

DOCUMENT RESUME

ED 097 791

EC 070 241

AUTHOR Singh, S. P.
TITLE Preparation of Education Personnel in a Pluralistic Social Context. Program Assumptions, Objectives, Implementation and Evaluation Strategies - An Approach: Program Early Childhood Early Intervention (N-3).
INSTITUTION University of South Florida, Tampa. Coll. of Education.
SPONS AGENCY Bureau of Educational Personnel Development (DHEW/OE), Washington, D.C.
PUB DATE Jun 74
GRANT OEG-0-70-1816 (7251)
NOTE 38p.; For related documents, see EC 070 240 and 369

EDRS PRICE MF-\$0.75 HC-\$1.85 PLUS POSTAGE
DESCRIPTORS *Cultural Differences; Evaluation Methods; Exceptional Child Education; Graduate Study; Kindergarten; *Learning Disabilities; Preschool Programs; *Prevention; Primary Grades; *Program Descriptions; Program Evaluation; *Teacher Education

ABSTRACT

Described is a proposed graduate program to train nursery school, kindergarten, and primary grade educational personnel in a pluralistic social context for the purpose of reducing the number of children in need of special educational services. Program assumptions include causes of behavior such as the interaction of the internalized sets of concepts held by children with the external factors of home and school. A program format is recommended which includes curriculum content focusing on understanding the child's self through study of child rearing practices and cultural pluralism. Listed are 24 program objectives such as the development of awareness and appreciation of individual differences among children. The schedule for a typical week includes field work experiences and class participation. Noted is the involvement of community members. Compared are six modes of program evaluation such as gathering empirical evidence on pupil progress and evaluating the rationale on which a particular program is based. An evaluation design is proposed which would include provisions to collect empirical data, gather information to evaluate the program rationale, and assess the motivational and attitudinal variables of the program. Implementation and feedback phases involve activities such as taking standardized tests prior to and following the program. (DB)

**Preparation of
Education Personnel in a Pluralistic Social Context
Program Assumptions, Objectives, Implementation
and Evaluation Strategies--An Approach**

Program Early Childhood Early Intervention (N-3)

Contract No. OEG 0-70-1816 (7251)

BEST COPY AVAILABLE

**S. P. Singh, Ed.D.
Associate Professor
Project Director**

The training program reported herein was conducted pursuant to a training contract with BEPD, Office of Education, U. S. Department of Health, Education and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Point of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

**College of Education
University of South Florida
Tampa, Florida**

June 1974

ED 097791

175 C 0 70 241

BEST COPY AVAILABLE

Introduction

It is generally accepted that in a non-congruent environment within a pluralistic cultural context children are characterized by a disproportionately high incidence of physical, emotional, social and intellectual discrepancies that are dramatically out of proportion to what might be expected. Very few of the teachers who serve children in such a context have had training aimed specifically towards the understanding of the dynamics of pluralistic cultural context as it effects learning and behavior patterns and learning disorders due to "environmental caging" To help meet the identified needs of children in such a context, a program has been developed as described in subsequent pages. The program described herein, is an attempt towards searching a better solution to assist children with special needs in the regular classroom.

