyt (1967) expressed the concern that there were too many settings calling for guidance services at the present time to insist that positions be filled only by counselors who had met the APGA goal of a minimum of two years of graduate education. Strowig (1968) predicted a higher quality of counseling if support personnel were available to perform related services which "distracted" the counselor from his more important duties.

One of the final recommendations offered by Howe (1968) before terminating his duties as Commissioner of Education was to suggest that three levels be considered in the implementation of guidance services. He proposed that a career ladder be created to include: 1) the "professional counselor" with two years of preparation as a specialist in behavioral change, 2) the "guidance specialist" with one year of training to include many functions currently being performed by counselors, and 3) the "guidance aide" with junior college preparation to perform supportive duties to both the counselor and the specialist.

The major findings resulting from the review of the literature on support personnel indicated that the utilization of additional personnel working under the direction and supervision of the counselor was a possible and feasible, in fact a necessary, solution to the problem

of personnel shortages. Many questions and issues were unresolved, but the challenge to explore new approaches to existing problems was implied.

Support Personnel Training

Despite the lack of precedent concerning the training of support personnel for the counselor, literature reported in related professions was available concerning the preparation and use of aides in similar capacities. The activities in related professions increased significantly during the period between 1962 and 1964 and were caused by such factors as: 1) an increased interest and social responsibility related to the poor or underprivileged; 2) a need to emphasize economic responsibility in preparing personnel for service occupations; and 3) to improve efficiency in the use of personnel in critical professions.

In the fields of medicine and mental health, significant strides have been made in capitalizing on the subprofessional as a unique contributor to the profession. Hogness (1967) identified and summarized the expansion of technical programs in the fields of nursing, laboratory technology, and dental hygiene, and mentioned the widespread use of one-year training programs which train both generalists and specialists. Many of these programs, and others, were offered in a two-year community college curriculum or in vocational schools.

Harrington (1968) described the recent emphasis on subprofessional training as a matter of practical urgency in a major social reform movement which is taking place in the country. He also mentioned that national policy indicated that there would be an increase in the demand for, and creation of, new jobs designed specifically for subprofessionals.

The teaching profession has experimented with aides and paraprofessionals, and has used them effectively in assisting in the classroom

(Bowman and Klopf, 1967). Social work aides have been prepared for work in the field after a two-year college program (Costin, 1968). Considerable work has been reported by Pearl and Riessman (1965) to prepare nonprofessionals to combat poverty in culturally deprived communities through the efforts of the Office of Economic Opportunity (OEO, 1966).

The results of work in related situations could be transferred or adapted for use in attempting to decide who should receive training as support personnel, under what conditions, and in what settings. Several alternatives appeared to be feasible: 1) junior college students involved in a terminal preparation program, 2) indigenous personnel trained in their home community to work with members of that community, 3) personnel with higher educational backgrounds and the potential to go on for professional preparation trained on-the-job in the public schools.

With the growth of junior colleges as a major development in education, it has been suggested that there would be a readily accessible and available population for support personnel training at this level. In an article dealing with some needed federal legislation for the profession, Stripling (1967) has suggested "developmental grants for junior colleges to establish programs of preparation for subprofessional personnel...in settings such as junior colleges, technical institutes, colleges and universities, employment service offices, and youth opportunity centers (p.140)." Beal (1968) conducted a doctoral investigation to examine the possibility of establishing a training program in the junior college. A survey instrument was designed to solicit opinions about the kind of activities which might best be included in a two-year terminal program. With such a program emerging at the junior college level,

training would focus on activities related to the "indirect helping relationships." Such a program could capitalize on precedents set by other related programs, such as nurses aides, dental technicians, or secretarial and clerical personnel, by designing a two-year terminal program with tasks which could be of value to the professional operating in the job setting.

Another alternative suggested frequently is the use of indigenous workers in performing support personnel functions. This approach has been used extensively in federally funded programs for deprived populations to offer a service in performing outreach activities for the professional. These programs have capitalized on the concept of homophily, the degree to which two individuals who interact are similar. Rogers (1969) described this process as being of value in the dissemination of innovations. The effect would be much the same in programs dealing with breaking the barriers between social classes. This program would create opportunities for highly homophilius persons to have frank and open discussions so as to create a more thorough understanding and to exert peer influence in adopting specified behaviors.

Schlossberg (1967) indicated that opportunities had been created in projects operating in Detroit to develop subprofessional roles to offer indigenous personnel a way to be gainfully employed and to find "meaningful activity to overcome their own arrested vocational development." The article also indicated that successful programs had been initiated in Pittsburgh and Philadelphia where subprofessionals were used effectively as a liaison or bridge between the professional and clients who would be more apt to identify and respond to a subprofessional. Programs utilizing indigenous personnel were conducted at the

local level by agencies or public institutions, were informal and imitative, and emphasized specific skills and knowledge necessary to perform designated functions appropriate for the local community.

A third alternative plan for support personnel training programs was that of selecting personnel with higher levels of education and providing training opportunities in the public schools. Munger (1968) suggested that school districts "hire untrained personnel and turn them over to counselors for such preparation, and let counselors use them where they will (p.82)." In a project discussed by Salim and Vogan (1968), secretaries were selected to work out a counselor assistant role in three secondary schools. Housewives from the local community who possessed baccalaureate degrees were selected for a program of training as guidance assistants to the elementary school counselor in the project described by Carlson, Cavins, and Dinkmeyer (1969). The primary advantage noted in the use of baccalaureate personnel was that they were able to perform a greater variety of tasks because they were able to be provisionally certified and, consequently, were legally allowed to work independently with children.

The problem of role conflict between the counselor and support personnel would be directly related to the kind of training programs which were used in preparing support personnel, as well as the preparation counselors would have to have to accept such personnel. With the utilization of support personnel, a new dimension is added to the role of the professional counselor. There is no preparation program currently in existence that considers the advent of a counselor directing the activities of assistants. Strowig (1968) has suggested that it would be desirable to develop workshops and institutes to insure that counselor

preparation programs and support personnel training could be integrated. This concern was considered by the American Personnel and Guidance Association (1967) as they indicated that "at least the final portions of a preparation program must involve opportunities to work under the field supervision of counselors. There should be supervised preparation as members of a team of support personnel (p.861)."

Two problems of role conflict that would have to be confronted and resolved prior to the establishment of working relationships between counselors and support personnel would be: 1) the higher the educational level of the support personnel, the greater the chance for role conflict with the professional; and 2) the more direct work or contact with "clients" by support personnel, the greater the chance for role conflict with the professional. Role conflict also might occur if the counselor were more interested or able to perform those tasks which might otherwise be performed by support personnel. Patterson (1968) suggested "it is understandable why many so-called counselors resist the suggestion that they relinquish these duties and responsibilities. There would then be nothing left for them to do (p.568)."

The review of the literature has indicated that programs dealing with the use of support personnel in counseling and guidance have provided the profession with sufficient input to generate opinion and controversy. However, practitioners facing critical personnel shortages and inefficient means of keeping up with the realistic expectations of other school personnel have experimented with support personnel programs to help to solve the dilemma of both improving and extending service to cope with the problems of education.

Systems Approach in Instruction

In literature reviewed to this point it was found that there was a need for additional personnel to perform routine and clerical tasks to assist the elementary school counselor. There was further indication that members of the counseling and guidance profession felt it would be feasible to train support personnel to perform such tasks. This section of the review of literature was conducted to determine what procedures could be adapted for use in such training programs.

Literature related to the use of the systems analysis approach in education was studied. Hartly (1969) found that there was considerable confusion when systems analysis processes were discussed due to the fact that there were 60 different terms used to identify "an outlook, or mode of thinking, by which a particular organization may be defined, examined, evaluated, and improved (p.515)." Additional reasons for confusion were identified by Pfeiffer (1968) which had resulted from the realization that there was no single systems approach to provide a uniform formula or special set of rules to be applied to any or all problems.

In the literature available on the application of the systems approach in education, three primary topics were covered: 1) the use of systematic approaches to administrative planning relevant to decision making in the allocation of resources, 2) the use of the computer in simulation activities in both determining projections for administrative purposes and in providing valuable assistance in data retrieval, and 3) the adaptation of systems principles to the design of instruction.

It was the adaptation of principles found in the use of the systems approach to training and instruction which were most directly

related to the development of this study. In this regard, the term "instructional system," defined by Smith (1966) as being "an integrated set of media, equipment, methods, and personnel performing efficiently the functions required to accomplish one or more training objectives (p.1)," will be considered in the discussion which follows.

The literature which dealt directly with the use of systems analysis in instruction was limited in quantity. However, in the examination of what authors had done in utilizing this approach, several vital elements to sensible planning and preparation for instruction were available. The basic principles were summarized by Loughary (1968) who said that "a systems approach would require stating program objectives and specific performance or behavioral terms (or coming as close as one can) and then designing specific learning procedures for the various objectives (p.4)."

In a more detailed examination of the adaptation of principles to be used in designing systematic instruction, Thoresen (1969) has indicated the need for identifying all the component parts of the "big picture" and the manner in which they interact, so that the parameters of the system would be known and a working model designed which would represent the existing system or the system which would be anticipated. This procedure was also acknowledged by Pfeiffer (1968) as being the necessary first step in developing a procedure for using systems principles.

Once the system was adequately defined, the next step would be that of analyzing the tasks which would be the necessary end results of training. The critical factor inferred by Mager and Beach (1967) was a need to know the target population which would ultimately be performing

the tasks to be taught. In their strategy for instructional development, it was necessary to determine what potential students already knew about job or task performance so that instruction could be built upon those factors. Smith (1964) advocated the development of a task inventory where all possible components of a specific job would be detailed so that instruction could be applied to each critical part of total job performance. The procedure for gathering necessary information which was suggested as being the most economical with the greatest yield was the individual interview of persons already functioning in the job.

The procedure of determining objectives was based upon the analysis of the job and the vital components of job performance and was seen by all authors as being the most critical aspect of the application of the systems approach to instruction. It was the statement of measurable objectives which was most influential in the selection of materials, the determination of course content, the instructional methods, the procedures for evaluation, or any other critical aspect of the overall training program. Mager and Beach (1967) have summarized the characteristics of objectives as: 1) saying something about the student, 2) saying something about the behavior or performance of students, 3) being about ends rather than means, 4) describing the conditions under which the student will be performing his terminal behavior, and 5) including information about the level of performance that will be considered acceptable.

The most important aspect of the need for measurable objectives was the relationship that objectives had to the process of evaluation. Through the application of well-defined objectives which describe performance, identify behavior which is to be observed, and state

acceptable standards, there would be objective data upon which to measure the success or failure of a training program. Thoresen (1969) had indicated that a systems orientation would allow for "evaluating continuously through experimentation the effectiveness and efficiency of training programs using explicitly established objectives as evaluation criteria (p.14)." The formulation of behavioral objectives would provide valuable data to continuously monitor the system and make necessary modifications throughout the program to attempt to increase the chances for success.

Many of the principles utilized in the application of a systems approach to instruction were adapted from findings reported by learning theorists in the application of a "programmed" process of instruction (Gagne, 1962; Green, 1962; Morrill, 1961). The primary concepts utilized in systematic instruction were reinforcement, knowledge of results or "feedback," and sequencing. These concepts were related to procedures which could be used to produce the highest level of student motivation, and the most efficient procedure for learning which would lead to student success within the system.

The influence that the systems analysis development has had in the field of counseling and guidance was most obvious in the March, 1969, publication of Educational Technology in which the entire issue was devoted to articles describing examples of the use of systems analysis concepts in the profession. Other indications of the growing interest in the potential of the systems approach to counseling and guidance were the opportunities for symposiums and workshops on the subject during the 1968 and 1969 American Educational Research Association annual conventions.

The application of systems analysis principles and procedures have been used effectively in the counselor education program at Michigan State University. Stewart, Winborn and Hinds (1969) have proposed that the entire core of master's level school counseling courses be incorporated into a "counselor education system." The recommendation was made based on the successful evaluation of systematic instruction designed for the first of five blocks leading to a M.A. degree. The adoption of this system would necessitate a major revision of course objectives and content which would be related directly to the work setting of the school counselor. Necessary knowledge and skills would be translated into performance objectives and programmed into a meaningful sequence of learning units. The results would improve upon the existing program by insuring that all students would be exposed to an identical system to prevent "learning gaps," and by providing more adequately for individual differences among students.

Yelon (1969) has described in detail one specific example of the procedures used in the systematic experimental program under study at Michigan State University. A comparison was made between the process used in present instructional programs and an instructional procedure based on systems analysis. The conclusion presented was that:

> A valid, effective, justifiable, relevant and economical instructional system can be derived in the area of counseling by job analysis, specification of objectives and utilization of learning principals established through empirical research (p.60).

In the design of an instructional system to be used in the training of support personnel, a distinction would have to be made between support personnel tasks or job analyses, and the tasks to be assumed by the counselor. These distinctions can be made only after a thorough job

analysis on the role of the counselor has been completed. The training system for support personnel would prepare them to perform tasks delimited from the counselor's role and would be directed toward the application of task performance on the job working under the direction and supervision of the counselor.

The intent in reporting related literature on the systems approach to instruction was to identify an instructional procedure which would be applicable to the training of support personnel for the elementary school counselor. Implications resulting from this review have supported the usefulness and appropriateness of adopting systematic instruction for this purpose. The procedures of defining a system designed to train personnel to perform specific tasks which would assist the counselor, defining measurable objectives, and identifying appropriate terminal behavior and acceptable standards, ought to provide the base for a productive and meaningful training program.

Summary

Literature related to the theoretical and practical role of the elementary school counselor was reviewed. It was found that there was agreement between "experts" and functioning school personnel that the counselor ought to allocate a majority of his time to the tasks of counseling and consulting. It was also apparent that the magnitude of the tasks to be accomplished in a total and comprehensive guidance and counseling service could not be provided by the counselor alone.

In the examination of literature concerning the use of support personnel to assist the counselor, it was found that the concept was generally accepted as a procedure which would help to reduce personnel shortages in the profession. Such a procedure would be dependent upon

a thorough task analysis of the jobs to be completed in an elementary school guidance program to determine exactly which tasks would be included in the job description for support personnel, and which tasks would be performed by the counselor. It was also noted that there was a void in the literature since little research had been done to attack this problem directly.

A review of the literature containing information on the use of "systems analysis" techniques adaptable to the design of instruction indicated that this procedure would be of value in designing programs for support personnel training. Evidence was cited that this method of training was gaining greater acceptance in the implementation of preparation programs in counseling and guidance.

The major implications resulting from the study of literature related to this research indicated that the procedure of training support personnel for the elementary school counselor was both feasible and possible. It was found that elementary school counselors needed assistance, that support personnel could provide a necessary service, and that there was a suitable procedure for training such personnel.

CHAPTER III

EXPERIMENTAL PROCEDURES AND RATIONALE

This study was designed to test the major hypothesis that lay personnel could be trained to perform certain selected tasks equally as well as either counselors or teachers. The procedures developed to test this hypothesis are listed first and will be followed by a more detailed discussion.

1. Tasks were selected which would ordinarily be performed by both teachers and counselors in their work in elementary schools.

2. An instructional procedure was established and materials were developed to train selected personnel to perform the tasks included in the study.

3. Subjects were selected to take short-term training. Included in the sample were one group of twelve laymen and another group of twelve teachers.

4. Training was given to both groups. The first phase was conducted in a classroom setting and included reading prepared material followed by simulated activities. The second phase was that of "practicing" the tasks in the actual school setting.

5. A test was developed to assess performance in each of three selected activities and was administered to the following groups: a) a group of twelve laymen without training; b) a group of twelve laymen receiving training; c) a group of twelve teachers without training; d) a group of twelve teachers receiving training; and e) a group of twelve counselors without training.

Task Selection

The tasks selected for study were as follows: a) the

administration of standardized group make-up tests; b) the summation of student cumulative folders; and c) the observation of individual student behavior. These tasks were chosen from a list of activities which made up the role description of support personnel trained in an Elementary and Secondary Education Act, Title III pilot project held in the school district in which this experiment was conducted.

The criteria used in deciding upon tasks best suited for investigation were that: a) such tasks ought to be performed by both teachers and counselors in their respective jobs; b) these tasks ought to be representative of different kinds and levels of performance; and c) selected tasks ought to be considered as appropriate activities for support personnel in assisting both teachers and counselors.

