SMITH, SARAH COOKE

A COMPARISON OF STAFF DEVELOPMENT METHODS FOR TRAINING SCHOOL-BASED ASSESSMENT COMMITTEES IN GUILFORD COUNTY TO DEVELOP AN INDIVIDUAL EDUCATION PROGRAM FOR SPECIAL STUDENTS

The University of North Carolina at Greensboro ED.D. 1980

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A COMPARISON OF STAFF DEVELOPMENT METHODS FOR TRAINING SCHOOL-BASED ASSESSMENT COMMITTEES IN GUILFORD COUNTY TO DEVELOP AN INDIVIDUAL EDUCATION PROGRAM FOR SPECIAL STUDENTS

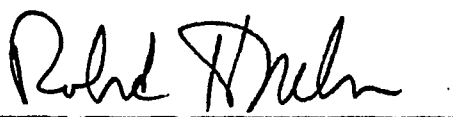
by

Sarah Cooke Smith

A Dissertation Submitted to
the Faculty of the Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

Greensboro
1980

Approved by



Dissertation Adviser

APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of the Graduate School at the University of North Carolina at Greensboro.

Dissertation Adviser _____

Committee Members _____

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February 20, 1980
Date of Acceptance by Committee

February 20, 1980
Date of Final Oral Examination

SMITH, SARAH COOKE. A Comparison of Staff Development Methods for Training School-Based Assessment Committees in Guilford County to Develop Individual Education Programs for Special Students. (1980)
Directed by: Dr. Roland H. Nelson. Pp. 248.

The purpose of this study was to determine the effectiveness of three techniques to train school based assessment committees in the writing of individual education programs for exceptional students. There were 104 professionals involved in the study. Of this number, twenty were principals, eighteen were counselors, and sixty-six were teachers who worked with exceptional children. The 104 participants were assigned randomly to be trained either by didactic, experiential, or self-study procedures. At the beginning and close of the training sessions, the participants were administered a thirty-item attitudinal scale and a seventy-item knowledge test. At the close of each training session, all participants wrote an individual education program for an exceptional student based upon pertinent data supplied.

An analysis of the data revealed the following:

1. The training, regardless of type, had little impact on the attitude that educators had toward developing individual education programs.

2. The training sessions had significant impact on the knowledge that educators gained relative to developing an individual education program for exceptional

students, the degree of gain being essentially the same regardless of the type of training received.

3. Educators who received experiential training developed better individual education plans than did educators who received didactic and self-study training.

4. Educators from the self-study group developed better individual education programs than did professionals trained didactically.

ACKNOWLEDGMENTS

The writer wishes to thank the special teachers, guidance counselors, and administrators of the Guilford County School System for their participation in the training session which generated the data in the study.

Appreciation is also expressed to Dr. H. T. Conner and other members of his staff in the Division of Research and Planning, State Department of Public Instruction.

The writer expresses appreciation to Mr. Kenneth Drum, Mrs. Joanne Hall, Miss Cornelia Tongue, Dr. H. T. Connor, and Mr. Clark Trivett who assigned ratings to the individual education programs developed by training participants.

The writer expresses her gratitude to the members of her advisory committee, Drs. Roland Nelson, Dale Brubaker, Donald Russell, and Joseph Bryson of the School of Education, and Dr. William Noland of the Department of Sociology.

The writer also expresses appreciation to her husband and son for their support and patience.

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CHAPTER I

INTRODUCTION

The Federal Register of May 1975, the official guidelines for implementing Public Law 94-142, and North Carolina House Bill 824 require local education agencies to plan and provide an individual education program for exceptional students. The Federal Register defines exceptional students as "mentally retarded, hard of hearing, deaf, speech impaired, visually impaired, visually handicapped, or as having specific learning disabilities, who because of those impairments need special education and related services." North Carolina legislation includes the aforementioned exceptionalities and adds gifted and talented students and pregnant schoolgirls to the list.

After the local education agency has determined that a student is eligible for special services, the School Based Assessment Committee at each school is to meet to write an individual education program for each special student. The committee must include a representative of the local education agency who is not a teacher of the student but is qualified to provide or supervise the

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[1] Federal Register, Vol. 42, No. 163; August 23, 1977; §121a.5, p. 42478.

provision of the special program; the teacher or teachers of the student who have direct responsibility for implementing the individual education program; one or both parents, guardians, or surrogate parents; and when appropriate, the student.

According to the Federal Register, each individual education program must include:

1. A statement of the present level(s) of educational performance of the student

2. A statement of annual educational goals

3. A statement of short-term instructional objectives

4. A statement of the specific educational services and instructional materials needed

5. The extent to which the student will be able to participate in regular classroom programs

6. The proposed date for program implementation and anticipated duration of service

7. Appropriate objective criteria, evaluation procedures, and schedule for determining, on at least an annual basis, whether the instructional objectives are being achieved.[2]

The 1977 annual report of the National Advisory Committee on the Handicapped stated that Public Law 94-142, including the individual education program mandate,

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[2]Ibid., §121a.346, p. 42491.

"promises to be one of the most massive teacher-training efforts the nation has ever witnessed."[3] The report also points out that private schools, public and private residential institutions, and correctional agencies, as well as institutions of higher learning will all be affected by this mandate. Six states already have mandated a uniform format to be used by all schools serving handicapped children which stipulates minimum requirements regarding facilities and data collection and facilitates monitoring and reporting to the Office of Education.[4]

Although many special teachers, guidance counselors, and principals in the Guilford County School System have taken college course work and workshops in formal student assessment, informal student assessment, and test interpretation, limited formal training had been provided for school based assessment committees regarding duties and responsibilities for planning for students with special needs.

Need for Study

School-based assessment committees by law had been assigned the responsibility for writing an individual education program for each exceptional student receiving

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[3]National Advisory Committee on the Handicapped, "The IEP and Personnel Preparation," American Education 13 (October 1977): 6.

[4]Ibid., p. 8.

special services. Without training, these committees did not have the necessary background or the confidence to implement the procedures mandated by state and federal legislation.

Few adaptable models were available for the training of school-based assessment committees in the performance of their newly assigned duties. Because those models which were available included placement procedures which differed from those in North Carolina, a need existed to design a staff development instructional packet pertinent to North Carolina placement procedures. Local committees needed information regarding state and federal legislation; the individual education program; its definition, purpose, and content; and instructions regarding how to write the individual education program.

Although school-based assessment committee composition remained stable as to position (principal, special teacher, classroom teacher, guidance counselor, etc.), the personnel filling these positions were subject to change at any time. Therefore, the need existed for a consistent method of training for current as well as for replacement committee members. The development of a training manual would enhance this consistency.

There was a need for experimentation with various training options because the training should be conducted with subsequent evaluation of these alternatives and a

selection made of the most efficient and effective staff development procedure. The determination that one inservice training option does not significantly change attitude, knowledge, or quality of performance more than others, would allow a school system to choose the most economical and/or feasible training option based on the needs of a particular system.

Purpose of Study

On the basis of the needs that were identified relative to the development of individual education programs for exceptional children, the purpose of this study was defined as follows: To identify effective methods of training educators to develop and write individual education programs for exceptional children.

The specific objectives of the study were to test the null hypotheses which follow:

1. There were no significant differences between the pre- and postattitudinal responses provided by participants trained by the didactic methods

2. There were no significant differences between the pre- and postattitudinal responses provided by the participants trained by the experiential methods

3. There were no significant differences between the pre- and postattitudinal responses provided by the participants trained by the self-study methods

4. There were no significant differences between the pretest and posttest responses on the knowledge test for participants trained by the didactic training methods

5. There were no significant differences between the pretest and posttest responses on the knowledge test for participants trained by the experiential methods

6. There were no significant differences between the pretest and posttest responses on the knowledge test for participants trained by the self-study methods

7. There were no significant differences among and between the ratings assigned to twenty-five criteria by five raters to individual education programs developed by participants who were trained by the didactic, experiential, or self-study training methods.

Procedures and Design for Study

The purpose and objectives of this study were met by selecting and training educators to develop individual education programs through three different training methods: didactic, experiential, and self-study training techniques. The participants were trained by educational supervisors using training packages that were developed by the researcher with consultant assistance. To evaluate the effectiveness of the training and compare the performance of the participants from the three groups, the participants were asked to respond to an attitude scale,

and a knowledge test which were developed by the researcher, and were asked to write individual education programs which were evaluated by five professional raters. Scores on the tests and ratings of the individual education programs were analyzed to determine which training program was the most effective in imparting knowledge, changing attitudes, and developing competency for writing individual education programs.

Limitation of Study

This study was limited to direct participation of personnel from the Guilford County School System in North Carolina. Advice regarding various aspects of the study was obtained from other professionals in the state. The findings of this study, therefore, may have limited generalizability to other areas of North Carolina and to other states.

Two types of instruments, a knowledge test and an attitudinal scale, were developed to measure change among and between the participants. Because standardized instruments were not available, the researcher, assisted by selected consultants, developed the tests utilized in the study. Because there was not enough time to establish standards and procedures for external measures of attitude and knowledge relative to individual education programs, validation of the tests was limited to content validation.

Definition of Terms

1. PUBLIC LAW 94-142: A law passed by Congress in 1975 entitled the Education for All Handicapped Children Act. Public Law 94-142 and its predecessor Public Law 93-380 passed by Congress in 1974 served an advocacy function to protect children from the negative effects associated with handicapped children receiving either inappropriate or no special educational services. This law guarantees that all handicapped children, birth to twenty-one years of age, will have available to them a free, appropriate public education, multi-team identification, due process, and the development of an individual education program.

2. HOUSE BILL 824: North Carolina legislation which made state law consistent with Public Law 94-142 and added two additional categories: the gifted and talented, and pregnant schoolgirls.

3. INDIVIDUAL EDUCATION PROGRAM: A written statement describing the annual educational goals and objectives for and the services to be provided to a child identified as handicapped. A careful multi-team evaluation of the child and his/her environment must be conducted prior to the development of the individual education program. Mandated components of the program are: statements of present educational performance, annual goals, short-term instructional objectives, degree of participation in regular education program, specific educational services to be provided, dates for initiation and evaluation of services, and evaluation

procedures including criteria and schedule for determining whether instructional objectives are being achieved.

4. DIDACTIC TRAINING: An inservice procedure consisting primarily of lecture. Audio-visuals, discussion, and opportunities for questions used to supplement the lecture.

5. SELF-STUDY TRAINING: An inservice procedure consisting of written information which is read by the individual. The individual in this training procedure has the opportunity to view audio-visuals and to ask questions regarding the written information.

6. EXPERIENTIAL TRAINING: An inservice procedure identical to didactic with one major exception; a simulation activity related to the training content is used after the new information has been presented to the training group.

7. TRAINING MANUAL: A packet written to train school-based assessment committees to write individual education programs for exceptional students.

8. SCHOOL-BASED ASSESSMENT COMMITTEE: A committee located at each school that has the responsibility for evaluating information on children referred for special education and recommending the most appropriate placement. It is also responsible for seeing that an individual education program is developed and annually re-evaluated for each exceptional student attending that school.

CHAPTER II

REVIEW OF RELATED LITERATURE

The study focused on the concept of training. It was necessary to define the concept, to describe its function, to consider the elements of a good training program, and to research various training techniques. Because a training manual was to be developed for use in training school-based assessment committees to write individual education programs for exceptional students, literature on this subject was reviewed.

B. Othanel Smith said that "teaching is a system of actions intended to induce learning."[1] Cloyd S. Steinmetz wrote that "words and signs are devices used to administer the development process called training."[2] If words are transmitted from one person and received by another person or persons successfully, learning takes place and knowledge and skills are transferred from one person to another.[3]

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[1]B. Othanel Smith, "A Concept of Teaching," Teachers College Record 61 (1971): 230.

[2]Cloyd S. Steinmetz,"Training and Development Function," Training and Development Handbook,ed. Robert L. Craig (New York: McGraw-Hill, 1976),Ch. 1, p. 3.

[3]Ibid.

For the purposes of this study, "teaching" and "training" were used interchangeably and were defined as "the transmission, through written or spoken words, of information regarding expected behaviors and instructions about how to behave."

Elements of a Good Training Program

John Dewey believed that the teaching process involved four components. Reginald D. Archambault summarized the components as follows: "(1) the aim of the activity, (2) the agent responsible for the activity (the teacher), (3) the subject of the activity (the pupil), and (4) the means by which the aim is achieved (curriculum and method)."[4] Although Ronald Hyman mentioned only three elements of the teaching process--the teacher, the student, and the subject matter--his explanation of what teachers teach was reminiscent of the "aim" component stated by Dewey.[5] Hyman identified three broad areas of instruction as follows: "In addition to teaching skills (teaching how to do something), knowledge (teaching that something is the case), teachers also teach values (norms and attitudes)."[6]

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[4]Reginald D. Archambault, John Dewey on Education (New York: Random House, Inc., 1964), p. xxii.

[5]Ronald Hyman, Ways of Teaching (Philadelphia: J. B. Lippincott, 1974), p. 14.

[6]Ibid., p. 16.

Some authorities feel that planning for training in a specific area should await determination of the need for it. James H. Morrison said that "educational training and developmental programs should be a response to a need, not merely a reaction to a problem."[7] He defined a training need as a situation in which the actual condition differs from a desired condition and a change in the knowledge, skills, or attitudes of pertinent individuals can result in the desired performance.[8] Richard B. Johnson identified the head of the organization or unit as the person responsible for determining the need for training.[9] Morrison described three ways that management may determine training needs. First, those individuals affected by the situation may be surveyed as to their perceptions of training needs or their attitude about a specific concern. They may be asked to identify areas in which they feel they need training. Second, organizational audits may be conducted to expose deficiencies in operation or performance resulting in a determination of training needs. A third approach is to

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[7]James H. Morrison, "Determining Training Needs," Training and Development Handbook, Ch. 9, p. 1.

[8]Ibid.

[9]Richard B. Johnson, "Organization and Management of Training," Training and Development Handbook, Ch. 2, p. 11.

assess individual training needs through personal interviews or observations.[10]

Ethan A. Winning described three phases of a training needs assessment. Phase one, the definition of responsibilities phase, clarifies specific responsibilities and determines lines, limits, and assumptions about authority overlap. Phase two, the definition of expectations phase, results in a determination of specific expectations on the part of superordinates and subordinates in such things as performance, productivity, training direction, and support. Phase three, the goal setting phase, establishes specific objectives for all individuals and groups within the organization.[11]

After training needs are identified, the next step is to set training objectives. According to Johnson, there are five objectives as follows: (1) operational objectives that are measured in terms of organizational outputs, (2) performance objectives that involve individual performances, (3) instructional objectives that are measurable and determine successful completion of the training, (4) reaction objectives that involve participant feedback regarding feelings about and reaction to the

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[10]Ibid., Ch. 9, p. 2.

[11]Ethan A. Winning, "Integrating Management Development," Personnel 53 (May-June 1976):21-29.

training, and (5) personal growth objectives that have to do with various aspects of self-realization.[12]

While the success of a training program is dependent on many variables, some writers indicated that the choice of training methods is one of the most important factors. Mildred Tapper suggested three factors to be considered in selecting appropriate training techniques: (1) theories of learning, (2) the individual being taught, and (3) needs, objectives, and content of the program.[13] Tapper described three basic learning theories and matched appropriate teaching strategies to each. Behaviorists, such as Skinner and Thorndike, believed that all learning was change of behavior. This concept was thought to be compatible with "teacher directed" teaching techniques such as lectures and other highly structured activities. Humanistic theorists, such as Maslow and Knowles, saw learning as a self-directed or self-actualizing experience. "Learner directed" teaching techniques where the learner sets his/her goals and locates the resources to obtain these goals were seen as growing out of this concept. Gestalt theorists including Lewin, Allport, and J. S. Brunner, saw learning as a process of gaining or changing insights, outlooks, or thought patterns. The resultant

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[12]Ibid., pp. 9-16.

[13]Mildred Tapper, "Teaching Methods and Techniques for Staff Development," Journal of Continuing Education in Nursing 8 (May-June 1977): 72.

"teacher-learner" plan was thought to include discussion, role playing, and buzz groups.[14]

Tapper reviewed Knowles's assumptions about the adult learner. According to Knowles, adult learners will learn better if strategies involve the learner, build on the learner's experiences, relate the learning to role requirements, and organize the learning experience around actual life problems.[15] Trainers, according to Tapper, too often use the same methods by which they were taught. She argued that, in addition to considering learning theories and the learner, the trainer should select teaching techniques which best enable the trainer and the learner to achieve the learning objectives of the situation.[16]

Based on his review of learning theories and relevant research, Craig Eric Schneier outlined a four-phase process for training programs. The phases were: (1) diagnosis of the learning situation, (2) design of the appropriate strategy, (3) implementation, and (4) evaluation. Although the four phases were not unique, the approach he used in the first phase was found to be of particular interest. Schneier contended that successful learning experiences depend on the ability of the trainer to diagnose a situation properly. He suggested seven principles useful in the

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[14]Ibid., pp. 72-73. [15]Ibid., p. 72.

[16]Ibid., p. 73.

diagnosis of the learning situation. These principles, which he said were based on learning theory and research, are summarized as follows: (1) The learning environment included communication with learners, specific program objectives, sequentially structured tasks, and collection of baseline frequencies. (2) The role of the teacher-trainer was basic because of the need of the trainer to generate favorable reactions to the subject matter and to the trainer. (3) An analysis of the characteristics of the learners according to ability, learning rate, motivation and prior conditioning was needed in order to make an effective choice of teaching strategies. (4) Basic processes in the human learning activity which should be considered included the facts that repetition may result in fatigue and inhibited learning and successful learning experiences may increase interest and attention in addition to facilitating learning. (5) The principle that reinforcement and punishment were basic to learning theory. (6) Transfer of learning often occurred when the information was presented in the learning setting and in the application setting. Demonstration of the information learned enhanced retention and transfer of learning. (7) Practice should be taken seriously and should include information which is similar to but different from the training stimuli.[17]

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[17]Craig Eric Schneier, "Training and Development Programs: What Learning Theory and Research Have to Offer," Personnel Journal (April 1974): 289-92.

Once the trainer had thoroughly analyzed the data in these seven categories, an appropriate training situation could be designed and appropriate training methods could be selected. The trainer used these data for evaluating the implementation phase of the training program.[18]

Advantages and Disadvantages of Different Methods

Although numerous specific teaching techniques were found to be available to trainers, the researcher chose to concentrate on three: (1) lecture, (2) simulation, and (3) self-study. These three are the most common and widely accepted training modes.

Lecture

According to Ronald Hyman, proponents of the lecture method of teaching make nine basic assumptions:

1. The knowledge the student needs to acquire is external to the student--someone communicates the knowledge to be received, assimilated, and stored by the student with previous information transmitted

2. Teaching is the activity that enables the learner to accumulate knowledge

3. The teacher has, or can acquire, the knowledge the learner needs

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[18]Ibid., p. 293.

4. The teacher should transmit the knowledge to the student in a form that is meaningful to the student

5. The student may receive the knowledge in two possible ways, rote reception or meaningful reception

6. The accumulated knowledge of humans can be transmitted to other humans

7. Lecture methods are consistent with the concept that schooling is to transmit knowledge to students

8. This method is an efficient way of transmitting knowledge to a large number of students at the same time

9. Students benefit from the security of being in a large group and lectures usually include question-and-answer periods in which students can learn from others in the group.[19]

Jack Reith defined the lecture method as "a carefully prepared oral presentation of a subject by a qualified individual."[20] Reith indicated that lectures are more formal, are easy to organize, but provide little opportunity for audience participation and therefore result in one-way communication.[21]

Hyman believed that the minimum number of students in a lecture situation should be fifteen. A smaller number

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[19]Ibid., pp. 128-32.

[20]Jack Reith, "Group Methods: Conferences, Meetings, Workshops, Seminars," Training and Development Handbook, Ch. 34, p. 3.

[21]Ibid.

prevents the trainer from presenting a formal lecture in that the environment invites informality and group discussion. Although the maximum number may vary according to the expertise of the trainer, Hyman felt that the upper limit of participants was approximately two hundred. Hyman also made a distinction between the teaching lecture and the simple lecture. In a simple lecture, someone speaks before a large group. Characteristics of a teaching lecture included the stating and restating of the problem to determine relevant structure; the weaving of relevant subject matter into the presentation in such a way that the student feels able to comprehend it; the ability to leave a topic open for further study; the elimination of minute details and the emphasis on concepts, generalizations, and principles; the ability to involve actively the student in the lecture, allowing time for questions; and the effective use of props such as diagrams, maps, models, handouts, and slides.[22]

Dissatisfaction with the lecture method was noted among students in elementary and secondary schools, colleges and universities, and in-service training programs in business, industry and educational institutions. However, proponents of the lecture method of instruction have insisted that criticisms of this method are unfounded.

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[22]Ibid., pp. 133-54.

Ausubel and others have claimed that the criticisms made of the lecture method usually arise from abuses of these methods.[23]

Various research designs have been utilized in attempts to determine effective training methods. One technique often used has been the survey method in which training participants are asked to indicate preferences regarding teaching methods. Pascale and Murray compiled a 112-item questionnaire which they administered to seventy-five administrators and teachers. Inservice training needs and techniques were assessed and it was determined that this particular group of individuals preferred (in rank order): lecture/demonstration, demonstration by an expert, and work sessions with children.[24] A similar type of survey administered by Karen Boote to 136 teachers and fifty administrators indicated that most inservice programs consisted of lectures and that teachers desired modes of presentation other than lecture.[25] While this type of survey resulted in a statement of preference,

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[23]David P. Ausubel, "In Defense of Verbal Learning," Educational Theory (January 1961): 15-16.

[24]Pietro Pascale and Joseph Murray, "A Survey of Professional Needs in Special Education for Northeastern Ohio" (Youngstown, Ohio: Youngstown State University, 1973), p. 25.

[25]Karen S. Boote, "Principal and Teacher Perceptions of Special Education Inservice Programs for Regular Elementary Teachers" (Master's Thesis, Temple University, 1976).

many researchers such as Rodin,[26] Blassett,[27] Schuk and Crivelli,[28] and Henson[29] cited evidence to support the belief that other noncontrolled variables, such as number in the group, teacher personality, and hour of instruction could contaminate the opinion results.

Most research efforts in the area of the lecture method have compared the lecture technique with other techniques. Since the lecture method has been in existence for a long time, it was not surprising to find research citations dating back to the early 1930s and 1940s. A study conducted by R. W. Edmiston and R. W. Braddock looked at the following seven teaching procedures in a secondary school: laboratory, demonstration, lecture, student reports, general discussion, rapid-fire question/answer, and workbook. In terms of one procedure obtaining better attention than another, student reports ranked first, lecture ranked fifth, and general discussion ranked eighth. The researchers concluded that

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[26]M. Rodin, "Rating the Teachers," Center Magazine 8 (September-October 1975): 55-60.

[27]T. R. Blassett, "Letters," Center Magazine 8 (November-December 1975): 77-77.

[28]A. J. Schuk and M. A. Crivelli, "Animadversion Error in Student Evaluation of Faculty Teaching Effectiveness," Journal of Applied Psychology 58 (October 1973): 259-60.

[29]Gerald Henson, "A Method to Evaluate Teaching Effectiveness in an Introductory American Government Course," Teaching Political Science 5 (January 1978): 155-67.

> the procedure which presents the best combination of the following attributes should produce the best attention: appropriateness to the learning situation . . ., student participation . . ., thorough previous preparation . . ., definiteness and clearness of assignment to pupil . . ., and combined visual and auditory learning.[30]

The lecture method was compared with a visual experience (silent film) by Clarence D. Jayne. Both methods covered the same material and lasted the same amount of time. Jayne concluded that visual experiences alone may be less effective than the lecture method, especially for informational learning.[31] James W. Popham compared the effectiveness of tape-recorded lectures with live lectures and found no statistically significant difference between the two methods.[32] The lecture method has also been compared to the individualized instruction method. One study, conducted by Raymond A. McCue, concluded that achievement was significantly higher with the individualized method than with the lecture method.[33]

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[30]R. W. Edmiston and R. W. Braddock, "A Study of the Effect of Various Teaching Procedures Upon Observed Group Attention in the Secondary School," The Journal of Educational Psychology 32 (December 1941): 665-72

[31]Clarence Jayne, "A Study of the Learning and Retention of Materials Presented by Lecture and by Silent Film," Journal of Educational Research 38 (September 1944): 58.

[32]James W. Popham, "Tape Recorded Lectures in College Classrooms, An Experimental Approach" (Pittsburgh: Kansas State College of Pittsburgh, 1960).

[33]Raymond A. McCue, "Comparison of Lecture-Discussion and Individualized Instruction Methods for the Preparation of Teachers of Cooperative Vocational Education"(Ed.D. Dissertation, University of Missouri, 1973).

Most research comparing the lecture and discussion methods qualified the effectiveness on the basis of objectives of the instruction. The research of J. D. Barnard indicated that the lecture method was superior when the objective was to convey specific information, but that the discussion method was superior in measures of problem solving and scientific attitude.[34]

C. L. Bane found no difference between the discussion method and the lecture method in instances of immediate recall, but the discussion method was superior in measures for later recall.[35] C. S. Hirschman found discussion to be better than lecture on a measure of concept learning.[36] J. E. Casey and B. E. Weaver compared lecture and discussion methods as they relate to content knowledge and attitudes. They found no difference between the two methods on the content knowledge measure, but the discussion method was superior in affecting attitudes toward teaching.[37]

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[34]J. Darnell Barnard, "The Lecture-Demonstration versus the Problem-solving Method of Teaching a College Science Course," Science Education 26 (January 1942):121-32.

[35]C. L. Bane, "The Lecture versus the Class Discussion Method of College Teaching," School and Society 21 (March 1925): 300-302.

[36]C. S. Hirschman, "An Investigation of the Small Groups Discussion Classroom Method on Criteria of Understanding, Pleasantness, and Self-confidence Induced" (Master's thesis, University of Pittsburgh, 1952).

[37]J. E. Casey and B. E. Weaver, "An Evaluation of Lecture Method and Small Group Method of Teaching in Terms of Knowledge of Content," Journal of Colorado-Wyoming Academic Science 4 (October 1956): 54.

All of the experiments mentioned here used measures other than the traditional "final examination" for measurement purposes. W. J. McKeachie summarized the lecture versus discussion research by concluding that, if the objective of the instructor was to transmit information, the lecture method was preferable. However, if the objective of the instructor was to teach critical thinking, attitude change, or if the objective was more complex, the discussion method was preferable.[38]

The lecture method of instruction has also been experimentally compared to the self-study method of instruction. Hovey, Gruber, and Terrell compared two sections of the same college course. One section utilized lecture and the other utilized self-study. According to the researchers, the students who were equal in aptitude indicated that the time the two sections were taught was equally desirable. Retention of course material was the variable assessed in the study. Students in the self-directed section were found to have mastered the course material better than students in the lecture section although the difference was small and was not statistically significant. Ten months later, the students were retested and the self-directed group was still slightly superior.[39]

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[38]W. J. McKeachie, "Current Research on Teaching Effectiveness," College and University Teaching, ed. Herman A. Estrin (W. C.Brown Co., 1964), pp. 377-384.

[39]Donald Hovey, Howard E. Gruber, and Glenn Terrell, "Effects of Self-Directed Study on Course Achievement, Retention, and Curiosity," Journal of Education Research 56 (March 1963): 346-51.

Studies conducted by McMichael and Corey,[40] Sheppard and MacDermott,[41] Born, Gledhill, and Davis,[42] Born and Whelon,[43] and Witters and Kent[44] comparing examination performance following instruction with traditional lecture procedures and self-study instructional procedures concluded that students in the self-study groups performed at a significantly higher level on final examinations than students attending daily lectures which covered the same material. Philippas and Sommerfeldt compared the Keller self-study method with the traditional lecture method in a general physics class of one hundred students. Although student performances were not significantly different, student reaction to the self-study program was favorable, and the cost of running the program was not found to be

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[40] J. S. McMichael and J. R. Corey, "Contingency Management in an Introductory Psychology Course Produces Better Learning," Journal of Applied Behavior Analysis 2 (Winter 1969): 79-83.

[41] W. C. Sheppard and H. G. MacDermott, "Design and Evaluation of a Programmed Course in Introductory Psychology," Journal of Applied Behavior Analysis 3 (Spring 1970): 5-11.

[42] D. G. Born, S. M. Gledhill, and M. L. Davis, "Examination Performance in Lecture-Discussion and Personalized Instruction Courses," Journal of Applied Behavior Analysis 5 (Spring 1972): 33-43.

[43] D. G. Born and P.Whelon, "Some Descriptive Management in an Introductory Psychology Course Produces Better Retention," Psychological Record 21 (March 1971): 391-400.