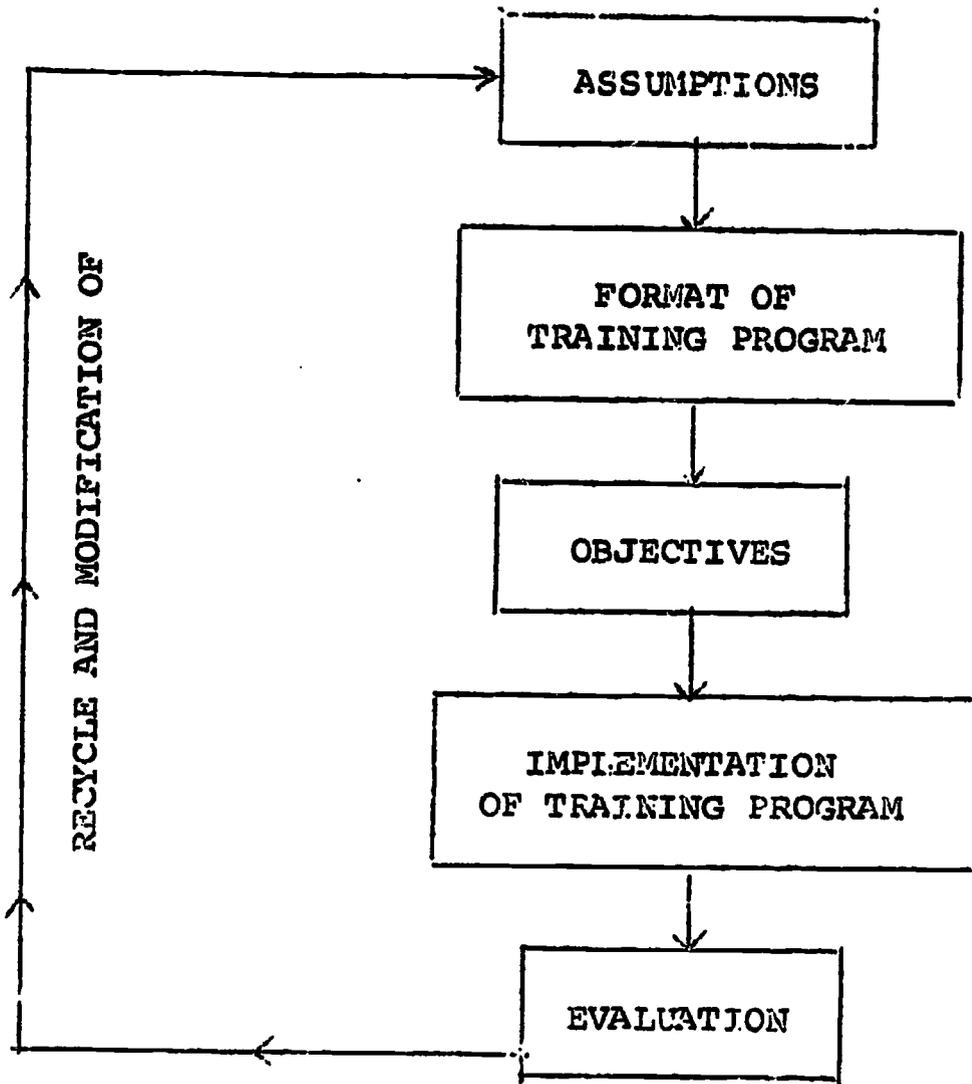
Educators frequently voice the proposition that in general nothing dissipates problems or alleviates their possible consequences as effectively as programs employing early intervention techniques. In spite of this, education still attempts to eliminate many major difficulties by directing its efforts to the reduction or eradication of the results of those difficulties. rather than by mustering its forces to prevent problem

areas from becoming serious initially. Therefore, the purpose of the current program is to prepare persons to work with children in nursery schools, kindergartens and primary grades either as teachers or trainers of teachers with preventive skills and competencies.

The immediate and long range objectives of this program are identical: a reduction in the number of individuals in need of special services and a resultant conservation of human resources.