The decision to include training for the administration of standardized group tests was based on the realization that both teachers and counselors cooperate in this activity in elementary schools. Teachers generally administer the tests to their classes, but counselors are often charged with the responsibility of coordinating and implementing the testing program. Training support personnel to give make-up tests to students absent from the regularly scheduled test administration would release either the teacher or the counselor, depending upon who was expected to perform this activity, to spend this time on more complex professional aspects of his job.

The second task for which training was implemented dealt with work on cumulative folders. It was assumed that when a student was considered for referral because of problems detected by the teacher, support personnel could be used to examine the student's cumulative folder and prepare sequential information which would be useful to both

teachers and counselors. Personnel trained to arrange student information in chronological order, to extract pertinent and current information, and to summarize the developmental history of students, could assist both teachers and counselors.

The final task identified for investigation in this study was the observation of individual student behavior. This activity was felt to have value in that independent and objective observations done in a variety of settings would provide current data about students referred to the counselor. Teacher reports have value but may be subject to personal bias. The counselor should have some opportunities for personal observation, but his time for this is limited. Personnel could be trained to gather several objective samples of an individual's behavior and report this behavior to teachers and counselors in such a way as to help them make decisions on how best to help that student.

These tasks were representative of the kinds of activities for which support personnel were used as indicated in the literature. Administering make-up standardized group tests would be a direct helping relationship. The work on cumulative folders and in observation would provide indirect services. In the performance of these tasks, training would be directed toward the use of different skills. Test administration is a task which necessitates administrative ability and skill in interpersonal relationships with students and teachers. Observation tests an individual's perception or awareness, as well as his ability to record and understand human behavior. Work on cumulative records demands clerical skills, an ability to attend to detail, and an aptitude for synthesizing information in a clear and concise manner.

Development of Instructional Materials

In an effort to prepare instructional materials for a short-term training program, it was decided that a "systems" approach would be desirable. The advantages of such a process were that training activities could be standardized and that all participants would have the same information with which to work. The procedure was that of developing "instructional units" that would prepare participants to gain skills in each of the identified tasks. Each instructional unit was written so that each participant could work independently and all materials were included within each unit. Instructional units are located in Appendix A.

The format developed for each task included the following: a) an explanation of the purpose for learning to do the task; b) specific directions to be followed from the beginning to the end of the instructional unit; c) objectives to be achieved by each participant with a specification of successful performance criteria; d) informational references to be studied; e) opportunities for self-evaluation that provided reinforcement and immediate knowledge of results; f) simulated experiences; and g) instructions for practice opportunities in a real school situation.

Units developed for the study were written by staff members engaged in the training program to prepare support personnel to work with elementary school counselors. Consequently, the instructional units contained materials previously developed which had proven useful in implementing the services of support personnel. Informational references were directed toward instructional material used in the established program. The major difference was the format of the presentation. The

development of a standardized systematic process made it possible to have each participant read all the material included in each unit and eliminated the traditional lecture presentations. Opportunities for supplemental information were made available only by having an instructor available to answer questions raised by the participants. Simulated experiences were also standardized so that individuals could work independently under the supervision of an instructor.

The three instructional units developed for the study were field tested on the group of twelve support personnel involved in the established training program. Several changes were suggested and some modifications were made on the basis of the reaction of this group to the instruction. The final units contained only essential information related to the performance of the tasks included in the study. A brief description of each unit follows:

Group Standardized Test Administration

This unit used the Manual for the Stanford Achievement Test as the primary informational reference. Each participant was given a Manual for the Intermediate I level of the test and specific pages were noted for reading with important information either circled or underlined. The emphasis was placed on directions and procedures for giving this specific test. It was assumed that this exercise would be transferable to other group standardized tests and to other levels of the test battery. Another informational reference was a modified version of the Test Giver's Self Inventory written by Thompson and reprinted by the California Test Bureau. This reference indicated the procedures to be followed prior to and during the administration of any standardized group test.

Work with Student Cumulative Folders

A form developed by project staff members was the tool used in training for this task. The instructional unit included information on the contents of the form followed by explanations of the meaning and use of each item on the form. Each participant was given a "sample" form which had been completed, giving examples of the kind of information expected within each item. Upon the completion of reading and studying the information and the form, subjects were given a "dummy" or simulated folder and were asked to fill out a form. After completing that assignment, participants compared their forms to a "model" form which had been completed by an instructor.

Observation of Individual Student Behavior

A structured observation form had been developed for use by the project staff. Information was provided giving the rationale for the use of the form, the methods used in recording data, and the explanation of the various categories as well as reasons for their inclusion. Participants were given a copy of the form to study and were then shown a video-tape of a student in the classroom during an arithmetic lesson and in a physical education class. Another section of the video-tape included an interview with the classroom teacher as she explained her personal reactions concerning the student's classroom adjustment. Participants then compared the forms they had completed during the observation with a "model" form done by an instructor.

Sample

Subjects for this study came from three classifications: a) volunteer laymen from local communities; b) teachers from the first through sixth grades of the district sponsoring the experiment; and c) counselors

from school districts immediately surrounding the site of the experiment.

Laymen

An announcement of a need for volunteers to take short-term training was made to members of the support personnel project and to the local chapter of the American Association of University Women. Laymen were chosen from a list of respondents indicating a willingness to become involved. The first twelve women volunteering for training made up the experimental group receiving systematic instruction. A similar method was later used to establish a control group.

In generalizing from the results of this study, it is necessary to consider the following conditions: a) all participants had a baccalaureate degree, came from suburban communities north of Chicago, were housewives with children, and were active in community affairs; b) all participants in these groups were volunteers; and c) participants were not randomly assigned to treatment groups. Demographic data on these groups is found in Table 3.1.

Teachers

Teachers included as subjects in this experiment were randomly chosen from the population of sixty eligible teachers in grades one through six within the district conducting the investigation. Twenty-four teachers were selected and randomly assigned to either the group of twelve receiving treatment or the group of twelve without training. Demographic data on these subjects appears in Table 3.1 and indicates that the teachers without training included teachers who were older, had more advanced education, more teaching experience, and more years of service in the school district than those teachers receiving training.

Counselors

The twelve counselors involved in this experiment included all those functioning at the kindergarten through grade six level in the districts adjacent to the school district in which the experiment was conducted. This sample was chosen primarily because of their accessibility to the site of the experiment. They were also chosen in an effort to help them understand the kinds of tasks for which support personnel were trained as well as the kind of training used in the program. Still another reason for using only those working in communities quite similar to the one conducting the investigation was to insure that such tasks as were being tested would fall within the probable responsibilities of the school counselor.

An inspection of the demographic data reported by counselors in Table 3.1 indicates that they represent a group varying in age; they have more education than most other subjects; and they represent a considerable number of years of both teaching and counseling experience, but are relatively new to their present jobs.

Table 3.1

Demographic Data
On all Subjects Included in the Study

	Laymen No Training	Laymen With Training	Teachers No Training	Teachers With Training	Counselors No Training
Age:					
26 or less	0	0	5	8	3
27-32	2	1	1	2	1
33-38	5	4	3	0	2
39-44	4	6	3	1	2
45 or more	1	1	0	1	4
Education:					
Baccalaureate	12	12	5	10	0
B.A. + 15	0	0	2	1	1
Masters	0	0	4	1	5
M.A. + 15	0	0	1	0	6
Teaching Experience:					
None	8	8	0	0	0
1-3 years	1	2	2	7	4
4-6 years	3	2	3	1	3
7-9 years	0	0	3	2	1
10 or more	0	0	4	2	4
Years At Present Job:					
1 or 2			4	5	8
3 or 4			1	3	3
5 or 6			3	1	0
7 or more			4	3	1
Counseling Experience:					
1-2 years					7
3-4 years					2
5-6 years					1
7 or more					2

Experimental Procedures

A group of twelve laymen and another group of twelve teachers were selected to receive treatment consisting of short-term systematic training in three tasks. Identical instructional units for each task were given to the subjects in these groups and each group met three times during a two-week period. Some differences did occur in the manner in which the subjects were allowed to work on the materials. Since the twelve laymen were volunteers with on-going commitments, subjects in this group were allowed to take the information references home and read them at times their schedules would permit. Teachers worked together as a group and completed all requirements at the training site on the three mornings they were released from their classroom obligations.

An instructor attended all sessions with each group to monitor their learning experiences, to offer general assistance, and to answer questions. Orientation activities during the first meeting consisted of an explanation of the experiment, background on the training program, and expectations held for subjects receiving training. After responding to questions raised by subjects, a "warm-up" unit was introduced and participants went through the process with the instructor. A brief description about the presentation of each instructional unit and the structure for practice opportunities follows.

Group Standardized Test Administration

Volunteer laymen were given the materials included in this unit to be read at their convenience and were instructed to complete the unit prior to their second meeting. Questions regarding what was read were to be answered at that time by the instructor before becoming involved in other activities.

Teachers were presented the same material and were instructed to complete the unit independently and have questions answered before leaving the first meeting. Sufficient time had been allowed for all teachers to complete the unit before the actual time of dismissal.

Work on Cumulative Folders

Volunteer laymen had been given this instructional unit during the first meeting so that they could complete the reading of the informational reference, become familiar with the "Cumulative Folder Information" form, and take the self-test prior to the second meeting. At the beginning of the second group session, questions about the material were answered by the instructor. The subjects were given a copy of an actual cumulative folder of a student in the school district. Time was allowed so that subjects could become familiar with the contents of the folder. After this orientation, "Cumulative Folder Information" forms were completed. This exercise was an actual simulation of the activities which participants would be expected to perform in the schools during their practice opportunities. The instructor was available for assistance during this exercise and evaluated the forms completed by the participants. The two hours allocated for this activity was adequate.

Teachers were given the instructional unit at the beginning of the second meeting and were requested to work independently until completion. The instructor was available to answer questions and provide assistance. The sequence was precisely the same as that of the laymen group. All subjects were finished within the three hours allocated for this experience.

Observation of Individual Student Behavior

Volunteer laymen had completed the reading assignment and were

familiar with the "Behavioral Observation" form prior to the beginning of the third group session. As that session began, questions raised by the subjects were answered. This was followed by a simulated exercise in which subjects viewed a video-tape of a student in his classroom and physical education class, and an interview with his teacher concerning his classroom adjustment. Subjects filled out a "Behavioral Observation" form and then compared their form with a "model." The instructor was available for assistance during the meeting and conducted the evaluation of the forms completed by the subjects. This exercise was completed within the two hour limit.

Teachers were given materials for this unit at the beginning of the third meeting and worked independently until all were ready for the simulated experience. They they saw the same video-tape, filled out the same "Behavioral Observation" forms, and compared their work with the "model" form, just as the lay group had done. The three hour time allotment was sufficient.

Practice Situations for Subjects

Volunteer laymen were assigned to schools within the district. Each subject was requested to schedule times during three specified weeks when it was convenient to spend a morning at school. During each visit, subjects were to administer a sub-test of the Stanford Achievement Test, complete a "Behavioral Observation" form based on a thirty minute observation of an individual student, and complete a "Cumulative Folder Information" form working with an actual cumulative folder. Counselors in each building coordinated these experiences and support personnel trainees were available to observe each activity and offer assistance, and critique each volunteer's experience. Each subject

spent no more than three hours on any of the three visits, which occurred every other week starting the second week after training and ending two weeks before the post-test administration. All subjects fulfilled the practice expectations.

Teachers were given three "Behavioral Observation" forms and three "Cumulative Folder Information" forms during the final formal meeting. These subjects were not expected to administer achievement tests since all had administered an entire battery to their classes during September. However, teachers were requested to work on three cumulative folders of students in their classes and complete the forms. Eight of the twelve complied with this request. Teachers also were asked to fill out "Behavioral Observation" forms on three students during the times when special teachers were conducting their classes, but only four teachers showed evidence of honoring this request.

The treatment for both groups resulted in approximately nine hours spent in working with the instructional units created for this study. The group of laymen were given more flexibility in scheduling this instruction by doing some of the reading at home. All simulated experiences for each group were similar.

Another nine hours of time was devoted to treatment by the lay group as they practiced each of the three tasks in the schools on three different occasions. Teachers as a group did not have similar experiences in that several failed to fulfill this requirement. Also, teachers were not expected to devote time to the administration of group tests. It was impossible to determine the actual time spent by teachers in practice situations. In spite of these known differences, the "treatment effect" was felt to be comparable between groups since the

informational references, forms, self-tests, and simulated experiences were standardized and completed by all subjects receiving treatment.

Two months after the end of the instruction, and two weeks after the final practice opportunity, both treatment groups were given the post-test together and were involved for two and one-half hours one morning. That same afternoon, the post-test was administered to those subjects who had not received systematic instruction; i.e., twelve teachers from the district and twelve counselors from the surrounding area.

During a third administration of the test, a group of twelve volunteer laymen who had not received treatment were involved for the same length of time. No unusual developments or major problems were noted during the administration of the test. Standardization was achieved during the three different test situations, as the same person administered the test to all participants and directions within the test were quite explicit.

Instrumentation

Three separate paper and pencil tests were constructed to measure performance levels in each of the tasks studied. Each test contained forty items and each test was broken into two parts so that performance could be assessed in two different ways. In keeping with the systematic approach to instruction, each test was designed to measure only what had been taught during instruction or in performing the actual tasks in simulated or practice situations. These tests would be similar to any "teacher made" test which would attempt to measure whether or not subjects would be able to apply the information presented during instruction. In the construction of these tests it was also necessary to use items which

would not discriminate against subjects not receiving systematic training. Consequently, each test simulated the activities used during instruction or practice, but different procedures, forms, and materials were used. The entire test is located in Appendix B in the form in which it was given to the sixty subjects tested. A description of each test, as well as the rationale used in construction, follows.

Group Standardized Test Administration

Part I consisted of twenty-four multiple choice questions based on this simulated make-up testing situation:

> "The principal calls you to his office at 9:30 A.M. He states that a new fifth grade student named John Jones has entered school and had been placed in Miss Smith's room. Since no records are available on the student, he asks you to test John's achievement in mathematics and reading as soon as possible."

The test was designed to progress from this hypothetical situation through a sequence of logical events to the conclusion or fulfillment of the simulated assignment. Each of the twenty-four items described a specific problem and four alternative solutions were offered for each one. Subjects were instructed to choose the best response in each situation and had twenty minutes to complete the test.

Items were written to test the subjects' understanding of good testing practices and their ability to apply appropriate procedures to problem situations. These items were based on information presented in the instructional unit. Other items were included to cover unexpected or unusual developments which had been known to occur during test administrations in normal situations. The rationale for these items was based on the need to apply practical knowledge or common sense in areas which could not be anticipated in short-term training.

Five members of the staff involved in the support personnel training program acted as judges to establish consensus concerning the realism and practicality of each item as well as to determine which response could be identified as "best." Because of their backgrounds in actual test administration and as supervisors of support personnel giving make-up tests, these staff members gave content validity to this section of the test.

Part II of this test approached the task of make-up testing differently. Subjects saw five short video-tape segments (between two to four minutes each) which showed a test administrator giving a make-up sub-test to four students. The segments were sequenced beginning with a principal's request for make-up testing and ending with the examination of answer sheets after the students were dismissed. After each of the taped segments, subjects responded to questions about the behavior of the tester during each situation and decided whether behavior had been appropriate or not appropriate. If the subject indicated that he felt behavior was not appropriate, he was to describe in writing what had been wrong. Periods between segments for answering questions were timed so as to equalize the opportunities subjects had for responding to behavior which was not appropriate.

Again agreement was gained on "right" answers by the staff members viewing the video-tape and responding to the sixteen items. It was more difficult to score this part of the test because of the greater degree of subjectivity introduced in determining the quality of subject responses. In an effort to standardize the scoring three independent raters read each sub-test. Each subject received a score which was the average of the scores given by the three independent raters. This score

was added to the score received in Part I for a total score on the test for "Standardized Group Test Administration."