[44] D. R. Witters and G. W. Kent, "Teaching Without Lecturing: Evidence in the Case for Individualized Instruction," Psychological Record 3 (June 1970): 5-11.

excessive.[45] Morris and Kimbrell compared the two methods on the variables of student performance and student attitudes. Their analysis revealed that students preferred the self-study technique and that student performance on the final examinations was significantly better for the self-study group. They further contended that this experiment negates the criticism that the self-study technique was useful only for teaching simple academic skills because students in the self-study group performed significantly better on the examination items which required recall and application of concepts and principles of a complex nature.[46]

Self-Study

Much of the credit for training methods involving self-study activities has been given to B. F. Skinner. Fred S. Keller used the same theoretical concept that Skinner used in the laboratory but applied it to teaching an undergraduate course in general psychology. Insight resulting from efforts to teach himself Morse Code combined with his observation and analysis of teaching, his review of the work of Skinner, and his dissatisfaction with conventional teaching methods, led Keller to develop a

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[45] A. Michael Philippas and R. W. Sommerfeldt, "Keller vs. Lecture Method in General Physics Instruction," American Journal of Physics 40 (September 1972): 1300-1306.

[46] Charles J. Morris and G. M. Kimbrell, "Evaluation of Training Techniques," Psychological Record 23 (May 1972): 523-30.

teaching method which he called a "personalized system of instruction."[47] The system, as summarized by Keller, included several features which he said distinguished it from conventional teaching procedures. These characteristics included the following:

1. The go-at-your-own pace feature, which permits a student to move through the course at a speed commensurate with his ability and other demands upon his time.

2. The unit-perfection requirement for advancement which lets the student go ahead to new material only after demonstrating mastery of that which preceded.

3. The use of lectures and demonstrations as vehicles of motivation rather than sources of critical information.

4. The related stress upon the written word in teacher-student communication.

5. The use of proctors which permits repeated testing, immediate scoring, almost unavoidable tutoring, and a marked enhancement of the personal-social aspect of the educational process.[48]

Although the method developed by Keller was designed for use with college students, it had much applicability

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[47]Fred S. Keller, "Engineering Personalized Instruction in the Classroom," Revue Interamer de Psicol 1 (Spring 1967): 189-97.

[48]Fred S. Keller, "Good-bye Teacher," Journal of Applied Behavior Analysis 1 (Spring 1968): 83.

for other age groups, especially adults. Dugan reported that Malcolm Knowles indicated that adults needed to become involved in learning decisions in order for learning to be significant and lasting. He maintained that adults felt that they possessed unique experience which they wished to invest in learning. In addition, they expected immediate application of the learning and they profited more from self-directed learning methods than authoritarian methods.[49]

Carl Rogers, a strong advocate of the concept of self-study, made several points in Freedom to Learn to support his belief that learning must be self-initiated. He felt that humans have a natural potential for learning provided the subject matter is relevant, that significant learning is accomplished through doing, and that use of feelings, as well as intellect, results in retention of learning.[50]

The self-study concept changes the roles of the learner, the teacher, and the course developer. Preparation of instructional material for conventional teaching usually has been written by subject matter experts, edited for grammar and accuracy, and printed. A self-study instructional course had to be written, field tested, and changed if

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[49]Laird Dugan, "Learner-Controlled Instruction," Training and Development Handbook, Ch. 42, p. 2.

[50]Carl R. Rogers, Freedom to Learn (Columbus, Ohio: Charles E. Merrill Books, Inc., 1969), p. 5.

directions were unclear or if the subject content was confusing. The role of the teacher was changed from one of delivering information to one of being a resource and environmental manager. The role of the learner was changed from one of being a passive recipient of information to one of being actively involved.

Self-teaching techniques began in psychology laboratories where experiments to test theories of learning were applied to animal learning. Later, the theories were applied to human learning. Automated teaching machines and the personalized system of instruction have been duplicated in college and university classrooms all over the world. Similar techniques have been used in staff development and in-service programs by educational institutions as well as business and industry. One example is the Life Office Management Association, an organization of 490 life insurance companies that serves as a vehicle for educational and research projects related to the life insurance industry. The association creates instructional packets designed specifically for various insurance roles. When a need of a learner was diagnosed through testing, an instructional packet with appropriate feedback mechanisms was designed for the individual.[51]

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[51]Frederick H. Antil, "Meeting the Training Challenge," Personnel Journal 54 (October 1975) : 536.

The comparison of the lecture method with self-study overlaps into the review of the research literature regarding self-study. Much of this research identified one area of concern with self-study, a high rate of incomplete and postponed work by the students. Keller,[52] Lloyd and Knutzen,[53] and Whaley and Malott[54] all noted this problem. In separate studies, Lloyd,[55] Johnston and Pennypacker,[56] Powers and Edwards,[57] and Miller, Weaver, and Semb[58] concluded that some instructor-based pacing was necessary for the student to receive maximum benefit from the class.

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[52]Ibid., pp. 79-89.

[53]K. E. Lloyd and N. J. Knutzen, "A Self-Paced Programmed Undergraduate Course in the Experimental Analysis of Behavior," Journal of Applied Behavior Analysis 2 (Winter 1969): 125-33.

[54]D. L. Whaley and R. W. Malott, Elementary Principles of Behavior (New York: Appleton-Century-Crofts, 1971), pp. 30-36.

[55]K. E. Lloyd, "Contingency Management in University Courses," Educational Technology 11 (January 1971): 18-23.

[56]J. M. Johnston and H. S. Pennypacker, "A Behavioral Approach to College Teaching," American Psychologist 26 (March 1971): 219-44.

[57]Richard Powers and Anthony Edwards, "Performance in a Self-Paced Course," The Journal of Experimental Education 42 (Summer 1974): 62-64.

[58]L. Keith Miller, F. Hal Weaver, and George Semb, "A Procedure for Maintaining Student Progress in a Personalized University Course," Journal of Applied Behavior Analysis 7 (Spring 1974): 87-91.

Researchers have not agreed on the desirability of self-directed study. Although Blake,[59] and Berzon and Solomon[60] believed that self-directed and facilitator directed training were equally effective, Gibb[61] and Conyne and Rapin[62] have argued that there is no consistent evidence to support this position. Kersh found that greater interest and curiosity about a given field was generated by independent study and that continued efforts resulted in superior mastery of subject matter knowledge at intervals remote from the initial learning period.[63]

Simulation

Simulation was defined by Larry C. Coppard as "a representation of a real life situation which attempts to

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[59]Robert Blake, "The Laboratory Way of Learning," Proceedings of the Fifth Annual Training Session: Human Relations Training Laboratory (Austin: University of Texas, 1965), pp. 1-12.

[60]B. Berzon and L. Solomon, eds., New Perspectives on Encounter Groups (San Francisco: Jossey-Bass, 1972). pp. 3-20.

[61]J. Gibb, "The Effects of Human Relations Training," in Handbook of Psycho-Therapy and Behavior Change (New York: John Wiley, 1971), pp. 14-25.

[62]Robert Conyne and Lynn Rapin, "Facilitator and Self-directed Groups--A Statement by Statement Interaction Study," (Small Group Behavior 8 (August 1977): 341-49.

[63]Bert Y. Kersh, "The Adequacy of Meaning as an Explanation for the Superiority of Learning by Independent Discovery," Journal of Educational Psychology 49 (October 1958): 282-92.

duplicate selected components of the situation along with their interrelationships in such a way that it can be manipulated by the user."[64] A simpler explanation is that it is "an operating imitation of a real process."[65] According to Eugene Gilliom, learning through simulation has been traced back to 3,000 B.C.[66] Early simulation games served as symbolic equivalents of warfare. Nineteenth-century military experts recognized the potential of such exercises and utilized them in the training of officers and in the study of military tactics. In 1798, the Prussians developed "N. cue Kriegspiel," a complex model of warfare which was the forerunner of modern war games. Simulation was useful in providing experience in formulating strategy, making decisions under stress, and handling potential crises.[67] During the 1950s, the business world began using simulation for personnel training activities. In 1950, the American Management Association produced the first management game entitled "Top Management Decision Simulation."[68] Within a few years, other disciplines such

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[64]Larry C. Coppard, "Gaming Simulation and the Training Process," Training and Development Handbook, Ch. 20, pp. 2-4.

[65]Larry C. Coppard, "War Gaming," International Science and Technology, August 1964, p. 29.

[66]Eugene M. Gilliom, "Trends in Simulation," High School Journal 57 (April 1974): 265.

[67]Ibid., p. 267.

[68]Ibid., p. 268.

as sociology, psychology, and education began using the technique also. Malcolm Shaw identified four kinds of learning that can take place through role-playing or simulation:

1. learning by doing
2. learning through imitation
3. learning through observation and feedback
4. learning through analysis and conceptualization.[69]

Hyman summarized the opinions of many regarding justifications for the use of simulation to enhance learning. These were as follows:

1. People learn to do things by doing them
2. Motivation is high because (a) the learner is a participant rather than a spectator, (b) the situation becomes relevant to the learner, and (c) the attention span of the learner is increased
3. Critical and intuitive thinking is encouraged
4. The participant learns facts, processes, and alternative strategies of decision making
5. Opportunities are provided for learning from successes and from failures (without any real harm being done)
6. Communication among participants is encouraged and often results in constructive feedback.
7. Participants learn from each other.[70]

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[69]Malcolm E. Shaw, "Role Playing," Training and Development, Ch. 26, pp. 2-3.

[70]Ibid, pp. 169-82.

Wallace Wohlking described two types of simulation activities: structured and spontaneous. Spontaneous activities were used to help gain insight into the behavior of participants while structured activities emphasized skill development. Structured activities were subdivided into three categories: single role plays involving two or three participants acting out a situation in front of other participants; multiple role plays involving all participants placed in groups of three to five; role rotation involving one person acting out a designated problem and others attempting to solve it.[71]

Wohlking outlined three phases of simulation activity. He called the first the warm-up phase during which the trainer attempted to create an atmosphere that would reduce anxiety and increase participation. During this phase, an explanation as to what will happen in the session and some discussion of the process was thought to be helpful. The second, or enactment phase, was initiated by the trainer who set the scene by restating the situation and the roles to be played. He called the third phase post-enactment discussion and said that this phase was usually led by the trainer who was responsible for helping the participants discuss the situation in such a way that they developed a better understanding of its implications.[72]

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[71]Wallace Wohlking, "Role-Playing," Training and Development Handbook, Ch. 36, pp. 2-3.

[72]Ibid., Ch. 36, pp. 4-8.

Wohlking believed that problems encountered with simulation activities usually stemmed from a failure of the trainer to set clear training objectives or failure to establish a supportive climate for the enactment.[73]

Structured simulation exercises and activities have been utilized in many educational settings in recent years. In Massachusetts, the planning of a differentiated staffing prospectus for a high school was successfully simulated.[74] Also in Massachusetts, an exercise simulating the planning of an instructional program for a sixth grade was designed to influence the planning of personnel to utilize the talents and interests of each member of the six-person staff team.[75] A simulated institution for the mentally retarded was designed to provide a reality-based context for linking management theory and practice, the goal being to improve institutional management skills.[76] In Michigan a simulated

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[73]Ibid., Ch. 36, p. 9.

[74]Leadership Training Institute for School Personnel Utilization, "The School Planning Game" (Amherst School of Education, University of Massachusetts, 1970).

[75]Leadership Training Institute for School Personnel Utilization, "Instructional Planning Simulation"(Amherst School of Education, University of Massachusetts, 1970).

[76]William E. Garove et al., "The Shannon State School and Hospital Simulation," Mental Retardation 13 (June 1975): 32-35.

case technique was designed to provide decision-making exercises in a setting where there were opportunities to discuss alternative actions without incurring the risks of a real-life situation.[77]

Although the concept of simulation for learning purposes has been used for centuries, research in this area was found to be relatively recent. Much of the educational research relating to simulation has been concentrated upon designing and evaluating specific simulation games. Research designed to evaluate the effectiveness of educational simulations was found to be both recent and contradictory. Cleo Cherryholmes reviewed six major studies dealing with educational simulation effectiveness. The studies included Anderson; Boocock; Boocock and Coleman; Cherryholmes; Garvey and Seiler; and Robinson, Anderson, Herman, and Snyder. The chart on the following page, taken from Cherryholmes, lists the major features of these six studies. Cherryholmes reviewed the data from these studies in an effort to compare the effectiveness of simulation and conventional classroom teaching techniques in terms of student interest, facts and principles of information gained, retention of

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[77]Elaine F. Uthe, "The Cooperative Vocational Program, Multi-Media and Simulated Cases for Pre-Service and In-Service Development of Teacher-Coordinators" (East Lansing: Division of Vocational Education, Michigan State Department of Education, 1972).

Study	Simulation	Length	Control Group	Subjects
Anderson	Inter-Nation Simulation	12 weeks	Case studies	Under-graduates
Boocock	Election Game	8 days	Recitation	High school students
Boocock and Coleman	Career Game Legislative Game Disaster Game	1 day	Other games	High school students
Cherry-holmes	Inter-Nation Simulation	6 weeks	None	High school students
Robinson, Anderson, Hermann & Snider	Inter-Nation Simulation	12 weeks	Case studies	Under-graduates
Garvey and Seiler	Inter-Nation Simulation	6 weeks	Recitation	High school students

information, acquisition of critical-thinking and decision-making skills, and alteration of attitudes. Although there was some variance, in general all six studies concluded that students reported more interest in simulation activities than conventional teaching techniques. None of the researchers reported evidence to support the theory that simulation techniques increase learning rate or information retention. Garvey and Seiler were the only researchers of the six that reported any findings on critical thinking and decision-making skills. Although

Robinson et al. had planned to evaluate these variables, they did not because of evaluation difficulties encountered. Cherryholmes concluded that simulation is not superior to other teaching methods in helping students gain critical thinking and problem-solving skills. Although simulation techniques resulted in realistic attitude changes, he found that conventional techniques did also. Cherryholmes concluded that "without exception, no evidence was uncovered supporting the contention that participants in a simulation learn more facts or principles than they would by studying in a more conventional manner."[78]

Lee and O'Leary contended that the researchers cited by Cherryholmes focused on factual learning in their evaluations and, for the most part, ignored other significant areas. Lee and O'Leary argued that simulation is valuable for teaching concepts, insights, and awareness. In an attempt to support this contention, they conducted an elaborate study utilizing five classes of a high school course entitled "Problems of American Democracy." All of the students were seniors who had elected the course. Two of the classes served as the experimental group and participated in the Inter-Nation Simulation while the other three classes were conducted in a more traditional manner.

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[78]C. H. Cherryholmes, "Some Current Research on Effectiveness of Educational Simulations," American Behavior Scientist 10 (October 1966): 4-7.

Lee and O'Leary concluded that simulation can:

> 1. be a truly high-powered educational technique . . .
>
> 2. induce personality and other changes in students along lines that can enable them to function more effectively in complex and ambiguous decision-making environments . . .
>
> 3. make nontrivial learning fun
>
> 4. invoke deep and powerful emotional forces which become critically enmeshed with the learning process . . . ; and
>
> 5. can be one of the foundations for a truly revitalized educational system . . .[79]

Training Technique

The function of training was taken to be the passing on of information to others which they may use in performing certain tasks. Many methods of sharing information with others were taken into consideration and three methods were explored in this review of related literature. Lectures were defined as oral presentations of information, usually given by one person to a group of individuals. The simulation training technique was defined as the acting out of certain tasks which individuals may be required to perform after training. Self-study was defined as involving interaction with certain information on one's own. It was concluded that no single training method has been demonstrated to be superior and that much depends on the

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[79]Robert S. Lee and Arlene O'Leary, "Attitude and Personality Effects of a Three-Day Simulation," Simulation and Games 2 (September 1971): 344-45.

type of information to be shared, the type of people to be trained, the expectation of the trainer, and how the training is to be used by the trainee at a later date.

Individual Education Program Mandate Training Implications

The 1977 annual report of the National Advisory Committee on the Handicapped indicates that the individual education program concept establishes a systematic approach toward planning and providing appropriate education and related services to exceptional children, while developing an accountability system for these services.

> It implies an accommodation to each child's learning style . . . calls for new attitudes and perceptions on the part of school personnel, along with new competencies such as writing instructional objectives and matching instructional strategies with individual students' learning style.[80]

The report also points out that appropriate training experiences for individuals responsible for developing and implementing these procedures could provide invaluable orientations to the challenges involved, enlightened sensitivity to each handicapped child's unique needs, the basis for prescribing those needs, and a foundation for effective communication with the parents of the child, special education teachers, and appropriate school support staff.[81]

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[80]National Advisory Committee on the Handicapped, "The IEP and Personnel Preparation," American Education 13 (October 1977): 6.

[81]Ibid.

Authors of The Yearbook of Special Education analyzed Public Law 94-142, compared it with previous laws for the handicapped, and stated implications of the law. Inservice training of teachers and administrators for implementation of the law was a major implication. Training areas cited as needed included writing individual education programs, program planning and management, financial management, data collection, needs assessment, education of severely handicapped, implementation of least restrictive environment concept, developing and conducting evaluation of programs, surrogate parent training, and training in due process procedures.[82]

During the period from October 1975 to October 1977, Kathleen Fenton and Ron Yoshida conducted a study in Connecticut which focused on levels of satisfaction and participation of individual education planning teams, decision-making styles, and responsibilities of planning team members. A total of 1,478 persons representing 230 planning teams were surveyed. Major findings were as follows:

1. Planning team decisions were communicated to program implementors orally which resulted in confusion

2. Teachers did not participate in meetings as much as principals and appraisal personnel

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[82] 1978-79 Yearbook of Special Education (Chicago: Marquis Academic Media), pp. 3-29.

3. Not all team members were aware of the full purposes and scope of the committee activities

4. Decisions were not made through a decision-making process but were made by one of two members of the team.[83]

James Marver and Jane L. David reviewed and analyzed 150 individual education programs and interviewed two hundred parents, teachers, and administrators. They indicated that parents were not involved in preplacement of exceptional children, that assessment was not very adequate in that assessors were not usually trained and the guides were inadequate, that the committees ranged in size from three to fifteen members, and that student participation was nonexistent.

In reference to the individual educational program, they found that in general there was compliance to state law although the quality of the programs varied from school system to school system. Staff felt the need for training in the process and development of individual goals and objectives.[84]

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[83]Ibid., pp. 65-66.

[84]Ibid., pp. 66-67.

CHAPTER III

RESEARCH PROCEDURES

Introduction

In order to meet the objectives of this study, a number of procedures had to be implemented. The major tasks included the following:

1. The development of a comprehensive training package
2. The selection and training of the educators who participated in the training sessions and ultimately wrote individual education programs
3. The development of the knowledge test
4. The development of the attitude scale
5. The writing of individual education programs
6. The development of criteria for evaluating the individual education program
7. The evaluation of education programs by a panel of experts
8. The analysis of data with the use of appropriate statistical procedures

John P. Cicero cautioned that training should be developed according to the type of performance expected of the learner. He listed steps the trainer should utilize in planning for training others. These included

(1) goal analysis, (2) identification of a target population, (3) objective setting, and (4) the development of criterion instruments.[1] The researcher identified the above stated goals and determined the target population for the training to be the school-based assessment committee members from each of the forty-two schools in the Guilford County School System. The specific objectives of the training were as follows:

1. At the conclusion of the training, trainees would demonstrate an understanding of the function of individual education programs for the handicapped as measured by a knowledge test

2. At the conclusion of the training, trainers would demonstrate an understanding of the components of the individual education program as measured by a knowledge test

3. At the conclusion of the training, trainees would demonstrate confidence in their ability to write an individual education program as measured by an attitude test

4. At the conclusion of the training, trainees would demonstrate the skills needed to write an individual education program

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[1]John D. Cicero, "Instructional Systems," Training and Development Handbook, ed. Robert L. Craig (New York: McGraw-Hill, 1976), pp. 14-25.

The Development of a Comprehensive Training Manual

Prior to writing the training manual, the researcher reviewed the literature for (1) information regarding Public Law 94-142 and North Carolina House Bill 824, and (2) for examples of inservice training to implement the laws. Although most of the information found dealt with interpretation of the laws, some dealt with suggestions for writing individual education programs and some dealt with functions of school-based assessment committees.

Utilized in the training manual were edited versions of three pamphlets compiled by the North Carolina State Department of Public Instruction entitled "Highlights of Public Law 94-142," "Highlights of House Bill 824," and "The Spirit of the Law." The first two pamphlets explained the mandated target population and stated the assurances of the legislation. The third noted that the laws had a specific time-line for full implementation and placed the responsibility for compliance on the local educational agency.

The Federal Register was used extensively during the development of the training manual. From the Federal Register came the definition and purpose of individual education programs, organization and administrative aspects, and the required content of the individual education program.

A description of the role and function of the school-based assessment committee was taken from the North Carolina Rules Governing Programs for Children with Special Needs. It was necessary to determine the format of the individual education program. Although many formats were reviewed, the ones which proved to be most helpful were from Richmond County Public Schools in Richmond, Virginia, The Council for Exceptional Children, and the Division of Exceptional Children, North Carolina State Department of Public Instruction.

Since the training manual was designed to train school-based assessment committees in the Guilford County School System, utilization was made of locally developed evaluation and placement forms, skills checklists, parent contact records, and individual education program forms.

Popham and Baker advocated involving people in behaviors that they would be expected to practice later. They also believed that a synopsis of the information was more profitable than requiring participants to read long readings.[2] These ideas of Popham and Baker were incorporated by the researcher. Participants of the training sessions were involved in writing an individual education program similar to the ones they would be expected to write at a later date. The training manual included a

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[2]James W. Popham and H. Baker, Competency-based Education: A Process for the Improvement of Education (Englewood Cliffs, New Jersey: Prentice Hall, 1976).

summation of the legislation, responsibilities of committee members, and an explanation of the mandated components of the individual education program.

Henryetta Sperle surveyed the use of case studies in teacher training. She defined case study as "the careful description, definition, and interpretation of an actual condition or situation"[3] and case method as

> a laboratory method in which the student not only studies source material . . . but parallels this study with the application of the principle derived to the activities in which he engages as part of his practical prepreparation for his profession or work.[4]

The researcher utilized the case study and case method concept in the development of the training manual (Appendix A). Included in the manual was a case study of a student who had been referred and placed in a special program. Utilizing the sample case, instruction was provided on how to: (1) analyze performance levels of students, (2) develop annual goals, (3) develop short-term instructional objectives, (4) plan the use of services, (5) decide which, if any regular educational programs were appropriate for exceptional students, (6) schedule instructional activities and assign responsibilities, (7) establish appropriate performance criteria for students, and (8) design evaluation procedures.

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[3]Henryetta D. Sperle, Teachers College, Columbia University, Contributions to Education, No. 571 (New York: Teachers College, Columbia University, 1933).

[4]Ibid.

Five professionals from the Guilford County School System and four consultants from the State Department of Public Instruction assisted with the development of the training package through initially reacting to the outline of the training package and evaluating the plan at two developmental stages: a tentative draft and a corrected draft.

Specific Training Techniques Utilized

For experimental purposes, the researcher chose to rename two of the three training methods reviewed in the literature. It was noted in the review of the literature describing the lecture method of instruction that lecture sessions often included some discussion, some question-and-answer opportunities, and the use of audio-visual materials. This type of method in actuality is a didactic approach to training. Therefore the researcher chose to substitute the word "didactic" for the word lecture. Didactic training was defined as an inservice procedure consisting primarily of lecture. Audio-visuals, discussion, and opportunities for questions were used to supplement the lecture.

The literature review of simulation training techniques noted that simulation opportunities were often one component of other training techniques. Therefore, the researcher chose to substitute the word "experiential"

for simulation. Experiential training was defined as an inservice procedure identical to didactic with one major exception, a simulation activity related to the training content was used after the new information had been presented to the training group.

The self-study technique used by the researcher adhered closely to the literature reviewed. Self-study training was defined as an inservice procedure consisting of written information which was read by the individual. The individual in this training procedure had the opportunity to view audio-visuals and to ask questions regarding the written information.

Selection and Training of Assessment Teams

The professional educators involved in this research project were principals, teachers, and support personnel from the Guilford County Schools who had responsibility for developing individualized education programs for handicapped students as required by Public Law 94-142. A total of 104 individuals in the Guilford County School System were available for a three-hour training session. Through random assignment, twenty-nine professionals were selected to be trained through didactic procedures, thirty-eight through experiential procedures, and thirty-seven through self-study procedures.

All participants were involved in a twenty-minute orientation session. The participants then went to their assigned rooms where the attitude and knowledge pretests were administered.

The thirty-seven self-study participants devoted the allotted training time to independent study using the training manual. Also available to these participants were visuals identical to those used in the other two training groups. A consultant from the Guilford County School System was assigned the responsibility of responding to questions from the group.

The twenty-nine didactic participants devoted the allotted training time to listening to information (lecture) taken from the training manual. Visuals identical to those available in the other two groups were presented. The participants also had the opportunity to ask questions.

The thirty-eight experiential participants devoted the allotted training time to listening to information (lecture) taken from the training manual. Visuals identical to those available to the other two groups were presented. The participants had the opportunity to ask questions. This group also participated in a simulation activity designed by the researcher (Appendix B).

Selection and Training of Trainers

Three supervisors of special education were selected and assigned at random to one of the three groups to provide training for the participants in the didactic, experiential, and self-study training sessions. The researcher provided training to the three trainers. The training included an explanation of the purposes and objectives of the study, a complete orientation to the training package, guidelines that were to be followed in training participants in the three groups, a discussion of the use of visuals, the tests that were to be administered, and the general evaluation design.

The Development of the Knowledge Test

The knowledge test (Appendix C) was developed by the researcher with the assistance of a consultant from the Guilford County School System, a consultant from the Division of Exceptional Children, North Carolina State Department of Public Instruction, and a test and measurement specialist from the Division of Research, North Carolina State Department of Public Instruction. The final test included seventy items. Of this number, thirty-nine items or 56 percent of the items reflected information that was included in the training package, whereas thirty-one items or 46 percent of the items were generated from information obtained from various sources of literature or from the experience of the researcher.

After items were selected and written in draft form, the consultants reviewed the items, made editorial suggestions, and indicated whether or not they thought the seventy items had content validity. In determining content validity, the consultants were requested to study the legislation and other background information on Public Law 94-142 and to determine whether the proposed items were related explicitly to the information. Many editorial suggestions were made and incorporated in the final knowledge test. All of the seventy items that were included in the draft form were rated as valid by the consultants and were included in the final knowledge test. Upon the recommendations of the test consultants, the researcher placed the seventy items in a true-false format. The consultants believed that the true-false format was preferable to other alternatives, such as multiple choice questions, for two reasons. First, the nature of the content of the items could readily be adapted to a true-false format without making the correct response obvious. Second, the true-false test was easy to administer and easily understood by the respondents. The sequence of the items in the test were assigned randomly to avoid any bias relative to whether or not certain items appeared near the beginning, the middle, or the end of the test. The knowledge test was administered to persons involved in the training sessions on a pretest and a posttest basis.

Development of the Attitude Scale

The Attitude Scale (Appendix D) was developed by the researcher with the assistance of a consultant from the Guilford County School System, a consultant from the Greensboro City School System, a consultant from the Division of Exceptional Children, North Carolina State Department of Public Instruction, and a test and measurement specialist from the Division of Research, North Carolina State Department of Public Instruction. These consultants judged the content validity of the attitudinal items. In determining content validity, the consultants reviewed the legislation on Public Law 94-142 and literature related to this legislation. Using this background, they made judgments as to whether or not responses to the proposed items would reflect attitudes on the part of individuals who had to be involved in writing individual education programs. Thirty-six items were included in the draft attitude scale. Six items were eliminated because they were judged to be inappropriate by the panel of consultants. The remaining thirty items were assigned randomly. All items were created by the researcher after reviewing special education literature, discussions with colleagues, students, and parents, and recalling events and concepts from her own experiences. The attitude scale was administered on a pre-test and post-test basis to participants.

Upon completion of the training sessions, all participants were given identical packets containing relevant data about a fictitious student. Each participant was asked to write an individual education program for the student using these data (Appendix E). The program (IEP) was to include: (1) the present level of educational functioning in the areas of academic achievement, social adaptation, prevocational and vocational, psychomotor, self-help skills, and language skills; (2) the annual goals and statements; (3) the instructional objectives; (4) the special and related services and materials needed; (5) the identification of individuals responsible for implementation of plan; (6) the dates for initiation and review; (7) the evaluation criteria; (8) the special program placement and related services; (9) the justification for placement; (10) the percentage of time to be spent by the student in regular programs; (11) the student schedule of special services; and (12) a statement of parental participation in and approval of the plan.

Development of Criteria and Scale for Evaluation of Individual Education Programs

The criteria and scale developed for evaluating the individual education program of an assessment team were created after review of the literature and consultation with members of the Division of Planning and the Division of Research of the North Carolina Department of Public Instruction (Appendix F).