BEST COPY AVAILABLE

CONCEPTUAL OUTLINE

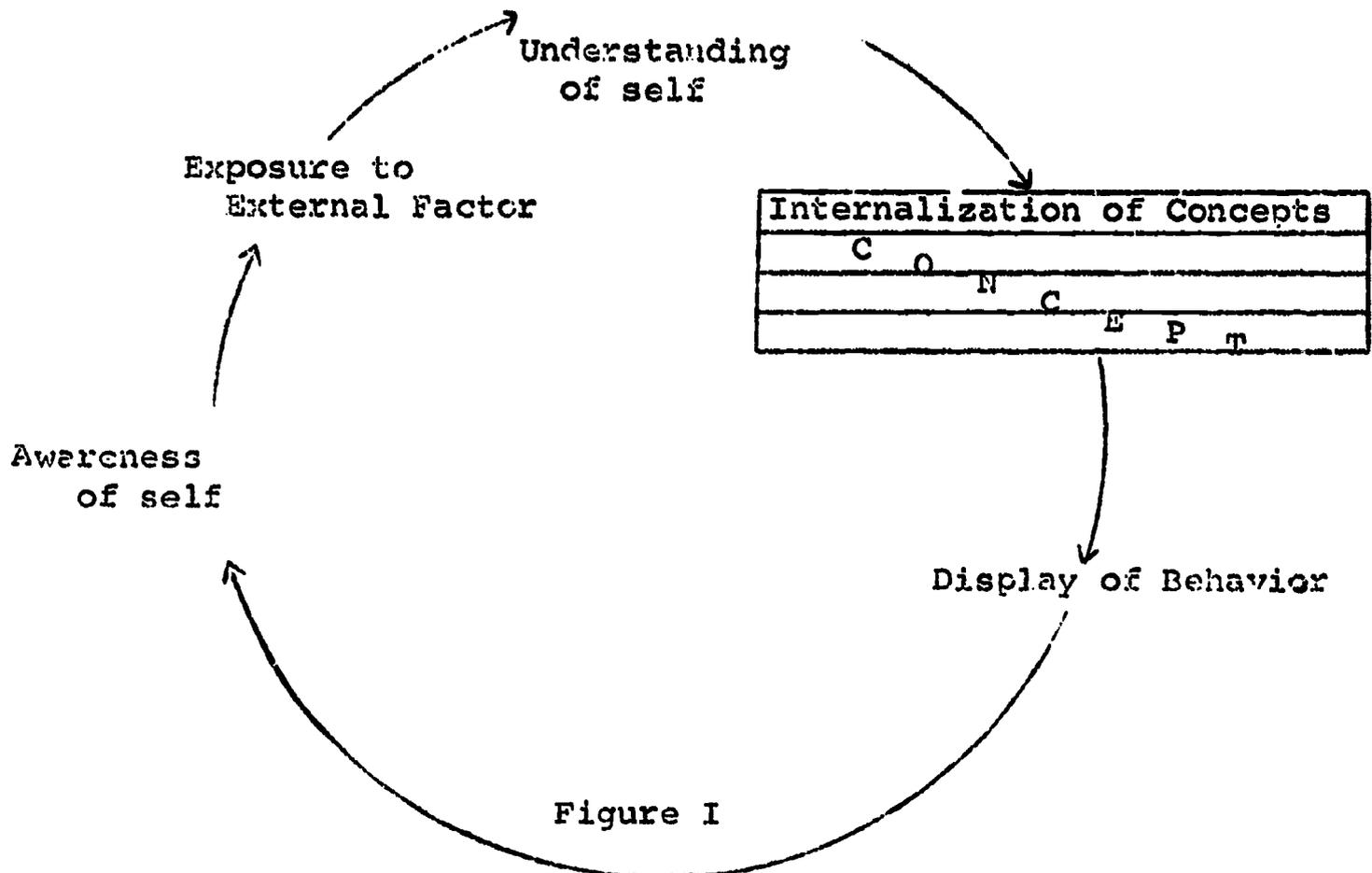


ASSUMPTIONS :

The objectives of the current program are based on the basic assumption that the formulation of behavior, in general, seems to be the outcome of the following processes.

- (1) Emergence of awareness of self activated by reflex as it interacts with external factors (family, peers, classmates with diversified background, methods and materials etc.) thus creating reaction followed by understanding and culminating into the internalization of the concept (values, etc.). The internalized concepts then are displayed through external mechanics such as performance in the classroom, inter-intra relationship with teachers, peers, etc. (Figure I)

Children
at
birth
& on



Children
at
school
& on

(II) Internalized sets of concepts of children (outcome of child-rearing practices in general) are exposed to external factors of school (peers with diversified background, teachers, curriculum content, etc.) thus creating a state of tolerance, a state of acceptance, a state of accommodation, a state of ambivalence, or a state of rejection towards learning and growth.