Work on Cumulative Folders

In Part I of this test, a simulated cumulative folder was used which had been developed by Science Research Associates for use in their "Teaching Problem Laboratory." Subjects were tested on their ability to locate information in that folder. Each subject received a folder in which the major classifications of data were labeled with a letter of the alphabet; i.e., "A - Personal Data," or "G - Teacher's Comments," etc. Specific pieces of information within each major classification were numbered; i.e., "A.2 - home address." The test consisted of twenty-six statements about information contained within the simulated folder. For example: "Indication of student's mental ability." The task for the subjects taking the test was to supply the letter and the number which would verify the location of information related to each statement. In some instances, there was no information in the folder related to the statement and subjects were instructed to use the symbols "N.A." for not available. In four statements verifying information could be found in two places and spaces were available for the letters and numbers of both locations. There were thirty possible answers and subjects were given twenty minutes to complete that part of the test.

This exercise provided an acceptable way to assess an individual's ability to deal with information found in most cumulative folders. The task was quite similar to the activities used in training, but eliminated the need to transpose or summarize information from one source to another once it had been located. All subjects had an equal

chance for success since the exercise was timed and did not necessitate abstract reasoning. The test was timed to insure that the discriminating factors resulting in completion of the exercise could be attributed to clerical adeptness, efficiency, or organizational ability. The material was well enough standardized that room for error could only be a result of not following directions or slowness.

Part II of this test was another clerical and organizational exercise. Included in the Science Research Associates material were special reports prepared by pupil personnel workers. Twelve loose sheets of written reports prepared by these specialists were randomly given alphabetical order. The task for subjects being tested was to put the reports into chronological sequence within a ten minute period.

The concept being examined was whether practice, experience, or familiarity with student data in folders would provide a greater adeptness in performing this task. No attempt was made to evaluate the subject's understanding of purposes for performing the task, knowledge of why certain material was pertinent or important, or rationale for the use of cumulative folders.

Observation of Individual Behavior

Part I of the test on observation consisted of a matching exercise in which subjects were to identify the specific characteristics which could be most appropriately grouped under the classification of traits. The four traits identified were physical, social, emotional, and intellectual. Characteristics were listed in the left hand column and subjects were instructed to place the letter labeling the characteristic in the space provided under the specified trait. This was a "forced choice" exercise in that all letters had to be used and none of the

letters could be used more than once.

This test was based on the classification system found in the material which had been used during training. The rationale behind this particular test was that in any observational situation there had to be some way to group reported data systematically. The characteristics were words or phrases that were typically used in describing behavior; i.e., acceptance by peers, organizational ability. The test attempted to access the subject's ability to operate from an organizational framework.

The second part of this test was a ten minute video-tape showing a sixth grade boy during a classroom discussion about poetry. After viewing this episode, subjects were asked to respond to twenty statements about the observed boy. Each statement was either true, false, or neither, which indicated that there was insufficient data on which to make a judgment. The test evaluated the subject's ability to discriminate between what had been seen and what could not be verified with such a small sample of individual behavior.

The final instrument used in testing the sixty subjects selected for this study consisted of three independent tests of forty items each divided into two parts. The administration of the entire 120 item test took approximately two hours.

Statistical Analysis

Data were analyzed using the statistical procedures for an analysis of variance of repeated measures. The 1604 Analysis of Variance computer program written by Jennrich (1961) was used in the analysis. This procedure was chosen because it fit the experimental design of this study and directly tested the hypotheses generated by this design. The data matrix is presented in Figure 3.1.

Figure 3.1

Experimental Design for Analysis of Variance of Repeated Measures

		Testing	Cumulative Folder	Observation
Laymen No Training	S1 to S12	S	Post	
Laymen With Training	S13 to S24	C	O	Test
Teachers No Training	S25 to S36		R	
Teachers With Training	S37 to S48			E
Counselors No Training	S49 to S60			S

N = 60

The sources of variance found in this design and an explanation of their meaning are as follows:

1. (T) Treatment or groups with or without training; between groups, treatment main effect.

2. (S:T) Subjects within groups; error term.

3. (R) Repeated measures; between measures effect.

4. (RT) Repeated measures by treatment; interaction effect.

5. (SR:T) Subjects by repeated measures within treatment; error term.

Three tests for significance were performed in the analysis of variance for repeated measures. The analysis on repeated measures effect was not important in this experiment because each test differed in the degree of difficulty and each test examined different kinds of performance. The

analysis for differences resulting from treatment was of vital importance. Significant differences found on this factor would offer evidence on which to reject the null hypothesis. Significant differences in treatment main effect would allow post-hoc examination to determine where differences existed. Significant interaction would also be important. Examination between groups would indicate which groups seemed to profit from which treatment and to what degree in relation to other factors.

The test chosen for the post-hoc examination of groups where significant differences were found was the Scheffé method for multiple group comparisons. As indicated in Winer (1962), this is the most likely method of preventing the occurrence of a Type I error. The application of this test would decrease the opportunities for significant differences. The Scheffé method defines a procedure for making all possible comparisons between groups. Included in the formula is the same critical value used by the experimenter when conducting the original analysis of variance. Hays (1963) explains this by noting that when the "F" test is significant at the prescribed critical value, then some comparison between the groups must be significant at or beyond that same level. Therefore, when significance is found, the experimenter inspects the results of the analysis and makes judgments about where the large and interpretable effects lie. This process establishes which group mean comparisons ought to be made. Not all possible comparisons are tested in that they would not all be meaningful.

In this study the Scheffé method was applied to total treatment effect and to the interactions found on each independent measure. This interaction was plotted in graphic form and the results were explained. In the study of the interaction effect a conservative test was used to

insure against a Type I error. This process was suggested by Greenhouse and Geisser (1959) whenever the analysis of repeated measures design was used. The procedure called for reducing the degrees of freedom by multiplying them by the factor 1/(p-1) where "p" is the number of repeated measures. Consequently, in the analysis of the data in this experiment, only 1 and 55 degrees of freedom were used in analyzing interaction effect rather than 2 and 110. This takes into account the required assumption that in a repeated measures ANOVA the repeated measures by repeated measures correlation matrix must have equal off diagonal elements.

In all of the statistical treatments of the data resulting from this study, the 5 percent probability of a Type I error was established as the minimum criteria for accepting mean differences as being significant. Throughout the study higher levels of significance were reported when appropriate.

Chapter Summary

In this chapter the research design developed to test the hypothesis of this experiment has been presented. A discussion of the development of materials used in training for three selected tasks and the procedures used in administering treatment to the experimental groups has been detailed. The methods used in subject selection have been presented along with certain demographic data. A description of the post-test and an explanation of procedures used in giving the test have been discussed. Finally, the statistical analysis applied to the data resulting from the administration of the test has been described. In Chapter IV the results will be presented and analyzed.

Chapter IV

ANALYSIS OF RESULTS

Experimental prodecures were developed to examine the effects of short-term systematic training upon a group of twelve laymen and a group of twelve teachers. The training was administered to the laymen to determine if instruction could prepare them to perform certain tasks as well as teachers or counselors who generally would be responsible for such activities. Teachers were given systematic training to determine if instruction would prepare them to perform selected tasks with greater proficiency than teachers without instruction.

Training consisted of nine hours of instruction and work in simulated situations as well as nine hours of practice in the school setting. The tasks selected for study included make-up testing, summarizing cumulative folders, and observing individual student behavior. The instructional phase of the training was completed in two weeks. Practice opportunities were scheduled for three different times during a six week period following instruction. A post-test was taken two weeks after the final practice session.

Three additional groups were selected to take the post-test along with the two groups receiving treatment. A second group of twelve laymen and a second group of twelve teachers were control groups for the experimental groups. A group of twelve counselors were also involved in taking the post-test and, with the advantage of having had previous graduate training and experience in these tasks, were considered to be a criterion group.

Data Analysis

An analysis of the data resulting from a post-test administered to five groups to measure performance in three tasks will be discussed as follows:

1. The source table for the analysis of variance of repeated measures performed on the data will be presented. Discussion will focus on the three sources of variation for which significant differences were found; i.e., total treatment main effect, repeated measures effect, and interaction effect.

2. A Scheffé multiple group comparison test will be performed on the group means in treatment main effect. Discussion will focus on these findings with conclusion suggested.

3. Group by repeated measures means will be plotted in graphic form for all groups in each of the tasks. Each task will be examined separately with discussion about group differences in both treatment effect and interaction. The Scheffé test will be done on the scores of each sub-test to account for treatment effect.

4. The results of a correlational analysis on the relationships between demographic and independent variables will also be discussed.

Hypotheses

Two major hypotheses were examined in the analysis of the data resulting from the post-test constructed for this experiment. Both hypotheses are stated below in the null form.

H_o 1: There will be no significant differences found among groups in this experiment when total treatment main effects are analyzed.

H_o 2: There will be no significant interaction differences found between treatment groups and repeated measures in this experiment.

The procedure used to evaluate these hypotheses was the analysis of variance of repeated measures statistical treatment. The source table generated by this analysis is reported in Table 4.1.

Table 4.1
Source Table for Analysis of
Variance of Repeated Measures
On Data Resulting from Post-Test Scores

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	"F" Ratio	Critical Value
Treatment	289.922	4	72.480	5.22	.05=2.54
Subjects within Treatment	763.472	55	13.881		
Repeated Measures	1951.111	2	975.555	105.01	.05=4.02[a]
Repeated Measures by Treatment	272.278	8	34.034	3.66	.05=2.54[a]
Subjects by Measures within Treatment	1021.944	110	9.290		

[a]Degrees of freedom reduced as suggested by Greenhouse and Geisser (1959).

Findings

Both null hypotheses were rejected at the .05 level as indicated in Table 4.1. It was also noted that the repeated measures source of variance was also significant at the .05 level. The latter finding was of little value in this study. The meaning of this significant difference was that the three measures had different overall means. This is logical to assume since each test measured a different skill or levels of performance and the tests differed greatly in their degree of difficulty. Consequently, this finding confirmed the expected and indicated that each test was significantly different and independent from the others.

Discussion - H_o 1

Since total treatment effect was significant, it was appropriate to examine the composite group means to establish what effect caused significance. The total effect of training was obtained by getting an average score on each subject's performance across the three tasks. This score represented a composite measure of each subject's performance. Each group's composite score was the mean of the individual's composite scores averaged together. Differences between group means then were indicative

of the differing abilities of groups to perform these tasks. The group composite means are found in Table 4.2.

Table 4.2
Composite Group Means of Total Treatment Effect for All Groups Taking the Post-Test

Groups	Composite Mean
Laymen - no training	23.528
Laymen - with training	26.556
Teachers - no training	26.806
Teachers - with training	26.917
Counselors - no training	26.389
GRAND MEAN	26.039

Upon visual inspection of these composite means, it can be seen that four out of the five are highly similar and differ at the most by only .528. However, the laymen group with no training differs from the grand mean by nearly five times as much or 2.51. It seems that the group of twelve laymen who did not receive training might account for the significant differences found between groups on the total main effects of treatment.

To assess this finding more closely, a Scheffé multiple comparison test was calculated on the four closely grouped means (four similar groups) against the single mean (laymen with no training) which differed markedly from the others. The Scheffé formula used on these composite means is included below with an explanation of factora and values substituted within the formula.

Scheffé Formula

$$P_r\left\{\hat{\psi}-\sqrt{(\text{d.f.})\ (.05)\ (MS_w)\ \frac{\Sigma c_j^2}{n_j}}\leq\psi\leq\hat{\psi}+\sqrt{(\text{d.f.})\ (.05)\ (MS_w)\ \frac{\Sigma c_j^2}{n_j}}\right\}\geq .95$$

Where: $\hat{\psi} = -1\ (\bar{x}_1) - 1\ (\bar{x}_2) - 1\ (\bar{x}_3) - 1\ (\bar{x}_4) + 4\ (\bar{x}_5)$

$c_1 = -1,\quad c_2 = -1,\quad c_3 = -1,\quad c_4 = -1,\quad c_5 = +4$

d.f. = degrees of freedom; 4

"F" = critical value; .05 = 2.54

MS_W = error term; 13.88

$\frac{\sum c_j^2}{n}$ = $c = -4^2$ or 16 plus; $\frac{20}{36} = \frac{5}{9}$
n = number of scores;

Substitution

$\hat{\psi} = -1(26.556)-1(26.806)-1(26.917-1(26.389) + 4(23.528)$

$\hat{\psi} = 12.556$

$C = \left\{ 12.556 - \sqrt{(4)\ (2.54)\ (13.88)\ (5/9)} \quad 12.556 + \sqrt{(4)(2.54)(13.88)(5/9)} \right\} \geq .95$

$C = \left\{ -12.556 - \sqrt{77.44} \leq \psi \leq 12.556 + \sqrt{77.44} \right\} \geq .95$

$C = \left\{ -12.556 - 8.8 \leq \psi \leq -12.556 + 8.8 \right\} \geq .95$

$C = \left\{ -21.356 \leq \psi \leq -\ 3.756 \right\} \geq .95$

The results of the application of this formula indicated that the calculated confidence level failed to cover (which is equal to 0) and that the comparison was significant at the .05 level since that critical value was substituted in the formula. It was concluded that the group of laymen without training were significantly different from the other groups in their ability to perform the tasks being studied.

To be sure that no other significant differences between other group scores were present, an additional Scheffé was calculated between the highest mean score; i.e., teachers with training, and the score nearest the significant group of laymen without training; i.e., counselors.

$\hat{\psi} = -1(26.917) -1(26.389) = -.528$, where $\frac{\sum c_j^2}{n} = \frac{2}{36} = \frac{1}{18}$

and $\sqrt{(4)(2.54)(13.88)(1/18)} = 2.8$

$C = \left\{ -.528 - 2.8 \leq \psi \leq -.528 + 2.8 \right\} \geq .95$

$C = \left\{ -3.328 \leq \psi \leq + 2.328 \right\} \geq .95$

In this case the interval does include zero and indicates that the differences noted between these groups is not significant. Since the values represented by these two means are the largest between the remaining groups, it was not necessary to compute all other pair comparisons to establish that none of the other differences were significant.

Discussion

The implications derived from the analysis of these data when assessing main treatment effect were straightforward. Laymen without training scored significantly lower than laymen with training. This finding indicated that systematic training was the effect which caused the trained lay personnel to perform as well as both teachers and counselors.

When analyzing the results of the training effect on the teacher group it was noted that they were not able to perform any better than other teachers or counselors without training, nor laymen receiving the same treatment. The lack of movement of the trained teachers would indicate that the treatment effect did not improve their performance overall.

The fact that the counselors were not able to score higher than teachers or laymen with training tends to indicate that their graduate training or experience in the selected tasks did not give them any particular advantage in the performance of these tasks.

Implications from these findings would indicate that the short-term instruction used in this study could most profitably be used with personnel who had little or no prior knowledge or experience in these tasks. However, such training would not seem to alter the performance of personnel who had achieved a certain instructional level or familiarity with the implementation of these tasks in a school setting.

Consequently, it was found that personnel outside the field of education could be trained to perform adequately certain tasks generally and

traditionally performed by certified professionals. This generalization would apply only to the performance of tasks similar to those included in this study or which could be classified as being either routine or clerical.

Another generalization supported by the findings in this investigation, was that short-term systematic training dealing with clerical or routine tasks would be of little value in an in-service training program for teachers. It was apparent that teachers could perform such activities adequately with the backgrounds they had achieved through their education and experience. Instruction for in-service training for teachers ought to be focused on more complex or sophisticated topics. Implications regarding counselors and their preparation will be discussed in detail in Chapter V.