The first step in developing the evaluation procedure was to write the criteria that were appropriate for judging each component of the individualized education program. After the researcher completed this task, two consultants from the North Carolina State Department of Public Instruction Division of Planning and two consultants from the North Carolina State Department of Public Instruction Division of Research were asked to review the criteria and to make suggestions for improvement. The suggestions were incorporated in the final evaluation instrument. The criteria were used by a five-member expert panel to rate the individual education programs written by the participants after the training sessions. After the participants had completed the writing of the individual education programs, the attitude and knowledge posttests were administered to them by the researcher.

Evaluation of Individual Education Programs

Five raters were selected by the researcher. The raters were given the responsibility for assigning ratings to the individual education programs that had been written by the training participants. The panel of raters consisted of two local school system Directors of Exceptional Children; the Director of the Division of Gifted and Talented, North Carolina State Department of Public Instruction; and two staff members from the Division of

Research, North Carolina State Department of Public Instruction. The researcher provided a training session for the five raters. The researcher reviewed the evaluation criteria and the raters evaluated a sample individual education program and compared results and concerns. Upon completion of the training session, all five raters expressed confidence that they had a clear understanding of the criteria and procedures that were to be used in rating the individual education programs.

Following the training program, each of the five raters evaluated and assigned ratings, using twenty-five criteria, to each of the 104 individual education programs that were written by the training participants. The ratings were subsequently analyzed to determine whether or not qualitative differences existed in the individual education programs written by the participants involved in the three training groups.

Analysis of Data

In order to test the null hypotheses that were proposed for this study as well as to satisfy some of the essential standards for test development, standard research procedures and statistical techniques were employed. These included a research design that contrasted three types of participant training using pre- and post-knowledge and attitudinal tests and further contrasted

the quality of individual education programs that were developed by the participants who were trained by one of the three methods.

Establishment of Reliability of Instruments and Ratings

This phase of the study was concerned with establishing the reliability of the knowledge and attitudinal tests and the reliability of the ratings assigned to individual education programs developed by the participants. In order to determine the reliability of the knowledge and attitudinal tests that were developed for this study, reliability coefficients were calculated by determining the correlation between the scores on the odd items and the scores on the even items for the tests administered to the 104 participants. The scores for the knowledge test were obtained by assigning the value of two to true and a value of one to false responses. Scores were assigned on a five-point continuum for the attitudinal test. The responses on fifteen negatively stated questions were inverted in order to insure that a particular assigned rating would have the same value for all questions in the test. The reliability coefficient that was obtained for the attitudinal test was .78, the reliability coefficient for the knowledge test was .89. Both of these were considered acceptable.

In order to determine the reliability of the ratings that were assigned by the true raters to the criteria used for judging the individual education programs developed by the participants in the study, a correlation coefficient was obtained by using the total ratings assigned by raters one and two, one and three, one and four, and one and five, two and three, two and four, and two and five. The intercorrelations among the five raters exceeded .90, and the ratings between the two raters were judged reliable because researchers and test developers traditionally have accepted a correlation of .75 or higher as the standard for the reliability of a test or an instrument.

Statistical Procedures Employed in Testing Hypotheses

The null hypotheses that were tested in this study were:

1. There are no significant differences between the pre- and postattitudinal responses of participants trained by the didactic method

2. There are no significant differences between the pre- and postattitudinal responses of participants trained by the experiential method

3. There are no significant differences between the pre- and postattitudinal responses of participants trained by the self-study method

4. There are no significant differences between the pretest and posttest responses on the knowledge test for participants trained by the didactic training method

5. There are no significant differences between the pretest and posttest responses on the knowledge test for participants trained by the experiential training method

6. There are no significant differences between the pretest and posttest responses on the knowledge test for participants trained by the self-study method

7. There are no significant differences among and between the ratings assigned by five raters using twenty-five criteria to individual education programs developed by participants trained by the didactic, experiential, or self-study training methods.

The first six null hypotheses were tested by the Chi Square statistical procedure. This procedure determined whether there were significant differences between the proportions of pretest responses and the proportions of posttest responses assigned to the various options for each item on the knowledge and attitude test used in the study.

The seventh null hypothesis was tested by the use of the Analysis of Variance statistical technique. The analysis determined if there were significant differences among the responses for all three groups, between didactic

and experiential participants, between didactic and self-study participants, and between experiential and self-study participants.

In listing all hypotheses, observed differences among and between tests or among and between groups were considered significant at the .05 level of confidence. Tests of significance were made for each item on the knowledge test and each item on the attitude tests and for each criterion that was employed by the raters in judging individual education programs.

CHAPTER IV

ANALYSIS OF THE DATA

Analyses of the data collected to test seven hypotheses are presented in this chapter. The chapter is organized into six sections. The first section is an explanation of the statistical procedures utilized in analyses of the data. Establishment of reliability of the testing instruments and the ratings of twenty-five criteria items are found in the second section. The next three sections are analyses of attitudinal data, knowledge data, and data pertaining to the rating of the 104 individual education programs respectively. The final section is a summary of findings for testing the hypotheses.

Statistical Procedures

The data collected for this study were analyzed by the use of several standard statistical procedures. The reliability of the attitudinal and knowledge tests was determined by obtaining correlations between the odd-item and even-item scores that were made by the participants on the attitudinal and knowledge tests. The reliability of the ratings assigned by the five raters who evaluated the individual education programs written by the participants was determined by obtaining intercorrelations

between the ratings assigned by the five raters to the plans of the participants.

Statistical Analysis System 76 (SAS 76) was used to generate the analysis of variance and chi-square results. The program for analysis of variance was PROC ANOVA. This program, which analyzes balanced data, was appropriate because the data gathered from ratings of individual education programs were balanced. The program for the chi-square analysis was PROC FREQ which produced one-way to N-way frequency tables. This program was used because it offered the flexibility of analyzing data that are grouped in varying numbers of cells.

In order to test the hypothesis that there were no significant differences in the pre- and postattitudinal and knowledge test scores on the part of the three groups of participants in the study, chi-square analyses were made. With the attitudinal test, chi-squares were calculated to determine whether there were significant differences between the responses of particular paired groups at the beginning of the training program (pretest) and at the end of the training period (posttest). If there were significant differences observed between the pretest and posttest responses for a particular group of respondents, it was concluded that the change resulted from the training received.

In the case of the knowledge test, which required true-false responses rather than the multiple responses used in the attitudinal test, a chi-square analysis was made

between the proportion of pretest and posttest correct responses within each of the three training groups. If the posttest proportions of correct responses were significantly better than the pretest proportions for a particular group, it was concluded that the training program had a positive impact on that group.

Finally, analysis of variance was used to determine whether there was a significant difference among and between the ratings assigned by five raters to individual education plans that were developed by participants who were trained by three different training methods. If the ratings on a particular criterion were significantly higher for one group than another, it was concluded that the type of training received influenced the rating score.

Establishment of Reliability of Instruments and Ratings of Individual Education Programs

One of the major concerns of this investigation was to establish the reliability of the attitudinal and knowledge tests that were administered to the 104 participants who were trained as a part of the study. The reliability of the two instruments was determined by calculating zero order correlations between the scores obtained on the even items and the scores obtained on the odd items by the participants for each of the two tests. The reliability coefficient calculated for the attitudinal test was .78. The reliability coefficient obtained for the knowledge test was .89. It was

determined that each of these reliability coefficient calculations met a minimum level of acceptability.

To determine the reliability of the ratings assigned by five raters, using twenty-five criteria to measure the quality of the individual education programs developed by the 104 participants in the study, a zero-order correlation was calculated for the rating assigned to each of the 104 individual education programs by each rater and the rating assigned by each of the other four raters. Reliability coefficients were obtained for the scores of all participants as determined by rater one with raters two, three, four and five; for rater two with raters three, four, and five; for rater three with raters four and five; and for rater four with rater five.

The intercorrelations between the total ratings assigned by the five raters are presented in Table 1. The range in the reliability correlations was from a low of .916 between the ratings assigned by raters two and four to a high of .972 between raters three and five. The reliability correlations were sufficiently high to conclude that the raters were in agreement relative to the quality of the individual education programs that were written by the 104 participants.

Analysis of Attitudinal Data

The objective of this phase of the study was to determine whether the participants in the three training

groups--didactic, experiential, and self-study--changed significantly during the training period relative to their attitude toward the development of individual education programs. The null hypotheses regarding attitude were:

1. There are no significant differences between the pre- and postattitudinal responses of participants trained by the didactic methods.

2. There are no significant differences between the pre- and postattitudinal responses of the participants trained by the experiential methods.

3. There are no significant differences between the pre- and postattitudinal responses of the participants trained by the self-study methods.

TABLE 1

RATER RELIABILITY CORRELATION COEFFICIENTS FOR FIVE RATERS WHO ASSIGNED RATINGS TO INDIVIDUAL EDUCATION PLANS DEVELOPED BY 104 PARTICIPANTS

	Raters				
	1	2	3	4	5
1		.932	.946	.935	.937
2			.934	.916	.937
3				.960	.972
4					.967

A chi-square analysis was used on the pretest and posttest responses on each of the thirty items on an attitudinal scale for the participants in each of the three training groups. If there were significant differences between the pretest and posttest responses for a training

group, the hypothesis was rejected and it was concluded that the change was a result of the training received.

A summary of the chi-square results that were obtained is presented in Table 2. No significant change on the part of the didactic and self-study trained groups was observed. However, the participants in the experientially trained group reflected significant change on two of the thirty items between pretest and posttest.

The two items on which significant change was observed were: "The individual education program is doomed to failure because the cost-effect ratio will be too high" and "It is impossible to develop a valid individual education program because the tests for collecting information for the students are not valid." The observed chi square for the first analysis was 9.85, which was significant at the .05 level of confidence. A chi-square of 10.26 for the second statement was found to be significant at the .05 level of confidence also.

The results from the chi square analyses were thought to indicate that the null hypotheses proposed for this phase of the study could not be rejected. No significant differences between the pre- and postattitudinal responses for the experiential, self-study, or didactic groups were observed. It was concluded that the training had no significant impact on the general attitude of participants toward individual education programs.

TABLE 2

CHI SQUARE SUMMARIES OF DIFFERENCES BETWEEN PRETEST AND POSTTEST ADMINISTRATION OF ATTITUDE TEST TO THREE TRAINING GROUPS

Item	Didactic	Experiential	Self-Study
1. The individual education plan is an unrealistic approach to solving the problems of exceptional children	χ^2 = .88 P= .9280	χ^2 =1.50 P= .8261	χ^2 =1.31 P= .7256
2. The classroom teacher will benefit from the involvement of parents which is inherent in the individual education programs	χ^2 =5.78 P= .1227	χ^2 =3.46 P= .4841	χ^2 =1.53 P= .8220
3. The individual education approach is another attempt for administrators to control teachers	χ^2 =6.38 P= .1728	χ^2 =3.19 P= .3627	χ^2 =2.62 P= .6232
4. The detailed work involved in the individual education program does more to harm than benefit the instructional program	χ^2 =5.02 P= .2851	χ^2 =2.58 P= .6295	χ^2 =5.36 P= .2527
5. It is impossible to make a significant impact on the learning of handicapped children	χ^2 = .94 P= .9182	χ^2 =4.74 P= .3155	χ^2 =4.50 P= .3450
6. The systematic procedures incorporated in the individual education program will result in improved instruction and learning	χ^2 =5.25 P= .1547	χ^2 = .88 P= .8313	χ^2 =6.93 P= .1396

TABLE 2 (continued)

Item	Didactic	Experiential	Self-Study
7. The supervisors who are responsible for directing and monitoring individual education programs are competent	χ^2=2.91 P= .2331	χ^2=1.55 P= .6709	χ^2=4.22 P= .3770
8. The average teacher has the ability to develop an individual education program	χ^2=1.91 P= .5905	χ^2=4.25 P= .2362	χ^2=3.67 P= .4519
9. The requiring of teachers to develop individual education programs is another attempt on the part of administrators to involve teachers in management by objectives activities	χ^2=2.53 P= .4707	χ^2=5.36 P= .2522	χ^2=4.91 P= .2968
10. The amount of clerical work involved in developing individual education programs is reasonable and necessary	χ^2=1.87 P= .7592	χ^2=2.27 P= .6864	χ^2=9.45 P= .0507
11. The detailed work involved in developing individual education programs will distract significantly from the individual attention given to a student	χ^2=3.33 P= .5049	χ^2= .83 P= .4290	χ^2=6.60 P= .1586

TABLE 2 (continued)

Item	Didactic	Experiential	Self-Study
12. The involvement of parents in reviewing individual education programs will enhance their understanding of the needs and problems of their child	χ^2=4.30 P= .3664	χ^2= 6.37 P= .1731	χ^2=2.20 P= .5300
13. The typical parent is capable of understanding the individual program that will be developed for his/her child	χ^2=2.28 P= .6848	χ^2=1.38 P= .8474	χ^2=1.86 P= .7608
14. The use of the individual education program will increase the conflicts between parents and teachers	χ^2=2.35 P= .5031	χ^2=3.22 P= .5224	χ^2=1.33 P= .8549
15. The individual education program will improve the placement of students in educational activities and programs	χ^2=8.51 P= .0746	χ^2=2.36 P= .6706	χ^2=1.34 P= .8542
16. Principals will have a significantly better understanding of exceptional children from participation in the individual education program	χ^2=8.65 P= .0703	χ^2=4.84 P= .3037	χ^2=3.48 P= .4816
17. Teachers will have a significantly better understanding of exceptional children from participating in the individual education program	χ^2=4.42 P= .3511	χ^2=2.37 P= .49993	χ^2=1.27 P= .7353

TABLE 2 (continued)

Item	Didactic	Experiential	Self-Study
18. The individual education program is doomed to fail because the cost-effective ratio will be too high	χ^2 = .46 P= .9286	χ^2=9.85 P= .0198	χ^2=3.01 P= .5559
19. The individual education program will assist educators to become more accountable for the success of programs for exceptional children	χ^2=2.79 P= .5929	χ^2=5.87 P= .2088	χ^2=3.06 P= .3822
20. The procedures followed by the classroom teacher in developing individual education programs would contribute to the instructional performance of all classroom teachers	χ^2=3.26 P= .5146	χ^2=6.80 P= .0784	χ^2=4.18 P= .3820
21. Individual education program is a professional approach to teaching exceptional children	χ^2=2.78 P= .5954	χ^2=4.03 P= .4025	χ^2= .13 P= .9362
22. Individual education programs will tend to dehumanize the teaching/learning process	χ^2= .40 P= .9395	χ^2=2.26 P= .5202	χ^2=7.10 P= .0687
23. It is impossible to develop a valid individual education program because the test for collected information about these students is not valid	χ^2=1.71 P= .6357	χ^2=10.26 P= .0363	χ^2=6.36 P= .1740

TABLE 2 (continued)

Item	Didactic	Experiential	Self-Study
24. The local school districts in North Carolina lack the personnel for training teachers and administrators to implement the individual education program	χ^2= .13 P= .9886	χ^2=5.72 P= .2213	χ^2=1.31 P= .8594
25. The team approach required for implementing the individual education program will fail because educators in North Carolina are too prone to "do their own thing"	χ^2=1.06 P= .9005	χ^2=1.39 P= .8452	χ^2=5.26 P= .2613
26. Exceptional children consultants in the State Department of Public Instruction have the expertise to assist local school districts to implement the individual education program	χ^2=2.69 P= .6109	χ^2=5.73 P= .1255	χ^2=3.08 P= .3797
27. The local directors of exceptional children programs in North Carolina are really not sold on the individual education program	χ^2=2.21 P= .5301	χ^2= .12 P= .9890	χ^2=3.19 P= .3642
28. To expect local directors of special education to provide leadership in the individual education program is tantamount to the "blind leading the blind"	χ^2=1.01 P= .7991	χ^2=2.48 P= .6485	χ^2=1.10 P= .8936

TABLE 2 (continued)

Item	Didactic	Experiential	Self-Study
29. Most of the clerical work in implementing individual education programs will be passed on to overburdened secretaries	χ^2=1.65 P= .7997	χ^2=5.28 P= .1523	χ^2=1.19 P= .8818
30. The frequencies of complaints, grievances, and legal negotiations will eventually wreck the individual education program	χ^2=2.27 P= .6870	χ^2=2.49 P= .4762	χ^2=2.18 P= .5363

Analysis of Knowledge Data

The purpose of this phase of the study was to test the following three null hypotheses:

1. There are no significant differences between the pretest and posttest responses on the knowledge test for participants trained by the didactic training methods.

2. There are no significant differences between the pretest and posttest responses on the knowledge test for participants trained by the experiential training methods.

3. There are no significant differences between the pretest and posttest responses on the knowledge test for participants trained by the self-study methods.

The pretest and posttest responses on the knowledge test are summarized in Table 3. The number and proportions of right and wrong responses, the chi square ratios, and the probability ratios are presented. Inspection of the data revealed that, between pre- and posttesting, the didactic group improved on 26 of 70 items or approximately 37 percent; the experiential group improved on 15 of the 70 items or approximately 22 percent; and the self-study group improved on 17 of the 70 items or approximately 24 percent. On the basis of the analysis, the three null hypotheses were rejected. It was concluded that the didactic training approach was slightly more effective

TABLE 3

CHI SQUARE ANALYSIS OF THE DIFFERENCES BETWEEN THE PROPORTIONS OF RIGHT AND WRONG RESPONSES BETWEEN PRETESTING AND POSTTESTING FOR EACH PARTICIPATING GROUP ON KNOWLEDGE TEST

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
1. The academic performance level in an IEP must be stated in grade level terms.	Right	19	56	30*	88	16	50	26*	81	10	28	27*	75
	Wrong	15	44	4	12	16	50	6	19	26	72	9	25
		χ^2=7.30 P= .0069				χ^2=5.61 P= .0179				χ^2=14.23 P= .0002			
2. The superintendent of a school system must approve and sign each student's IEP.	Right	28	82	27	79	20	63	28*	88	34	94	36	100
	Wrong	6	18	7	21	12	38	4	13	2	6	0	0
		χ^2=0.0 P=1.00				χ^2=4.08 P= .0433				χ^2 =.51 P=.4733			
3. Federal law requires that each objective for handicapped students address who, what and when.	Right	32	94	33	97	27	84	30	94	34	94	34	94
	Wrong	2	6	1	3	5	16	2	6	2	6	2	6
		χ^2=0.0 P=1.00				χ^2=4.08 P= .0433				χ^2=.26 P=.6069			

*Notes significant difference.

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
4. The IEP must be reviewed at least annually.	Right	34	100	34	100	31	97	32	100	35	97	36	100
	Wrong	0	0	0	0	1	3	0	0	1	3	0	0
		χ^2=0.0 P=1.00				χ^2=0.0 P=1.00				χ^2=0.0 P=1.000			
5. N.C.HB824 (the Creech Bill) includes the Gifted and Talented but Public Law 94-142 does not.	Right	18	53	33*	97*	18	56	29*	91	20	56	36*	100
	Wrong	16	47	1	3	14	44	3	9	16	44	0	0
		χ^2=15.37 P= .0001				χ^2=8.01 P= .0047				χ^2=18.08 P= .0000			
6. Federal guidelines for implementing IEPs discourage the use of IQ tests because these tests tend to label students within rigid intelligence classifications.	Right	19	56	18	53	13	41	19	59	18	50	24	67
	Wrong	15	44	16	47	19	59	13	41	18	50	12	33
		χ^2=0.0 P=1.00				χ^2=1.56 P=2.113				χ^2=1.43 P= .2320			
7. Social adaptation assessment should be stated in specific terms.	Right	28	82	25	74	25	78	30	94	28	78	29	81
	Wrong	6	18	9	27	7	22	2	6	8	22	7	19
		χ^2=.34 P=.5586				χ^2=2.07 P= .1504				χ^2=0.0 P=1.000			

*Notes significant difference.

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
8. Documentation must be kept of the efforts to obtain parent input in the writing of the IEP.	Right	31	91	34	100	30	94	32	100	35	97	36	100
	Wrong	3	9	0	0	2	6	0	0	1	3	0	0
		χ^2=1.39 P= .2376				χ^2=.52 P=.4725				χ^2=0.0 P=1.000			
9. A student's psychomotor functioning level indicates fine and gross motor skills.	Right	26	77	33*	97	27	84	31	97	31	86	35	97
	Wrong	8	24	1	3	5	16	1	3	5	14	1	3
		χ^2=4.61 P= .0318				χ^2=1.67 P= .1983				χ^2=1.63 P= .2008			
10. In developing IEPs under PL 94-142 racial balance in classes and in schools must be a major consideration.	Right	19	56	27	79	20	63	27	84	21	58	34	94*
	Wrong	15	44	7	21	12	38	5	16	15	42	2	6
		χ^2=3.29 P= .0696				χ^2 =2.88 P= .0895				χ^2=11.09 P= .0009			

*Notes significant difference

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
11. Legislation states that intelligence scores shall be recorded in a range (i.e. 90-95) rather than as a unique score.	Right	6	18	5	15	7	22	6	19	0	0	2	6
	Wrong	28	82	29	85	25	78	26	81	36	100	34	94
		χ^2=0.0 P=1.00				χ^2=0.0 P=1.00				χ^2=.51 P=.4733			
12. The fact that a student's test scores are below grade level is a definite indicator that the student is an underachiever.	Right	32	94	24	71	28	88	20	63	33	92	26	72
	Wrong	2	6	10	29	4	13	12	38	3	8	10	28
		χ^2=4.95 P= .0260				χ^2=4.08 P= .0433				χ^2=3.38 P= .0660			
13. According to NC HB824, any child receiving special services who is suspended from school for 10 days must have their special education services continued.	Right	27	79	34*	100	25	78	26	81	30	83	35	97
	Wrong	7	21	9	0	7	22	6	19	6	17	1	3
		χ^2=5.73 P= .0166				χ^2=0.0 P=1.00				χ^2=2.53 P= .1116			

*Notes significant difference.

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
14. In developing a student's IEP, the race of the student is an important factor in assigning the student to classes and activities.	Right	27	79	32	94	30	94	32	100	31	86	36	100
	Wrong	7	21	2	6	2	6	0	0	5	14	0	0
		χ^2=2.04 P= .1523				χ^2=.52 P=.4725				χ^2=3.44 P= .0637			
15.The law requires that an IEP include the selection of a specific career goal that a special education student can pursue upon leaving the secondary school.	Right	19	56	21	62	17	53	18	56	16	44	23	64
	Wrong	15	44	13	38	15	47	14	44	20	56	13	36
		χ^2=.06 P=.8054				χ^2=0.0 P=1.00				χ^2=2.01 P= .1559			
16. The IEP is written in a planning conference.	Right	27	79	34*	100	24	75	31	97	26	72	34	94
	Wrong	7	21	0	0	8	25	1	3	10	28	2	6
		χ^2=5.73 P= .0166				χ^2=4.65 P= .0310				χ^2=4.90 P= .0269			

*Notes significant difference.

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre P	Group C Post N	Group C Post %
17. Students with intelligence quotients over 120 are excluded from Public Law 94-142.	Right	26	77	10	29	23	72	11	34	28	78	10	28
	Wrong	8	24	24	71	9	28	21	66	8	22	26	72
		χ^2=13.28 P= .0003				χ^2=7.59 P= .0059				χ^2=16.11 P= .0001			
18. Under PL 94-142 a parent who holds a bona fide teaching certificate in a state may assume direct supervision of his or her son or daughter's education.	Right/ Wrong	25	74	30	88	28	88	22	69	28	78	32	89
		9	27	4	12	4	13	10	31	8	22	4	11
		χ^2=1.52 P= .2174				χ^2=2.29 P= .1306				χ^2=.90 P=.3428			
19. The IEP is not a contract between school personnel and parents.	Right	19	56	28*	82	17	53	31*	97	22	61	28	78
	Wrong	15	44	6	18	15	47	1	3	14	39	8	22
		χ^2=4.40 P= .0357				χ^2=14.08 P= .0002				χ^2=1.64 P= .2008			

*Notes significant difference.

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
20. "Least Restrictive Environment" means that the school should educate a handicapped or gifted student in the regular class setting to the maximum extent possible.	Right	30	88	34	100	27	84	32	100	33	92	35	97
	Wrong	4	12	0	0	5	16	0	0	3	8	1	3
		χ^2=.24 P=.1221				χ^2=3.47 P= .0624				χ^2=.26 P=.6069			
21. An IEP for a secondary school student must include a minimum of 20 hours per month in exceptional training.	Right	13	38	22*	65	5	16	10	31	8	22	14	39
	Wrong	21	62	12	35	27	84	22	69	28	78	22	61
		χ^2=2.77 P= .0522				χ^2=1.39 P= .2379				χ^2=1.64 P= .2008			
22. In order to make appropriate comparisons, all EMR students in a particular school system must be administered the same achievement test.	Right	12	35	15	44	13	41	10	31	8	22	17*	47
	Wrong	22	65	19	56	19	59	22	69	28	78	19	53
		χ^2=.25 P=.6201				χ^2=.27 P=.6023				χ^2=3.92 P= .0477			

*Notes significant difference.

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
23. According to NC HB824 a local school system is required to take affirmative action to employ handicapped adults to assist in the education of handicapped students in a local system of NC.	Right	16	47	21	62	16	50	21	66	19	53	27	75
	Wrong	18	53	13	38	16	50	11	34	17	47	9	25
		χ^2=.95 P=.3301				χ^2=1.03 P= .3113				χ^2=2.95 P= .0859			
24. In evaluating the effectiveness of the IEP, process is more important than product.	Right	24	71	25	74	24	75	23	72	32	89	30	83
	Wrong	10	29	9	27	8	25	9	28	4	11	6	17
		χ^2=0.0 P=1.000				χ^2=0.0 P=1.000				χ^2=.12 P=.7333			
25. The percentage of time the student spends in the regular education program is to be stated.	Right	31	91	34	100	29	91	32	100	34	94	35	97
	Wrong	3	9	0	0	3	9	0	0	2	6	1	3
		χ^2=1.39 P= .2376				χ^2=1.40 P= .2369				χ^2=0.0 P=1.000			

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
26. House Bill 824 specifies the maximum amount of time between referral of a child to a special program and a decision regarding program placement.	Right	28	82	33	97	28	88	31	97	34	94	35	97
	Wrong	6	18	1	3	4	13	1	3	2	6	1	3
		χ^2=2.55 P= .1104				χ^2=.88 P=.3516				χ^2=0.0 P=1.000			
27. The IEP must include goals and objectives but not specific teaching activities.	Right	20	58	26	77	14	44	22	69	18	50	28*	81
	Wrong	14	41	8	24	18	56	10	31	18	50	7	19
		χ^2=1.68 P= .1949				χ^2=3.11 P= .0778				χ^2=6.13 P= .0133			
28. The federal law requires that county and state agencies, such as Mental Health and Welfare provide services in a student's plan that cannot be provided by the school system.	Right	6	18	11	32	4	13	7	22	7	19	7	19
	Wrong	28	82	23	68	28	88	25	78	29	81	29	81
		χ^2=1.25 P= .2626				χ^2=.44 P=.5076				χ^2=.09 P=.7659			

*Notes significant difference.

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
29. A teacher cannot deviate from the special or related services outlined in a student's individual instructional plan without the approval of the majority of the planning committee.	Right	11	32	4	12	15	47	15	47	10	28	9	25
	Wrong	23	68	30	88	17	53	17	53	26	72	27	75
		χ^2=3.08 P= .0793				χ^2=.06 P= .8022				χ^2=0.0 P=1.000			
30. More than one non-discriminatory assessment must be used to determine a student's educational functioning level.	Right	30	88	34	100	30	94	32	100	34	94	33	92
	Wrong	4	12	0	0	2	6	0	0	2	6	3	8
		χ^2=2.39 P= .1221				χ^2=.52 P=.4725				χ^2=0.0 P=1.000			
31. The school may refuse to release parents' specific test scores that are used in developing the IEP.	Right	32	94	33	97	27	84	28	88	27	75	29	81
	Wrong	2	6	1	3	5	16	4	13	9	25	7	19
		χ^2=0.0 P=1.00				χ^2=0.0 P=1.000				χ^2=.08 P=.7768			

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
32. PL 94-142 stipulates that a given school district must assure that a sum of State and local funds equal to the average annual per pupil expenditure for all children being served in the district is available for each handicapped child before federal funds can be used.	Right	27	79	29	85	27	84	29	91	32	89	34	04
	Wrong	7	21	5	15	5	16	3	9	4	11	2	6
		χ^2=.10 P=.7504				χ^2=.14 P=.7055				χ^2=.18 P=.6698			
33. Under N.C. law the Individual Education Planning Conference would be considered an "open" meeting and thus could be attended by the general public.	Right	23	68	19	56	19	59	24	75	26	72	31	86
	Wrong	11	32	15	44	13	41	8	25	10	28	5	14
		χ^2=.56 P=.4541				χ^2=1.34 P= .2869				χ^2=1.35 P=24.57			

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
34. Legislation requires that an exceptional student's IEP provide for at least 50% of their time in regular education programs.	Right	14	41	26*	77	16	50	25*	78	21	58	28	78
	Wrong	20	59	8	24	16	50	7	22	15	42	8	22
		χ^2=7.34 P= .0067				χ^2=4.34 P= .0371				χ^2=2.30 P=12.94			
35. Parents may refuse to accept the IEP developed for their son or daughter.	Right	34	100	32	94	30	94	31	97	35	97	34	94
	Wrong	0	0	2	6	2	6	1	3	1	3	2	6
		χ^2=.52 P=.4729				χ^2=0.0 P=1.000				χ^2=0.0 P=1.000			
36. Principals, teachers and parents are supposed to attend the planning conference.	Right	33	97	32	94	28	88	31	97	34	94	35	97
	Wrong	1	3	2	6	4	13	1	3	2	6	1	3
		χ^2=0.0 P=1.000				χ^2=.87 P= .3516				χ^2=0.0 P=1.000			

*Notes significant difference.