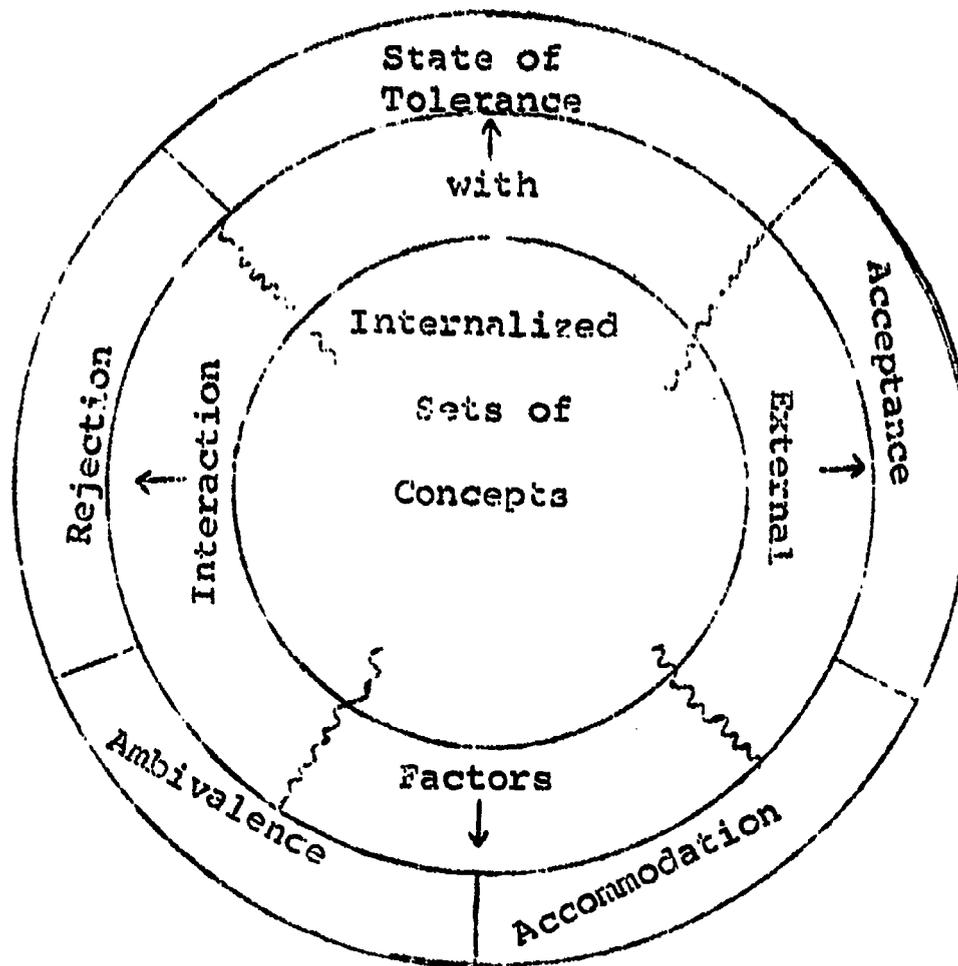


Figure II

(III) Internalized sets of concepts of graduate students exposed to external factors of training components (peers with diversified background, staff, curriculum content, etc.)

Trainees thus creating a state of reaction with individual self. (Graduate student) The reaction may cause a state of tolerance, a state of acceptance, a state of accommodation, a state of ambivalence, or a state of rejection towards learning and growth.