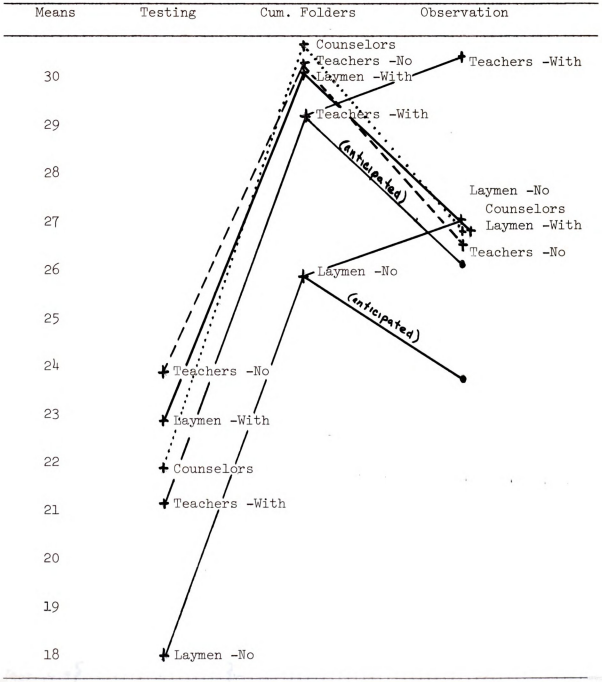
Discussion - H_o 2

The analysis indicated that significant interaction did exist within the variance found in the experiment. In Table 4.1 the interaction critical value was reported at the five percent level with 4 and 55 degrees of freedom along with a notation indicating that the degrees of freedom had been reduced from 8 and 110. Such a reduction has been suggested by Greenhouse and Geisser (1959) and is accomplished by multiplying the degrees of freedom by the factor 1/(p-1), where "p" denotes the number of repeated measures. This produces a more conservative estimate of interaction effect and reduces the probability of a Type I error. The reduction in the degrees of freedom is done to provide a test which is valid in spite of the necessary assumption in a repeated measures analysis that the repeated measures by repeated measures correlation matrix has equal off-diagonal elements. Further discussion about interaction will be presented in the discussions related to group differences in each of the three tasks.

Analysis of Task Performance

Three additional null hypotheses were submitted to testing to determine exactly where the significant differences were which caused the overall main treatment and interaction effects. Group mean scores are presented graphically in Figure 4.1.

Figure 4.1
Group Mean Scores on Each Task



Inspection of the graphic presentation of mean scores, shown in Figure 4.1, in each of the three tasks permitted the investigator to see that in each sub-test there was one group located away from the cluster of the four remaining groups. Laymen without training had divergent means in the tasks of testing and cumulative folder work. In the observation test the group mean of the teachers with training was removed from the cluster. The Scheffé test was used to determine if the differences that were noted were significant in each of the three separate sub-tests.

Test Administration

The differences between groups in the sub-test measuring performance in the task of test administration were calculated by comparing the divergent group mean of the laymen without training with the remaining group means using the Scheffé test. The null hypothesis stated below was tested.

H_o 3: There will be no significant differences between the laymen group without training when compared with the other groups in the experiment on the test administration task.

The group means plotted in Figure 4.1 were substituted into the formula used below. The notations differ from those used in the main treatment effects formula only in MS_w and the c^2/n factors. In all of the remaining Scheffé tests these factors will be as follows: $MS_w = 9.29$, "n" = 12, making the new factor 20/12 or 1.66.

$$\hat{\psi} = -1(23.667)-1(22.750)-1(21.750)-1(21.176) + 4(18.083) = -17.011$$

$$\sqrt{(4)(2.54)\ (9.29)(1.66)} = 12.53$$

$$C = \{-17.011 - 12.53 \leq \psi \leq -17.011 + 12.53\} \geq .95$$

$$C = \{-29.541 \leq \psi \leq -4.481\} \geq .95$$

Findings

Hypothesis H_o 3 was rejected. The comparison of the lower mean of the laymen group without training with the means of the four clustered groups was found to be significant at the .05 level. This finding was consistent with the findings reported in the analysis of the main effect of treatment when using group composite means.

It was concluded that laymen without training performed significantly below the level of performance of the other four groups, and that there were no significant differences between the multiple comparisons of performance of the other groups. Consequently, the interpretation of the performances in the specific task of test administration supports the discussion reported earlier in reference to the overall main effect of treatment.

Cumulative Folder

The same procedures described above were applied to the group mean scores resulting from the cumulative folder sub-test. Inspection of Figure 4.1 shows that the laymen group without training was again removed from the cluster of means representing the scores of the other groups. The null hypothesis related to performance in the cumulative folder task is stated below.

H_o 4: There will be no significant differences between the laymen group without training when compared with the other groups in this experiment on the cumulative folder task.

This hypothesis was tested by the Scheffé method with the means plotted in Figure 4.1 under the cumulative folder task substituted into the formula.

$$\hat{\psi} = -1(30.667)-1(30.250)-1(30.167)-1(29.167) + 4(25.500 = -18.251$$

$$C = \{-30.781 \leq \psi \leq -5.721\} \geq .95$$

Findings

Hypothesis H_o 4 was rejected. The computation indicated that the laymen group without training was again below the performance level of the other four groups and differed significantly at the .05 level. This finding offers additional support for the realization that laymen who had training were able to compare quite favorably with groups of teachers and counselors in performing activities for which systematic training had prepared them. The training was the contributing effect in view of the fact that laymen without training were significantly less able to perform either of these two tasks.

Discussion

In the test on cumulative folder performance, the rank order of the groups changed only slightly and the clustered means were closer together than results found in test administration. In connecting the mean scores in both sub-tests, the only interaction observed was that of counselors with other groups. Although the position of counselors with respect to other groups was changed, it was not enough to cause a significant interaction. For all practical purposes the lines were parallel and equadistant when graphed between the two sub-tests. These findings indicated that treatment effect was much the same in each of the two tasks. With no group by repeated measures interaction working between test administration and cumulative folder tasks, group performances were similar in each case and in keeping with the results reported in the overall analysis of treatment effect.

Observation

In previous discussions about the significant interaction effect, it was found that the performances of the groups in the test on observation were contrary to group performances in the first two tests. There

had been only slight changes in group mean positions between task one and task two and, consequently, there had been no significant interaction. Visual inspection of Figure 4.1 indicated that the group of teachers with training and the laymen group without training improved their positions considerably in comparison with what might have been anticipated for them on the basis of their performances on the other two tests. This change in rank position appeared to be the effect causing disordinal interaction which would account for the significant interaction effect reported in the source table for the analysis.

The Scheffé was used to establish that the performance of the group of teachers with training was significantly higher at the .05 level. This group mean was compared with the four closely clustered means to test the null hypothesis stated below.

H_o 5: There will be no significant differences between the group of teachers with training when compared with the other four groups in this experiment on the observation task.

The mean scores for the observation task plotted in Figure 4.1 were substituted into the Scheffé formula and are reported below.

$$\hat{\psi} = -1(27.000) -1(26.750)-1(26.750)-1(26.500) + 4(30.417) = -14.668$$

$$C = \{-14.668 - 12.53 \leq \psi \leq -14.668 + 12.53\} \geq .95$$

$$C = \{-27.198 \leq \psi \leq -2.138\} \geq .95$$

Findings

The null hypothesis H_o 5 was rejected. The group of teachers with training was significantly higher at the .05 level than the other groups. These results were in opposition to the treatment effects on composite overall performance, and performance on the sub-tests of test administration and cumulative folder. However, the results showing a

change in position among performances were supportive of the significant interaction noted in the source table of the analysis of variance of repeated measures reported in Table 4.1.

Discussion

The results found in the performances of the five groups on this task were not straightforward and were difficult to interpret. The process used in assessing the results on this test was to explore possible explanations, analyze the data further, and discuss plausible reasons for the way in which the groups performed. Two problems which could have produced these results were considered. First, the possibility existed that observation was inappropriately classified as routine or technical. Behavior is a complex phenomenon and attempting to observe only segments of behavior and then to make judgments about appropriate classifications, may not be ideally suited for short-term training. Secondly, it was possible that the training was appropriate and feasible, but that the method of evaluating such a complex process was not accurate. Neither of these alternatives was an entirely acceptable explanation for the unusual occurrences.

The task has been judged to be appropriate for training based on the realization that persons in the "support personnel training program" have been able to perform this task to the satisfaction of the professionals with whom they work. Through the use of support personnel performing this task, valuable information has been contributed to case studies and valuable professional time has been saved. It was acknowledged, however, that more time and training were offered to these personnel. Instruction ought to be revised before being used with new training groups.

Developing instrumentation that assessed performance accurately was more difficult in this particular task than in either of the other

two. It was stated in Chapter III that each test had two parts, with each part testing the task in a different way. In the observation test, the first part consisted of matching characteristics with traits. The assessment covered the subject's ability to accurately categorize within an organizational structure the behavior that was observed. It was an intellectual or passive task in relation to actual performance and was not directly applicable to the activity of a real observation. The second part, however, was a simulation of an actual observation situation. Subjects were able to make judgments about an individual's behavior on a video-tape which was similar to the way in which training for the task was accomplished.

By examining the scores achieved by each group in each part of this test, additional data about group performance on this task was available. The mean scores of each group and rank order in Total Score, Part I, and Part II are found in Table 4.3.

Table 4.3
Group Mean Scores by
Parts in the Observation Test

Group	Total Score	Rank Order	Part I	Rank Order	Part II	Rank Order
Teachers With Training	30.417	1	17.33	1	13.08	1
Laymen No Training	27.000	2	16.25	2	10.75	4
Counselors No Training	26.750	3	15.91	4	10.83	3
Laymen With Training	26.750	4	15.75	5	11.00	2
Teachers No Training	26.500	5	16.00	3	10.50	5

Inspection of Table 4.3 indicated that means in Part I were higher than those found in Part II and that the rank order in each test was different. With the realization that each test had a possible perfect score of twenty, Part II had a greater amount of variability in range with 2.58 points separating high from low as compared with a 1.58 range in Part I. The differences between rank #1 and rank #2 in Part II was 2.08 points and differences on the same comparison in Part I was 1.08. The interpretation of these data indicated that Part II was a more difficult test and better able to discriminate than was Part I.

Realizing that Part II more closely duplicated the training sequence and had more relevance for the actual task of observation, it was felt that an evaluation of this sub-test would more accurately explain the reasons for the results indicated in the post-test than would the findings reported in Part I.

An examination of the rank order of mean scores in Part II indicated that teachers with training and laymen with training had the two highest mean scores. This finding would tend to indicate that this method of training was meaningful, but only made a difference to the group of teachers who were able to score considerably higher on this test. A logical explanation for this situation would be that teachers would be able to immediately apply this training to the classroom and use the learned skill daily. Laymen would not have had the immediate pragmatic use for this training when not involved in the classroom setting. Consequently, since laymen without training were able to score as well as the three groups clustering below the significant score of the group of teachers with training, it can be seen that training seemed to have little applicability or relevance to lay personnel.

The conclusion suggested by this analysis is that training in this task makes a significant difference only when it is given to those who have a way to immediately apply the training to a real situation. It was further suggested that the training activity of using a video-tape simulation of an actual observational situation was the most accurate method of evaluating performance in this task.

Correlation Analysis

Demogrpahic data was collected about subjects on the factors of age, education, teaching experience, counseling experience, and years in the district or year in the current job. The primary purpose for the collection of this information was to have additional data which might prove useful in examining levels of performance in different tasks to see if these kinds of factors had a positive or negative effect when related to success.

A correlation matrix was calculated which pooled variables across the five groups. Since the demographic variables and the dependent variables were entered into the correlation, it was decided that the pooling process would get at the most useful interpretations in spite of the fact that the laymen group had little job experence, no advanced education, and no years in a current job. Had these variables not been pooled across groups, the correlations would have been run on small "n" groups which would make it difficult to generalize any significant findings.

Findings

The results of the entire correlation matrix pooled across eight variables is duplicated and included in Appendix C. Table 4.4 reports the correlations which were found to be significant at or beyond the .05 level with 50 degrees of freedom.

Table 4.4
Significant Correlations From A
Matrix Including Eight Variables Pooled
Across Five Groups

Age and Teaching Experience	.621	.01
Age and Counseling Experience	.374	.01
Age and Years in District	.525	.01
Age and Testing Task	- .317	.05
Education and Counseling Experience	.399	.01
Education and Years in District	.418	.01
Teaching Experience and Counseling Experience	.326	.05
Teaching Experience and Years in District	.617	.01
Counseling Experience and Years in District	.336	.05

.05 with 50 degrees of freedom = .273
.01 with 50 degrees of freedom = .354

Discussion

Only one of the significant correlations offered new and useable information related to the problem being studied. That is, there was a significant negative correlation between age and the task of administering make-up tests. On the basis of this significant difference it can be stated that the younger subjects tended to be more successful on this particular task.

The remaining significant correlations were all related to demographic variables and they correlated as one would logically predict. For example, the highest correlation was between age and teaching experience indicating that of those subjects represented in this study, the older one is, the more teaching experience he is likely to have.

With the one exception of the negative relationship between age and ability in test administration, it appears that all of the other variables, both demographic and independent, were evenly distributed throughout the experiment. This can be stated positively to mean that the factors of education, experience, and years in current job are not necessary prerequisites to potential success in the performance of the cumulative record and observation tasks.

Summary

The results of an analysis of variance of repeated measures on post-test scores in this study indicated that there was a significant treatment effect as well as a significant interaction effect found in the data. Further computations were calculated to determine exactly where differences existed.

These findings were discussed in detail, explanations were presented, and conclusions were suggested. In the next chapter a summary of these findings will be reported and implications resulting from the conclusions will be discussed.

CHAPTER V

SUMMARY AND CONCLUSIONS

Preceding chapters have dealt with rationale and need for this study, a review of related literature, experimental design and procedures, as well as the findings resulting from data analysis. In this chapter the study will be summarized, results and conclusions will be presented, implications will be discussed, and the need for additional research will be acknowledged.

Summary

The problem investigated in this study was related to personnel shortages in the profession of counseling and guidance. Recent statements in the literature have advocated that guidance services ought to be available to all students beginning in elementary schools and extending throughout the college years. Federal legislation has made funds available to implement guidance services and to prepare counselors. In spite of the impetus that has been given to the guidance movement, counselor preparation programs have not been able to produce sufficient numbers of counselors to close the gap between supply and demand.

One possible solution which has received attention has been the suggestion that training personnel to assist the counselor might alleviate certain persisting problems. The American Personnel and Guidance Association (1967) through the work of the Professional Preparation and Standards Committee, has acknowledged this concept and has prepared a policy statement offering guidelines for the duties and preparation of support personnel. This study attempted to assess the feasibility of this idea.

The purpose of this investigation was to determine the

effectiveness of lay personnel after short-term systematic training designed to prepare them to perform tasks traditionally completed by either teachers or counselors in the elementary schools. Instruction was written to teach personnel to perform the following tasks: 1) group standardized test administration, 2) summary of student cumulative records, and 3) observation of individual student behavior.

Instructional materials were prepared specifically for this experiment. A "systems approach" method was adopted so that each individual receiving training could be aware of instructional objectives in advance, work independently, and meet a predetermined criterion before the task was considered completed. Instructional units were written for each of the selected tasks and included the following specific elements: a) an explanation of the purpose of learning to do the task, b) specific directions to be followed from the beginning to the end of the instructional unit, c) objectives to be achieved by each participant with a specification of successful performance criteria, d) informational references to be studied, e) opportunities for self evaluation that provided reinforcement and immediate knowledge of results, f) simulated experiences, g) instructions for practice opportunities in a real school situation, and h) provision for recycling until the performance criteria was attained.

Instructional units were given to a group of twelve laymen and a group of twelve teachers. Laymen and teacher control groups of equal size were also selected and their results on a post-test were compared with the results of the teachers and laymen receiving treatment. A fifth group of counselors served as a criterion group and were also given the post-test.

Laymen subjects were volunteers from the local community responding to invitations to participate. Of those accepting the opportunity to be involved, twelve were given the training sequence with another twelve laymen taking only the post-test at a later time. The twenty-four participating teachers were randomly selected from sixty eligible first through sixth grade teachers working in the district in which the experiment was conducted. The treatment group was established through random assignment. The twelve counselors involved in the study represented all of the elementary school (K-6) counselors working near the site of the study.

In implementing this experiment lay personnel and teachers spent nine hours in instruction over a two-week period working for three hours on each of the three tasks. After instruction, participants were given opportunities to practice these tasks in the school setting.

The lay group spent three mornings during a six-week period in the schools and performed each task during each visit. The experiences of the lay personnel were monitored and supervised by guidance personnel in each building. Teachers were given forms to complete on three children in their classes in the tasks of observation and cumulative folder work. They were not requested to practice test administration since they had all had experience during the school testing program.

A post-test was constructed to measure performance in each of the three tasks studied. Each test had two parts so that performance could be assessed in different ways, and each test contained forty items. These tests simulated the activities used during instruction or practice, but different procedures, forms, and materials were used.