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
37. PL 94-142 states that a parent may invite the family doctor to participate in her child's planning conference.	Right	27	79	30	88	24	75	29	91	29	81	27	75
	Wrong	7	21	4	12	8	25	3	9	7	19	9	25
		χ^2=.43 P= .5101				χ^2=1.76 P= .1851				χ^2=.08 P=.7768			
38. A handicapped student who is 18 years old or older may have access to any and all of his school records.	Right	34	100	31	91	29	91	29	91	35	97	33	92
	Wrong	0	0	3	9	3	9	3	9	1	3	3	8
		χ^2=1.39 P= .2376				χ^2=.18 P=.6680				χ^2=.26 P=.6069			
39. A goal is defined as a specific statement of program interest which defines how much progress a student will make in a specific amount of time.	Right	6	18	6	18	4	13	3	9	6	17	5	14
	Wrong	28	82	28	82	28	88	29	91	30	83	31	86
		χ^2=.10 P=.7504				χ^2=0.0 P=1.000				χ^2=0.0 P=1.000			

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
40. PL 94-142 was designed to assure that all handicapped children have an available free appropriate education.	Right	33	97	32	94	29	91	31	97	36	100	35	97
	Wrong	1	3	1	3	3	9	1	3	0	0	1	3
		χ^2=0.0 P=1.00				χ^2=.27 P=.6056				χ^2=0.0 P=1.00			
41. PL 94-142 requires that parents accept instructional responsibilities which might be included in a student's IEP.	Right	17	50	22	65	18	56	14	44	15	42	21	58
	Wrong	17	50	12	35	14	44	18	56	21	58	15	42
		χ^2=.96 P=.3267				χ^2=.56 P=.4533				χ^2=1.39 P= .2396			
42. The Wide Range Achievement Test, the Comprehensive Test of Basic Skills and the Peabody Individual Achievement Test are appropriate measures of academic level of performance.	Right	26	82	32	94	26	81	30	94	34	94	34	94
	Wrong	6	18	2	6	6	19	2	6	2	6	2	6
		χ^2=1.28 P= .2588				χ^2=1.29 P= .2568				χ^2=.26 P=.6069			

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
43. Statements relative to the present level of education functioning for academic achievement, social adaptation, pro-vocational skills, and self-help skills must be written.	Right	30	88	30	88	30	94	31	97	35	97	35	97
	Wrong	4	12	4	12	2	6	1	3	1	3	1	3
		χ^2=.14 P=.7066				χ^2=0.0 P=1.00				χ^2=.51 P=.4733			
44. The Competency Graduation Bill enacted by the 1977 N.C. General Assembly states that handicapped students who meet the objectives in their IEP may receive a high school diploma.	Right	6	18	5	15	6	19	7	22	6	17	7	19
	Wrong	28	82	29	85	26	81	25	78	30	83	29	81
		χ^2=0.0 P =1.00				χ^2=0.0 P=1.00				χ^2=0.0 P=1.00			
45. The parents must sign a statement on the IEP form indicating that they were afforded an opportunity to participate in the planning conference.	Right	34	100	29	85	29	91	31	97	34	94	32	89
	Wrong	0	0	5	15	3	9	1	3	2	6	4	11

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
46. PL 94-142 includes the assurance that handicapped children in N. C. ages 5-21 will be provided an appropriate education.	Right	3	9	17*	50	3	9	19*	59	0	0	25	69
	Wrong	31	91	17	50	29	91	13	41	36	100	11	11
		χ^2=11.97 P= .0005				χ^2=15.58 P= .0001				χ^2=35.30 P= 0.0			
47. In N, C. an IEP must be written for handicapped and gifted children receiving special education services.	Right	2	6	0	0	2	6	0	0	1	3	0	0
	Wrong	32	94	34	100	30	94	32	100	35	97	36	100
		χ^2=.52 P=.4729				χ^2 =.52 P= .4725				χ^2=0.0 P=1.000			
48. The names and positions of those developing the plan must be recorded.	Right	32	94	32	94	29	91	31	97	36	100	35	97
	Wrong	2	6	2	6	3	9	1	3	0	0	1	3
		χ^2=.27 P=.6063				χ^2=.27 P=.6056				χ^2=0.0 P=1.000			
49. By October 1, 1977, the IEP must be written for all students receiving special services.	Right	33	97	32	94	29	91	30	94	33	92	33	92
	Wrong	1	3	2	6	3	9	2	6	3	8	3	8
		χ^2=0.0 P=i.00				χ^2=0.0 P=1.00				χ^2 =0.18 P= .6698			

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
50. PL 94-142 requires that all structional barriers be eliminated in school buildings that house orthopedic impaired students.	Right	28	82	25	74	29	91	29	91	31	86	21	58
	Wrong	6	18	9	27	3	9	3	9	5	14	15	42
		χ^2=.34 P=.5586				χ^2 =.18 P=.6680				χ^2=5.61 P= .0179			
51. Any special or related services which the special student needs must be listed regardless of the availability of services.	Right	31	91	32	94	29	91	31	97	34	94	30	83
	Wrong	3	9	2	6	3	9	1	3	2	6	6	17
		χ^2=0.0 P=1.00				χ^2=.27 P=.6056				χ^2=1.27 P= .2606			
52. Zero Reject means that all identified handicapped and gifted children must be provided special services by July 1, 1977.	Right	21	62	29*	85	18	56	22	69	22	61	26	72
	Wrong	13	38	5	15	14	44	10	31	14	39	10	28
		χ^2=3.70 P= .0543				χ^2=.60 P=.4386				χ^2=.56 P=.4533			

*Notes significant difference.

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
56. The ultimate measure of success of an IEP is whether a student changes behavior in a positive direction.	Right	23	68	30	88	25	78	28	88	32	89	30	83
	Wrong	11	32	4	12	7	22	4	13	4	11	6	17
		χ^2=3.08 P= .7933				χ^2=.44 P=.5076				χ^2=.12 P=.7333			
57.. The School-Based Assessment Committee is responsible for the development of the plan.	Right	9	27	8	24	12	38	9	28	14	39	6	17
	Wrong	25	74	26	77	20	63	23	72	22	61	30	83
		χ^2=0.0 P= 1.00				χ^2=.28 P=.5944				χ^2=3.39 P = .0655			
58. A justification for special placement must be written.	Right	31	91	34	100	31	97	31	97	36	100	35	97
	Wrong	3	9	0	0	1	3	1	3	0	0	1	3
		χ^2=1.39 P= .2376				χ^2=.52 P=.4725				χ^2 =0.0 P=1.00			
59. According to N.C. HB 824, the Zero Reject Clause is effective as of July 1, 1977.	Right	23	68	29	85	24	75	28	88	24	67	29	81
	Wrong	11	32	5	15	8	25	4	13	12	33	7	19
		χ^2=2.04 P= .1529				χ^2=.92 P=.3367				χ^2=1.14 P= .2848			

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
56. The ultimate measure of success of an IEP is whether a student changes behavior in a positive direction.	Right	23	68	30	88	25	78	28	88	32	89	30	83
	Wrong	11	32	4	12	7	22	4	13	4	11	6	17
		χ^2=3.08 P= .7933				χ^2=.44 P=.5076				χ^2=.12 P=.7333			
57. The School-Based Assessment Committee is responsible for the development of the plan.	Right	9	27	8	24	12	38	9	28	14	39	6	17
	Wrong	25	74	26	77	20	63	23	72	22	61	30	83
		χ^2=0.0 P= 1.00				χ^2=.28 P=.5944				χ^2=3.39 P = .0655			
58. A justification for special placement must be written.	Right	31	91	34	100	31	97	31	97	36	100	35	97
	Wrong	3	9	0	0	1	3	1	3	0	0	1	3
		χ^2=1.39 P= .2376				χ^2=.52 P=.4725				χ^2 =0.0 P=1.00			
59. According to N.C. HB 824, the Zero Reject Clause is effective as of July 1, 1977.	Right	23	68	29	85	24	75	28	88	24	67	29	81
	Wrong	11	32	5	15	8	25	4	13	12	33	7	19
		χ^2=2.04 P= .1529				χ^2=.92 P=.3367				χ^2=1.14 P= .2848			

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
60. Federal funds for educating handicapped children are limited to 12% of the total state school population.	Right	19	56	31*	91	21	66	26	81	25	69	34*	94
	Wrong	15	44	3	9	11	34	6	19	11	31	2	6
		χ^2=9.14 P= .0025				χ^2=1.28 P= .2576				χ^2=6.00 P= .0142			
61.The Guilford County Adaptive Behavior Scale will be used in Guilford County for conducting a social adaptation assessment of handicapped students.	Right	28	82	34*	100	28	88	31	97	30	83	32	89
	Wrong	6	18	0	0	4	13	1	3	6	17	4	11
		χ^2=4.57 P= .0325				χ^2=.87 P=.3516				χ^2=.12 P=.7333			
62. Personnel from the Division of Exceptional Children, SDPI, must audit a sampling of IEPs in each school system every five years.	Right	3	9	5	15	5	16	3	9	3	8	12*	67
	Wrong	31	91	29	85	27	84	29	91	33	92	24	67
		χ^2=.14 P=.7066				χ^2=.14 P=.7055				χ^2=5.39 P= .0303			

*Notes significant difference.

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
63. A handicapped or gifted child is to be educated in the regular educational program if possible.	Right	32	94	32	94	28	88	31	97	35	97	34	94
	Wrong	2	6	2	6	4	13	1	3	1	3	2	6
		χ^2=.27 P=.6063				χ^2=.87 P=.3516				χ^2=0.0 P=1.00			
64. N.C. House Bill 824 specifies that only teachers certified in special education may be involved in implementing a student's IEP.	Right	20	59	27	79	20	63	13	41	28	78	27	75
	Wrong	14	41	7	21	12	38	19	59	8	22	9	25
		χ^2=2.48 P= .1153				χ^2=2.25 P= .1334				χ^2=0.0 P=1.00			
65. The Annual Testing Program which was legislated by the 1977 General Assembly excludes the participation on the part of EMR students.	Right	20	59	20	59	20	63	18	56	24	67	23	64
	Wrong	14	41	14	41	12	38	14	44	12	33	13	36
		χ^2=.06 P=.8054				χ^2=.06 P=.7991				χ^2=0.0 P=1.00			

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
66. Prioritized goal statements must be made according to described educational functioning levels.	Right	28	82	32	94	32	100	31	97	33	92	34	94
	Wrong	6	18	2	6	0	0	1	3	3	8	2	6
		χ^2=1.28 P = .2588				χ^2=0.0 P=1.00				χ^2=0.0 P=1.00			
67. The school is required to help students' IEP for at least ten years.	Right	16	47	15	44	11	34	13	41	12	33	15	42
	Wrong	18	53	19	56	21	66	19	59	24	67	21	58
		χ^2=0.0 P=1.00				χ^2=.07 P=.7963				χ^2=.24 P=.6264			
68. Self-help skills are defined as those skills that a student possesses that will assist him or her in learning the subjects taught in school.	Right	16	47	13	38	12	38	14	44	15	42	17	47
	Wrong	18	53	21	62	20	63	18	56	21	58	19	53
		χ^2=.24 P=.6358				χ^2=.06 P=.7991				χ^2=.06 P=.8125			
69. Instructional objectives should be written for each goal statement.	Right	27	79	33	97	31	97	31	97	35	97	33	92
	Wrong	7	21	1	3	1	3	1	3	1	3	3	8
		χ^2=3.54 P= .0598				χ^2=.52 P=.4725				χ^2=.26 P=.6069			

TABLE 3 (continued)

Item Statement	Right/ Wrong	Group A Pre N	Group A Pre %	Group A Post N	Group A Post %	Group B Pre N	Group B Pre %	Group B Post N	Group B Post %	Group C Pre N	Group C Pre %	Group C Post N	Group C Post %
70. Parents must be given an opportunity to help write the IEP.	Right	27	79	33	97	29	91	31	97	29	81	35	97
	Wrong	7	21	1	3	3	9	1	3	7	19	1	3
		χ^2=3.54 P= .0598				χ^2=.27 P=.6056				χ^2=3.52 P= .0608			
Average number correct:		47		52		47		51		48		52	
Average percent correct:		67		74		67		73		69		74	

than the experiential and self-study approaches in imparting knowledge to trainees.

Analysis of Ratings of Individual Education Program

The final null hypothesis to be tested in this study was:

There are no significant differences among and between the ratings assigned by five raters to individual education programs developed by participants who were trained by either the didactic, experiential, or self-study training methods.

Analysis of variance statistical procedures were used to test the hypothesis. The results of the analysis are presented in Tables 4-28.

Table 4 contains an analysis of the data collected regarding the quality criterion: "Priorities are related to findings in information base." Analysis of variance calculations indicate that there were significant differences among ratings assigned to the participants in didactic, experiential and self-study groups. Ratings assigned to the individual education programs prepared by members of the experiential group were higher than the ratings assigned to those prepared by members of the didactic and self-study groups. Ratings assigned to individual education programs prepared by members of the self-study group generally were higher than those prepared by members of the didactic group.

TABLE 4

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Priorities are related to findings in information base.

Mean Ratings: Didactic = 3.81
Experiential = 4.62
Self-Study = 4.31

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	10.72	5.36	14.81	.0001
Within	103	37.28	.36		
Total	105	48.00			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	10.69	10.69	23.94	.0001
Within	66	29.46	.45		
Total	67	40.15			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	4.06	4.06	7.66	.0074
Within	65	34.45	.53		
Total	66	38.51			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	1.79	1.79	12.60	.0007
Within	75	10.65	.14		
Total	76	12.44			

An analysis of rater judgments using the criterion "Priorities reflect the expectations and beliefs of parents and educators" is presented in Table 5. Significant differences were observed among the three groups: between the didactic and experiential group in favor of the experiential group; between the didactic and self-study group in favor of the self-study group; and between the self-study and experiential in favor of the experiential group.

The differences between and among the ratings assigned to the criterion "Priorities are related to the identified needs of the child" are shown in Table 6. The highest ratings were assigned to the IEPs of the experiential participants; the second highest to those of the self-study participants; and the lowest ratings to the IEPs prepared by the didactic participants.

The analysis of the ratings assigned to the criterion "The selection and ranking of priorities was done in a systematic manner" is presented in Table 7. No significant differences occurred between the didactic and experiential groups or between the didactic and self-study groups. However, ratings assigned to the IEPs of the experiential group were significantly higher than those assigned to the IEPs of the self-study group.

TABLE 5

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Priorities reflect the expectations and beliefs of parents and educators.

Mean Ratings: Didactic = 3.44
Experiential = 4.50
Self-Study = 4.00

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	18.41	9.20	18.21	.0001
Within	103	52.06	.50		
Total	105	70.46			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	18.37	19.37	41.16	.0001
Within	66	29.46	.45		
Total	67	47.83			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	5.23	5.23	6.83	.0111
Within	65	49.75	.76		
Total	66	54.98			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	4.56	4.56	13.75	.0004
Within	75	24.91	.33		
Total	76	29.47			

TABLE 6

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Priorities are related to the identified needs of the child.

Mean Ratings: Didactic = 3.45
Experiential = 4.55
Self-Study = 3.98

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	20.06	10.03	33.08	.0001
Within	103	31.23	.30		
Total	105	51.30			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	19.86	19.86	62.28	.0001
Within	66	21.05	.32		
Total	67	40.91			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	4.72	4.72	11.46	.0012
Within	65	26.80	.41		
Total	66	31.53			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	5.97	5.97	30.60	.0001
Within	75	14.62	.19		
Total					

TABLE 7

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: The selection and ranking of priorities was done in a systematic manner.

Mean Ratings: Didactic = 2.56
Experiential = 3.11
Self-Study = 1.99

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	25.64	12.82	4.63	.0019
Within	103	285.33	2.77		
Total	105	310.97			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	5.79	5.79	2.30	.1340
Within	66	166.09	2.52		
Total	67	171.88			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	5.23	5.23	1.83	.1806
Within	65	185.59	2.86		
Total	66	190.82			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	25.63	25.63	8.78	.0041
Within	75	218.98	2.92		
Total	76	244.61			

There were no significant differences observed among and between the ratings assigned to the IEPs prepared by members of the three training groups on the criterion "The rationale employed in establishing priorities was sound" (Table 8).

Significant differences were observed between and among the ratings assigned to the IEPs of the members of the three groups using the criterion "Goals for the child are clearly stated and understood by school personnel and the parents" (Table 9).

An analysis of the ratings assigned using the criterion "Stated goals reflect the expectations of the planning committee" is presented in Table 10. Significant differences were noted among the ratings assigned to the IEPs of the three groups and between the didactic and experiential and the didactic and self-study groups but there were no significant differences between the ratings assigned to the self-study and experiential groups.

An analysis of the ratings assigned using the criterion "Objectives reflect the annual goal statements of the plan" is shown in Table 11. Significant differences were observed among the ratings assigned to the IEPs prepared by members of the three training groups.

Significant differences were observed among the ratings assigned to the IEPs prepared by members of the three training groups using the criterion "Objectives

TABLE 8

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: The rationale employed in establishing priorities was sound

Mean Ratings: Didactic = 2.81
Experiential = 3.14
Self-Study = 2.68

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	3.77	1.89	.96	.3873
Within	103	203.06	1.97		
Total	105	206.84			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	1.49	1.49	.71	.4026
Within	66	138.30	2.10		
Total	67	139.79			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	0.30	0.30	.19	.6614
Within	65	100.44	1.55		
Total	66	100.74			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	3.62	3.62	1.62	.2066
Within	75	167.39	2.23		
Total	76	171.01			

TABLE 9

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Goals for the child are clearly stated and understood by school personnel, and the parents.

Mean Ratings: Didactic = 3.39
Experiential = 4.49
Self-Study = 3.92

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	20.13	10.06	18.76	.001
Within	103	55.26	0.54		
Total	105	75.38			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	19.91	19.91	43.65	.0001
Within	66	30.10	0.46		
Total	67	50.01			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	4.68	4.68	6.03	.0167
Within	65	50.39	0.78		
Total	66	55.07			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	6.05	6.05	15.13	.0002
Within	75	30.02	0.40		
Total	76	36.07			

TABLE 10

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Stated goals reflect the expectations of planning committee.

Mean Ratings: Didactic = 3.70
Experiential = 4.57
Self-Study = 4.31

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	12.63	6.32	13.05	.0001
Within	103	49.86	0.48		
Total	105	62.49			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	12.32	12.32	29.50	.0001
Within	66	27.56	0.41		
Total	67	39.88			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	6.06	6.06	8.53	.0048
Within	65	46.19	0.71		
Total	66	52.25			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	1.24	1.24	3.57	.0625
Within	75	25.97	0.35		
Total	76	27.20			

TABLE 11

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Objectives reflect the annual goal statements of the plan.

Mean Ratings: Didactic = 3.90
Experiential = 4.45
Self-Study = 4.11

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	5.03	2.52	4.84	.0098
Within	103	53.60	0.52		
Total	105	58.63			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	4.79	4.79	10.92	.0015
Within	66	28.98	0.44		
Total	67	33.77			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	0.72	0.72	1.07	.3049
Within	65	43.55	0.67		
Total	66	44.27			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	2.07	2.07	4.48	.0376
Within	75	34.67	0.46		
Total	76	36.74			

indicate that educators have accepted responsibility for bringing about specific outcomes in child" (Table 12).

Table 13 presents an analysis of the ratings assigned to the IEPs prepared by members of the three training groups using the criterion "Objectives are written in specific terms in that they answer the questions: who? what? when? and how?." Although there were no significent differences observed between the assigned ratings of the didactic and self-study groups, significant differences were observed among the three groups and between the didactic and experiential and the self-study and experiential groups.

Significant differences were observed among the ratings assigned to the IEPs prepared by the participants of the training groups using the criterion "Objectives are written for the major educational needs identified for the child" (Table 14).

An analysis of rater judgments using the criterion "Objectives are written for the major educational needs for the child" is presented in Table 15. Significant differences were observed among and between the ratings assigned to the IEPs written by the participants of the three training groups.

An analysis of the ratings assigned for the criterion "Objectives are written to reflect student problems which were identified in the information base" are presented

TABLE 12

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Objectives indicate that educators have accepted responsibility for bringing about specific outcomes in child.

Mean Ratings: Didactic = 3.77
Experiential = 4.47
Self-Study = 4.23

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	8.22	4.11	6.96	.0015
Within	103	60.82	0.59		
Total	105	69.04			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	8.12	8.12	16.07	.0002
Within	66	33.36	0.51		
Total	67	41.45			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	3.57	3.57	4.73	.0333
Within	65	49.09	0.76		
Total	66	52.66			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	1.04	1.04	1.99	.1624
Within	75	39.21	0.52		
Total	76	40.25			

TABLE 13

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Objectives are written in specific terms in that they answer the questions: who? what? when? and how?

Mean Ratings: Didactic = 3.21
Experiential = 3.81
Self-Study = 3.37

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	6.82	3.41	4.46	.0139
Within	103	78.77	0.76		
Total	105	85.59			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	6.00	6.00	8.09	.0059
Within	66	48.97	0.74		
Total	67	54.97			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	.43	.43	.63	.4313
Within	65	44.49	.68		
Total	66	44.91			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	3.71	3.71	4.35	.0405
Within	75	64.09	0.85		
Total	76	67.80			

TABLE 14

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Objectives are written for the major educational needs identified for the child.

Mean Ratings: Didactic = 3.44
Experiential = 4.26
Self-Study = 3.70

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	12.11	6.06	11.67	.0001
Within	103	53.45	.52		
Total	105	65.56			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	11.05	11.05	26.94	.0001
Within	66	27.07	.41		
Total	67	38.11			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	1.10	1.10	1.64	.2053
Within	65	43.70	.67		
Total	66	44.79			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	5.96	5.96	12.37	.0007
Within	75	36.14	.48		
Total	76	42.09			

TABLE 15

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Objectives are written for the major educational needs for the child.

Mean Ratings: Didactic = 3.28
Experiential = 4.53
Self-Study = 3.84

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	26.19	13.10	22.51	.0001
Within	103	59.92	.58		
Total	105	86.11			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	25.59	25.59	54.67	.0001
Within	66	30.89	.47		
Total	67	56.48			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	5.05	5.05	5.87	.0182
Within	65	55.87	.86		
Total	66	60.92			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	9.06	9.06	20.55	.0001
Within	75	33.08	.44		
Total	76	42.14			

in Table 16. Significant differences were observed among and between the ratings assigned to the IEPs written by participants in the three training groups.

Significant differences were observed among and between the ratings assigned to the IEPs prepared by members of the three training groups using the criterion "Objectives are written in order that appropriate evaluation procedures can be applied" (Table 17).

Table 18 presents the analysis of the assigned ratings using the criterion "Special services in the plan are addressed to meet stated objectives." Significant differences were observed among the three groups but not between the self-study and experiential groups.

Table 19 presents an analysis of the ratings assigned to the IEPs prepared by members of the three training groups using the criterion "Special services were selected and planned in a systematic manner." Significant differences were observed among the three groups, between the didactic and experiential groups, and between the self-study and experiential groups. No significant difference was observed between the didactic and self-study groups.

The ratings assigned to the IEPs written by the members of the three training groups were very low for the criterion "Research and program literature, authorities, and other sources were used in selecting special services

TABLE 16

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Objectives are written to reflect student problems which were identified in the information base.

Mean Ratings: Didactic = 3.31
Experiential = 4.51
Self-Study = 3.94

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	23.72	11.86	21.74	.0001
Within	103	56.21	.55		
Total	105	79.93			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	23.64	23.64	63.44	.0001
Within	66	24.60	.37		
Total	67	48.24			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	6.46	6.46	8.01	.0062
Within	65	52.38	.81		
Total	66	58.83			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	6.16	6.16	13.04	.0005
Within	75	35.44	.47		
Total	76	41.60			

TABLE 17

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Objectives are written in order that appropriate evaluation procedures can be applied.

Mean Ratings: Didactic = 3.33
Experiential = 4.43
Self-Study = 3.87

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	20.33	10.16	16.75	.0001
Within	103	62.49	.61		
Total	105	82.82			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	20.12	20.11	37.99	.0001
Within	66	34.95	.53		
Total	67	55.06			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	4.75	4.74	5.70	.0198
Within	65	54.12	.83		
Total	66	58.87			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	6.09	6.09	12.71	.0006
Within	75	35.91	.48		
Total	76	41.99			

TABLE 18

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Special services in the plan are addressed to meeting stated objectives.

Mean Ratings: Didactic = 3.63
Experiential = 4.50
Self-Study = 4.29

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	13.09	6.54	12.10	.0001
Within	103	55.73	.54		
Total	105	68.82			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	12.36	12.36	23.08	.0001
Within	66	35.35	.54		
Total	67	47.72			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	7.32	7.32	10.77	.0017
Within	65	44.20	.68		
Total	66	51.52			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	73	.73	1.72	.1937
Within	75	31.91	.43		
Total	76	32.65			

TABLE 19

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Special services were selected and planned in a systematic manner.

Mean Ratings: Didactic = 3.65
Experiential = 4.57
Self-Study = 3.86

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	16.28	8.14	9.20	.0002
Within	103	91.08	.88		
Total	105	107.36			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	13.87	13.87	34.62	.0001
Within	66	26.44	.40		
Total	67	40.32			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	.72	.72	.55	.4599
Within	65	85.00	1.31		
Total	66	85.73			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	9.53	9.53	10.11	.0021
Within	75	70.70	.94		
Total	76	80.23			

from a number of alternatives" (Table 20). Significant differences were observed among the three groups.

Using the criterion, "Special Alternatives were considered in selecting special services," ratings were assigned to the IEPs written by members of the three training groups (Table 21). No significant differences were observed between the ratings assigned to the IEPs of the self-study and experiential groups but significant differences were observed among the three groups and between the didactic and experiential and the didactic and self-study groups.

Significant differences were observed among the ratings assigned to the IEPs of the members of the three groups using the criterion "Completion deadlines were established for all major special services" (Table 22).

An analysis of the ratings assigned to the IEPs of the members of the three training groups is presented in Table 23. The criterion used was "Responsibility has been assigned for the completion of all major special services." Significant differences were observed among the three groups and between the didactic and experiential groups.

An analysis of the ratings assigned to the IEPs of the members of the three training groups is presented in Table 24. The criterion used was "Performance standards are established for all major special services." There were significant differences observed among the three

TABLE 20

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Research and program literature, authorities and other sources were used in selecting special services from a number of alternatives.

Mean Ratings: Didactic = 0.82
Experiential = 0.06
Self-Study = 0.01

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	13.01	6.50	13.24	.0001
Within	103	50.60	0.49		
Total	105	63.60			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	9.59	9.59	12.52	.0007
Within	66	50.52	0.77		
Total	67	60.11			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	10.80	10.80	15.60	.0002
Within	65	44.98	0.69		
Total	66	55.78			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	0.05	0.05	0.66	.4190
Within	75	5.69	0.08		
Total	76	5.74			

TABLE 21

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Special alternatives were considered in selecting special services.

Mean Ratings:

Didactic	= 1.25
Experiential	= 0.05
Self-Study	= 0.37

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	24.74	12.37	9.18	.0002
Within	103	138.79	1.35		
Total	105	163.53			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	23.83	23.83	19.14	.0001
Within	66	82.19	1.25		
Total	67	106.02			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	12.73	12.73	6.14	.0159
Within	65	134.89	2.08		
Total	66	147.63			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	1.94	1.94	2.40	.1256
Within	75	60.50	0.81		
Total	76	62.44			

TABLE 22

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Completion deadlines were established for all major special services.

Mean Ratings: Didactic = 3.16
Experiential = 4.23
Self-Study = 3.92

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	19.09	9.55	7.83	.0007
Within	103	125.52	1.22		
Total	105	144.61			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	18.48	18.48	12.89	.0006
Within	66	94.67	1.43		
Total	67	113.16			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	9.56	9.56	7.38	.0084
Within	65	84.15	1.29		
Total	66	93.71			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	1.64	1.64	1.70	.1960
Within	75	72.21	0.96		
Total	76	73.85			

TABLE 23

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Responsibility has been assigned for the completion of all major special services.