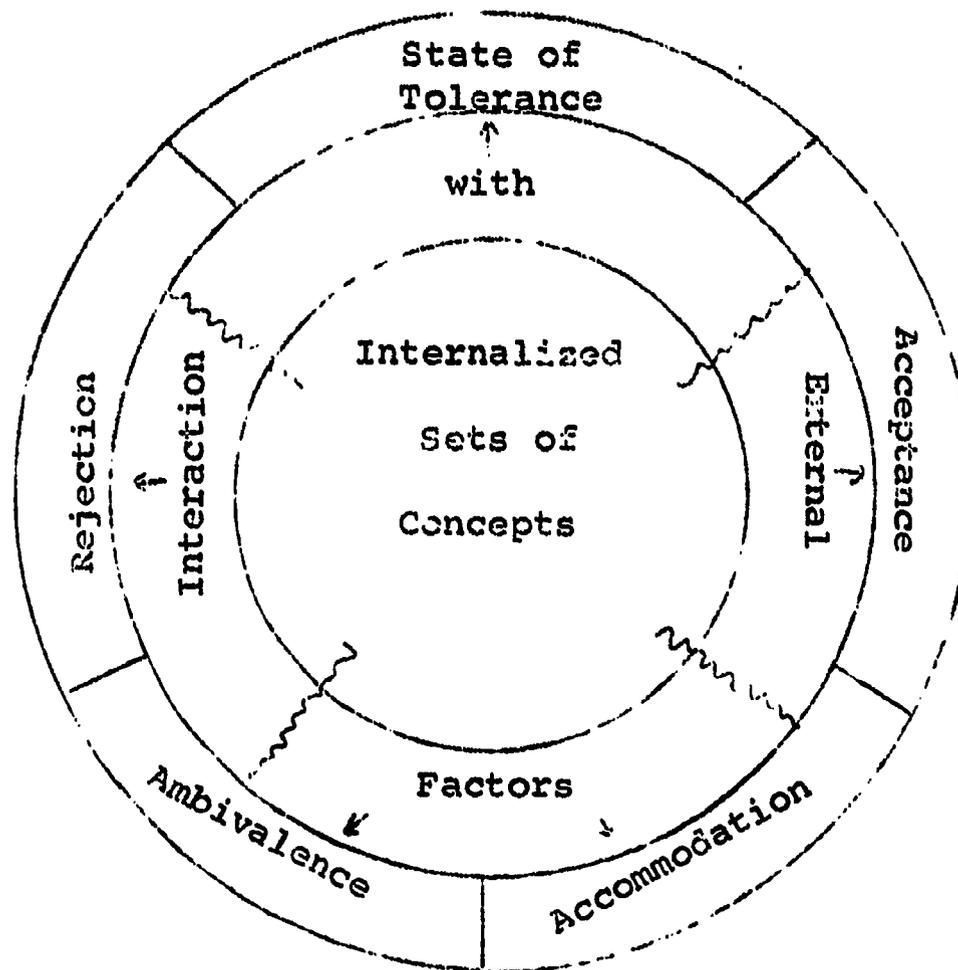


Figure III

(IV) Behavioral manifestations are the outcome of 1) self reflective process, 2) socially prone reflective process (social desirability), & 3) interactive process between self and social reflective process.

In all the above processes it is assumed that the nature of formulation of behavior seems to be 1) cyclical in nature and interdependent on each other, 2) depends on the dynamics of varied child-rearing practices, 3) reactive (tolerance, acceptance, etc.) to school and college content as it relates to internalized sets of concepts and 4) the interactive continuous process in a given time and space between self and societal reflective processes.

In addition to the general assumption of behavior development, the following assumptions are also taken into account for the development of training content.

- 1) Understanding of others must relate to the understanding of self in a more or less self-evolving altruistic fashion for all involved in the program (staff, students, children).
- 2) Components of training program must not necessarily be discrete and independent in itself rather be interdependent and interwoven. It is assumed that components

as parts have little or no meaning without the understanding of its nature as it relates and interacts among each other.

- 3) Procedures (tools and methods, etc.) are essential means for the achievement of the established goals, however, means must not become goals in itself.

It is assumed that means notoriously tend to persist although the needs for which they were created may not exist.

- 4) Early employment of appropriate intervention techniques in areas of language, math, science, etc. could substantially reduce the numbers of students who eventually could become the candidates for special services.
- 5) Understanding of identification and assessment procedures for young children with amelioration program procedures are more effective.
- 6) Effects of deprivation on human development, learning, personality development and socialization process once analyzed and looked upon as they relate to self*

*Self - includes all involved in the training program (students and the staff)

and others** could provide better survival skills for trainees.