The sixty subjects selected for this study took the entire test

of 120 items two months after the end of the instruction period, and two weeks after the final practice opportunity. The two treatment groups completed the test during the morning and the teachers and counselors were given the test the afternoon of the same day. Volunteer laymen without training were involved in a third administration of the test. Each testing session took approximately two and one-half hours and no unusual developments or major problems were noted which would have interfered with the standardization of the test administration.

The scores achieved by the participants taking the test were analyzed using the analysis of variance for repeated measures statistical technique. Data cards were punched for each individual reporting demographic data and the results on each of the three tests. A computer program designed by Jennrich (1961) was used to analyze the data and print out the mean scores and the source table for these data. Tests were performed to determine the "F" ratio and critical values were established at the .05 confidence level to examine findings related to total treatment main effect and interaction effect. Additional calculations were done by using the Scheffe method for multiple group comparisons to determine exactly where significant differences existed.

Results

The results of the analysis of variance of repeated measures indicated that both main treatment effect and interaction effect were significant beyond the .05 level. The application of a series of Scheffe tests further indicated the following:

1. In overall treatment main effect the group of laymen without training were significantly lower at the .05 level than the other four groups involved in the experiment whose means were not significantly

different.

2. In the tests evaluating performance in the tasks of test administration and cumulative folder work the results were the same as those found in the assessment of overall treatment effect. The rank orders of the group means were different in each of the two tasks as well as the overall effect, but there was no evidence of significant interaction.

3. A comparison of the group means scored on the test on individual observation indicated that the group of teachers with training were significantly higher at the .05 level than the other four groups whose means did not differ significantly. In this task the performances of the group of teachers with training and the group of laymen without training were better than would have been expected when considering their performance in the other two tasks. It was this change of position in rank order of group means that produced disordinal interaction and supported the findings of significant interaction effect in the repeated measures analysis.

Implications for Educational Practice

The findings reported in group performance related to overall treatment main effect were the most critical to this study and were supported by the results of the group scores achieved in test administration and cumulative folder work. Consequently, conclusions reported first will be based on the treatment main effect analysis since this assessed the relative ability of each group in all tasks. Additional conclusions will be presented in light of the different effect noted in the observation task.

The following conclusions are drawn from the findings on the

main effect of treatment:

1. Laymen without training would be considerably less capable of performing clerical tasks than would either teachers or counselors.

2. With short-term systematic training, lay personnel could be trained to perform routine and clerical tasks so as to do them equally as well as either counselors or teachers.

3. Short-term systematic instruction in the performance of clerical or routine tasks would not prepare teachers to perform such tasks any better than teachers without training, counselors, or laymen with similar training.

4. Counselors with graduate preparation and experience in performing the selected tasks would be no more effective in the performance of these tasks than either teachers or laymen with specific training.

In an analysis of the results of group performance in the task of individual observation, where significant disordinal interaction was found, the following conclusions are reported:

1. Teachers with instruction in this task, when presented with simulated observations using video-tape media with direct applicability to their daily classroom situations, were able to perform significantly better than teachers without training, counselors, or laymen with training.

2. Lay personnel were not able to profit as much from instruction as were teachers with training, but with training were able to perform as well as teachers and counselors without this training.

Discussion and Implications

With evidence indicating that laymen can be trained to perform selected tasks as well as teachers and counselors, the concept of using

lay personnel to assist the counselor has been strengthened. It has been demonstrated in this study that by focusing on the essential components of job performance, and by isolating the specific skills necessary to do certain tasks, training can be accomplished in a short period of time which will adequately prepare lay persons to perform routine technical or clerical tasks currently being done by highly paid professionals.

The obvious implication resulting from these findings is that counselors could be relieved of many time consuming tasks by trained laymen who could perform these tasks equally as well. With lay assistance the counselor could spend more of his time on activities which would demand the special skills he developed during his graduate degree work; i.e., counseling and consulting.

This implication deserves attention in realizing the potential impact it could have economically and in combating personnel shortages. The ideal situation would be accomplished when highly paid personnel were involved only in tasks which were highly complex and demanding of a high level of training, and minimally trained personnel, not eligible for professional salaries, were performing necessary routine and technical tasks.

The reverse situation currently exists where professionally salaried personnel are spending a great deal of their time engaged in activities not commensurate with either their salaries or their competencies. The argument can be made that because so much of the professional counselor's time is consumed in performing routine tasks, many more counselors are needed to insure that all aspects of the job description are accomplished. This appears to be both economically and professionally wasteful.

The solution suggested by this study would be the emergence of a new occupational role which would provide job opportunities for persons with less education who are currently denied entry into service positions in our schools. The population eligible for training is large and could be mobilized quite quickly through short-term systematic training. With such assistance counselors could devote more and more of their time to improving and extending their professional services to members of the school population in need of qualified and competent help.

Such a solution could not be implemented without complications. Preparation for the introduction of this new role would upset traditional and conservative practices and procedures. In accepting the findings that lay personnel can be trained to assist functioning counselors provide guidance and counseling services, many questions arise which require careful consideration. The list presented below is representative of the kinds of changes that will be required in implementing this innovative concept.

1. A detailed delineation must be established that focuses on tasks in a priority sequence so as to determine which tasks require what kinds of training and what skills need to be accomplished through instruction.

2. Determination of necessary personnel qualifications must be settled to determine who would be eligible to accept training. Criteria would be dependent upon educational level, personal qualities, past experiences, and individual potential.

3. Decisions need to be made regarding the location of training, qualifications of trainers, duration of programs, and provisions for related experiences.

4. Existing certification procedures have to be modified to include levels within the profession so that terminal steps could be established for specific kinds of training.

5. Counselor education programs need to include new courses to prepare counselors to supervise and direct the activities of assistants, as well as to modify existing instruction so that valuable time will not be wasted on preparation for tasks to be performed by persons with less training.

Additional results found in this study focused on the implications of using systematic instruction with teachers. The purpose of involving teachers was to determine if instruction in guidance related activities would be appropriate for use during in-service programs. Results indicated that teachers with training did not do better than other teachers in the tasks of test administration or cumulative folder work, but did do significantly better in the task of observing individual behavior.

The implication is that guidance activities can be identified which best use the classroom-oriented skills of teachers. An example of an appropriate task for use with teachers was observation where teachers were given instruction using a video-taped segment of student behavior. It was deduced that this kind of training was of particular interest to teachers as they could directly apply the training on a daily basis to work with students in their classroom. This finding would infer that, despite teacher training and experience, observational skills of classroom teachers can be significantly improved.

The other activities of test administration and cumulative folder work did not seem to require special instruction for teachers since

those without training were able to perform these tasks equally as well as those with training. It was reasoned that these two tasks were less applicable to daily use and were not as complex nor as interesting as the observation task. Moreover, untrained teachers proved as skilled as trained teachers and counselors because of past education and experience.

The criteria for choosing which tasks to use for in-service education might be that the greater the applicability for daily use in the classroom and the more complex or demanding the task is, the greater the opportunity to significantly improve teacher performance.

It was interesting to note that the counselor group was not able to score significantly better in any of the three tasks than any of the other groups. Counselors were considered to be a criterion group who would represent the group having the best chance for success on the post-test. It had been assumed that through frequent opportunities to perform the selected tasks as well as specific graduate training in activities related to the three tasks, the counselors would have an added advantage.

These findings imply that as a counselor prepares to work as a professional and confronts theoretical rationale and the application of sophisticated techniques, he learns enough about the routine and technical aspects of task performance to accomplish such tasks when necessary. It would seem wasteful to spend valuable training time to learn routine tasks such as those studied, especially when lay personnel could be trained to do them equally as well.

Implications for Additional Research

The problem of using support personnel for the counselor is a new concept in need of exploration. The findings reported in this study

demonstrated that lay personnel with a baccalaureate degree, trained through a process of short-term systematic instruction and practice, and tested by a "teacher-made" paper and pencil instrument could perform three selected tasks equally as well as either counselors or teachers. These results need to be verified by replication or expansion of the present study.

Based on the findings reported in this research, two directions for continued investigation seem apparent. First, a series of studies should be conducted to investigate different kinds of tasks for which support personnel could be trained. Information to supplement the knowledge gained in this study should focus on some examples of "direct helping relationships." The following suggestions are offered:

1. An examination of the effectiveness of support personnel in conducting "intake" or other data gathering interviews, as compared to the traditional initial interviews conducted by counselors or other specialists.

2. An investigation of the use of support personnel in disseminating general information; i.e., educational, vocational, personal, individuals or groups, to better prepare them for later contact with the counselor.

3. A study to research the use of support personnel in providing "outreach" activities such as liaison with the community, identification of new referrals, or follow-up with former counselees.

4. An experiment to compare the "counseling readiness" of students who had had previous informal discussions with support personnel versus those students who were seeing the counselor for the first time.

Another direction for additional investigation would be to study

the alternatives suggested in the discussion on implications, which would extend the knowledge resulting from this exploratory research. Some examples of research topics are listed below.

1. An analysis of counselor tasks that specifies the degree of difficulty of each, the amount of training needed, and whether each task should be performed by counselors, fully trained support personnel, or traditional clerical help.

2. The relationship between demographic variables such as educational level, maturity, background, etc., and success in training for specific tasks that are traditionally performed by counselors.

3. A study of the emerging role of a counselor who is complemented with an adequate support personnel and clerical staff. Specifically, measures could be made of the way he spends his time, the numbers and kinds of professional contacts he makes, the time he is required to spend in supervision and direction, and the evaluation of others regarding the differences noted in the services provided.

4. An analysis should be undertaken of training and supervisory services now provided by directors of guidance, state supervisors of guidance and counselor educators, and their relationship to emerging needs of counselors who are complemented by support personnel.

5. A comparative study of the possible settings for support personnel training programs to determine the kinds of programs which could be conducted in local school districts, junior colleges, or universities.

The list cited above is only suggestive of the many and varied opportunities for exciting research problems in a field of interest that is of vital concern to the entire profession of counseling and guidance

as well as other related professions. A significant professional service can be rendered by those choosing to explore the potential ramifications of the advent of support personnel for the counselor.

Concluding Statement

This study was directed toward a controversial professional issue about which many opinions have been voiced, but where little activity has taken place. The American Personnel and Guidance Association has taken the position that the development of support personnel programs ought to be initiated and guidelines were prepared for the accomplishment of this goal. In spite of this professional endorsement, there have been few indications of actual attempts to look critically at the potential that exists. It is an issue which needs attention.

It has been the intent of this experimental investigation to examine one facet of this issue and to contribute data which will help to further this concept and to stimulate interest in future exploration. Since this is an investigation into an area where little is known, the results of this study need to be verified and related variables need to be studied. This investigation has accomplished the goal of providing data to indicate that the implementation of training programs to prepare lay personnel to assist the counselor is feasible and practical, and that there is a great potential for success in this endeavor.

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APPENDICES

APPENDIX A

INSTRUCTIONAL UNITS

Group Standardized Testing
Unit #2

Title: Group Standardized Test Administration

Purpose: Trainees need to know the process and procedures involved in test administration so that they can effectively administer make-up tests to those students missing the original administration or to give the tests to students new to the district with no test data available.

This will be done either with individual or small groups of children. In most cases only certain subtests will be given.

The Stanford Achievement Test is used in this exercise for purposes of convenience and practicality since it has been adopted for use in District #109. It is assumed that the administration of this test is comparable to other standardized group instruments used by other public schools. (Note: any other series of tests can be easily adapted to this training framework.) Intermediate I Level was chosen because of its central location with the series. It is generally representative of the other levels.

Directions:
1. Study Informational Reference #1 (Test Manual).
2. Complete Self-test Exercise #1.
3. Study Informational Reference #2 (Test Manual).
4. Complete Self-test Exercise #2.
5. Read and become familiar with the "Test Giver's Self Inventory."
6. Check with your instructor regarding directions for the actual administration of make-up tests.

Objective #1: Given a self-test exercise, you will be able to recall at least 7 of the 8 "General Directions for Administering" located on page 7 of the Stanford Achievement Test.

Objective #2: Given a Stanford Achievement Test Manual (Intermediate I Level) you will be able to find the answers to 16 "fill-in-the-blank" questions on the "Specific Directions for Administering" located on pages 8-16.

Objective #3: Given a group of 4th and 5th graders, the trainee will be able to administer sections of the Stanford Achievement Test in such a manner so as to score no less than 20 on the "Test Giver's Self Inventory."

Next: Turn to Informational Reference #1 and commence studying.

INFORMATIONAL REFERENCE #1

1. Included is a copy of the Stanford Achievement Test Manual (Intermediate I Level). Turn to page 7 and read the "General Directions for Administering."

2. When you feel that you can recall at least 7 of the 8 General Directions turn to Self-test Exercise #1.

Begin studying! Take the Self-test! Follow directions, and when the time is right, read the directions below for Phase II.

INFORMATIONAL REFERENCE #2*
(Phase II)

1. It is now time to focus on the specific directions. Turn to page 8 in the Stanford Achievement Test Manual (Intermediate I Level), and read the "Specific Directions for Administration." Note the information circled.

2. In connection with the administration of standardized tests the question of how far one may go in giving help often comes up. A good rule to follow is to allow no assistance of any kind with the problems or tasks of the test proper. Also, it is generally considered good practice not to answer any questions regarding the test after work on it has actually begun. Though everyone is anxious for each pupil to do his best, the ideal standardized test situation requires uniformity of conditions for everyone being tested. Any act that gives one pupil more help or explanation than is given to all is not permissible. In some tests understanding and following directions are part of the test, and in such cases no explanation of directions other than what is provided by the manual is allowed. The manual of a well-standardized test is usually quite explicit regarding what to say and read in giving the test, and it is not permissible to add to or depart from such instructions in any way.

3. Although the reading will not be stimulating and may even appear to be repetitious, try to make it through. After you have become familiar with this information, take Self-test #2 on page 4.

*SPECIAL NOTE: The entire Manual is included so that you can read it in its entirety!!! All pages exept the actual directions are found in all manuals at each of the levels. The information ought to be useful to you!!!

SELF-TEST EXERCISE #1

List the 8 General Directions for Administering as located on page 7 of the Stanford Achievement Test Manual (Intermediate I Level). You are allowed to use your own terminology. Do not refer to Informational Reference #1 (test manual).

1.

2.

3.

4.

5.

6.

7.

8.

Nest: Turn to page 7 of the manual and check your answers. (The important ideas are underlined.)

If you listed 7 or more General Directions correctly, you are following in the footsteps of Kelley, Madden, Gardner and Rudman (test authors). Turn back to page 2 and read directions.

If you listed 6 or less, it is necessary for you to re-study. When you feel that you can recall 7 or more General Directions, list the eight general directions again from memory on a clean sheet of paper.

Then turn back to page 2 and read directions.

SELF-TEST EXERCISE #2

Fill in the following blanks. You MAY use the Stanford Achievement Test Manual.

1. In the Specific Directions for Administering, the test administrator reads aloud to the persons taking the examination the directions which are _____ in color.

2. Be sure that each pupil has _____ sharpened pencils.

3. The testee should not begin any test until the administrator says _____.

4. The pupils can not ask questions after _____.

5. The First Sitting includes Test 1: Word Meaning which begins on page _____.

6. The First Sitting also includes Test 2: _____ which begins on page 4.

7. When explaining the directions to Test 1, the examiner should hold up a _____ and point to the sample exercises.

8. The examiner should record the _____ time on the blackboard.

9. After Test 1 is completed, the examiner should allow a _____ of two or three minutes before starting to administer Test 2: Paragraph Meaning.

10. Test 2: Paragraph Meaning is _____ minutes in length.

11. At the beginning of the Second Sitting (after the booklets and answer sheets (if they are being used) are passed out), the administrator should hold up a test booklet and answer sheet (if they are being used) and point to the correct _____.

12. During the sample question, the examiner should _____ replies.

13. The examiner should see that all the pupils do Sample B of Test 3 _____ before beginning the test.

14. In Test 4: Word Study Skills, Part A is entitled _____.

15. Part A takes exactly _____ minutes.

16. At the end of Part B, Test 4, the test booklets and answer sheets (if they were used) should be collected _____.

Next: Turn the page to check your answers.