Mean Ratings: Didactic = 3.51
Experiential = 4.32
Self-Study = 4.01

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	10.68	5.34	4.96	.0088
Within	103	110.90	1.08		
Total	105	121.58			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	10.64	10.64	10.40	.0020
Within	66	67.54	1.02		
Total	67	78.19			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	4.11	4.11	3.07	.0844
Within	65	87.08	1.34		
Total	66	91.20			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	1.73	1.73	1.93	.1688
Within	75	67.17	.90		
Total	76	68.90			

TABLE 24

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Performance standards are established for all major special services.

Mean Ratings: Didactic =
Experiential =
Self-Study =

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	16.31	8.15	11.93	.0001
Within	103	70.41	0.68		
Total	105	86.72			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	15.91	15.91	22.39	.0001
Within	66	46.92	0.71		
Total	67	62.93			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	3.10	3.10	3.43	.0687
Within	65	58.85	0.91		
Total	66	61.95			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	5.69	5.69	12.18	.0008
Within	75	35.06	0.45		
Total	76	40.76			

groups, between the didactic and experiential groups, and between the self-study and experiential groups.

Table 25 presents the analysis of the ratings assigned to IEPs of the three training groups using the criterion "Evaluation procedures are outlined in detail for all stated objectives." Significant differences were observed among and between the three groups.

Table 26 presents the analysis of the ratings assigned to the IEPs of the members of the three training groups using the criterion "Data are available for evaluating all stated objectives." Significant differences were observed among and between the three groups.

Significant differences were observed between and among the ratings assigned to the IEPs of the members of the three groups using the criterion "Evaluation designs met accepted scientific standards" (Table 27).

Table 28 presents the analysis of the ratings assigned to the IEPs of the members of the three groups using the criterion "The implementation of an evaluation design will indicate with a high degree of validity whether an objective has been met." Significant differences were observed among the three groups, between the didactic and experiential groups, and between the self-study and experiential groups.

A review of the above analyses indicates that there were significant differences among the ratings assigned

TABLE 25

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Evaluation procedures are outlined in detail for all stated objectives.

Mean Ratings: Didactic = 3.20
Experiential = 4.40
Self-Study = 3.98

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	24.05	12.03	20.77	.0001
Within	103	59.63	.58		
Total	105	83.69			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	23.85	23.85	41.72	.0001
Within	66	37.73	.57		
Total	67	61.58			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	9.98	9.98	11.57	.0012
Within	65	56.06	.86		
Total	66	66.04			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	3.37	3.37	9.92	.0023
Within	75	25.47	.34		
Total	76	28.84			

TABLE 26

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Data are available for evaluating all stated objectives.

Mean Ratings: Didactic = 2.90
Experiential = 4.28
Self-Study = 3.55

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	32.82	16.41	22.63	.0001
Within	103	74.68	.72		
Total	105	107.50			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	32.28	32.28	45.23	.0001
Within	66	47.10	.71		
Total	67	79.39			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	6.97	6.97	6.89	.0108
Within	65	65.70	1.01		
Total	66	72.67			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	10.61	10.61	21.77	.0001
Within	75	36.55	.49		
Total	76	47.16			

TABLE 27

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: Evaluation designs meet accepted scientific standards.

Mean Ratings: Didactic = 3.17
Experiential = 4.42
Self-Study = 3.78

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	26.02	13.00	22.40	.0001
Within	103	59.82	.58		
Total	105	85.84			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	25.77	25.77	50.50	.0001
Within	66	33.68	.5103		
Total	67	59.45			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	6.19	6.19	7.18	.0094
Within	65	56.07	.86		
Total	66	62.26			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	7.67	7.67	19.24	.0001
Within	75	29.90	.3986		
Total	76	37.57			

TABLE 28

ANALYSIS OF VARIANCE TO DETERMINE SIGNIFICANCE OF DIFFERENCES BETWEEN AND AMONG RATINGS ASSIGNED TO PARTICIPANTS' INDIVIDUAL EDUCATION PLANS WHO WERE TRAINED IN DIDACTIC, SELF-STUDY, AND EXPERIENTIAL TRAINING PROGRAMS BY FIVE RATERS

Criterion: The implementation of an evaluation design will indicate with a higher degree of validity whether an objective has been met.

Mean Ratings: Didactic = 2.94
Experiential = 4.24
Self-Study = 3.31

Didactic, Self-Study, and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	2	31.15	15.57	24.29	.0001
Within	103	66.04			
Total	105	97.18			

Didactic and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	27.72	27.72	42.69	.0001
Within	66	42.86			
Total	67	70.59			

Didactic and Self-Study

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	2.20	2.20	2.31	.1331
Within	65	61.81			
Total	66	64.01			

Self-Study and Experiential

Source of Variance	df	Sum of Squares	Mean Squares	F	P
Between	1	16.48	16.48	45.10	.0001
Within	75	27.41			
Total	76	43.89			

to the three groups on twenty-four of the twenty- five criteria. Also, it was observed that on twenty-one of the twenty-five criteria, the experiential participants had the highest mean ratings; the self-study group, the second highest mean ratings; and the didactic, the lowest mean ratings. On two criteria, the experiential group had the highest average ratings followed by the didactic group. Finally, on two other criteria, the didactic participants had the highest mean ratings. When one training group was compared with another training group on ratings for the twenty- five criteria, the ratings were significantly different between the experiential and didactic group on twenty-three criteria; between the didactic and self-study group, for sixteen criteria; and between the experiential and self-study groups for seventeen criteria. These results justify rejecting the null hypothesis that training did not make a difference in the quality of individual programs developed by participants from the three groups. To the contrary, the plans developed by the experiential participants were superior to those developed by the self-study and didactic participants, and the plans developed by the self-study group were better than those developed by the didactic group.

Summary of Findings for Testing Hypotheses

This study was designed to test seven null hypotheses. These hypotheses and the results of the tests were as follows:

Hypothesis No. 1: There are no significant differences between the pre- and postattitudinal responses provided by participants trained by the didactic methods.

Results of Tests: The null hypothesis was accepted. Overall, there were no significant changes in the attitude of the didactic participants.

Hypothesis No. 2: There are no significant differences between the pre-and posttest attitudinal responses provided by the participants trained by the experiential methods.

Results of Tests: The null hypothesis was accepted.

Hypothesis No. 3: There are no significant differences between the pre- and postattitudinal responses provided by the participants trained by the self-study methods.

Results of Tests: No significant differences were observed; the null hypothesis was accepted.

Hypothesis No. 4: There are no significant differences between the pretest and posttest responses on the knowledge test for participants trained by the didactic methods.

Results of Tests: Significant differences were observed on a number of test items. The null hypothesis was rejected.

Hypothesis No. 5: There are no significant differences between the pretest and posttest responses on the knowledge test for participants trained by the experiential training methods.

Results of Tests: Significant differences were observed. The null hypothesis was rejected.

Hypothesis No. 6: There are no significant differences between pretest and posttest responses on the knowledge test for participants trained by the self-study methods.

Results of Tests: The null hypothesis was rejected because significant change was observed on a number of items.

Hypothesis No. 7: There are no significant differences among and between the ratings assigned by five raters, using twenty- five criteria, to individual education plans developed by participants who were either trained by the didactic, experiential, or self-study training methods.

Results of Tests: The null hypothesis was rejected. Significant differences were observed among the ratings received by the three groups of participants; between the experiential and didactic participants; between the experiential and self-study participants; and between the didactic and self-study groups.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Purpose and Objectives

The purpose of this study was to determine the effectiveness of three training techniques utilized to train school-based assessment committees in the writing of individual education programs.

The specific objectives of the study were to test the null hypotheses which follow:

1. There are no significant differences between the pre- and postattitudinal responses provided by participants trained by didactic methods.

2. There are no significant differences between the pre- and postattitudinal responses provided by the participants trained by experiential methods.

3. There are no significant differences between the pre- and postattitudinal responses provided by the participants trained by self-study methods.

4. There are no significant differences between the pretest and posttest responses on the knowledge test for participants trained by didactic training methods.

5. There are no significant differences between the pretest and posttest responses on the knowledge test for participants trained by experiential training methods.

6. There are no significant differences between the pretest and posttest responses on the knowledge test for participants trained by self-study methods.

7. There are no significant differences among and between the ratings assigned to twenty-five criteria by five raters to individual education programs developed by participants who were trained by either the didactic, experiential, or self-study training methods.

The study was further designed to determine the reliability of two instruments, developed by the researcher, to determine the reliability of quality ratings assigned to individual educational programs written by professional educators, who had been involved in the special training sessions.

Description of Participants and Instruments

One hundred and four professionals were involved in the training and responding phases of the study. The group of professionals involved in the investigation consisted of twenty (20) principals, eighteen (18) counselors, and sixty-six (66) special teachers who worked with exceptional children. These individuals, after being identified and selected for the project, were assigned at random to one of three training groups. One group was trained in a didactic mode, another in an experiential mode, and a third in a self-study mode.

Twenty-nine (29) participants were randomly assigned to be trained in the didactic group, thirty-eight (38) to be trained in the experiential group, and thirty-seven (37) to be trained in the self-study group. Supervisors in the field of special education led and coordinated the five-hour training sessions.

At the beginning and close of the training sessions, the participants responded to a thirty-item attitudinal scale and a seventy-item knowledge test. Also, at the conclusion of the training sessions, all participants completed an individual education plan for an exceptional student for whom pertinent data were supplied. Using twenty-five criteria, five raters provided quality ratings to the 104 programs that were written by the participants.

Items for the attitudinal and knowledge tests, as well as twenty-five criteria for rating the individual education programs written by the participants, were developed by the researcher with the aid of specialists in education for exceptional children and research.

Analysis of Data

Data collected as part of the study were analyzed by the use of several standard statistical techniques. Reliability of instruments--attitudinal and knowledge--was determined by obtaining zero-order correlations between

odd and even responses. The reliability of ratings was obtained by calculating zero-order correlations between the total quality ratings assigned by the five raters to the 104 participants who completed individual education programs.

The significance of differences between the pretest and posttest attitudinal and knowledge scores were obtained through chi-square tests for each group of participants. The significance of differences between the ratings assigned to participants from the didactic, experiential, and self-study groups was obtained by using the analysis of variance statistical technique. In all analyses, .05 was the level of significance.

Summary of Findings

The correlation analyses conducted to establish the reliability of the attitudinal and knowledge tests and the reliability of the ratings assigned to individual education programs by the five raters revealed results that met acceptable criteria. The odd-even item correlational analysis of the two tests resulted in a correlation coefficient of +.89 for the knowledge test. When inter-correlations were calculated to determine rater reliability for the five people who assigned ratings to the individual education programs, the range in the magnitude of correlations was from a low of +.916 between two raters to a high of +.972 between two other raters.

Change in Attitude

Participants in each of the three groups were administered a 30-item attitudinal survey on a pretest and posttest basis. In order to determine whether there were changes in participant attitudes within each of the three groups, a chi square analysis was made. The analysis did not reveal significant differences between the pretest and posttest responses for participants in the didactic and self-study groups for all thirty items in the attitudinal scale. For the experiential group, significant change was detected on only two of the thirty survey items. Those items were as follows:

> The individual education program is doomed to failure because the cost effective ratio will be too high

and

> It is impossible to develop a valid individual education program because the tests for collecting information about students are not valid.

The participants in the experiential group moved to a more negative attitude on these two items between the beginning and ending of the training period.

Change in Knowledge

One of the objectives of the study was to determine whether the participants in each of the three training groups would make significant improvement in knowledge as a result of having participated in the training sessions. The participants in the didactic, experiential, and self-study

groups were administered a knowledge test at the beginning and end of the training period. Chi square analyses were made to determine whether there was significant positive change within each of the three categories of participants. The analyses revealed that the didactic group improved on 26 of the 70 items, or on approximately 37 percent of the items; the experiential group improved on 15, or 22 percent of the items; and the self-study group 17, or 24 percent of the items.

An analysis of the improvement for the three groups revealed that all three groups shared improvement on seven items; the didactic and experiential group shared improvement on four items; and the experiential and self-study group shared improvement on one item. It was concluded that there was little variation among the three groups in the number of knowledge items on which improvements were made but that there was considerable variation among the three groups relative to the specific items on which change was observed. It was concluded that the type of training technique affected how much was learned and what types of things were learned.

Change among all three groups was observed in the following areas: (1) the terminology used in stating academic performance; (2) the inclusion or exclusion of gifted and talented students in programs mandated by state and federal legislation, (3) provisions in the legislation

for racial balance, the definition of underachievement, (5) the conditions under which individual education plans should be written, and (6) the age range for students under the legislation.

Summary of Ratings of Individual Education Programs

In order to compare the performance of the participants who were trained by didactic, experiential, and self-study methods, five raters, utilizing twenty-five criteria developed by the researcher, assigned ratings to the individual education programs developed by the participants. An analysis of variance procedure was applied to the results to determine whether there were significant differences between and among the quality ratings assigned by the raters.

When the analysis of variance test was applied, it was discovered that there were significant differences among the assigned ratings for the three groups on twenty-four of the twenty-five criteria. It was also observed that on twenty-one of the twenty-five criteria, the experiential participants had the highest mean ratings; the self-study group, the second highest mean ratings; and the didactic, the lowest mean ratings.

When the quality ratings on the individual plans between the didactic and experiential groups were compared, significant differences were observed between the ratings

for the two groups on twenty-three of the twenty-five criterion items. Similarly, there were significant differences observed between the ratings assigned to the didactic and self-study groups for sixteen of the twenty-five items and between the ratings assigned to the experiential and self-study group on seventeen of the criteria. Overall, the experiential participants received higher ratings than the didactic and self-study participants and the self-study participants received higher ratings than the didactic participants.

Summary of Results from Testing Hypotheses

From results of this study, it was concluded that participation in the training program had no significant effect on the attitudes of the participants who were trained by the didactic, experiential, and self-study methods. The training appeared to have effect on the knowledge that was gained by all three groups of participants. It was concluded that there were significant differences in the quality of the individual education programs written by didactic, experiential, and self-study participants. In general, the individual education programs written by the experiential participants were judged to be better than those written by the didactic and self-study participants. The self-study participants were judged to have written better plans than the didactic participants.

Conclusions

The findings of the study support the following conclusions:

1. It is possible to develop a comprehensive training manual useful in training school-based assessment committees to write individual education programs for special students.

2. The training manual can be developed in such a way that it can be easily replicated for use in other school systems.

3. The training manual can be used for training either individuals or groups.

4. It is possible to develop assessment instruments that provide reliable change measures for both attitudes and knowledge.

5. It is possible to develop criteria and rating procedures and to train raters to provide reliable measures of the quality of individual education programs written by participants in the training session.

6. Participation in training sessions has little effect on the attitudes of the participants toward developing individual education programs.

7. Training sessions have significant effects on the knowledge that participants gain relative to the development of individual education programs for special students.

8. The amount of knowledge gained through training is essentially the same regardless of whether participants are involved in didactic, experiential, or self-study training methods. However, significant variation can be expected among the three groups in the nature of the knowledge gained.

9. The type of training technique provided makes a significant difference in the quality of the individual education programs developed by the participants.

10. Participants who receive experiential training tend to develop better individual education plans than participants who receive didactic or self-study training. Participants who are involved in the self-study training mode develop better individual education programs than participants who are trained with the didactic technique.

11. The findings of this study indicate that, of the three methods studied, the most cost-effective and productive method for training personnel to write individual education programs for special students is the experiential approach.

12. The training manual was designed in such a comprehensive manner that it could be used to educate parents of exceptional students about handicapping conditions, identification and placement procedures, responsibilities of public educational systems, and rights of exceptional children and their parents. The manual could also be used

in training personnel in community agencies who might share with school systems, the responsibility of offering educational and/or related services to exceptional students.

Recommendations for Further Study

1. The participants in this study developed individual education programs on the basis of data provided for one student. Replication of the study, using data for a number of students, is recommended to provide additional reliability data.

2. The study indicated that there were gains in knowledge on the part of the participants. Further study is needed to determine whether gains in knowledge make a significant impact on the future professional performance of those individuals.

3. The study was undertaken when the concept of individual education programs was first introduced to educators. Additional research is needed to determine whether there have been changes in the attitudes of educators regarding the development of individual education programs since the concept was introduced.

4. The intent of the individual education program concept was to insure better educational benefits for special students. Research is needed to determine whether the writing of individual education programs for special students has, in fact, improved educational opportunities for special students.

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APPENDIX A

TRAINING MANUAL

HIGHLIGHTS OF P.L. 94-142

The Education for All Handicapped Children Act (94-142), signed into law by President Ford on November 28, 1975 was designed to assure that all handicapped children have available to them a free, appropriate public education. This bill emphasizes that special education and related services are needed to meet the unique needs of handicapped children. Other assurances included are the protection of children and parents' rights; assistance to states and local school systems; and effectiveness of efforts.

Handicapped children are defined as follows:

a. "Mentally retarded" means significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period, which adversely affects a child's academic performance.

b. "Deaf" means a hearing impairment which is so severe that the child's hearing is non-functional for the purposes of educational performance.

c. "Hard of hearing" means a hearing impairment, whether permanent or fluctuating, which adversely affects a child's educational performance.

d. "Orthopedically impaired" means a severe orthopedic impairment which adversely affects a child's educational

performance. The term includes impairments caused by congenital anomaly such as clubfoot or absence of some member; disease such as poliomyelitis; and other causes such as cerebral palsy, fractures, burns, amputation.

e. "Other health impaired" means limited strength, vitality, or alertness, due to chronic or acute health problems such as a heart condition, tuberculosis, nephritis, hemophilia, epilepsy, and diabetes.

f. "Seriously emotionally disturbed" means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree: An inability to learn which cannot be explained by intellectual, sensory or health factors; an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; inappropriate types of behavior or feelings under normal circumstances; a general pervasive mood of unhappiness or depression; or a tendency to develop physical symptoms or fears associated with personal or school problems. The term includes children who are schizophrenic or autistic but does not include children who are socially maladjusted but not emotionally disturbed.

g. "Specific learning disability" means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell or to do mathematical

calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain disfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, of mental retardation, or of environmental, cultural, or economic disadvantages.

h. "Speech impaired" means a communication disorder, such as stuttering, impaired articulation, a language impairment, or a voice impairment, which adversely affects a child's educational performance.

i. "Visually handicapped" means a visual impairment which, after correction, adversely affects a child's educational performance. The term includes both partially and blind children.

"Free appropriate public education" means special education and related services which--

a. are provided at public expense under public supervision and direction;

b. meet the standards of the state educational agency;

c. include preschool (unless inconsistent with state law), elementary school, and secondary school;

d. are provided in conformity with an individualized education program.

"Related services" means transportation and such developmental, corrective, benefit from special education, and

includes speech pathology and audiology, psychological services, physical and occupational therapy, recreation, early identification and assessment of disabilities in children, counseling services, and medical services for diagnostic or evaluation purposes. The term also includes school social work services, parent counseling and training, providing parents with information about child development, and assisting parents in understanding the special needs of their child.

P.L. 94-142 includes the following assurances:

1. "Zero-reject"

a. A "Free Appropriate Public Education" must be provided all handicapped children. The law applies to children ages 3-21, unless inconsistent with state law. In North Carolina, mandated ages are 5-21. Full compliance must be reached by September 1, 1978.

b. Service priorities for use of federal funds for the handicapped (Title-VIB) are set: First priority is "totally excluded," second priority is "functionally excluded" (i.e., most severely handicapped or inappropriately served).

c. Parents have the "right to due process" if the child is not served appropriately.

2. "Individually Appropriate Education"

a. An Individualized Education Program will be written for all children receiving special education services. These are subject to inspection by the Bureau of Education for the Handicapped.

These plans will be written by October 1, 1977.

b. Handicapped children will be served in the least restricted environment.

c. Special placement will be reviewed at least annually.

3. "Non-Discriminatory Testing"

a. Testing must be done in the child's "native language or dominant mode of communication."

b. No single procedure is to be used for making placement decisions.

c. There is a ceiling (12% of the state's total school population) on the number of handicapped children eligible for funding, of which no more than 1/6 (2% ceiling) of funding is for children classified as "Learning Disabled."

d. The State Education Agency may recoup monies from Local Education Agency for children found to have been mislabeled.

4. "Least Restrictive Environment"

a. The burden of proof for exclusion from the regular program is on the local education agency.

b. A continuum of services must be available.

c. Lack of local resources will not avoid responsibility for the local education agency to provide education to all handicapped children under this law.

d. Handicapped children placed by the local education agency or the State Education Agency in private schools have the same rights as children in public schools.

5. "Public Parental Involvement"

a. Parents have the right to be involved in writing Individual Education Plans.

b. Parents have the "right to bring suit."

c. Parents have the right to "Procedural Due Process."

d. Parents have the right of access to information on their child.

e. Parents have the right of privacy for information on their child.

f. The State Education Agency will establish a state-wide advisory council.

g. Public information will be available on programs and policies regarding handicapped children.

h. Both the State plan and the local applications are public documents and must be made available to parents and other interested parties upon request.

6. "Procedural Due Process"

a. Written notice must be given whenever the school acts, or fails to act, on a child's placement.

b. Notice must be given in the native language of parents.

c. Opportunity for parental complaint in a hearing must be provided.

d. An impartial hearing officer must be made available for parental appeal procedures.

e. Parents have the right to seek counsel.

f. Parents have the right to call witnesses in an appeal procedure.

g. Parents have the right to subpoena documents.

h. Parents have the right to appeal to the State Board of Education if the appeal at the local level does not meet with parent approval.

i. Parents have the right to bring civil action against the school system.

j. Parents have the right to receive a written transcript of the hearing and the judgment of hearing officer.

P.L. 94-142 stipulates that federal money may only be used for the additional costs involved in educating handicapped children. A given school district must assure that a sum of State and local funds equal to the average annual per pupil expenditure for all children being served in the district is available for each handicapped child before federal funds can be used.

(The assurance statements are edited reprints of a North Carolina State Department of Public Instruction pamphlet.)

HIGHLIGHTS OF NORTH CAROLINA HOUSE BILL 824 (THE CREECH BILL)

This bill attempts to make North Carolina law, regulations, and practice regarding handicapped children consistent with federal legislation. Variations from Public Law 94-142 are as follows:

1) Handicapped children as defined by Public Law 94-142 are included in the North Carolina HB 824 term "children with special needs." This bill adds a category which Public Law 94-142 does not include, that being the "Gifted and Talented."

2) The zero reject clause is effective as of July 1, 1977. (Public Law 94-142 has a September 1, 1978 zero reject date.)

3) North Carolina HB 824 specifies a maximum amount of time between referral of a child to a special program and a decision regarding program placement:

a. within 30 days of initial referral, parents must be sent a written description of the evaluation procedure and consent for evaluation must be obtained;

b. within 30 days after sending the written description of the evaluation procedure, an evaluation, diagnosis, and proposal for an educational program appropriate to the needs of the child must be completed;

c. within 15 calendar days after the diagnosis, evaluation, and program proposal are completed, the parents or guardian must receive an explanation of such either in writing or by their dominant mode of communication;

d. within 20 calendar days after the completion of the diagnosis, evaluation, and program proposal, a conference shall be scheduled by a school system staff member to interpret these reports;

e. this conference shall be held no later than 30 calendar days after the date it is scheduled. Parents or guardian may waive the interpretive conference.

4) If a local educational agency suspends or expels a child with special needs from a public school program for a period of more than ten (10) days the local educational agency shall continue to provide the child with essential special education or related services.

(Number 3 above is an edited statement from North Carolina HB 824.)

The Spirit of the Law

It is easy to fall into the habit of worrying so much about the letter of the law--guidelines, regulations, restrictions, etc.--that we lose sight of the philosophy, the "spirit of the law." We forget that policies and rules serve meaningful purposes; that they exist in order to fulfill needs that we, the professionals, have identified.

We often focus so much on what we as individuals have to do under the law that we forget about what the law can do to help the profession. The following concepts are fundamental to the laws pertaining to the education of the handicapped and are intended to aid professionals in their support of a child's growth.

Advocacy

P.L. 94-142 and North Carolina H.B. 824 serve an advocacy function. These laws evolved to protect children from the negative effects (often unintentional) associated with exclusion from services, or inappropriate service.

Justification

One stipulation of P.L. 94-142 is that a local education agency must justify the placement of a child into a special program. That is, the professional has a responsibility to provide a placement that is beneficial for the child and, at the same time, is in the least restrictive alternative environment.

The Teacher's Role

Before a child is considered for placement in a special program the classroom teacher retains the right of working with a child to offer the appropriate education within the regular classroom. If the teacher thinks that the child could benefit from additional or alternative services,

referral is then made to the appropriate committee or chairperson of special education. The committee then has the right and responsibility to determine the educational needs and goals for the child. A parent may, however, request (in writing) to the school that a child be referred for placement in a special program.

Equal and Appropriate

There is nothing in the Constitution requiring a state to provide an education for its children. However, the Constitution does require when Federal funds are used to provide such service, it be provided without discrimination. Thus, if a state accepts money under Title VI Part B, the state must agree to comply with the non-discriminatory nature of P.L. 94-142, which essentially says that handicapped children have equal rights to appropriate educational experiences, whatever the cost. If a state does not accept Title VI Part B funds, the state must comply with the Federal Right of Handicapped Persons Act (Section 504).

Parental Involvement

The law requires that parents have an opportunity to be actively involved in the program of their handicapped child at each step of the educational process. This provision opens up enormous possibilities for home-school cooperation.

Flexibility

Historically, childreen seen as having learning/behavior problems were permanently placed in special programs, often becoming "career special education students." P. L. 94-142 requires that a child move out of special programs as soon as needs are met. A review of the child's placement is to be made at least annually to determine the least restrictive environment in which his/her needs can be met.

Continuum of Services

P. L. 94-142 recognizes that the educational needs of children vary considerably. It is the spirit of the law to provide services that allow for this variability.

Least Restrictive Environment

If the local educational agency cannot demonstrate that a child needs a special service, it is not given. Similarly, service is no more intensive than is needed. To use an exaggeration, a child is not placed in a residential treatment center in order to receive help in reading for an hour a day.

(Edited from a North Carolina State Department of Public Instruction paper.)

THE INDIVIDUAL EDUCATION PROGRAM

Definition of the Individual Education Program

The Individual Education Program is to be a written statement describing the educational objectives for and the services to be provided to each identified handicapped or gifted child. Educational objectives and services include both instruction and those related services required to meet the unique needs of these children, and are derived from a careful evaluation of the child and his environment. The elements included in the plan are:

1. statements of present educational performance
2. annual goals
3. short-term instructional objectives
4. extent the student will be able to participate in regular education programs
5. specific educational services to be provided
6. projected date for initiation
7. anticipated duration of services
8. evaluation procedures including criteria and schedule for determining whether instructional objectives are being achieved. This evaluation is to be on at least an annual basis.

Purpose of the Individual Education Program

1. It is the basis for discussion in program planning for a special child.

2. It is an organizer for the development of educational practice.
3. It makes educational practices visible to all concerned.
4. It allows an opportunity for involvement of all concerned.
5. It enhances the development of complete activities and services.
6. It supports movement toward normalization.
7. It supports growth potential.
8. Although it is not a contract, it fosters educational accountability.
9. It provides a system of feedback so that it can be upgraded and updated as necessary.

Organizational and Administrative Aspects

I. Individualized Education Planning Conference

This is a meeting conducted for the purpose of developing, reviewing and/or revising a child's individualized educational program.

Participants in the individualized education planning conference must include the following:

A. A representative of the local educational agency, other than the child's teachers, who is qualified to provide or supervise the provision of special education (principal, or local director of exceptional children).

B. The child's teacher or teachers, special or regular, or both, who have a direct responsibility for implementing this child's individualized education program (including speech therapy)

C. One or both of the child's parents (if parents do not attend the planning conference, documentation of their opportunity to participate must accompany the plan). If the parent has a communication barrier such as language other than English, the local education agency must take whatever action necessary to assure parent understanding.

D. Where appropriate, the child should be a participant in the meeting.

E. Other individuals may attend at the discretion of the parents or agency. These include but are not limited to the following: school psychologist, guidance counselor, or nurse.

For students currently receiving special education and related services, this conference must be conducted as soon as possible after the beginning of each school year but not later than the first thirty days of attendance by the child (October 1, 1977 is the initial deadline).

For students who are not at present identified as handicapped or gifted, the individualized planning conference must be conducted within thirty (30) days of the formal determination of the child's eligibility for special education and related services.

II. Committee Member Roles

A smoothly-running committee depends upon the fulfillment of certain roles by its members. While the chairperson has the ultimate responsibility for the quality of the decisions which are reached by the committee, the most effective use of the committee structure comes with established procedures for shared decision-making.

The committee members should decide which decision-making style best meets their needs. An agenda can be a great time saver but should allow for some flexibility. It is recommended that a log be maintained of committee meetings.

III. Function of the Committee

The school-based committee is responsible for the development or revision of the Individual Education Program. The format of this plan is in the appendix. The responsibilities and procedures that the committee must follow to fulfill the requirements of the Individual Educational Program are outlined to correspond to the numbers on the form.