- 7) Field experience provides opportunity for the development of self and understanding of others as they interact and effect each other.
- 8) Courses in anthropology, sociology, and psychology could provide insight towards the development of self and understanding of others.

**Others - include all for whom trainees are trained (young children)

FORMAT :

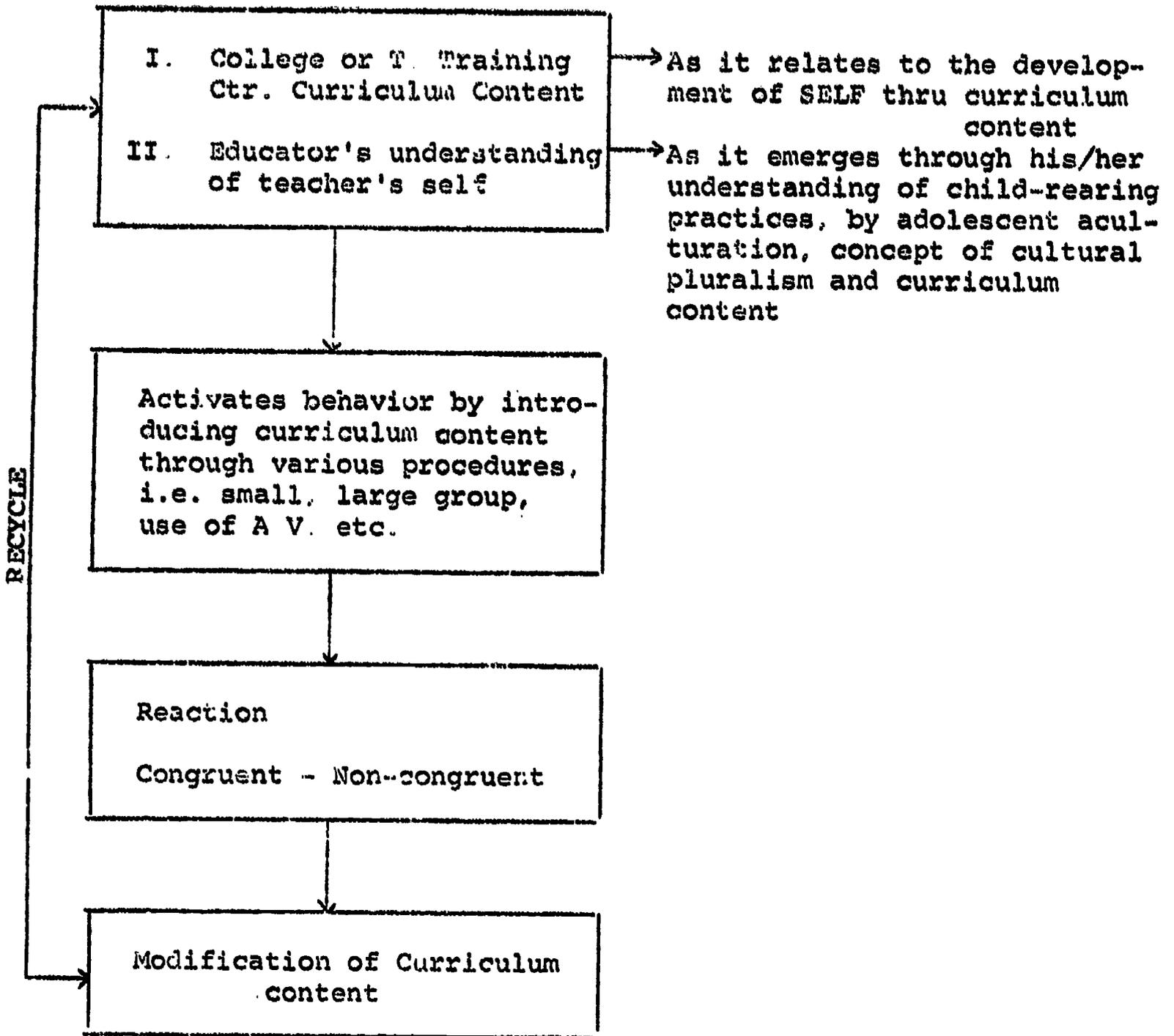
BEST COPY AVAILABLE

Based upon the assumptions, the general suggested formats for both the College training program and school activities shall include the following items and sequence (see also Figures IV & V) :