ANSWERS TO SELF-TEST #2

ANSWERS:

1. black
2. 2
3. Go
4. after they have begun the test
5. 2
6. Paragraph Meaning
7. booklet
8. starting
9. rest period
10. 30
11. page or correct place
12. encourage
13. correctly
14. Phonics
15. 12
16. immediately

If you gave 16 correct responses, you are now ready to administer a standardized test, congratulations. The next step is to examine and study the "Test Giver's Self Inventory." Turn the page and read the items included in the check-list. When you feel that you are quite familiar with the material, then report to your instructor for further directions and information about doing some make-up testing.

If you gave less than 16 correct responses, it will be necessary for you to re-examine Informational Reference #2. When you feel that you have studied it sufficiently, turn the page and complete the self-test once more. The next step is to examine and study the "Test Giver's Self Inventory." Turn the page and read the items included in the check-list. When you feel that you are quite familiar with the material, then see your instructor and make arrangements for actual make-up testing.

TEST GIVER'S SELF INVENTORY

(A modified version of the original compiled by Dr. Anton Thompson, 1956, and reprinted by the California Test Bureau.)

DIRECTIONS: This check list is to be used by those administering group standardized test or sub-tests so that uniformity can be maintained. Consult this sheet each time you engage in test administration.

CHECK BEFORE GIVING TESTS:

_____ 1. Before attempting to give the test, do I study the content of the test manual?

_____ 2. Before I give a test for the first time, do I rehearse to the extent of reading aloud all the directions and noting the timing for each section?

_____ 3. Before starting to test, do I make sure that I have an adequate supply of tests and an extra supply of pencils, erasers, and scratch paper if needed?

_____ 4. Before starting to test, do I check the seating arrangements to see that the pupils (including the left-handed ones) can handle the test materials comfortably? Are pupils seated in such a way as to encourage self-reliance?

_____ 5. Do I check to make sure that I have an accurate means of keeping time?

_____ 6. Before starting to test, do I check to see that the physical aspects of the testing room are satisfactory (heat, light, ventilation, etc.)?

_____ 7. Before the testing period, do I make arrangements so that pupils being tested won't be interrupted by administrative announcements, fire drills, visitors, etc.? Before I begin the test, do I also put a sign on the door (e.g., "Please DO NOT DISTURB! Testing in Progress") to prevent unnecessary interruptions?

_____ 8. Before giving a machine-scorable test, do I check the test booklets to see that they are clean and usable?

_____ 9. Before testing begins, do I check to see whether pupils are properly motivated? If I'm testing older pupils, do they know why the tests are given and do they care about the results?

_____ 10. When testing young children, do I remind them to go to the toilet and get a drink of water before starting the test?

_____ 11. Do I make sure that pupils have removed all extraneous books, pencils, magazines, papers, etc., from the tops of their desks and tables?

CHECK DURING THE TEST:

_____ 12. If all pupils are not present when the class period begins, do I delay the start of the test a minute or two in order to reduce the interruptions caused by the arrival of the tardy?

_____ 13. Do I try to be matter-of-fact in my manner so that the pupils will understand that the testing experience "is neither a crisis nor a lark?"

_____ 14. When I give the group necessary directions, do I act as if I expect them to be followed?

_____ 15. Without being rigid or stilted in manner, do I follow the test author's directions exactly?

_____ 16. Do I refrain from trying to recite test directions from memory?

_____ 17. Do I read the directions slowly, in a clear voice loud enough to be heard in all parts of the room, and do I give proper emphasis to key words and phrases?

_____ 18. Within the limits allowed by the test manual, do I supplement oral instructions with blackboard or chart illustrations for filling out basic data?

_____ 19. If a test is to be machine-scored, do I check to see that <u>every</u> pupil uses the necessary type of pencils for <u>all</u> parts of the test?

_____ 20. Do I allow pupils the precise amount of time which the directions specify?

_____ 21. Within the limits of the test directions, do I relieve pupils' tensions over the amount of time available for a long test by posting the ending time on the blackboard?

_____ 22. During the pupils' working period, do I move quietly around the room in order to note any individual's unusual behavior, to provide a replacement for a defective pencil, to answer those questions which the directions permit answering, to maintain order, and to encourage a good atmosphere for quiet work? Do I also avoid gazing over any pupil's shoulder in a manner that may make him self-conscious?

_____ 23. Even though a test is easily administered and has long working periods for the pupils, do I refrain from the temptation to step out into the corridor (or the cafeteria, or library, etc.) for a minute or two?

_____ 24. Before collecting machine-scorable answer sheets and test booklets, do I ask the pupils to erase any stray marks or words on the materials? Do I ask pupils to blacken the answers well?

CHILD STUDY
Unit #1

Title: Extracting Pertinent Data from Student Cumulative Folders

Purpose: Throughout the year trainees will be assisting the counselor in the referral process by gathering data and synthesizing material about those students referred by their teachers for Special Services.

This unit is designed to teach trainees to synthesize the kinds of data representing the student's patterns of academic growth and adjustment recorded in the cumulative folder.

Directions:

1. Read Informational Reference #1.
2. Read and familiarize yourself with the Cumulative Record Information Form.
3. Formulate and write questions which occur to you as you read about the use, content, and applicability of the information both on the form and in Informational Reference #1. Turn these questions in to the instructor.
4. When your questions have been answered, take Self-test #1.
5. Use the "simulated" cumulative folder, fill out the Cumulative Record Information Form and check your work with the "model" Cumulative Record Information Form.
6. Schedule opportunities to work on cumulative folders in the school to which you are assigned.

Objective #1: The trainee will be able to identify and list:

1. At least 7 out of 9 areas of information included on the Cumulative Record Information Form.
2. At least 4 out of 6 of the areas of information which are directly related to the academic growth and development of a student.
3. At least 2 out of 3 essential elements in determining growth and development patterns.

Objective #2: Given a "simulated" cumulative folder, the trainee will be able to:

1. Record on Cumulative Record Information Form all the prescribed factual data in chronological sequence.
2. Make summary statements as prescribed on the form, indicating what patterns of growth and development can be obtained from the factual data.

Objective #3: Given 3 actual cumulative records of children referred to the counselor, the trainee will be able to use the "Cumulative Record Information Form" as instructed to the satisfaction of the counselor. No more than 45 minutes should be spent on a single cumulative folder assignment.

Next: Turn to Informational Reference #1 and begin studying.

INFORMATIONAL REFERENCE #1

CUMULATIVE FOLDER INFORMATION

Rationale and use of cumulative folder information:

Cumulative folders are maintained on each student through his school years for the purpose of keeping records of testing, academic performance, and identification information to be used for a variety of purposes including vocational and college counseling. The data considered important by the school is added to and recorded by the student's classroom teacher. The kinds of information recorded indicate patterns of academic growth and development or the lack of the same. All of these data can be useful to teachers and special staff members in formulating diagnostic impressions and educational plans for individual students, particularly in situations necessitating an individual child study. It can be an invaluable aid in the assessment of a student's educational achievements and needs. Cumulative folders contain factual data describing three essential elements of a student's progress. These three essential elements are:

1. Rate of progress.

2. Strengths and weaknesses in specific content areas.

3. Changes in performance.

It is important to note that information is to be recorded in chronological sequence. If we do not know the chronology we do not know the pattern. The following outline gives the content of the Cumulative Folder Information Form. The outline is followed by an explanation of the meaning and use of each item on the form.

OUTLINE OF CONTENTS OF FORM

I. Identifying Information.

A. Name of data collector.

B. Date of extracting information.

C. Date and reason for referral of student.

D. Name of student accompanied by birthdate and age at time of entrance in school.

II. Grade placement and location of schools attended.

III. Test results.

IV. Summary statement of test results.

V. Summary statement of academic progress.

VI. Summary statement of health history.

VII. Summary statement of parent-teacher conference material.

VIII. Home background.

IX. School Services previously utilized.

DESCRIPTION OF CATEGORIES

I. Identifying Information:

A. Name of data collector is to identify source of information for the immediate and future planning conferences.

B. Date is to establish chronology of activity initiated for individual student.

C. Child's age when he entered school identifies the time our school district assumed its responsibility for this student.

D. Date and Reason for Referral is to establish chronology of the reasons for activity initiated for a student when a referral to counseling services is made.

II. Grade Placements is to establish factual information as to age of entrance in school, geographical locations of school attendance, and possible retentions or accelerations at any grade level. This information can indicate whether retentions were a successful method of educational management and contributed to changes in school performance.

III. Test Results to provide chronological objective description of psychometric and psychological test data to determine what academic growth patterns have been established and whether these patterns are consistent with present functioning in the classroom. Grade equivalents in subject areas are to be recorded to establish individual growth patterns.

IV. The Summary Statement of Test Results should describe student's tested abilities with descriptions of strengths and weaknesses in content areas along with rate of progress.

V. Summary Statement of Academic Progress should describe classroom adjustment and functioning related to educational experiences and is extracted from teacher's narrative comments and report cards.

VI. Summary Statement of Health History is obtained from cumulative folders and nurse's health records to indicate normal or abnormal health histories and results of vision and hearing tests to aid in diagnostic procedures and to enable the school staff to make appropriate medical referrals where indicated. Frequent and persistent absences may indicate need for evaluation as absenteeism may be related to academic progress and physical health.

VII. Summary Statement of Parent-Teacher Conference Material: Information included gives some indication of parental responses to student's academic experiences and previous recommendations made to the parents. This information also indicates some of the social-emotional difficulties experienced by the child and the parental views on education.

VIII. Home Background: To provide current factual data on the student's family constellation and legal guardians and to indicate education level of parents.

IX. School Services Previously Utilized: To give chronological information of educational, emotional, social difficulties, and methods employed in the resolution of these difficulties. This information can be obtained from cumulative folder summaries written by special teachers and/or guidance personnel. Patterns of previous planning may be indicators of immediate and future planning.

Next: Turn the page and study the sample "Cumulative Record Information Form" to make sure that all the categories are familiar to you. After you are sure that you are well aware of the material and have had all your questions answered by the instructor, take Self-test #1.

Name_____

Date_____

CUMULATIVE FOLDER INFORMATION

Name of Student_____ Date of Entrance_____ Age at Entrance_____

Date & Reason for Referral: _____

Grade Placements:

I.

	School Year	Name of School	Location of School
Kdg.			
1st			
2nd			
3rd			
4th			
5th			
6th			
7th & 8th			

II. Test Results in Chronological Order

Date Given	Name of Test	C.A.	M.A.	I.Q. or Grade Equivalent

Summary Statement; Re: test results:

CUMULATIVE FOLDER INFORMATION (con'd.)

Summary Statement of Academic Progress:

III. Summary Statement of Health History: (Please note dates and results of audiometric and vision tests.)

IV. Summary Statement of Conference Report Material:

V. Home Background:

Parents or Guardian (if guardian specify relationship):

Name of Mother_____Age____Education_____

Name of Father_____Age____Education_____

Names of Siblings (in chronological order) with ages:

VI. School Services Previously Utilized: (Please include dates of service).

_____
Signature

SELF-TEST #1

DIRECTIONS: Attempt to complete this exercise without referring to Informational Reference #1.

1. Identify and list the nine areas included on the Cumulative Record Information Form.

   1.
   2.
   3.
   4.
   5.
   6.
   7.
   8.
   9.

2. List the areas on the form which help us in determining the academic growth and development patterns of an individual student.

   1.
   2.
   3.
   4.
   5.
   6.

3. List at least two essential elements in determining growth and development.

   1.
   2.
   3.

Next: Turn the page and check the accuracy of your answers.

ANSWER SHEET FOR SELF-TEST #1

1.

1. Identifying information.
2. Grade placements and location of schools attended.
3. Standardized test results.
4. Summary statement of test results.
5. Summary statement of academic progress.
6. Summary statement of health history.
7. Summary statement of conference material.
8. Home background.
9. School services previously utilized.

2.

1. Grade placements and location of schools attended.
2. Standardized test results.
3. Summary statement of standardized test results.
4. Summary statement of academic progress.
5. Summary statement of health history.
6. Summary statement of conference material.

3.

1. Rate of progress.
2. Student's strengths and weaknesses in specific content areas.
3. Changes in performance.

The criteria for success on this test is as follows:

1. 7 out of 9 correct.
2. 4 out of 6 correct.
3. 2 out of 3 correct.

If you have met the criteria you may proceed. If your effort was not entirely successful, re-read the material and try again.

Next: Now get a "simulated" cumulative folder from your instructor and complete the Cumulative Record Information Form. Check your work with the "model" form. All information requested must be filled in or where information is not available, a statement to that effect is required. Items with asterisks are minimum requirements and should be on the form. The information recorded does not have to be stated in precisely the same syntax, but should be equivalent.

After you have satisfactorily accomplished Objective #2, you will be ready for practice with actual cumulative folders. You will be assigned to a school and the counselor will provide you with three folders for summation. You are to schedule times to complete this assignment at your convenience, but spaced within the six-week period after training.

CHILD STUDY
Unit #2

Title: Observation of Individual Students

Purpose: Trainees assist counselors in the referral process by doing individual observations on students referred to the counselor to get a current sample of student behavior. This activity is generally performed after the cumulative folder has been summarized.

This unit is designed to teach trainees to follow a structured observation form and record on the form descriptive data obtained from observing an individual student in the classroom, physical education class, recess, and/or other school situations.

Directions:

1. No oral directions are necessary. Read Informational Reference #1.
2. Read the observation form to familiarize yourself with its organization and content.
3. You may write any questions regarding terminology or procedure that is unclear to you. Submit your questions to the instructors.
4. When your questions have been answered, complete Self-test Exercise #1 on vocabulary.
5. Read the narrative description of the video-tape and watch the video-tape.
6. Fill out the observation form.
7. Check your work with "model" copy of observation form.
8. Schedule opportunities to do observations in the school to which you are assigned.

Objective #1: Given a self-test the trainee will be able to list the following:

1. At least two reasons for the use of observation of a student in school.
2. Nine out of nine categories of information on the observation forms.
3. The three methods of data recording on the observation form.
4. Two items to be included in the general impressions category on the observation form.

Objective #2: Given an observation form and a video-tape of an actual classroom situation, the trainee will be able to fill out an observation form on a specific child with all categories completed and with essential information consistent with that of the "model" form.

Objective #3: Given the assignment of observing three children referred to the counselor, the trainee will be able to use the "Behavioral Observation Form" as instructed to the satisfaction of the counselor. The observation period should be no longer than thirty minutes.

Next: Turn to Informational Reference #1 and begin studying.

INFORMATIONAL REFERENCE #1

For your convenience, the information in this reference will be presented in the sequence outlined below:

I. Rationale and Use of Material.

II. Procedures.

III. Methods of Data Recording on the Observation Form.

1. Narrative description.

2. Check lists.

3. Five point rating scale.

IV. Contents of Form.

1. Identifying information.

2. General appearance.

3. Physical coordination.

4. Social adjustment.

5. Emotional adjustment.

6. Use of instruction.

7. Intellectual activities.

8. Collateral information from teacher.

9. General impressions.

I. Rationale and Use of Material:

We learn about people in many ways. Observation is a most important method of learning. In a school there are many opportunities to observe children's responses to each other, to the group, to adults, and to the learning experience. Observation is more than merely looking and seeing. It implies that a question has been

formulated about a student and that observation is being used to gather information which may help to answer the question. Observations should consist of descriptions of samples of behavior in one or several situations. Comments and interpretations of the observer should be identified as such and differentiated from descriptions of behavior. Observations are useful to us in the following ways:

1. They provide us with current descriptive information about a child's behavior and responses in the school situation.

2. They contribute to the child study data used in the diagnostic and planning procedures of the Pupil Personnel Team.

3. An observer has the advantage of being more detached with less preconceived ideas and may be able to assess behavior with fewer biases and needs to solve problems.

II. Procedures:

Trainees are usually assigned an individual student to observe by the building counselor following a referral for service. No time limits are set other than the limits imposed by the school day and the observer is free to determine how much time is needed and what activities (classroom, playground, physical education, special teacher's, etc.) will provide the necessary information.