1) Personal information should be recorded in the appropriate spaces.

2) The name and position for each person who participates in the meeting must be recorded. The local educational agency shall insure that a representative of the local education agency, the child's teacher, and/or special

teacher, the child, when appropriate, and the child's parent or guardian are included in the meeting. Members should initial approval of the plan.

3) The present level of educational functioning should be included. Areas to be considered include academic achievement, social adaptation, prevocational and vocational skills and self-help skills. More than one nondiscriminatory assessment must be used to evaluate the child. The Wechsler Intelligence Scale for Children, Revised, Wide Range Achievement Test, Peabody Individual Achievement Test, and Guilford County Adaptive Behavior Scale, Bender Gestalt etc., are appropriate assessment instruments.

4) Prioritized goal statements must be made for educational needs as described in the present functioning level section. These goals must describe the educational performance to be achieved by the end of the school year. Academic goals for EMR and LD students will be taken from the Guilford County Exceptional Child Services Curriculum Guide. It is not necessary to complete goal statements for areas which are age- or grade-appropriate.

5) Instructional objectives should reflect sequential steps for goal accomplishment and should be written in measurable terms. Academic objectives for EMR and LD students are to be taken from the Exceptional Child Services Curriculum Guide. It is not necessary to write instructional objectives for areas which are age- or grade-appropriate.

6) Special and related services and materials to meet special educational needs are to be listed.

7) Individuals responsible for the implementation of special or related programs are to be listed according to functioning levels noted in column three (3).

8) Projected dates for initian and completion or review of services are to be listed by areas.

9) The objective criteria and evaluation procedures column should specify the method of assessing the child's attainment of the short-term objectives.

10) Special program placement and related services are to be checked in the appropriate space.

11) Justification for special program placement is to be briefly stated.

12) The student's schedule of special services is to be written in the designated space.

13) The percent of time the student spends in the regular educational program is to be written in the designated space.

14) Parents must be given the opportunity to participate in this educational program writing session. If present, they may sign in the appropriate space at the conclusion of the meeting. If not present, the plan must be presented to them (possibly first by telephone and then by mail) after which they sign in the appropriate space. If parents are not present at the writing session, documentation of efforts to facilitate their presence at the meeting must be attached to the plan.

Content of Individualized Educational Program

An Individualized Educational Program must be written for any child who has been appropriately identified as a handicapped or gifted child who is receiving or will receive special education, regardless of what institution or agency provides or will provide special education to this child.

The program is to be written for either the time the child spends in a special program or for special modifications to be made in the regular classroom.

All areas noted as levels of educational performance (which indicate a need for special services) must be spoken to in the remainder of the plan.

The Individual Educational Program must contain the following major information:

I. Present Levels of Educational Performance

In order to determine program content, it is necessary first to determine the child's current functioning levels. This information should be obtained from as many different perspectives as possible in order to view the child's entire range of capabilities and to develop a broad program to meet all the needs of the child. Each person involved with the child (teachers, parent, psychologist, therapist, etc.) should have the opportunity to provide input regarding levels of performance.

A. Academic achievement. There is a variety of assessment procedures and measures that can be used to obtain the child's academic levels. Informal measures may include classroom observations, anecdotal records, and parent reports. Formal measures include the Wide Range Achievement Test, the Peabody Individual Achievement Test, and the Comprehensive Test of Basic Skills. Descriptors to use in stating levels of academic performance are as follows:

1. Grade level performance
2. Above grade level performance--indicate achievement in grade equivalency using the most current individual standardized test and date administered.
3. Below grade level performance--indicate achievement in grade equivalency using the most current individual standardized test and the date administered.
4. Superior or advanced performance--indicate achievement in grade equivalency using the most current individual standardized test and date administered.

B. Social adaptation. Informal measures may include classroom observations, anecdotal records and parent reports. The Guilford County Adaptive Behavior Scale is to be used for formal assessment. Descriptors to use in stating levels of social adaptation are as follows:

1. Acceptable level of performance
2. Difficulty with peer group relationships

3. Difficulty with adult relationships
4. Displays disruptive classroom behaviors
5. Displays withdrawn behaviors
6. Misrepresents the truth
7. Displays nervous habits

C. Prevocational and vocational. Classroom observations, parent reports, and the Guilford County Adaptive Behavior Scale should be utilized in assessment of this level of educational performance. Descriptors to use in stating level of performance are as follows:

1. Acceptable level of performance
2. Unacceptable level of performance (if unacceptable, indicate specific behaviors)

D. Psychomotor (fine and gross motor skills). Informal measures may include teacher observation of handwriting and copying skills. Formal measures to be used are the Bender-Gestalt Motor-Integration Scale or the Berry Test of Visual Motor Integration. Descriptors to use in stating psychomotor level are as follows:

1. Acceptable level of performance
2. Unacceptable level of performance (if unacceptable, indicate specific problems)

E. Self-help skills (applicable to Trainable Mentally Retarded and Self-Contained Educable Mentally Retarded).

Informal measures may include teacher observation of self-help skills, anecdotal records, and parent reports. The formal measure to be used is the Guilford County Adaptive Behavior Scale. Descriptors to use in stating level of self-help skills are as follows:

1. Acceptable level of performance
2. Unacceptable level of performance. If unacceptable, indicate specific problem areas such as dressing, toileting, and safety.

F. Language skills. Informal measures may include teacher or parent observation. If formal assessment results are needed these should be obtained from the speech clinician and summarized in the appropriate space. If assessment indicates the need for special services in the area of language development, articulation, or hearing, the speech clinician should become a member of the planning conference.

II. Annual Goal Statements

In this context, it is necessary to define the term "goal." A goal is a broad general statement of program intent which usually encompasses many skills within one area of program content.

Goals must be written for stated areas of educational performance which identify a need for special education or related services and should describe the educational performance to be achieved by the end of the school year.

Academic goals for EMR and LD are to be taken from the Guilford County Exceptional Child Services Curriculum Guide. (Example: Completion of level two reading.)

Social adaptation, prevocational and vocational, and psychomotor goals should be based on the target areas described in the functioning level section.

III. Instructional Objectives

Instructional objectives written in measurable terms provide specific information about expected child behavior at the end of instruction and communicates to others what the child is to learn.

Academic objectives for EMR and LD are to be taken from the Guilford County Curriculum Guide. (Example: Skills No. 1-27 of level two reading.)

Objectives for social adaptation should be related to the target behaviors indicated earlier and should be stated in measurable terms. (Example: To reduce school absentism rate by 75%.)

Psychomotor and self-help skills should be treated in the same way.

IV. Special and Related Services and Materials Needed for Remediation

In any geographical area, a wide or narrow range of services and programs is available. All educational services considered by the committee as important to the student's

special educational needs must be listed, even if these services are not available.

Materials needed might include high-interest, low vocabulary tests; large print or braille texts; and special equipment such as typewriter, etc.

V. Individuals Responsible for Implementation of Special Programs

Only those special services which the student will receive are to be included. These services must relate to the identified special needs. (Example: EMR resource teacher, speech therapist, consultation from the school psychologist.) If specific modifications are to be made by the classroom teacher and these modifications have been incorporated into the goals and objectives section, the classroom teacher should also be listed.

VI. Initiation and Completion Dates

Services listed must include initiation and anticipated completion dates for each service or program to be provided.

VII. Evaluative Criteria

Ideally program evaluation is a formative process in which the program implementors continually document progress or in some cases lack of progress. The use of an objective-based curricular approach offers the advantage of systematic assessment, teaching and evaluation. Evaluation

criteria should be directly related to the instructional objectives. Anecdotal observation, formal pre- and post-assessments, and sequential skill checklists are to be used in evaluation.

VIII. Special Program Placement and Related Services

Any special or related service which the child will be receiving should be indicated with a check.

IX. Justification of Placement

A statement as to why the placement committee recommended the special placement is needed. (Example: It is felt that the structure of the EMR resource program can best meet the special goals stated for this student.)

X. Student Schedule of Special Services

State the projected weekly schedule of special services such as Monday-Friday, 9:00 A.M., EMR Resource Room. Schedules of secondary students participating in EMR departmentalization programs should reflect this type of program.

XI. Percentage of Time in Regular Educational Program

Public Law 94-142 stipulates that to the maximum extent appropriate, handicapped children are to be educated with children who are not handicapped. Therefore, the percentage of time the student is to be in the regular educational program should be determined by the nature or severity of the handicap. The child should remain in the regular education environment

"unless that education with the use of supplementary aids and services cannot be achieved satisfactorily." The following guide is to be used for completing this section:

Based on a six-period or six-hour day

one period or one hour in regular class is 17%;
two periods or two hours in regular class is 33%;
three periods or three hours in regular class is 50%;
four periods or four hours in regular class is 67%;
five periods or five hours in regular class is 83%;
six periods or six hours in regular class is 100%.

XII. Parental Participation

Steps must be taken to afford parents the opportunity to participate in the development of a handicapped or gifted child's individual education program, including individual or conference telephone calls. If parents cannot be convinced to attend a meeting, a record of attempts to arrange a mutually agreed on time and place should be kept. (Sample form included in Appendix) It is suggested that a copy be made of the letter of invitation to the parent. If the parent does not attend the Individual Education Program planning meeting, this should be noted on the school copy of the parent letter of invitation.

Detailed records of telephone calls, other correspondence and home visits should be kept as documentation of the attempt to arrange an appropriate meeting time and place.

It is also recommended that if the parent does not attend the planning session, the results of the planning conference should be shared with the parent (telephone, mail, etc.). The

parents must indicate that they were afforded the opportunity to participate in the planning session.

WRITING AN INDIVIDUALIZED EDUCATIONAL PROGRAM

Using the enclosed data and directions, complete an Individual Education Program on Joseph Slick. Directions are numbered to correspond with numbers on the Individualized Education Program format.

1. Complete the information for number one (1).
    1. Subject is to be completed for high school students and refers to special education subjects to which the child is assigned.

Name: Address: Grade: Subject:

2. Record the names of the members of the committee (see back of EC-4) and their position. Other support personnel may be included in this planning session such as psychologist, nurse, etc. If so, those names and positions should also be recorded. Membership may vary depending on the case. If parents attend, their name should be added.

Name	Position	Initial	Date

Committee members should write their initials in the designated space after the plan has been completed.

3. Data for this section can be found on forms EC-1, EC-4, Guilford County Adaptive Behavior Checklist, and the psychological. Utilizing the descripors given earlier (pp. 20-22 in this manual) complete no. 3.

3. Present Level of Educational Functioning
Academic Achievement Level of performance: Test(s) used Date Reading Spelling Arithmetic
Social Adaptation
Prevocational and Vocational
Psychomotor (fine and gross motor)
Self-help Skills
Language Skills

4. and 5. Assume that prior to the planning meeting, the special teacher has assessed the student's academic level of functioning utilizing the sequential skills checklists in the Guilford County Exceptional Child Services Curriculum Guide. Using the enclosed sample checklists, indicate academic goals (by priority) which should be stated for the student. Assume the student had

demonstrated mastery of previous levels in reading and arithmetic. Combine spelling goals with the reading goals.

4. Annual Goals Statements	5. Instructional Objectives

6. Indicate special or related services needed according to the stated areas of educational performance. Special materials should also be listed.

7. and 8. Indicate special or related services which will be provided and by whom and the date for initiation and anticipated date for completion.

7. Individuals Responsible for Implementation of Special Programs	8. Dates for Initiation	Completion or Review

9. State what criteria will be used to determine if educational objectives have been attained.

9. Evaluative Criteria

10. Indicate special program placement and related services.

10. List all on #10

11. Write a simple justification for this placement

11.

12. State the projected weekly schedule of special services which the student will receive.

12. Student Schedule of Special Services

13. State the percentage of time the student will be educated in the regular educational program. (Refer to guidelines presented earlier in this manual on p.26.)

13. Percentage of Time in Regular Educational Program

14. It is not necessary to complete this item at this time. You may check your Individual Education Program with the one on the next page.

EC-1

TEACHER REFERRAL

(To be used by the regular class teacher and submitted to the principal or his designee)

Name of Student Joseph Slick Sex M Birthdate 5-12-65

Age 11 Grade/Team/Subject 6 Referring Teacher Barnes

1. a. Please describe, being brief but specific, the reasons for which this referral is being made. Address your comments to the situation as you see and understand it.

   Joseph is performing below grade level in all academic areas.

   b. What methods have you tried to solve the problem?

   Allowing more time for him to finish his work.
   Giving as much one-to-one instruction as possible.

2. a. What do you perceive as being the particular strengths of this student?

   His willingness to try to perform the task which he is asked to do.

   b. Weaknesses:

   Slow to finish.
   Tendency to become frustrated.

3. When is a convenient time for us to talk?

   After 2:30

L. Barnes
Referring Teacher

11-76
Date

EC-4

GUILFORD COUNTY SCHOOLS
Drawer B-2
Greensboro, N. C. 27402

SUMMARY INFORMATION SHEET AND CENTRAL OFFICE REFERRAL FORM

PERSONAL DATA

Student Joseph Slick School Tall Trees Elemen. Date 11-76
Birthdate 5-12-65 Age 11 Grade 6 Teacher L. Barnes
Parents (or guardian) Mr. and Mrs. Samuel Slick
Address Box 20, Tall Trees, N. C. Phone 222-2222
Occupation Housewife / Mother Business Phone _____
Child Lives With Parents X
Occupation Construction Company Business Phone _____
Child Lives With Other _____
Race W Others In Home 3 Type of Referral Learning Disabilities

HEALTH RECORD

General Health: Good X Poor _____
Vision: Normal X Deficient __ Corrective Lenses: Prescribed __ Used __
Hearing: Normal X Deficient __ Hearing Aid: Prescribed __ Used __
Speech: Normal X Deficient ___ Therapy ___ Prognosis _____
Unusual Illness or Condition, or Comments None

CLASSROOM ACHIEVEMENT

General Progress: Above Average _____ Average _____
Below Average X Inconsistent _____
Retention: Yes __ No X If yes, circle grade-- K 1 2 3 4 5 6 7 8 9 10 11 12
Present Grade Level of Classroom Achievement: Reading 3
Math 3 Spelling 3 Writing 6

Behavior: passive	____	: X :	____	assertive
bored	____	: X :	____	interested
resistant	____	: ____ :	X	cooperative(with teacher)
isolated	____	: X :	____	involved

EC-4 (p. 2)

Absences: (days per school year)

K		3	3	6	9
1	5	4	6	7	10
2	18	5	5	8	11
					12

List any agencies who have had contact with the child (i.e., DEC, Mental Health, VR).

Date	Agency or Special Services

EDUCATIONAL OR PSYCHOLOGICAL ASSESSMENT

Date	Test Instrument	Results (IQ Scores, %iles, Grade Equivalency)	
11-11-76	Slosson Intelligence Test	80-89	
11-11-76	Wide Range Intelligence Test	Reading	3.6
		Spelling	3.6
		Arithmetic	3.6

SCHOOL-BASED COMMITTEE CHECKLIST

Student Joseph Slick School Tall Trees

Steps	Date	Checklist	Individual Responsible
1.	11-76	Teacher Referral (including appropriate inventory	L.B.
2.	11-76	Review of Cumulative Folder	Z.R.
3.	12-76	Recommendation for Screening	L.B.
4.	12-76	Screening Tests Completed	Z.R.
		WRAT	X
		SIT	X
		Slingerland	
		Other	
		Medical Evaluation	X
		Visual Examination	X
		Auditory Examination	X
	1975	Recent events in the child's life which may be affecting current functioning (death, change in residence, injury, etc.)	Sister killed in swimming accident 7-76

SCHOOL-BASED COMMITTEE RECOMMENDATION

We have reviewed the reports and considered all the material pertaining to the appropriate placement of the child named herein, and we recommend the following remedial action and specific services for said child's benefit (list areas needing special attention, enrichment, and/or remediation and general recommendations for the child):

Further evaluation for possible LD placement.

Date: 12-76

R. Mobley
Principal

(guidance counselor) Z. Roth
Committee Member

(classroom teacher) L. Barnes
Committee Member

special teacher B. Teague
Committee Member

(4th grade classroom teacher) O. Smith
Committee Member

*Adaptive Behavior Scale

Name Joseph Slick Grade 6 Sex M School Tall Trees

Date 11-76 Date of Birth 5-12-65 Age 11

Referral: EMR _____ LD X Behavioral _____

Ethnic Background: B _____ W X Other (Specify)____

Occupation: Father Construction

Mother Housewife

The required part of evaluating children for eligibility in special programs involves evaluation of their adaptive behavior. Adaptive behavior is defined as 1) the degree to which the individual is able to function independently, and 2) the degree to which he meets satisfactorily the culturally imposed demands of personal and social responsibility.

An assessment of adaptive behavior includes how well the child adapts to the school, home, and community environments. Information can be gathered from school records, school personnel, parents, and/or other professionals who work with the child.

COMPUTING ITEM SCORES. The Adaptive Behavior Scale (ABS) utilizes three types of items which require different scoring procedures.

(1) "Check all statements that apply," e.g. I.A. INDEPENDENT FUNCTIONING--Eating. Total the number of checks, and record this number on the line provided.

(2) "Check only one," e.g. I.B. INDEPENDENT FUNCTIONING--Toilet Training. Record the number circled on the line provided.

(3) "Circle the number that applies for all statements," e.g. V. CLASSROOM BEHAVIORS. Total the numbers circled for each section (Activity, Reaction to Frustration, Social Demands, Other Classroom Behaviors) and place on their respective lines.

*This scale was adapted from the 1974 Revision of the American Association of Mental Deficiency Adaptive Behavior Scale--Public School Version

Sum the scores on the lines between a rectangle and the preceding rectangle. Enter that total in the rectangle that applies for that section. Rectangle will appear at the end of that section. Record the rectangle and line scores in the Data Summary Sheet.

Special Note: Primary/elementary school personnel
Omit I.A. and I.B. unless applicable

Secondary school personnel
Omit I.A. and I.B. unless applicable

Data Summary Sheet

Adaptive Behavior Scale

I. INDEPENDENT FUNCTIONING

A.	Eating	6	8
B.	Toilet Training	4	4
C.	Personal Hygiene	3	4
D.	Travel	3	3
E.	Motor Development	5	9

Total of INDEPENDENT FUNCTIONING = 21

28

II. SELF-DIRECTION

A.	Initiative	3	3
B.	Persistence	1	4

Total of SELF-DIRECTION = 4

7

III. RESPONSIBILITY

Total of RESPONSIBILITY = 1

3

IV. SOCIALIZATION

A.	Cooperation	2	4
B.	Participation	1	3

Total of SOCIALIZATION = 3

7

V. CLASSROOM BEHAVIORS

A.	Activity	5	8
B.	Reaction to Frustration	5	8
C.	Social Demands	5	8
D.	Other Classroom Behaviors	21	30

Total of CLASSROOM BEHAVIORS = 36

54

I. INDEPENDENT FUNCTIONING

A. Eating (check all statements which apply)

Uses table utensils appropriately	X	Total Checked
Chews food appropriately (mouth closed)	X	
Does not drop food on table or floor	X	
Uses napkin correctly		
Refrains from talking with mouth full	X	6
Refrains from taking food off another's plate	X	
Eats at appropriate rate	X	
Does not play in food		

B. Toilet Training (circle only one)

Never has toilet accidents	4	Number Circled
Never has toilet accidents during the day	3	
Occasionally has toilet accidents during the day	s	
Frequently has toilet accidents during the day	1	4
Is not toilet trained at all	0	

C. Personal Hygiene (check all statements that apply)

Absence of body odor	X	Total Checked
Skin appears clean	X	
Nails are kept clean		
Wears clean clothing	X	3

D. Travel (circle only one)

Catches appropriate bus to and from school	3	Number Circled
Goes around school grounds without getting lost	2	
Goes around school room alone	1	
Gets lost whenever he leaves his own room	0	3

E. Motor Development (check all statements that apply)

Walks up and down stairs alone	X	Total Checked
Walks down stairs by alternating feet		
Runs without falling often	X	
Hops, skips, or jumps	X	
Has a natural gait		
Catches a ball	X	
Throws a ball overhead		5
Has effective control of right side (arm and leg)	X	
Has effective control of left side (arm and leg)		

TOTAL = 21

II. SELF-DIRECTION

A. Initiative (circle only one)

Upon completion of assigned work, initiates appropriate activities of own (e.g., reading and projects)	3	Number Circled
Upon completion of assigned work generally asks if there are other appropriate classroom activities to do (e.g., reading and projects)	2	3
Will engage in activities only if assigned or directed	1	
Will not engage in assigned activities	0	

B. Persistence (check all statements that apply)

Does not become discouraged easily		Total Checked
Completes tasks		
Remains on tasks (does not jump from one activity to another one)	X	1
Works at task without constant encouragement		

TOTAL = 4

III. RESPONSIBILITY

A. General Responsibility (circle only one)

Assigned tasks always performed	3	Number Circled
Reasonably certain that assigned tasks will be performed	2	1
Uncertain that assigned tasks will be performed	1	
Unable to carry out responsibility		

TOTAL =

IV. SOCIALIZATION

A. Cooperation and Consideration (check all statements that apply

Takes turn	___	
Shares and offers assistance to others	___	Total
Is willing to help if asked	X	Checked
Shows consideration of others' feelings	X	1

B. Participation (circle only one)

Initiates group activities (leader and organizer)	3	Number Circled
Participates in group activities spontaneously and eagerly (active participant)	2	1
Participates in group activities if encouraged to do so (passive participant)	1	
Does not participate in group activities	0	

TOTAL = 3

V. CLASSROOM BEHAVIORS
(Circle appropriate number for all statements)

	No Problem	Occasionally Problem	Frequently Problem	
A. Activity				
Talks excessively	2	1	0	
Rarely sits still for any length of time	2	1	0	Total Points
Constantly runs or jumps around room or hall	2	1	0	5
Moves and fidgets constantly	2	1	0	
B. Reaction to Frustration				
Blames own mistakes on others	2	1	0	Total
Complains of unfairness	2	1	0	Points
Withdraws or pouts	2	1	0	
Throws temper tantrums	2	1	0	5

	No Problem	Occasionally Problem	Frequently Problem	
C. Social Demands				
Wants excessive praise	2	1	0	
Is jealous of attention given to others	2	1	0	Total Points
Demands excessive reassurance	2	1	0	5
Acts silly to gain attention	2	1	0	
D. Other Classroom Behaviors				
Threatens or does physical violence (e.g., kicks, bites, pushes, etc.)	2	1	0	
Damages personal or public property (e.g., clothing, books, furnishings)	2	1	0	
Has temper tantrums (e.g., cries, screams, stamps feet)	2	1	0	
Teases or picks on others	2	1	0	
Bosses or manipulates others (e.g., tries to tell others what to do)	2	1	0	
Shows disrespect for others' property (e.g., uses others' property without permission)	2	1	0	
Takes others' property without permission	2	1	0	
Uses angry language (e.g., verbally threatens)	2	1	0	
Resists following instructions or requests (e.g., refuses to work on assigned subject)	2	1	0	
Is absent from, or late for, the proper assignments	2	1	0	
Misrepresents the truth concerning self, situations, or others to own advantage	2	1	0	
Violates the rules in games, tests, or assignments	2	1	0	

	No Problem	Occasionally Problem	Frequently Problem	
Is timid or shy in social situation	2	1	0	
Has tendency to withdraw (e.g., may appear apathetic and unresponsive)	2	1	0	
Disrupts classroom activities (e.g. excessive verbalizations, noise making, throws objects, snatches things out of others' hands etc.)	2	1	0	Total Points 21
			TOTAL = 36	

COMMENTS: Specific behaviors not assessed by ABS.

PSYCHOLOGICAL TEST REPORT
Guilford County Schools
Drawer B-2
Greensboro, N. C. 27402

NAME: Joseph Slick
BIRTHDATE: 5-12-65
CHRONOLOGICAL AGE: 11 years, 10 months, 2 days
GRADE: 6
TESTS ADMINISTERED: Wechsler Intelligence Scale for Children, Revised (WISC-R); Bender Visual Motor Gestalt Test
DATE OF TEST: 3-14-77
SCHOOL: Tall Trees
TEACHER: L. Barnes
EXAMINER: B. Onslow

REASON FOR REFERRAL:

Joseph was referred because of underachievement in the regular classroom.

RELEVANT HISTORY AND BACKGROUND:

Joseph's general health record was good. His vision, hearing, and speech were screened within the normal limits. His progress in the regular classroom was below average. There was no record of any retentions.

Several methods had been utilized in order to solve the problem of underachievement. The teacher had allowed Joseph more time to finish his work. She had made available more one-to-one instructions when possible. The teacher indicated that Joseph was very willing to perform tasks he was asked to do. He tended to get somewhat frustrated.

In review of the Learning Disabilities Checklist, it was indicated that Joseph was slow to finish his work. At times he appeared to be somewhat disorganized and confused and became upset with changes in his routine. The teacher indicated that Joseph tended to "blend into the background" in the groups situation. He seldom initiated activities. He often withdrew when he became upset. He appeared to have difficulty with visual memory. All other visual skills appeared to be adequate. His auditory skills seem to be deficit. He had difficulty in terms of auditory discrimination and auditory memory. He could not follow oral directions. He displayed difficulty associating letter sounds with its symbols and breaking words into component syllables and sounds. He exhibited difficulty blending sounds into words. His written skills appeared to be adequate. There was some discrepancy in terms of his verbal expression language development skills

11-11-76 Slosson--Low Average Range
11-11-76 WRAT Reading 3.6, Spelling 3.0, Math 3.6

Page 2, STUDENT Joseph Slick BIRTHDATE 5-12-65

BEHAVIOR DURING CLASSROOM OBSERVATION OR IN TEST SETTING:

Joseph was an eleven-year-old male Caucasian. He appeared to be somewhat withdrawn. However, there was no significant problem indicated during the process of obtaining rapport. He spoke very openly with the examiner. He indicated that he did not like cold weather, but enjoyed the snow.

Joseph's favorite subject was reading. He did not like English because of the difficulty he had with verbs, adverbs, and other parts of speech.

During the test administration, Joseph appeared to have difficulty recalling words. At times questions had to be repeated more than once. He tended to be a descriptive person in terms of his verbalization. The examiner noted Joseph's excellent visual part to whole perceptual skills.

RESULTS OF TESTING:

WRAT 11-11-76 (Date) 6 (Grade)

Reading 3.6 (G.E.)

Spelling 3.0 (G.E.)

Arithmetic 3.6 (G.E.)

WISC-R 3-14-77 (Date) 6 (Grade)

Verbal Scale IQ Range	Low Average	(80-89)
Performance Scale IQ Range	Average	(90-109
Full Scale IQ Range	Average	(90-109)

Verbal Scale Score		Performance Scale Score	
Information	7	Picture Completion	8
Similarities	8	Picture Arrangement	9
Arithmetic	10	Block Design	12
Vocabulary	7	Object Assembly	12
Comprehension	9	Coding	10
(Digit Span)	5	(Mazes)	

(A scaled score of 10 is at the mean. One (1) standard deviation is equal to 3.)

DESCRIPTION AND DISCUSSION OF TEST RESULTS:

Joseph obtained an overall IQ score which fell within the lower limits of the Average range of intellectual functioning. His Verbal score fell within the upper limits of the Low Average range while his Performance score fell within the middle limits of the Average range of intellectual functioning. There was a thirteen-point discrepancy between the Verbal and Performance scores. There was some slight scatter, or variability, noted between the subtest scores.

Joseph obtained his highest scores on Performance items which utilized visual skills. He was able to reproduce an abstract design from a model. He displayed good visual comprehension and sequencing skills. His conceptualization of spatial relationships was good. He was able to synthesize concrete parts into meaningful wholes. Joseph was able to distinguish essential from nonessential details in his environment. He was required to deliberately focus his attention and use active visual scanning to match his completeness within an internalized pattern. His visual-conceptual abilities were adequate.

Joseph displayed good use of common sense, judgment, and reasoning. On a subtest which was purported to measure judgment in practical situations he obtained an average score. This required him to draw upon past experiences in reaching the solutions to common sense problems and situations. His individual efficiency in common sense problem solving was in the average range. On a subtest in which he was to properly arrange pictures in order to tell a story he obtained an average score. It was necessary for him to comprehend social situations by visually decoding causal relationships. Again, his good visual concentration in comprehension skills enhanced his success.

On a variety of verbally administered arithmetic problems which had to be solved without benefit of paper or pencil, he obtained an average score. He was able to integrate and utilize abstract concepts of numbers and numerical operations. He could concentrate and intensely focus his attention to extract the essentials of a stated problem. However, he displayed some difficulty in terms of recalling auditory information in the proper sequence and detail.

Other weaknesses appeared to be in the area of information and vocabulary skills. He had difficulty retrieving stored information which should have been acquired through the educational process. His range of ideas and fund of information as assessed by the Vocabulary test was somewhat limited. At times he has difficulty retrieving a series of words in order to express himself. However, the quality and quantity of the conceptualizations that he made was good.