- 1) College/school curriculum content as it relates to the development of self and Educators/Teachers understanding of children's self as it emerges through his/her understanding of child-rearing practices, adolescent psychology and dynamics of cultural pluralism.
- 2) Educator/Teacher activates behavior by introducing curriculum content through various procedures (small/large groups, individual instruction, use of A. V. etc).
- 3) Follow the reactions (congruent/non-congruent) of pupil/student behavior.
- 4) Modification of curriculum content.
- 5) Recycle.

BEST COPY AVAILABLE

COLLEGE



BEST COPY AVAILABLE

Figure IV

BEST COPY AVAILABLE

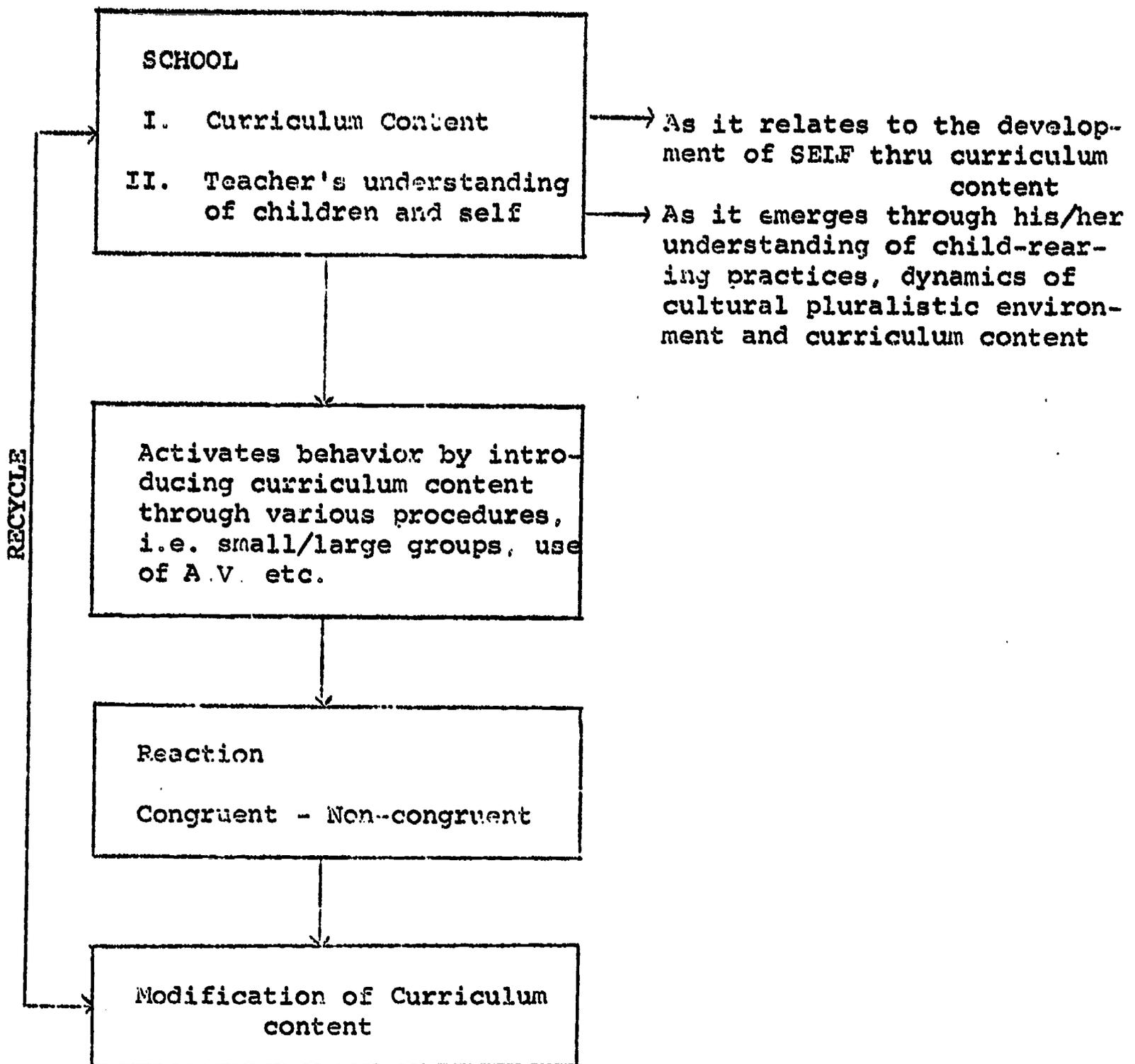
SCHOOL

Figure 7

BEST COPY AVAILABLE

OBJECTIVES AND IMPLEMENTATION:

The above formats of the training and school activities program are to achieve the following objectives through a suggested implementation procedures:

Objectives	IMPLEMENTATION	
	College	School
1. Develop higher thought processes (analytical thinking, problem solving ability, creativity, concept formation, etc.)	Continuous formal and informal seminars. It should be continuous & imbedded in all other activities of college or training ctr act.	Continuous interaction and demonstration
2. To become aware and develop appreciation for individual differences	Case study (will include self and others) and seminar discussions	Case study (self & others)
3. To become aware of the effect of level of aspiration of the pupil/student and expectation of the teacher/educator on academic performance	Continuous research studies such as Pygmalion in the classroom	Same
4. To develop skills in the processes of learning such as inquiring, observing, generalizing, experimenting, discovering, classifying, verifying and quantifying.	Imbedded in all curriculum activities	Imbedded in curriculum activities & demonstrations
5. To develop the ability to assess pupil progress and utilize results in planning instruction	Develop appraisal of young children through directed study or modified version of EDS 611 (Psycho. Ed. App. of Except. Children)	Same
6. To know the importance of defining goals, planning experiences, and pacing activities according to the developmental level of each child	Preparation of profile & preparing Ed. Programs	