III. Methods of Data Recording on the Observation Form:

Three methods of data recording are used on the observation form. They are as follows:

1. Narrative description.

2. Check lists.

3. Five point rating scale.

Narrative description is a method where the observer describes in his own words a specific behavior trait. This method is used to expand and clarify terminology where the terminology may be ambiguous or not sufficiently precise.

Check lists involve choices and judgments as to behavioral traits and how they best correspond to a given category.

Five point rating scales are used to illustrate extremes of behavior and to allow for gradations in specific behavior traits. On the form, in the majority of cases, specific behavior traits are chosen to describe what has been observed between two extreme points.

IV. Contents of Form:

1. Identifying information includes the name, age, grade, and school of the child. In addition to this, the name of the classroom teacher, the name of the observer, the dates and observational settings are recorded in order to better identify the samples of behavior.

2. General appearance of the child may give clues as to physical, emotional, and social health. Some of the characteristics to look for include:

   a. Grooming.

   b. State of clothing.

   c. Complexion color.

   d. Size (height and weight).

   e. Visible abnormalities.

3. Physical coordination may give clues as to physical development. Some of the characteristics to look for are:

   a. Running and gait. Are they smooth and rhythmical? Are the arms used in a balance role? Is the walking indicative of good balance? Can the child follow directions at the same time he is in motion?

   b. Throwing and the use of arms and hands. Do the arms supinate and pronate easily? When throwing a ball does the ball reach the target intended with reasonable speed and direction? Can the child grasp and sustain the grasp with objects such as balls, writing utensils, and other small objects?

   c. Level of physical energy. Things to look for are restlessness, lack of energy, and adequate amount of energy demonstrated by the child being able to sit in a relaxed manner, move about easily, and perform classroom tasks without fatigue.

   d. Gross motor coordination is a general impression on a rating scale ranging from very poor to good.

4. Social adjustment. Look for those characteristics that enable a child to function in a peer group which involves instruction and social interaction. These characteristics include:

   a. Ability to share the teacher with peers.

   b. Ability to contribute to group activities and allow others to contribute.

c. Ability to function with ease in the context of classroom rules and limits and accept the authority of the teacher.

d. Ability to work independently and accomplish assigned tasks without constant seeking of help or support.

5. Emotional adjustment. This area is similar to social development in many respects but is more specifically directed to the child's responses to classroom tasks, stresses, and demands. Look for the child's ability to handle stress in the form of not understanding directions, inability to do the task, using instructional periods, and being distracted by classroom activities. Look for whether the child can tolerate some confusion and frustration and whether he responds by criticizing himself or putting blame on others. Can the student wait or tolerate delays and changes in routine, or do his impulses remain the most important thing to him so that he persists in what he wants? Does he work so hard at controlling impulses that inactivity results? Does the child seek attention with persistence from peers and adults? In what manner does he do this? Some methods of attention seeking are compulsive talking or questioning, misbehavior, and moving about. Is the child attempting to obtain attention, approval, or dominance in the group? Does the child seem to wish to succeed? Does he have goals similar to those of the curriculum teacher, and peer group?

6. Use of instruction. Look for the child's ability to use the teacher so that he knows how to do something today that he could not do before and he understands something today that he did not understand before, rather than as a source of meeting emotional needs for support and dependency. Look for the child's ability to concentrate on independent work as well as group work. Can he or she attend to the immediate task or does the child seem unable to follow through even though he appeared to understand what was expected of him?

7. Intellectual activities. This refers to native ability and development which enables the child to participate in the learning process and to listen to directions in such a way as to help him use his own abilities efficiently. A gross impression of work habits can be notated on a rating scale.

8. Collateral information from teacher. This material obtained from asking the teacher can serve to clarify some of the observed behavior from the point of view of persistence and timing. For example, does the student always react with frustration to new situations or is this reaction confined to specific content areas, peer relationships, or special activities? Does the child seem as fatigued in the morning as in the afternoon? The teacher may also have some diagnostic impressions as to health, learning disabilities, or crisis situations in the family.

9. General impressions. The observer is expected to write a narrative statement including comments, and interpretations of what has been observed. Also, the observer should be able to raise questions as to what additional information might be helpful for purposes of diagnosis and planning. Such information could include health, social and developmental history, and additional testing. In short, this narrative statement will be a summary of the observations and include recommendations for further activity.

Next: Turn to the next page and study the "Behavioral Observation Form" and become familiar with its organization and content. After you are sure that you are well aware of the material and have had your questions answered by the instructor, take Self-test #1.

BEHAVIORAL OBSERVATIONS

1. CHILD'S NAME_____ AGE_____

SCHOOL_____ GRADE____ TEACHER'S NAME_____

GUIDANCE ASSISTANT_____ DATE OF OBSERVATION_____

Observational Setting Should be Indicated.

2. CHILD'S GENERAL APPEARANCE

3. PHYSICAL COORDINATION

a. Running and Gait.

b. Throwing, use of arms and hands.

c. Level of Physical Energy.

d. Gross Motor Coordination.

1	2	3	4	5
Very Poor Coordination	Below Average	Average	Above Average	Good Coordination

4. SOCIAL ADJUSTMENT

a. Social Adjustment.

1	2	3	4	5
Not Accepted	Tolerated By Others	Liked by Some, Disliked by Some	Accepted by Most Children	Accepted by Children

b. Group Participation.

1	2	3	4	5
Does Not Participate	Sometimes Participates	Often Participates	Participates Most of Time	Active Participation

c. How does he relate to adults?

4. SOCIAL ADJUSTMENT (continued).

d. Acceptance of Authority.

e. Social Independence.

1	2	3	4	5
Overly Dependent	Sometimes Independent	Self-sufficient Most of time	Self-Sufficient	Overly Independent

5. EMOTIONAL DEVELOPMENT

a. How does he handle stress situations?

1	2	3	4	5
Always Becomes Disorganized	Often Disorganized	Occasionally Disorganized	Seldom Disorganized	Never Disorganized

b. When he is frustrated, does he blame himself or others?

c. Impulse Control.

1	2	3	4	5
Must Seek Immediate Satisfaction	Rarely is in Control of Impulses	Sometimes Controls Impulses	Usually Controls Impulses	Is in Control of his Impulses

d. Seeks Attention.

Often _____ Sometimes _____ Never _____

How?

e. Seeks Approval.

Often _____ Sometimes _____ Never _____

How?

f. Is there an apparent need to dominate in certain situations? (Describe).

5. EMOTIONAL DEVELOPMENT (continued).

g. Need for Achievement.

1	2	3	4	5
Not Motivated	Gives Up Easily	Motivated Most of the Time	Well Motivated	Overly Motivated

6. USE OF INSTRUCTION

a. Distractibility.

1	2	3	4	5
Incapable of Concentration	Distracted Easily	Adequate Attention	Good Attention	Able to Concentrate Under Adverse Conditions

b. Attention Span.

1	2	3	4	5
Poor		Good		Excellent

7. INTELLECTUAL ACTIVITIES

a. Classroom Participation.

1	2	3	4	5
Does not Participate in Classroom Discussions	Seldom Participates in Classroom Discussions	Participates Adequately	Participates Most of the Time	Always Participates

b. Follows Directions.

1	2	3	4	5
Never	Seldom	Often	Most of the Time	Always

c. Work Habits.

1	2	3	4	5
Works quickly, Disregards Quality	Slow, but Many Errors	Fairly Systematic in Work	Systematic	Extremely Systematic

8. REQUEST INFORMATION FROM TEACHER (Teacher's view of classroom adjustment.)

9. GENERAL IMPRESSIONS

SELF-TEST #1

1. List at least two reasons for the assignment of an observation.

   1.

   2.

   3.

2. List the nine categories of information on the observation form.

   1.

   2.

   3.

   4.

   5.

   6.

   7.

   8.

   9.

3. List the three methods of data recording on the observation form.

   1.

   2.

   3.

4. List at least two items that should be included in the general impressions category at the end of the observation form.

   1.

   2.

   3.

Next: Turn the page and check your work.

ANSWER SHEET TO SELF-TEST #1

1.

1. To get current descriptive information about a child's school situation.
2. To contribute to diagnostic procedures of pupil personnel team.
3. To get an unbiased and objective behavior assessment of a specific child.

2.

1. Identifying information.
2. General appearance.
3. Physical coordination.
4. Social adjustment.
5. Emotional adjustment.
6. Use of instruction.
7. Intellectual activities.
8. Collateral information from teacher.
9. General impressions.

3.

1. Narrative description.
2. Check lists.
3. Rating scale with five points.

4.

1. Summary of observation.
2. Recommendations for further diagnostic material.
3. Recommendations for further case activity.

If you correctly answered two items on question #1, nine items on question #2, three items on question #3, and two items on question #4 -- Whoopee!!! You are now ready to proceed to viewing the video-tape and completing a "Behavioral Observation Form." Check your work with the "model" form when you have completed the assignment. If you were not completely successful and were unable to recall this information, re-read the material and try again. Then, view the video-tape and complete a "Behavioral Observation Form" and check your work with the "model" form.

Finally -- Check with the counselor in the school to which you are assigned and do three real observations after you have summarized the cumulative records on the child assigned. Hopefully you will be able to do this on the same day after the cumulative folder assignment is completed.

APPENDIX B

POST-TEST

POST-TEST

CODE NUMBER_____

Identifying Data

DIRECTIONS: Circle the NUMBER in each category to indicate correct facts about yourself.

RESULTS

TESTING:_____

CUMULATIVE FOLDER: _____

OBSERVATION:_____

GRAND TOTAL_____

A. GROUP:

1 - Volunteer
2 - Teacher with training
3 - Teacher - no training
4 - Counselor
5 - Other

B. AGE:

1 - 26 or less
2 - 27 to 32
3 - 33 to 38
4 - 39 to 44
5 - 45 or more

C. EDUCATION:

1. B.A. but less than 15
2. B.A.+15 but less than M.A.
3. M.A. but less than 15
4. M.A.+15 but less than 30
5. M.A.+30 or more

D. TEACHING EXPERIENCE:

1. 0 years
2. 1-3 years
3. 4-6 years
4. 7-9 years
5. 10 or more years

E. COUNSELING EXPERIENCE:

1. 0 years
2. 1 or 2 years
3. 3 or 4 years
4. 5 or 6 years
5. 7 or more years

F. YEARS IN CURRENT DISTRICT:

1. 0
2. 1 or 2 years
3. 3 or 4 years
4. 5 or 6 years
5. 7 or more years

Guidance Assistant Project
February, 1969

Evaluation of Instructional Units

Title: The Use of a Post-test to Assess Performance in Three Tasks.

Purpose: New instructional procedures have been developed to train personnel to perform certain "guidance related" tasks: 1.)test adminstration, 2.)summary of student cumulative folders, and 3.)observation of student behavior. In an effort to assess the effectiveness of these procedures and materials, it would be desirable to compare the performance of those receiving specific training with those who have not had the training.

A paper and pencil test has been developed to evaluate an individual's ability to perform each of the three tasks. This "simulated" experience is necessary for the purpose of saving time, standardization of procedure, and ease of scoring rather than having each individual perform each task and be evaluated on his actual performance.

Therefore, the results of this test ought to indicate which of the following groups is best able to perform each task:

1. Laymen with specific training.
2. Elementary school teachers with specific training.
3. Elementary school teachers without specific training.
4. Elementary school counselors without specific training.

Directions:

1. You are to take three independent tests according to the directions given at the beginning of each test.
2. Read the cover sheet for each test which will indicate specific directions for each of the following parts:

   a. Testing - Part I - 24 items.
   b. Testing - Part II - 16 items.
   c. Cumulative Folder - Part I - 30 items.
   d. Cumulative Folder - Part II - 10 items.
   e. Observation - Part I - 20 items.
   f. Observation - Part II - 20 items.

3. Each page will have directions at the bottom. Pay particular attention to those directions reading - STOP!

Objective: Given three independent tests including a total of 120 items, subjects being tested will be able to complete the exercise within a two-hour period.

Next: Turn the page and read the cover sheet for the test on "Test Administration."

Guidance Assistant Project
February, 1969

Evaluation Unit #1

Title: Post-test on "Standardized Group Test Administration."

Purpose: This test has been developed to evaluate your ability to perform the task of giving make-up tests to one or more students being tested at times other than the normally scheduled testing periods.

Directions:

1. In "Testing - Part I," there are 24 multiple choice questions based on a "simulated" experience which could be found in any elementary school situation in which a standardized achievement test was given to a student new to the school.
2. Read each question carefully and CIRCLE the best response.
3. After you have decided on the response YOU feel is best, make a judgment about where you got the information to use in making the decision to choose a specific response. Use the following criteria:

   a. Place a #1 in the space provided if you answered the question with knowledge that you gained in training (college, graduate, special, etc.).
   b. Place a #2 in the space provided if you answered the question with knowledge that you gained in performance (actual test administration).
   c. Place a #3 in the space provided if you answered the question with knowledge which can NOT be attributed to either training or performance (guessing, common sense, etc.).

4. Read the statement below entitled "SITUATION" which will be your reference point upon which to determine which answer would be best in each of the 24 items.

   SITUATION - The principal calls you to his office at 9:30 A.M. He states that a new fifth grade student named John Jones has entered school and has been placed in Miss Smith's room. Since no records are available on the student, he asks you to test John's achievement in mathematics and reading as soon as possible.

5. You will have twenty minutes to complete Part I. Do NOT continue on to Part II until you are instructed to do so.

6. When the tester indicates you are to begin "Testing - Part II," you are to read the specific directions and view the video-tapes developed for that test.

Objective: Given a test of 40 items related to test administration, the subject will be able to complete the test within forty minutes.

Next: Turn the page and begin reading the items included in "Testing - Part I." Refer back to the "SITUATION" if necessary.

TESTING - PART I

_____ 1. The small distraction free office normally set aside for testing is being used by the school nurse to interview a parent. Therefore, you would:

a. Ask the nurse to confer in another area as you need the office.
b. Wait until the conference is over and then use the office.
c. Use an empty classroom for testing.
d. Use the library for testing.

_____ 2. After preparing the setting you select for testing, you discover that John's class is having recess. You would:

a. Go to the playground area and bring John inside for testing.
b. Find John on the playground and tell him to report to you immediately after recess.
c. Inform Miss Smith of your intentions to test and then pick John up after recess.
d. Inform Miss Smith of your intentions to test and ask her to send John to you after recess.

_____ 3. The student meets you for the first time and asks, "What do you want?" You reply:

a. "John, we have some interesting tests that you'll enjoy taking."
b. "John, if you'll come to my office I'll explain then."
c. "John, we have some tests which will help in your school placement."
d. "John, we have some tests that all students take in our schools and we want you to take them also."

_____ 4. John then asks, "Why do you have to give tests all the time?" You reply:

a. "We want to know what you have learned."
b. "So that we can know what to expect from you in your school work."
c. "Because your parents would like to learn about your progress in school."
d. "So that you will better understand why you have either success or difficulty in your subjects."

_____ 5. John replies, "I hate tests. They're hard and everyone always hollers at me when I goof up." You respond:

a. "I think you will find that these tests are different."
b. "It probably just seems as if they are hard. Try to do the best you can."
c. "You will be the only one tested so no one will know the difference."
d. "I'll be right there with you to help you when you need it."

_____ 6. When you arrive at the testing area you should <u>first</u>:

a. Sit John down in front of the test materials and start giving directions.
b. Spend a few moments talking with John about previous experiences.
c. Tell John about test conditions; i.e., length, responsibility to do well, etc.
d. Ask John to tell you more about his fear of testing.

_____ 7. John complains to you that he is uncomfortable. You would:

a. Ask him if he would like to see the nurse.
b. Determine the cause of the discomfort and attempt to alter the situation.
c. Tell John to please stop delaying because time is being wasted.
d. Ignore John and start in with the test.

_____ 8. After explaining the instructions, you get to the examples. John says politely, "I've done lots of tests like this. Could we just skip the examples?" You respond:

a. "Certainly, if you would like to."
b. "Let's do these examples and then skip the rest."
c. "To make sure, let's do them all."
d. "It's up to you. We can omit them and it won't make any difference."

_____ 9. After twenty minutes of a twenty-five minute test, John intentionally breaks the lead in his pencil. After he shows this to you, you would:

a. Give him another pencil and take the broken one.
b. Tell him to sharpen it quickly.
c. Stop the test as he obviously is being frustrated.
d. Warn him to stop his nonsense and then immediately give him another pencil.