On the Bender Visual Motor Gestalt Test, Joseph obtained a perceptual motor age of ten years and up. He made one error which involved integration of two figures. There was some degree of anxiety noted within his figure drawings.

GENERAL RECOMMENDATIONS:

Motivate Joseph to extend himself in seeking information and completing class assignments. Earlier learned concepts should be reinforced by frequent review of the basics. Use high interest low vocabulary reading materials to improve his general fund of information. Encourage independent oral expression by having him describe things in the room and outside. Encourage independent pleasure reading without requiring a formal book report. Place emphasis on oral book reports on a volunteer basis.

Ensure a minimum vocabulary key for each subject area. Assign required reading and involve him in play-acting the different characters or verbally explaining the materials read. Increase dictionary work whereby he might be requested to give word origins or trace the development of meanings to current usage. Make use of crossword puzzles, scrabble games, and analogy games.

All directions should be given clearly and slowly, and they should be repeated whenever necessary. Reduce the number of instructions presented. Emphasis should be upon specific and simple instructions and task assignments.

Have Joseph repeat tongue twisters. Ask him to study an interesting and appropriate picture and then tell: 1) What happened in this picture? 2) How does this picture make you feel? 3) Associate and pronounce a word list of objects in the pictures and then tell a story using some of the words.

RECOMMENDATION FOR PLACEMENT

Based on Joseph's present level of intellectual functioning and his current achievement scores, it was recommended that he be seen in LD resource program. Joseph's weak areas appeared to be that of the retrieval of information. His auditory sequential memory skills appeared to be somewhat deficit. Language development appeared to be the overall area of weakness. Verbal expression should be the key point in instructions. His strongest area appeared to be that of visual skill.

_____

Examiner

SCHOOL PSYCHOLOGICAL SERVICES
Guilford County Schools

ADMINISTRATIVE PLACEMENT COMMITTEE RECOMMENDATION

NAME Joseph Slick SCHOOL Tall Trees

RECOMMENDATION FOR PLACEMENT:

___ EMR self-contained	___ Remedial reading
___ EMR resource	___ Counseling
X LD resource	___ Outside agency
___ Regular classroom	___ TMR
X Speech and hearing instruct.	___ Visually impaired
___ Attendance counselor	___ Further assessment

COMMENTS:

Sarah Smith Sarah Smith, Director Exceptional Child Services	3-77 Date	Janice Ressegger Janice Ressegger, Director Guidance Services	3-77 Date
Robert P. Clark Robert P. Clark, Director School Psychological Services	3-77 Date	Kenneth M. Ide Kenneth M. Ide Committee Member	3-77 Date

Notice to Principal: A conference should be conducted with the parent(s) explaining the Administrative Placement Committee's recommendations and parental permission obtained, if necessary, for the assignment. The child should then be assigned to the appropriate program and a copy of this form returned to the Office of School Psychological Services.

Parental consent obtained Yes X No ___
Child assigned Yes X No ___
Type of class LD

Comments: ___

R. Mobley 3-77
Principal's Signature Date

GUILFORD COUNTY SCHOOLS
Exceptional Child Services
Individual Education Program

1. STUDENT	2. COMMITTEE
Name: Joseph Slick Date of Birth: 5-12-65 Address: Box 20, Tall Trees, NC Grade: 6 Subject(s)	Name / Position / Initial / Date R. Mobley Principal Z. Roth Guidance Counselor L. Barnes Classroom Teacher B. Teagues L.D.Teacher Sam Slick Parent

3. Present Level of Educational Functioning	4. Annual Goals Statement	5. Instructional Objectives	6. Special Services and Methods for Remediation
Academic Achievement Level of performance: below grade level performance Test(s) used:WRAT Date: 11-11-76 Reading 3.6 Spelling 3.0 Arithmetic 3.6	1. reading & spelling: To complete level two of Guilford County ECS Curriculum Guide by June 1, 1977 Arithmetic: to complete level two of Guilford County ECS Curriculum Guide by June 1, 1977	1. Mastery of #2,3, 5-12 of phonetic analysis; #3-10 of Structural Analysis B, 3-5, C-3, and D 1 of Comprehension Skills; A,B-3,C1, & D1-3 of Organizing Information (G.C. ECS) Curric. Guide) 2. Mastery of #8-10 of addition; #4-7 of subtraction	Educational remediation in resource program for learning disabilities
Social adaption: Acceptable level of performance			

GUILFORD COUNTY SCHOOLS
Exceptional Child Services
Individual Education Program
(continued)

3. Present Level of Educational Functioning (continued)	4. Annual Goals Statement	5. Instructional Objectives	6. Special Services and Methods for Remediation
Prevocational and Vocational skills: Acceptable level of performance			
Psychomotor: (fine and gross motor skills): Acceptable level of performance			
Self-Help Skills (TMR and self-contained ( ) EMR only)			

7. Individuals Responsible for Implementation of Special Programs:	8. Dates for Initiation	Completion or Review	9. Evaluation Criteria
B. Teague: L.D. Teacher	9-1-77	6-1-77	Post-test administration of WRAT Post-test administration of sequential skill checklists for level two reading and math

GUILFORD COUNTY SCHOOLS
Exceptional Child Services
Individual Education Program
(continued)

10. Special Program Placement and Related Services	11. Justification for Placement:	13. Percent of Time in Regular Program
__Trainable Mentally Retarded __EMR Self-contained __EMR Departmentalized (Secondary School) __Exceptional Child Services Academic Program __EMR Resource X LD Resource __ED Self-Contained __Homebound __Speech and Language __Cerebral Palsy School __Consultation with School Psychologist __Physical Therapy __Occupational Therapy __Counseling Services	It is felt that Joseph's remedial needs can be met in the L.C. resources program	83%
	12. Student Schedule of Special Services Monday through Friday- 8:30-9:30	14. Parental Participation I have had an opportunity to participate in the development of this plan. I (approve) (disapprove) of the implementation of this plan. Parent, Guardian Surrogate Date

READING SKILLS
CHECKLIST--LEVEL TWO Joseph Slick

I. WORD ANALYSIS

A. Basic Vocabulary

X 1. Given the basic vocabulary of text used, will identify the words.

B. Phonetic Analysis

X 1. Given a written list of words with the letter c, will ring the words with the s sound and put an x on the words with the k sound

____2. Given a written list of words with the letter s, will distinguish between the s and the z sound.

____3. Given a page of pictures which contain the two sounds of g, will identify pictures with the j sound and hard g sound.

X 4. Given a written list of words which contain the k sound, will ring the letters c, k, and ck which represent that sound.

____5. Given a written list of words which contain the vowels a, e, i, o, u, and y, will draw a ring around all the vowels.

____6. Given a page of pictures with words containing short, long, and r-controlled vowel sounds, will check the word which has the same sound as the vowel in the name of the picture.

____7. Given a list of one-syllable words containing the vowels ai, ay, ea, ei, oa, and oe, will demonstrate understanding of this visual clue first vowel long, second vowel silent by ringing the letter combination that causes the vowel sound to be long.

____8. Given a list of one-syllable words containing a vowel followed by a consonant and a final e, will demonstrate understanding of this visual clue to the long vowel sound by ringing the words which contain this letter combination.

____9. Given a list of 8 words with the w-controlled sound of a, will ring those words.

___10. Given a list of consonant combinations and pronounced words, will identify the consonant combinations by writing them.

___.11. Given a list of words with 3-letter blends, will ring those blends.

___12. Given a list of words in which the vowel y has the long i or short i sound, will identify them by ringing the words which contain the long i sound and X the words with the short i sound.

C. Structural Analysis

X 1. Given sentences and a list of known root words which do not require spelling changes, will add possible suffixes--en, er, ing, ed, to the word and write the new words on the blanks to complete the meaning of the sentence.

X 2. Given root words, will write the correct ending es, or s.

____3. Given underlined nouns in sentences, will add s or 's to make the sentences correct

____4. Given incomplete sentences add a choice of comparative forms of words (Ex: big, bigger, biggest), will ring the form that correctly completes the sentence.

____5. (a) Given a list of root words ending in e, will drop the final e, before adding the suffixes en, ing, er, ed, and es.

____6. (b) Given a list of root words ending in a consonant and preceded by one vowel, will double the final consonant before adding above suffixes.

____7. (c) Given a list of root words ending in y, will change the y to i before adding es.

____8. Given a list of contractions, will write the two words which each contraction represents.

____9. Given a list of words, can ring compound words.

___10. Given the words Doctor, Minister, etc. can abbreviate.

II. Comprehension Skills

A. Main Idea

X 1. Given a story to be read silently and a choice of three possible statements of the story's main idea will check the correct statement.

X 2. Given a list of titles for story can choose an appropriate one.

X 3. Given sentences with new words can determine meaning of the word using contextual clues in sentence.

B. Details

X 1. Given a stated main idea and a list of details some related to the main idea, will put a check by the related details.

X 2. Given a story containing details of time and place to be read silently, will make the correct response to a given set of questions. (X) silent ( ) oral

____3. Given a story and a list of words describing the main character, will check the words which describe the character. ( ) silent ( ) oral

____4. Given a story to be read silently and a list of story problems, will check the problem in the story. ( ) silent ( ) oral

____5. Given a story to be read silently and a group of sentences stating events from the story, will number the sentences in the order in which the events happened in the story ( ) silent ( ) oral

C. Inferential Reading

_X_ 1. Given a story and a list of motives, will check the correct motives of the main character.

_X_ 2. Given a story containing clues to a character's feelings and a list of emotions, will check the correct feelings of the character.

____3. Given a story will write an alternate ending logically based on events in the story.

D. Critical Reading

____1. Given a story and a group of questions comparing the two main characters, will make the correct response to the questions.

_X_ 2. Given stories, can distinguish between fact and fiction.

III. Study Skills

___A. Given written and oral directions, will be able to follow them.

B. Locating Information

_X_ 1. Given a title page of a book, will name the book's title, author, and publisher.

_X_ 2. Given the table of contents of the basal text being used, will match story titles to unit titles.

____3. Given a list of words will different initial letters, will write the words in alphabetical sequence to the first letter.

_X_ 4. Given a list of words, will look them up in My Little Pictionary and write on the blank the page on which the word is found. (If Pictionary is not available, use similar materials to test this item.)

C. Organizing Information

____1. Given a list of words or phrases, can classify them by meaning and function.

D. Oral and Silent Reading

____1. Given a selection to be read orally, will read in a conversational tone conveying mood and pace.

____2. Given a new selection and a specific item to find, will skim the selection to find and name the item within a limited time.
____3. Given a story, will participate in role-playing appropriate to the story.

IV. Environmental Reading Skills

____1. Uses reference books to gain information.
_X_2. Reads labels on food items.
_X_3. Begins to read road signs.
_X_4. Reads information signs found at school (office boys, girls etc.)

GUILFORD COUNTY SCHOOLS
Exceptional Child Services

SKILLS CHECKLIST

ARITHMETIC LEVEL I

School Tall Trees
Student Joseph Slick
Year 1977
Classroom Teacher L. Barnes
Resource Teacher Z. R.

BASIC FACTS & PROCESSES

Number Seriation and Comparison (Quantitative Equality and Inequality)

1. Understands the concept of "more than" when

✓ a. Using concrete objects to construct groups
✓ b. Using pictures to identify groups
___ c. Supplying missing numerals in incomplete sentences
___ d. Using the symbol (>) more than

2. Understands the concept of "less than" when

✓ a. Constructing and identifying groups with concrete objects
✓
___ b. Identifying and constructing groups using pictures
___ c. Supplying the missing numerals in incomplete sentences
___ d. Using symbol (<) less than

3. Understands the meaning of the term "equal"

✓ a. Using concrete objects to construct groups
✓ b. Can match equal groups of pictures
___ c. In a numerical and/or numerical/pictorial equation
___ d. Recognizes and understands symbol (=)

Basic Addition--Concepts, Operation, and Fundamental Terminology

1. Concepts

✓ a. Using concrete objects and pictures
✓ b. Use of the (+) symbol
✓ c. Using the symbol in numerical sentences
✓ d. Understands meaning of sum and plus

2. Operations with 2 or 3 single-digit numbers

a. Sums through 5
✓ 1) Using concrete objects
✓ 2) Using pictures
✓ 3) Vertically-presented
✓ 4) Horizontally-presented
✓ 5) Can supply missing addends

b. Sums through 10
✓ 1) Using concrete objects
✓ 2) Using pictures
✓ 3) Vertically-presented
✓ 4) Horizontally-presented
✓ 5) Can supply missing addend

3. Fundamentals

___a. Solve simply presented oral word problems with and without picture clues
___b. Solve simple written word problem with and without picture clues
✓ c. Recognizes commutatively of addition
✓ d. Masters basic addition facts for sums through 5; through 10

Basic Subtraction--Concepts, Operation, and Fundamental Terminology

1. Concepts

✓ a. Using concrete objects and pictures
✓ b. Use of the - symbol in pictorial sentences
✓ c. Uses the - symbol in numerical sentences

2. Operations with minuends through 5

✓ a) using concrete objects
✓ b) using pictures
✓ c) vertically-presented
✓ d) horizontally-presented
✓ e) can supply missing term

3. Operations with minuends through 10

✓ a) using concrete objects
✓ b) using pictures
✓ c) vertically-presented
✓ d) horizontally-presented
✓ e) can supply missing term

4. Fundamentals

✓ a) Solve simple orally presented word problems with and without picture clue
✓ b) Solve simple written word problems with and without picture clues
✓ c) Masters basic subtraction facts with minuends through 5; through 10

ARITHMETIC LEVEL II

1. Solves addition problems with sums 10-20

__✓__ a. Using real objects
__✓__ b. Using pictures
___ c. Using pencil and paper with equations
___ d. Using pencil and paper with word problems

2. Masters 100 basic addition facts

3. Uses symbols less than (<) and greater than (>) with numerals

___ a. 11-20
___ b. 20-50
___ c. 50-100

4. Arranges objects in sets of ten when total number of objects is not a multiple of ten

5. Understands the meaning of place-value of two-digit numerals (0-99)

__X__ a. Can point to ones and tens place
__X__ b. Can write the number of ones and tens
__X__ c. Given the number of ones and tens can write the corresponding numeral

6. Understands the meaning of place value (0-999)

__X__ a. Can write the ones, tens, and hundreds
__X__ b. Given the amount of ones, tens and hundreds can write numeral

7. Solves column addition without carrying or grouping by rote and paper and pencil

__X__ a. 2-digit and 1-digit numerals
__X__ b. 2-digit to 2-digits
___ c. 3-digits to 1-digit
___ d. 3-digits to 2-digits
___ e. 3-digits to 3-digits

8. Solves column addition with carrying (grouping) to tens place in equations and word problems

__X__ a. 2-digits to 1-digit
___ b. 2-digits to 2-digits
___ c. 3-digits to 2-digits
___ d. 3-digits and 3-digits

____ 1. equations
____ 2. word problems

___ e. three 2 or 3-digit numerals

9. Solves column addition with carrying to (grouping) tens and/or hundreds place in equations and word problems

___a. 3-digits to 2-digits
___b. three 2 or 3-digit numerals

10. Supplies the missing addends in addition combinations with 1 digit and 2 digit numerals

Basic Subtraction

1. Solves subtraction problems with minuends 10-20

___a. using real objects
___b. using pictures

2. Subtracts without borrowing (re-grouping) in equations and word problems

_X_a. two 1-digit numerals
_X_b. one digit from 2-digit numerals
_X_c. 1-digit from 3-digit numerals
_X_d. 2-digits from 2-digits
_X_e. two digits from 3-digits
_X_f. three digits from 3-digits

_X_3. Masters 54 basic subtraction facts

4. Subtracts with borrowing (regrouping) from tens place in equations and word problems

___a. one-digit from 2-digits
___b. two-digit numeral from 2-digit
___c. one-digit from 3-digit with no zeros in numeral
___d. two-digits from 3 digits with no zeros in numeral
___e. 3-digit numeral from 3-digit numeral with no zeros in numeral

5. Subtracts with borrowing (regrouping) from hundreds place only with no zeros in the minuend in equations and word problems

___a. 2-digits from 3-digits
___b. 3 digits from 3-digits

6. Subtracts with borrowing (regrouping) from 10's and 100's place with zero in minuend in equations and word problems

___a. two digits from 3 digits
___b. three digits from three digits

7. Recognized the relationship between addition and subtraction by writing the reverse operation when an equation is given.

APPENDIX B

KNOWLEDGE TEST

EXCEPTIONAL CHILD SERVICES
Guilford County Schools

Test: Pre__ Post__ Code___

KNOWLEDGE TEST
INDIVIDUAL EDUCATION PROGRAM

Instructions: Read each of the statements below and indicate whether you think it is true or false by circling either T or F.

T F 1. The academic performance level in an individual education program must be stated in grade level terms.

T F 2. The superintendent of a school system must approve and sign each student's individual education program.

T F 3. Federal law requires that each objective for handicapped students address who, what, and when.

T F 4. The individual education program must be reviewed at least annually.

T F 5. North Carolina HB 824 (The Creech Bill) includes the Gifted and Talented but Public Law 94-142 does not.

T F 6. Federal guidelines for implementing individual education plans discourage the use of I.Q. tests because these tests tend to label students within rigid intelligence classifications.

T F 7. Social adaptation assessment should be stated in specific terms.

T F 8. Documentation must be kept of the efforts to obtain parent input in the writing of the individual education program.

T F 9. A student's psychomotor functioning level indicates fine and gross motor skills.

T F 10. In developing individual education programs under Public Law 94-142, racial balance in classes and in schools must be a major consideration.

T F 11. Legislation states that intelligence scores shall be recorded in a range (i.e., 90-95) rather than as a unique score.

T F 12. The fact that a student's test scores are below grade level is a definite indicator that the student is an underachiever.

T F 13. According to North Carolina HB 824, any child receiving special services who is suspended from school for ten days must have his special education services continued.

T F 14. In developing a student's individual education program, the race of the student is an important factor in assigning the student to classes and activities.

T F 15. The law requires that an individual educational program include the selection of a specific career goal that a special education student can pursue upon leaving the secondary school.

T F 16 The individual educational program is written in a planning conference.

T F 17. Students with intelligence quotients over 120 are excluded from Public Law 94-142.

T F 18. Under Public Law 94-142 a parent who holds a bona fide teaching certificate in a state may assume direct supervision of his or her son's or daughter's education.

T F 19. The individual education program is not a contract between school personnel and parents.

T F 20. "Least Restrictive Environment" means that the school should educate a handicapped or gifted student in the regular class setting to the maximum extent possible.

T F 21. An individual education program for a secondary school student must include a minimum of twenty hours per month in exceptional training.

T F 22. In order to make appropriate comparisons, all educable mentally retarded students in a particular school system must be administered the same achievement test.

T F 23. According to North Carolina House Bill 824 a local school system is required to take affirmative action to employ handicapped adults to assist in the education of handicapped students in the local school system of North Carolina

T F 24. In evaluating the effectiveness of the individualized educational program process is more important than product.

T F 25. The percentage of time the student spends in the regular educational program is to be stated.

T F 26. House Bill 824 specifies the maximum amount of time between referral of a child to a special program and a decision regarding program placement.

T F 27. The individual educational program must include goals and objectives but not specific teaching activities.

T F 28. The Federal law requires that county and state agencies, such as mental health and welfare, provide services in a student's plan that cannot be provided by the school system.

T F 29. A teacher cannot deviate from the special or related services outlined in a student's individual educational program without the approval of the majority of the planning committee.

T F 30. More than one nondiscriminatory assessment must be used to determine a student's educational functioning level.

T F 31. The school may refuse to release to parents specific test scores that are used in developing the individual education program.

T F 32. Public Law 94-142 stipulates that a given school district must assure that a sum of State and local funds equal to the average annual per pupil expenditure for all children being served in the district is available for each handicapped child before federal funds can be used.

T F 33. Under North Carolina law the individual education planning conference would be considered an "open" meeting and thus could be attended by the general public.

T F 34. Legislation requires that an exceptional student's individualized education program provides for at least 50% of their time in regular education programs.

T F 35. Parents may refuse to accept the individual education program developed for their son or daughter.

T F 36. Principals, teachers, and parents are supposed to attend the planning conference.

T F 37. Public Law 94-142 states that a parent may invite the family doctor to participate in her child's planning conference.

T F 38. A handicapped student who is eighteen years old or older may have access to any and all of his school records.

T F 39. A goal is defined as a specific statement of program interest which defines how much progress a student will make in a specific amount of time.

T F 40. Public Law 94-142 was designed to assure that all handicapped children have an available free appropriate education.

T F 41. Public Law 94-142 requires that parents accept instructional responsibilities which might be included in a student's individual education program.

T F 42. The Wide Range Achievement Test, the Peabody Individual Achievement Test and the Comprehensive Test of Basic Skills are appropriate measures of academic level of performance.

T F 43. Statements relative to the present level of education functioning for academic achievement, social adaptation, prevocational and vocational skills, and self-help skills must be written.

T F 44. The Competency Graduation Bill enacted by the 1977 North Carolina General Assembly states that handicapped students who meet the objectives in their individual education program may receive a high school diploma.

T F 45. The parents must sign a statement on the individual education program form indicating that they were afforded an opportunity to participate in the planning conference.

T F 46. Public Law 94-142 includes the assurance that handicapped children in North Carolina, ages 5-21, will be provided an appropriate education.

T F 47. In North Carolina an individual education program must be written for handicapped and gifted children receiving special education services.

T F 48. The names and positions of those developing the plan must be recorded.

T. F 49. By October 1, 1977 the individual education program must be written for all students receiving special services.

T F 50. Public Law 94-142 requires that all structural barriers be eliminated in school buildings that house orthopedic impaired students.

T F 51. Any special or related services which the special student needs must be listed regardless of the availability of services.

T F 52. Zero Reject means that all identified handicapped and gifted children must be provided special services by July 1, 1977.

T F 53. Handicapped students who are sixteen years of age or older must be involved in developing their own individualized education program.

T F 54. Public Law 94-142 specifies that a seeing-eye dog may attend classes with a blind student.

T F 55. In designating special or related services for a student's individual education program, the entire community should be thought of as the school environment.

T F 56. The ultimate measure of success of an individual education program is whether a student changes behavior in a p sitive direction.

T F 57. The School-Based Assessment Committee is responsible for the development of the plan.

T F 58. A justification for special placement must be written.

T F 59. According to North Carolina HB 824, the Zero Reject clause is effective as of July 1, 1977.

T F 60. Federal funds for educating handicapped children are limited to 12% of the total state school population.

T F 61. The Guilford County Adaptive Behavior Scale will be used in Guilford County for conducting a social adaptation assessment of handicapped students.

T F 62. Personnel from the Division of Exceptional Children, State Department of Public Instruction, must audit a sampling of individual education programs in each school system every five years.

T F 63. A handicapped or gifted child is to be educated in the regular educational program if possible.

T F 64. North Carolina House Bill 824 specifies that only teachers certified in special education may be involved in implementing a student's individual education program.

T F 65. The Annual Testing Program which was legislated by the 1977 General Assembly excludes the participation on the part of educable mentally retarded students.

T F 66. Prioritized goal statements must be made according to described educational functioning levels.

T F 67. The school is required to keep students' individual education programs on file for at least ten years.

T F 68. Self-help skills are defined as those skills that a student possesses that will assist him or her in learning the subjects taught in school.

T F 69. Instructional objectives should be written for each goal statement.

T F 70. Parents must be given an opportunity to help write the individual educational program.

APPENDIX C

ATTITUDE SCALE

Test: Pre _____
Post_____ Code ____

Attitude Scale Concerning
The Individual Education Program

Instructions: Please read each of the statements below and indicate the degree you agree with the item by circling either 5 = strongly agree, 4 = agree, 3 = neutral or undecided, 2 = disagree, and 1 = strongly disagree.

Statements	Rating Scale
1. The individual education program is an unrealistic approach to solving the problems of exceptional children.	5 4 3 2 1
2. The classroom teacher will benefit from the involvement of parents which is inherent in the individual education program.	5 4 3 2 1
3. The individual education approach is another attempt to administrators to control teachers.	5 4 3 2 1
4. The detailed work involved in the individual education program does more to harm than benefit the instructional staff.	5 4 3 2 1
5. It is impossible to make a significant impact on the learning of handicapped students.	5 4 3 2 1
6. The systematic procedures incorporated in individual education program will result in improved instruction and learning.	5 4 3 2 1
7. The supervisors who are responsible for directing and monitoring the individual education program are competent.	5 4 3 2 1
8. The average teacher has the ability to develop an individual education program.	5 4 3 2 1
9. The requiring of teachers to develop individual education programs is another attempt on the part of administrators to involve teachers in management by objective activities.	5 4 3 2 1

Statement	Rating Scale				
10. The amount of clerical work involved in developing individual education programs is reasonable and necessary.	5	4	3	2	1
11. The detailed work involved in developing an individual education program will distract significantly from the individual attention given to a student.	5	4	3	2	1
12. The involvement of parents in reviewing individual education programs will enhance their understanding of the needs and problems of their child.	5	4	3	2	1
13. The typical parent is capable of understanding the individual education program that will be developed for his/her child.	5	4	3	2	1
14. The use of the individual education program will increase the conflict between parents and teachers.	5	4	3	2	1
15. The individual education program will improve the placement of students in educational activities and programs.	5	4	3	2	1
16. Principals will have a significantly better understanding of exceptional children from participation in individual education program planning.	5	4	3	2	1
17. Teachers will have a significantly better understanding of exceptional children from participation in individual education program planning.	5	4	3	2	1
18. The individual education program is doomed to fail because the cost effective ratio will be too high.	5	4	3	2	1
19. The individual education program will assist educators to become more accountable for the success of programs for exceptional children.	5	4	3	2	1
20. The procedures followed by the classroom teacher in developing individual education programs would contribute to the instructional performance of all classroom teachers.	5	4	3	2	1
21. Individual education programs are truly a professional approach to teaching exceptional children.	5	4	3	2	1

Statement	Rating Scale
22. Individual education programs will tend to dehumanize the teaching/ learning process.	5 4 3 2 1
23. It is impossible to develop a valid individual education program because the test for collected information about these students is not valid.	5 4 3 2 1
24. The local school districts in North Carolina lack the personnel for training teachers and administrators to implement the individual education program.	5 4 3 2 1
25. The team approach required for implementing the individual education program will fail because educators in North Carolina are too prone to "do their own thing."	5 4 3 2 1
26. Exceptional children consultants in the State Department of Public Instruction have the expertise to assist local school districts to implement the individual education program.	5 4 3 2 1
27. The local directors of exceptional children programs in North Carolina are really not sold on the individual education program approach.	5 4 3 2 1
28. To expect local directors of special education to provide leadership in the individual education program is tantamount to the "blind leading the blind."	5 4 3 2 1
29. Most of the clerical work involved in implementing individual education programs will be passed on to overburdened school secretaries.	5 4 3 2 1
30. The frequencies of complaints, grievances, and legal negotiations will eventually wreck the individual education program.	5 4 3 2 1

APPENDIX D

LAURA SIMS

TEACHER REFERRAL

(To be used by the regular class teacher and submitted to the principal or his designee)

Name of Student Laura Sims Sex F Birthdate 12-30-65

Age 9 Grade/Team/Subject 3 Referring Teacher E. Jones

1. a. Please describe, being brief but specific, the reasons for which this referral is being made. Address your comments to the situation as you see and understand it.

   Laura needs help with reading and math.

   b. What methods have you tried to solve the problem?

   Peer tutoring

2. a. What do you perceive as being the particular strengths of this student?

   Writes well for age
   Tries to learn when receiving individual help

   b. Weaknesses:

   Independent functioning

3. When is a convenient time for us to talk?

   After 2:30

E.Jones
Referring Teacher

Date

*Adaptive Behavior Scale

Name Laura Sims Grade 3 Sex F School Pine Trees

Date 2-25-76 Date of Birth 12-30-65 Age 10

Referral: EMR ✓ LD _____ Behavioral _____

Ethnic Background: B _____ W ✓ Other (Specify)_____

Occupation: Father mechanic

Mother housewife

The required part of evaluating children for eligibility in special programs involves evaluation of their adaptive behavior. Adaptive behavior is defined as 1) the degree to which the individual is able to function independently, and 2) the degree to which he meets satisfactorily the culturally imposed demands of personal and social responsibility.

An assessment of adaptive behavior includes how well the child adapts to the school, home, and community environments. Information can be gathered from school records, school personnel, parents, and/or other professionals who work with the child.

COMPUTING ITEM SCORES. The Adaptive Behavior Scale (ABS) utilizes three types of items which require different scoring procedures.

(1) "Check all statements that apply," e.g., I.A. INDEPENDENT FUNCTIONING--EATING. Total the number of checks, and record this number on the line provided.

(2) "Check only one," e.g., I.B. INDEPENDENT FUNCTIONING--Toilet Training. Record the number circled on the line provided.

(3) "Circle the number that applies for all statements," e.g., V. CLASSROOM BEHAVIORS. Total the numbers circled for each section (Activity, Reaction to Frustration, Social Demands, Other Classroom Behaviors) and place on their respective lines.

*This scale was adapted from the 1974 Revision of the American Association of Mental Deficiency Adaptive Behavior Scale--Public School Version.

Sum the scores on the lines between a rectangle and the preceding rectangle. Enter that total in the rectangle that applies for that section. Rectangle will appear at the end of that section. Record the rectangle and line scores in the Data Summary Sheet on the following page.

Special Note: Primary/elementary school personnel
Omit I.A. and I.B. unless applicable

Secondary school personnel
Omit I.A. and I.B. unless applicable

Data Summary Sheet

Adaptive Behavior Scale

I. INDEPENDENT FUNCTIONING

A.	Eating	2	8
B.	Toilet Training	4	4
C.	Personal Hygiene	3	4
D.	Travel	3	3
E.	Motor Development	9	9

28

Total of INDEPENDENT FUNCTIONING = 21

II. SELF-DIRECTION

A.	Initiative	1	3
B.	Persistence	0	4

7

Total of SELF-DIRECTION = 1

III. RESPONSIBILITY

Total of RESPONSIBILITY = 1 — 3

IV. SOCIALIZATION

A.	Cooperation	0	4
B.	Participation	1	3

7

Total of SOCIALIZATION = 1

V. CLASSROOM BEHAVIORS

A.	Activity	4	8
B.	Reaction to Frustration	0	8
C.	Social Demands	0	8
D.	Other Classroom Behaviors	8	30

54

Total of CLASSROOM BEHAVIORS = 12

I. INDEPENDENT FUNCTIONING

A. Eating (check all statements which apply)

Uses table utensils appropriately	✓	Total Checked
Chews food appropriately (mouth closed)	—	
Does not drop food on table or floor	—	2
Uses napkin correctly	—	
Refrains from talking with mouth full	—	
Refrains from taking food off another's plate	✓	
Eats at appropriate rate	—	
Does not play in food	—	

B. Toilet Training (circle only one)

Never has toilet accidents	4	
Never has toilet accidents during the day	3	Number Circled
Occasionally has toilet accidents during the day	2	
Frequently has toilet accidents during the day	1	4
Is not toilet trained at all	—	

C. Personal Hygiene (check all statements that apply)

Absence of body odor	✓	
Skin appears clean	✓	Total Checked
Nails are kept clean	—	
Wears clean clothing	✓	3

D. Travel (circle only one)

Catches appropriate bus to and from school	3	Number Circled
Goes around school grounds without getting lost	2	
Goes around school room alone	1	3
Gets lost whenever he leaves his own room	0	

E. Motor Development (check all statements that apply).

Walks up and down stairs alone	✓	
Walks down stairs by alternating feet	✓	
Runs without falling often	✓	Total Checked
Hops, skips, or jumps	✓	
Has a natural gait	✓	
Catches a ball	✓	9
Throws a ball overhead	✓	
Has effective control of right side (arm and leg)	✓	
Has effective control of left side (arm and leg)	✓	

TOTAL = 21

II. SELF-DIRECTION

A. Initiative (circle only one)

Upon completion of assigned work, initiates appropriate activities of own (e.g., reading and projects)	3	
Upon completion of assigned work, generally asks if there are other appropriate classroom activities to do (e.g., reading and projects)	2	Number Circled: 1
Will engage in activities only if assigned or directed	1	
Will not engage in assigned activities	0	

B. Persistence (check all statements that apply)

Does not become discouraged easily	___	Total Checked: 0
Completes tasks	___	
Remains on tasks (does not jump from one activity to another one)	___	
Works at task without constant encouragement	___	

TOTAL = 0

III. RESPONSIBILITY

A. General Responsibility (circle only one)

Assigned tasks always performed	3	
Reasonably certain that assigned tasks will be performed	2	Number Circled: 1
Uncertain that assigned tasks will be performed	1	
Unable to carry out responsibility	0	

TOTAL = 1

IV. SOCIALIZATION

A. Cooperation and Consideration (check all statements that apply)

Takes turn	___	Total Checked: 0
Shares and offers assistance to others	___	
Is willing to help if asked	___	
Shows consideration of others' feelings	___	

B. Participation (circle only one)

Initiates group activities (leader and organizer)	3	
Participates in group activities spontaneously and eagerly (active participant)	2	Number Circled: 1
Participates in group activities if encouraged to do so (passive participant)	1	
Does not participate in group activities	0	

TOTAL =

V. CLASSROOM BEHAVIORS
(Circle appropriate number for all statements)

	No Problem	Occasionally Problem	Frequently Problem	
A. Activity				
Talks excessively	2	1	0	
Rarely sits still for any length of time	2	1	0	
Constantly runs or jumps around room or hall	2	1	0	Total Points
Moves and fidgets constantly	2	1	0	4
B. Reaction to Frustration				
Blames own mistakes on others	2	1	0	Total
Complains of unfairness	2	1	0	Points
Withdraws or pouts	2	1	0	0
C. Social Demands				
Wants excessive praise	2	1	0	
Is jealous of attention given to others	2	1	0	Total Points
Demands excessive reassurance	2	1	0	0
Acts silly to gain attention	2	1	0	
D. Other Classroom Behaviors				
Threatens or does physical violence (e.g., kicks, bites, pushes, etc.)	2	1	0	
Damages personal or public property (e.g., clothing, books, furnishings)	2	1	0	
Has temper tantrums (e.g., cries, screams, stamps feet)	2	1	0	
Teases or picks on others	2	1	0	
Bosses or manipulates others (e.g., tries to tell others what to do)	2	1	0	
Shows disrespect for others' property (e.g., uses others' property without permission)	2	1	0	

	No Problem	Occasionally Problem	Frequently Problem	
Takes others' property without permission	2	1	0	
Uses angry language (e.g., verbally threatens)	2	1	0	
Resists following instructions or requests (e.g., refuses to work on assigned subject)	2	1	0	
Is absent from, or late for, the proper assignments	2	1	0	
Misrepresents the truth concerning self, situations, or others to own advantage	2	1	0	
Violates the rules in games, tests, or assignments	2	1	0	
Is timid or shy in social situation	2	1	0	
Has tendency to withdraw (e.g., may appear apathetic and unresponsive)	2	1	0	Total Points 8
Disrupts classroom activities (e.g., excessive verbalizations, noise making, throws objects, snatches things out of others' hands etc.)	2	1	0	
			TOTAL = 12	

COMMENTS: Specific behaviors not assessed by ABS.

GUILFORD COUNTY SCHOOLS
Drawer B-2
Greensboro, N. C. 27402

SUMMARY INFORMATION SHEET AND CENTRAL OFFICE REFERRAL FORM

PERSONAL DATA

Student Laura Sims School Pine Trees Elementary Date 2-12-76
Birthdate 12-30-65 Age 10 Grade 3 Teacher E. Jones
Parents (or guardian) Bertha Sims Address 1102 Way Lane
Phone 116-4527
Occupation Housewife (Mother) Business Phone --------
Occupation Mechanic (Father) Business Phone --------
Child lives with parents X Child lives with Other ____
Race W Others in Home ___ Type of Referral EMR

HEALTH RECORD

General Health: Good X Poor ____
Vision: Normal X Deficient ___ Corrective Lenses: Prescribed ___ Used ___
Hearing: Normal X Deficient ___ Hearing Aid: Prescribed ___ Used ___
Speech: Normal ___ Deficient ___ Therapy ___ Prognosis ___
Unusual Illness or Condition, or Comments _____

CLASSROOM ACHIEVEMENT

General Progress: Above Average _____ Average _____
Below Average _____ Inconsistent _____
Retention: Yes X If yes, circle grade--K 1 2 3 4 5 6 7 8 9 10 11 12
Present Grade Level of Classroom Achievement: Reading 1.0 Math 1 Spelling ___

Behavior: passive	X	____	____	assertive
bored	X	____	____	interested
resistant	X	____	____	cooperative (with teacher)
isolated	____	____	X	involved

Absences: (days per school year)

K	___	3	___	6	___	9 ___
1	___	4	___	7	___	10 ___
2	6	5	___	8	___	11 ___
						12 ___

List any agencies who have had contact with the child (i.e., DEC, Mental Health, VR).

Date Agency or Special Services

EDUCATIONAL OR PSYCHOLOGICAL ASSESSMENT

Date	Test Instrument	Results (IQ Scores, &iles, Grade Equivalency)
2-25-76	Slosson Intelligence Test	77
2-25-76	Wide Range Intelligence Test	Reading 2.0 Spelling 2.0 Math 2.4

SCHOOL-BASED COMMITTEE CHECKLIST

Student Laura Sims School Pine Tree Elementary

Steps	Date	Checklist	Individual Responsible
1.	2-12-76	Teacher Referral (including appropriate inventory)	E. Jones
2.	2-12-76	Review of Cumulative Folder	B. Smith
3.	2-12-76	Recommendation for Screening	E. Jones
4.	2-12-76	Screening Tests Completed	B. Smith
		WRAT	
		SIT	
		Slingerland	
		Other	
		Medical Evaluation	
		Visual Examination	
		Auditory Examination	
5.	_____	Recent events in the child's life which may be affecting current functioning (death, change in residence, injury, etc.)	

SCHOOL-BASED COMMITTEE RECOMMENDATION

We have reviewed the reports and considered all the material pertaining to the appropriate placement of the child named herein, and we recommend the following remedial action and specific services for said child's benefit (list areas needing special attention, enrichment, and/or remediation and general recommendations for the child):

We would like further testing administered to determine if Laura qualified for placement in an EMR-Resource room for reading and math remedial instruction.

Date: 3-23-76

W. Simpson
Principal

Committee

PSYCHOLOGICAL TEST REPORT
Guilford County Schools
Drawer B-2
Greensboro, N. C. 27402

NAME: Laura Sims
BIRTHDATE: 12-30-65
CHRONOLOGICAL AGE: 10-3-28
GRADE: 3
DATE OF TEST: 4-28-76
SCHOOL: Pine Trees
TEACHER: Jones
EXAMINER: S. Millner
TESTS ADMINISTERED: Wechsler Intelligence Scale for Children--Revised (WISC-R)
Bender Visual-Motor Gestalt Test (Bender)

REASON FOR REFERRAL: Laura was referred for possible placement in an EMR resource room.

RELEVANT HISTORY AND BACKGROUND: Laura is currently attending Pine Tree Elementary School in the third grade. The Central Office Referral Form indicates that her vision, hearing, and speech are normal, her health is good, and there are no indications of excessive absences. It is reported that she was retained in second grade and that her present classroom achievement is below average. Specifically, her present grade level classroom achievement is reported as 1.5 in reading, 1.2 in spelling, and 1.5 in math.

The Adaptive Behavior Scale indicates that she tends to be overly active, does not react well to frustration, demands excessive praise or attention, and threatens or does physical violance such as kicking and biting in the classroom.

On the Wide Range Achievement Test, administered 2-25-76, Laura earned grade equivalent scores of 2.0 in reading, 2.0 in spelling, and 2.4 in math. Laura's IQ score from the Slosson Intelligence Test, administered 2-25-76, placed her in the borderline range of mental ability.

Laura lives with her parents and is an only child.

BEHAVIOR DURING CLASSROOM OBSERVATION AND/OR TEST SETTING: Laura is a white female of age appropriate physical stature. She entered the testing situation in a cautious, guarded manner and continued to be rather shy and reticent throughout the entire session. Verbal expression problems were evident in that she tended to communicate by gesture and spoke in a soft, almost inaudible voice. She responded to all items presented, but at no time during the testing session did she initiate any verbal communication with this

examiner. Moreover, she rarely manifested any type of facial expression other than what appeared to be a rather dull stare. She tended to give up easily and would often emit an impulsive response to most of the items on both the Verbal and Performance Scales of the WESC-R. Although she was generally cooperative, she often appeared to feel defeated before attempting difficult items in that she would say, "I can't do that." Her problem-solving approach to most tasks was generally trial and error rather than analytic. On the Coding subtest of the WISC-R, she held her pencil in an awkward manner, appeared to be unaware of the time factor, tended to respond to each item in a slow, careful fashion, and appeared to have difficulty responding to the items in sequence.

RESULTS OF TESTING:

WRAT 2-25-76 (Date) 3 (Grade) Reading 2.0 (Grade Equivalent)

Spelling 2.0 Arithmetic 2.4

STANFORD-BINET _____ (Date) _____ (IQ Range) ( )

WISC-R	4-28-76 (Date)	Verbal Scale IQ Range	Mentally Deficient	(69 & below)
		Performance Scale IQ Range	Mentally Deficient	(69 & below)
		Full Scale IQ Range	Mentally Deficient	(69 & below)

DESCRIPTION AND DISCUSSION OF THE TEST RESULTS: Laura's Full Scale IQ score from the WISC-R places her in the mentally deficient range of intelligence.

On the Verbal Scale of the WISC-R, Laura's scores ranged from the mentally deficient to the Average range of mental ability. She earned a score in the mentally deficient range on a task which measures verbal abstract reasoning ability. Her scores were in the borderline range on subtests which measure long-term retention of general information, arithmetic reasoning ability, as well as one which measures long-term retention of what words mean and the ability to learn new material presented verbally. She earned a score in the low average range on a subtest which measures short-term auditory memory, while her score was in the average range on a subtest measuring the social judgement in everyday practical situations.

On the Performance Scale of the WISC-R, Laura earned scores ranging from the mentally deficient to the average range of intelligence. She earned a score in the mentally deficient range on a subtest which measures short-term visual memory and the ability to learn new material presented visually. She also earned scores in the mentally deficient range on subtests which measure the ability to differentiate essential from nonessential visual details in a familiar picture. She earned a score in the average range on a subtest which measures the ability to fit pieces into a familiar visual configuration.

On the Bender, Laura's perceptual age equivalent was 6 years, 2 months. With a chronological age of 10 years, 3 months, her score represents a four-year lag in visual-motor integration ability. Errors were generally in the areas of shape distortions and rotations. She had difficulty with angles, tended to perseverate two Bender figures, and substituted circles for dots. Her ability to integrate two or more separate figures appears to be generally good. There was evidence of emotional indicators associated with poor planning and an inability to organize material.

Overall, Laura's strengths lie in the area of long-term retention of concrete visual imagery and the ability to utilize past experience in social situations. Her weaknesses lie in the areas of verbal and nonverbal abstract reasoning ability, short-term visual memory, and the ability to learn new material presented visually. Based upon her strengths in concrete areas and weaknesses in areas requiring the ability to think abstractly, it would appear that Laura's overall cognitive orientation is concrete rather than abstract in nature. Her visual-motor integration ability is less well developed than other children of her chronological age.

RECOMMENDATIONS FOR TEACHING:

To improve Laura's verbal abstract reasoning ability, activities such as classifying objects which go together, e.g., ball--cow--bat, building concepts of same and different by asking her how the following things are alike, e.g., apple--orange--pear--carrot, posting pictures on large posterboard--Laura identifies all pictures whose names start alike, telling the names of the letters and giving the sounds, problem-solving questions, e.g., What would happen if you put an ice cream cone in your locker?, having Laura identify incongruities in sentences, e.g., Could you fish in a swimming pool?, reading questions and then asking Laura to decide upon an answer, e.g., Which of these has legs but cannot walk? a. table--b. chair--c. dog, finding opposites, e.g., Up is to down as out is to _____. (in) and analogies, e.g., A ring is to a hand like a hat is to a _____. (head) are useful for helping this area of weakness.

Laura's strengths in the area of long-term visual imagery may be utilized to improve her deficiency in the area of nonverbal abstract reasoning. Specifically, activities such as finding incongruities in pictures, e.g., bicycle with part of handlebar missing, showing art blobs and training Laura to emit quick spontaneous responses such as, "It looks like _____.", block designs, parquetry blocks, Chinese checkers, dominoes, rearranging letters of the alphabet which have been scrambled, mazes, having Laura tell the object in a picture which is not related and does not belong, classifying pictures according to conceptual topics, such as transportation, food, etc., and sorting buttons or geometric shapes according to size, color, or shape are useful.

To improve Laura's visual sequencing ability, activities such as arranging cartoon pictures to make a story, copying patterns, dot-to-dot, and mazes are useful to improve this area.

SUMMARY: Laura is currently functioning in the mentally deficient range of mental ability. Her strengths lie in the areas of long-term retention of visual imagery and the ability to utilize past experience in social situations. Her weaknesses lie in the areas of verbal and nonverbal abstract reasoning ability, short-term visual memory, and the ability to learn new material presented visually, especially if the new material is abstract in nature. Based upon Laura's strengths in concrete areas and her general weakness in areas requiring abstract thinking, it would appear that her overall cognitive orientation is concrete rather than abstract in nature. Her visual-motor integration ability is less well developed than other children of her chronological age.

S Millner

Examiner's Signature

Sarah C. Smith

Director, Exceptional Child Services

SCHOOL PSYCHOLOGICAL SERVICES
Guilford County Schools

ADMINISTRATIVE PLACEMENT COMMITTEE RECOMMENDATION

NAME Laura Sims School Pine Tree Elementary

RECOMMENDATION FOR PLACEMENT:

___ EMR self-contained
___ EMR resource
___ LD resource
___ Regular classroom
___ Speech and hearing instruct.
___ Attendance counselor
___ Remedial reading
___ Counseling
___ Outside agency
___ TMR
___ Visually impaired
___ Further assessment

COMMENTS:

Sarah Smith Sarah Smith, Director Exceptional Child Services	8-19-77 Date	Janice Ressegger, Janice Ressegger, Director Guidance Services	8-19-77 Date
R. P. Clark Robert P. Clark, Director School Psychological Services	8-19-77 Date	Committee Member	

Notice to Principal: A conference should be conducted with the parent(s) explaining the Administrative Placement Committee's recommendations and parental permission obtained, if necessary, for the assignment. The child should then be assigned to the appropriate program and a copy of this form returned to the Office of School Psychological Services.

Parental consent obtained Yes ___ No ___
Child assigned Yes ___ No ___
Type of class ___

Comments ___

8-19-77
Date

W. Simpson
Principal's Signature

GUILFORD COUNTY SCHOOLS
Exceptional Child Services
Individual Education Program

1. STUDENT	2. COMMITTEE
Name Date of Birth: Address Grade Subject(s)	Name Position Initial Date

3. Present Level of Educational Functioning	4. Annual Goals Statements	5. Instructional Objectives	6. Special Services and Methods for Remediation
Academic Achievement: Level of performance: Test(s) used: Date: Reading Spelling Arithmetic			
social adaptation:			
prevocational and vocational			
psychomotor (fine and gross motor skills)			
Self-help skills (TMR & EMR & SC)			
language skills (Artic. & Langu.)			

7. Individual Responsible for Implementation of Special Programs	8. Dates for: Initiation Completion or Review	9. Evaluation Criteria

10. Special Program Placement and Related Services	11. Justification for Placement	13. Percent of Time in Regular Program
__Trainable Mentally Retarded __EMR Self-contained __EMR Departmentalized Secondary School) __Exceptional Child Services Academic Program __EMR Resource __LD Resource __ED self-Contained __Homebound __Speech and Language __Cerebral Palsy School __Consultation with School Psychologist __Physical therapy __Occupational therapy __Counseling services	12. Student Schedule of Special Services	14. Parental Participation I have had an opportunity to participate in the development of this plan. I (approve) (disapprove) of the implementation of this plan. _____ Parent, Guardian, Surrogate _____ Date

READING CHECKLIST
LEVEL ONE

SCHOOL _____
STUDENT _____
YEAR _____
CLASSROOM TEACHER _____
RESOURCE TEACHER _____

I. Word Analysis

A. Basic Vocabulary

__✓__ 1. Given the vocabulary of the basal text being used, will correctly identify the words

B. Phonetic Analysis

__✓__ 1. Given pictures of objects will identify the letter which represents the beginning of consonant sound heard in the name of each object.
__✓__ 2. Given pictures of objects, will identify the ending consonant sound of the word by writing on the blank the letter which represents that sound.
___ 3. Given pictures of objects, will identify the medial consonant sound of the word by writing on the blank the letter which represents that sound.
___ 4. Given a group of three words, will be able to identify the two words with the short vowel word family.
___ 5. Given a word in context from a simple sentence, will be able to identify the missing letter.
___ 6. Given records, pictures, worksheets, or word lists will identify words which contain short vowel sounds.
___ 7. Given records, pictures, worksheets or word lists will identify words which contain long vowel sounds.
___ 8. Given a group of pictures of objects will write below each picture the blend with which the word begins (bl, pl, st, br, gr, dr, fr, fl)

C. Structural Analysis

___ 1. Given a list of nouns, will form plurals
___ 2. Given incomplete sentences, will complete them with the correct form of verbs containing s, ed, er, and ing.
___ 3. Given a list of words, will form compound words.
___ 4. Given words with more than one meaning, will demonstrate understanding of the various meanings of the word.

D. Context Clues

__✓__ 1. Given questions with new words, will read silently with comprehension using phonetic and context clues.

II. Comprehension Skills

A. Main Idea

_✓_1. Given a story will be able to identify the main idea and important events in the story

B. Sequence

___1. Given a story to read silently and a group of sentences stating events from the story, will number the sentences in the order in which the events happened in the story.

C. Inferential and Critical Reading

___1. Given a selection to read, will draw conclusions a but what will happen.
___2. Given a selection or page to read, will relate his own experience with it.
___3. Given a selection to read, will identify why certain things happened.

III. Study Skills

A. Following Directions

___1. Given oral directions, will gain independence in following them.
___2. Given written directions, will gain independence in following them.

B. Locating and Organizing Information

___1. Given a list of study questions, will read stories to find answers.
___2. Given a list of words, will use the index to find other words which begin the same. (This is developing readiness for index skills)
_✓_3. Given a list of words will arrange them in A, B, C order.

C. Recalling and evaluating information

___1. Given a question related to a specific selection, will record facts to answer questions.

D. Silent Reading Skills

___1. Given a selection to read, will identify the best answer to fit the selection.

E. Oral Reading Skills

___1. Given a selection to read aloud, will read with expression and regard all punctuation marks.

IV. ENVIRONMENTAL READING SKILLS

___1. Recognizes names of city, state, common street signs, and family members' names.

___2. Uses library books to look up information on unit activities.

GUILFORD COUNTY SCHOOLS
Exceptional Child Services

SKILLS CHECKLIST

ARITHMETIC LEVEL I

School Tall Trees
Student Laura Sims
Year 1978
Classroom Teacher E. Jones

BASIC FACTS & PROCESSES

Number Seriation and Comparison (Quantitative Equality and Inequality)

1. Understands the concept of "more than" when

✓a. Using concrete objects to construct groups
✓b. Using pictures to identify groups
__c. Supplying missing numerals in incomplete sentences
__d. Using the symbol (>) more than

2. Understands the concept of "less than" when

✓a. Constructing and identifying groups with concrete objects
✓b. Identifying and constructing groups using pictures
__c. Supplying the missing numerals in incomplete sentences
__d. Using symbol (<) less than

3. Understands the meaning of the term "equal"

✓a. Using concrete objects to construct groups
✓b. Can match equal groups of pictures
__c. In a numerical and/or numerical/pictorial equation
__d. Recognizes and understands symbols (=)

Basic Addition--Concepts, Operation, and Fundamental Terminology

1. Concepts

__a. Using concrete objects and pictures
__b. Use of the (+) symbol
__c. Using the symbol in numerical sentences
__d. Understands the meaning of sum and plus

2. Operations with 2 or 3 single-digit numbers
   a. Sums through 5

__1) Using concrete objects
__2) Using pictures
__3) Vertically-presented
__4) Horizontally-presented
__5) Can supply missing addends

b. Sums through 10

__1) Using concrete objects
__2) Using pictures
__3) Vertically-presented
__4) Horizontally-presented
__5) Can supply missing addend

3. Fundamentals

__a. Solve simply presented oral work problem with and without picture clues
__b. Solve simple written word problems with and without picture clues
__c. Recognizes commutatively of addition
__d. Masters basic addition facts for sums through 5; through 10

Basic Subtraction--Concepts, Operation, and Fundamental Terminology

1. Concepts

__a. Using concrete objects and pictures
__b. Use of the - symbol in pictorial sentences
__c. Uses the - symbol in numerical sentences

2. Operations with minuends through 5

__a) using concrete objects
__b) using pictures
__c) vertically presented
__d) horizontally-presented
__e) can supply missing term

3. Operations with minuends through 10

__a) using concrete objects
__b) using pictures
__c) vertically presented
__d) horizontally-presented
__e) can supply missing term

4. Fundamentals

__a) Solve simple orally presented word problems with and without picture clue
__b) Solve simple written word problems with and without picture clues
__c) Masters basic subtraction facts with minuends through 5; through 10

APPENDIX E

CRITERIA FOR RATING

EVALUATION FORM

FOR APPRAISING AN INDIVIDUAL EDUCATION PLAN

Instructions: Each member of the evaluation team is requested to complete independently one of these forms for each Individual Education Plan by indicating in the appropriate column whether each listed criterion should be rated 5 = superior, 4 = above average, 3 = average, 2 = poor, or 0 = not applicable. Before evaluating a plan, please record the identification number found in the top right-hand corner of the Individual Education Program Form

Indication Code: _____

CRITERIA FOR EVALUATION PLAN	Please circle one rating for each criterion					
Information Base						
1. Achievement and aptitude data summarized and available to planning committee.	5	4	3	2	1	0
2. Information about students in the affective domain have been summarized.	5	4	3	2	1	0
3. Demographic data relevant for the child's education have been summarized.	5	4	3	2	1	0
4. Weaknesses and strengths of student have been documented.	5	4	3	2	1	0
5. Data have been collected, summarized, analyzed, and interpreted in order to give valid picture of child.	5	4	3	2	1	0
Involvement in Planning Activities						
1. Teacher involvement was evident in the development of the program.	5	4	3	2	1	0
2. Parent involvement was evident in the development of the program.	5	4	3	2	1	0
3. Support personnel involvement was evident in the development of the program	5	4	3	2	1	0

CRITERIA FOR EVALUATING PLAN	Please circle one rating for each criterion					
4. Nonprofessional personnel involvement was evident in the development of the program.	5	4	3	2	1	0
5. School Board involvement was evident in the development of the program.	5	4	3	2	1	0
6. Business and professional personnel involvement was evident in the development of the program.	5	4	3	2	1	0
<u>Establishment of Instructional Priorities</u>						
1. Priorities are related to findings in information base.	5	4	3	2	1	0
2. Priorities reflect the expectations and beliefs of parents and educators.	5	4	3	2	1	0
3. Priorities are related to the identified needs of the child.	5	4	3	2	1	0
4. The selection and ranking of priorities was done in a systematic manner.	5	4	3	2	1	0
5. The rationale employed in establishing priorities was sound.	5	4	3	2	1	0
<u>Establishment of Goals</u>						
6. Goals for the child are clearly stated and understood by school personnel, and the parents.	5	4	3	2	1	0
7. Stated goals reflect the expectations of planning committee.	5	4	3	2	1	0
<u>Establishment of Instructional Objectives</u>						
8. Objectives reflect the annual goal statements of the program.	5	4	3	2	1	0

CRITERIA FOR EVALUATING PLAN	Please circle one rating for each criterion					
9. Objectives indicate that educators have accepted responsibility for bringing about specific outcomes in child.	5	4	3	2	1	0
10. Objectives are written in specific terms in that they propose the questions: Who?, What?, When?, and How?	5	4	3	2	1	0
11. Data can be obtained and analyzed for determining whether objectives have been met.	5	4	3	2	1	0
12. Objectives are written for the major educational needs identified for the child.	5	4	3	2	1	0
13. Objectives are written to reflect student problems which were identified in the information base.	5	4	3	2	1	0
14. Objectives are written in order that appropriate evaluation procedures can be applied.	5	4	3	2	1	0
Establishment of Special Services						
15. Special services in the program are addressed to meeting stated objectives.	5	4	3	2	1	0
16. Special services were selected and planned in a systematic manner.	5	4	3	2	1	0
17. Research and program literature, authorities, and other sources were used in selecting special services from a number of alternatives.	5	4	3	2	1	0
18. Several alternatives were considered in selecting special services.	5	4	3	2	1	0

CRITERIA FOR EVALUATING PLAN	Please circle one rating for each criterion					
19. Completion deadlines were established for all major special services.	5	4	3	2	1	0
20. Responsibility has been assigned for the completion of all major special services.	5	4	3	2	1	0
21. Performance standards are established for all major special services.	5	4	3	2	1	0
Evaluation						
22. Evaluation procedures are outlined in detail for all stated objectives.	5	4	3	2	1	0
23. Data are available for evaluating all stated objectives.	5	4	3	2	1	0
24. Evaluation designs meet accepted scientific standards.	5	4	3	2	1	0
25. The implementation of an evaluation design will indicate with a high degree of validity whether an objective has been met.	5	4	3	2	1	0