_____ 10. During the mathematics test, John works quietly until he gets to division problems. At this point, he asks you what to do with remainders. You would:

a. Reply, "I'm not allowed to tell you that."
b. Explain why you can't help him.
c. Tell him to just do his best and not worry.
d. Reply, "Skip the problems you have trouble with and try them later."

_____ 11. Later you notice that John is randomly filling in spaces on his answer sheet without reading the test items. You would:

a. Make him erase and start over, allowing extra time.
b. Make him erase and start over, without allowing extra time.
c. Tell him firmly to go back and correct his work.
d. Stop the test and re-schedule that sub-test at a different time.

_____ 12. On the arithmetic reasoning test, John appears to be enjoying himself. He's still hard at work when time is up, so he asks for more time. You would:

a. Allow extra time, but do not count any of John's answers after that time.
b. Explain why the need for standardization prohibits allowing extra time.
c. Remind John of earlier instructions and proceed.
d. Explain that since the test is timed for students his age, he should have completed the test.

_____ 13. John has started a new sub-test and you notice that he has been filling in the answer sheet spaces for the wrong test. You would:

a. Have him erase the answers and start over in the right place but allow extra time.
b. Give him another answer sheet and have him immediately record his answers in the right place.
c. Have him start putting his remaining answers in the right place on his answer sheet, and record earlier answers after time has run out.
d. Give him a new answer sheet and have him start with the next answer in the right place.

_____ 14. Three minutes before the vocabulary test is over, the fire alarm sounds. Your best course of action would be to:

a. Continue the test until finished and then leave the room.
b. Leave immediately, then start the whole test over at a later date.
c. Pick up the test and consider it finished, since you had noticed John dawdling anyhow.
d. Leave immediately, then after the fire drill, re-introduce the test, allowing some extra time for reorientation.

_____ 15. Shortly after the fire drill, John starts another test. Someone ignores your "Testing in Progress" sign and knocks at the door. Your best action would be to:

a. Ignore the knocking.
b. Open the door and quickly explain the situation without interruption of the testing.
c. Make a sign through the glass panel of the door that you don't want to be bothered.
d. Stop the testing until the situation is clarified.

_____ 16. Looking over John's shoulder you notice, that he has accidentally smudged portions of his sheet. At this point, you would:

a. Quietly tell him to erase the marks.
b. Ignore the marks as they probably won't affect scoring.
c. Wait until later to have John erase the marks.
d. Caution him about further extraneous marks.

_____ 17. John tells you that he has to go to the washroom badly. The 12 minute test he is taking has 7 minutes to go. You would:

a. Note the time and let him go.
b. Ask him to wait until the test is over.
c. Ignore his request until after the test.
d. Send him to the washroom and start the entire test over at a later date.

_____ 18. When faced with the decision as to when to schedule the remaining testing for John, the <u>best</u> solution would be to:

a. Schedule it for the afternoon since the principal requested the results as soon as possible.
b. Check with the teacher and ask her to make the decision.
c. Ask John when he would prefer to take the rest of the test.
d. Request from the teacher that testing be resumed early the next morning.

_____ 19. During the next testing session you remember an extremely important phone call you must make immediately. You decide to:

a. Make the call quietly from your desk.
b. Get a teacher to relieve you for 5 minutes.
c. Forget about the call until later.
d. Make the call between sub-tests.

_____ 20. John carefully finishes the final test before time has elapsed. He checks his work and ask to leave for his classroom. It would be best to:

a. Allow him to leave if he knows the way.
b. Escort him to his class.
c. Ask that he recheck his work again and stay until the end of the testing period.
d. Tell him to sit quietly and relax so the test conditions will be standardized.

_____ 21. Upon checking John's test after he has returned to his classroom, you notice that he has entered an entire series of answers in section D instead of section C on the answer sheet. The most desirable course of action is to:

a. Call John back and have him transfer his answers to section C.
b. Enter all John's responses on a clean answer sheet.
c. Wait until morning before having John correct his answer sheet.
d. Let the answers stay as they are, since not following instructions is a serious trait often affecting test results.

_____ 22. The next morning John returns, to complete a section of the test (assume for purposes of the remaining questions only, that testing was continued on the next day). John is working too slowly on a section of the test. To enable him to better pace himself, you might:

a. Mention the time remaining occasionally.
b. Mention the time remaining every 3 minutes.
c. Write the time the test will end on the board at the beginning of the test.
d. Tell him at what time the test will be up and encourage him to pace himself by checking the time occasionally.

_____ 23. When the testing session is completed, John's class is halfway through a music class. John hates music and asks that he be allowed to remain in the testing room until recess. You decide to:

a. Send John back to his room alone.
b. Accompany him back to his classroom.
c. Ask his teacher what she wants John to do.
d. Allow John to remain in the room and read quietly.

_____ 25. When compiling all the tests for the entire school, you notice 11 sheets are probably mutilated too badly for data processing. You remedy this by:

a. Hand scoring the 11 sheets.
b. Having the students recopy their sheets.
c. Recopying the 11 sheets yourself.
d. Repair the sheets as best you can and process them. Then hand score any that the machine can't handle.

Next: Do not turn the page until you are instructed to do so.

TESTING - PART II

Directions: You will see five video-tape segments showing a test administrator giving a make-up test to four students. Occasionally, it will be necessary to stop the tape and give clarification to verbal statements made on the tape. No other questions will be answered.

After each segment is completed, you will turn the page and answer questions on what you have seen. You are to decide whether the behavior of the tester was APPROPRIATE or NOT APPROPRIATE. If you decide the tester's behavior was NOT APPROPRIATE, then you are to indicate WHY it was NOT. Give brief and concise answers to identify what was WRONG with the tester's behavior but do NOT indicate what should have been done to correct such behavior. You will have 3 minutes to answer questions after viewing each video-tape.

Next: Watch the video-tape paying attention to the tester's behavior. After the segment is finished you may turn the page and answer the questions about what you saw.

Scene #1:

1. The tester's response to the principal's request was:

   a. _____Appropriate b. _____Not appropriate - Why?

   _____

   _____

2. The way in which the tester initially prepared for the situation was:

   a. _____Appropriate b. _____Not appropriate - Why?

   _____

   _____

3. The procedure for contacting the students was:

   a. _____Appropriate b. _____Not appropriate - Why?

   _____

   _____

Next: Do not turn the page until told to do so.

Scene #2:

4. The preparation of the tester was:

a. _____Appropriate b. _____Not appropriate - Why?

_____

_____

5. The tester's manner in setting students at ease was:

a. _____Appropriate b. _____Not appropriate - Why?

_____

_____

6. The procedure of giving the directions for the test was:

a. _____Appropriate b. _____Not appropriate - Why?

_____

_____

Next: Do not turn the page until told to do so.

Scene #3:

7. The tester's actions in helping Sam with his problem was:

   a. _____Appropriate b. _____Not appropriate - Why?

   _____

   _____

8. The tester's actions in handling Sam's cheating was:

   a. _____Appropriate b. _____Not appropriate - Why?

   _____

   _____

9. The manner in which the tester concluded the test was:

   a. _____Appropriate b. _____Not appropriate - Why?

   _____

   _____

10. The tester's manner of proctoring the test was:

   a. _____Appropriate b. _____Not appropriate - Why?

   _____

   _____

Next: Do not turn the page until told to do so.

Scene #4:

11. The tester's actions in introducing the second test were:

    a. _____Appropriate b. _____Not appropriate - Why?

    _____

    _____

12. The tester's actions in handling the problem of letting the students know how much time remains was:

    a. _____Appropriate b. _____Not appropriate - Why?

    _____

    _____

13. The manner in which the tester handled Sam's request to go to the washroom was:

    a. _____Appropriate b. _____Not appropriate - Why?

    _____

    _____

Next: Do not turn the page until told to do so.

Scene #5:

14. The procedure of the tester in collecting the materials at the end of the test was:

a. _____Appropriate b. _____Not appropriate - Why?

_____

_____

15. The manner in which the tester handled Sam's questions was:

a. _____Appropriate b. _____Not appropriate - Why?

_____

_____

16. The actions of the tester in dealing with the final check of the answer sheets were:

a. _____Appropriate b. _____Not appropriate - Why?

_____

_____

Next: Let's take a break! Close your test booklets. After 10 minutes please return and await instructions.

Guidance Assistant Project
February, 1969

Evaluation Unit #2

Title: Post-test on "Student Cumulative Folders."

Purpose: This test has been developed to evaluate your ability to perform the task of finding data and placing data into chronological sequence using information or material found in a student cumulative folder.

Directions:

1. You will be given a "simulated" cumulative folder which has been developed by Science Research Associates for use in their "Teaching Problem Laboratory."
2. Each piece of information printed on the cardboard folder itself is coded. The major categories have a letter of the alphabet and each section of information under the major category has a number.
3. In Part I of the test you are to use ONLY the information printed on the folder. (Set aside the inserted material which will be used in Part II.) When the test begins, quickly read the information on the folder. (Examples to be explained here.)
4. After you have become aware of the information on the cumulative folder, you are to read each statement found on the test and then locate verifying data on the cumulative folder.
5. When you have found information supporting the test statement, write the coded letters and numerals in the space provided. In four (4) statements you are expected to identify two places where verifying data can be found.
6. If you are not able to find verification, or supporting information for a statement, use the letters "N.A." (Not Available) to put in the space.
7. Part I will be timed and all must stop after 20 minutes.
8. When all have completed Part I, the tester will ask you to go on to Part II.
9. Read the directions for Part II using ONLY the 12 sheets of information inserted in the cumulative folder.
10. Part II is timed and all must stop after 10 minutes. You will then be ready to read the cover sheet for the test on observation.

Objective: Given a test of 40 items related to work with student cumulative folder, the subject will be able to complete the test in 30 minutes.

Next: Take the "simulated" cumulative folder and begin reading the information printed on the folder, and then find the data which verified each of the 26 statements.

CUMULATIVE FOLDER - PART I

1. Initial referral to psychologist. (1)_____

2. Indications of parental cooperation. (2)_____ and _____

3. Student's current age. (3)_____

4. Indications of others residing in home. (4)_____ and _____

5. Indications of mother's emotional condition. (5)_____ and _____

6. Age of student when entering school. (6)_____

7. Student's best school subject as indicated by achievement. (7)_____

8. Father's occupation. (8)_____

9. Indication of reading readiness. (9)_____

10. Student's worst attendance period. (10)_____

11. Educational level of parents. (11)_____

12. Indication of discipline needed. (12)_____

13. Student's worst subject as indicated by achievement. (13)_____

14. Student's musical aptitude. (14)_____

15. Name of student's school. (15)_____

16. Indications of most successful school year. (16)_____ and _____

17. First indication of difficulty with school work. (17)_____

18. Indication of length of time spent in home tutoring. (18)_____

19. Musical instrument played by student. (19)_____

20. Indication of math aptitude. (20)_____

21. Conditions regarding grade advancement. (21)_____

22. Indication of improvement resulting from tutoring. (22)_____

23. Health condition causing absenteeism. (23)_____

24. Achievement test scores. (24)_____

25. Student's achievement in physical education. (25)_____

26. Indication of student's mental ability. (26)_____

CUMULATIVE FOLDER - PART II

Directions: Using the material which is inserted into the cumulative folder, arrange the sheets into chronological order. Place the letter found at the tope of each sheet in the space provided on this answer sheet so that the logical sequence of services or activities is recorded. The material identified by the letter "L" and "M" have two pages. The second pages are lettered "L, con't." and "M,con't." These second pages should NOT take up an answer space. Therefore, use only the 10 letters"L" through "U" in the answer spaces.

(1)_____

(2)_____

(3)_____

(4)_____

(5)_____

(6)_____

(7)_____

(8)_____

(9)_____

(10)_____

Next: When the tester calls time, you may turn the page and begin reading about "Observing Student Behavior."

Guidance Assistant Project
February, 1969

Evaluation Unit #3

Title: Post-test on "Observing Student Behavior."

Purpose: This test has been developed to evaluate your ability to perform the task of observing an individual student and making judgments about the observed behavior so that you can describe the child to others, based on your observation.

Directions:

1. In "Observation - Part I" you will be presented with 20 characteristics which will be applicable to 4 specified traits.
2. You will match the characteristic with the trait.
3. "Observation - Part II" is based on a video-tape of a 6th grade student involved in a class discussion of poetry selected and reprinted by the teacher.
4. You are to focus your attention on the boy - TIM - who is in the front of others also seen on the tape.
5. There will be 20 statements made about the behavior of the student. You are to judge whether the statements are "True," "False" or "Neither" (i.e., insufficient data, or not observable).
6. Upon completion of this exercise the post-test is finished.

Objective: Given a test of 40 items related to the observation of individual student behavior, the subjects will be able to complete the test in 20 minutes.

Next: Turn the page and read the directions for Observation - Part I.

OBSERVATION - PART I

Directions: Identify the appropriate "characteristics" which belong with the selected "traits" by placing the letter of the characteristic in a space under the trait to which it belongs. This is a "forced choice" exercise. There are spaces for all the characteristics and none can appear more than once.

CHARACTERISTICS		TRAITS
A. grooming	PHYSICAL	- - -
	1.	_____
B. motivation		
	2.	_____
C. acceptance by peers		
	3.	_____
D. coordination		
	4.	_____
E. group participation		
	5.	_____
F. acceptance of authority		
	SOCIAL	- - -
G. energy level	6.	_____
H. self-sufficiency	7.	_____
I. frustration level	8.	_____
J. control of impulses	9.	_____
K. need for approval	10.	_____
L. speed in doing accurate work	EMOTIONAL	- - -
	11.	_____
M. concentration		
	12.	_____
N. use of pencil		
	13.	_____
O. following directions		
	14.	_____
P. complexion		
	15.	_____
Q. seeking attention		
	INTELLECTUAL	- - -
R. cooperation with peers	16.	_____
S. organizational ability	17.	_____
T. degree of aggression	18.	_____
	19.	_____
	20.	_____

Next: Do Not turn the page. You will need to wait until the tester begins the video-tape before doing Observation Part II. You may take notes during the video-tape.

OBSERVATION - PART II

Directions: After viewing the video-tape, you are to make a judgment on each statement listed below. Place a (✓) check mark in the space according to the following criteria:

T - the statement is True.
F - the statement is False.
N - the statement is Neither true nor false; (i.e., insufficient data, not shown).

	True	False	Neither
1. Is neat, well groomed, and clean.	____	____	____
2. Is well accepted by his peers.	____	____	____
3. Has a good relationship with his teacher.	____	____	____
4. Is eager to participate in group discussion.	____	____	____
5. Keeps abreast of the discussion.	____	____	____
6. Is motivated to achieve well in school.	____	____	____
7. Is easily frustrated in stress situations.	____	____	____
8. Is able to cope with distractions.	____	____	____
9. Is restless during periods of inactivity.	____	____	____
10. Is well coordinated in physical movements.	____	____	____
11. Has adequate control of his impulses.	____	____	____
12. Is capable of leadership in a group.	____	____	____
13. Is able to organize his work systematically.	____	____	____
14. Is able to follow directions.	____	____	____
15. Is respectful of the rights of others.	____	____	____
16. Is able to do his work accurately and quickly.	____	____	____
17. Is in control of aggressive tendencies.	____	____	____
18. Is responsive to authority.	____	____	____
19. Is desirous of recognition by others.	____	____	____
20. Is interested in pleasing his teacher.	____	____	____

APPENDIX C

CORRELATION MATRIX

Correlation Matrix on Pooled Variables Across
Five Groups on Demographic Data

	1 Age	2 Education	3 Teaching Experience	4 Counseling Experience	5 Years In District	6 First Test	7 Second Test	8 Third Test
1 Age	1.000							
2 Education	.132	1.000						
3 Teaching Experience	.621	.141	1.000					
4 Counseling Experience	.370	.399	.326	1.000				
5 Years In District	.525	.418	.617	.336	1.000			
6 First Test	.317	.074	.198	.146	.026	1.000		
7 Second Test	.191	.252	.210	.247	.263	.164	1.000	
8 Third Test	.123	.182	.247	.114	.152	.237	.071	1.000