7. To become cognizant of human behavior patterns and sequence of growth, the effect of genetics and environmental factors which influence personality development from birth to adolescence with particular emphasis upon early years.		

Objectives	College	School
8. To gain general knowledge of the nature of prejudice, social integration and contextual (situation) analysis	Modified version of EDS 541 (see appendix) interdis. seminar (see interdis. seminar report)	Same
9. Be able to understand and apply the concept of individualized instruction and learning disability prevention in the regular classroom	Through Directed Study as outlined in appendix or modification of EDS 582	Demonstration
10. To develop knowledge about the principles of learning including <ul style="list-style-type: none"> a. fundamentals of the learning processes and different learning pattern b. Cognitive development c. perceptual development d. characteristics of environments conducive to optimal learning 	Principles of Learning EDF 613	Demonstration
11. To gain general knowledge about the family structure in various ethnic social, and specific interest group (parents of exceptional children) and also the general nature of group dynamics. To display skill in the utilization of multi-disciplinary approach in involving parents, paraprofessionals, and professional personnel in the school program.	General course of interdisciplinary seminar or modify EDS 643, Guidance for Exceptional Children and Parents	Preparation of parent study report
12. To gain knowledge of the nature of prejudice, ethnocentric behavior, dynamics of closed and open mind	EDS 541 with suggested modification as suggested in appendix	Demonstration & discission concept of Pr
13. To understand general principles and applicability of research design & statistics	EDF 605, 607 modify with relevant classroom needs	Application
14. To be able to understand research studies in journals and books		

IMPLEMENTATION

Objectives	College	School
<p>15. Be able to develop knowledge in general, child development theories and practices</p> <p>a. critical period</p> <p>b. Piaget's formulation on how children learn</p>	EDE 527 or EDF 612	Application in the classroom
<p>16. To gain knowledge about various interaction analysis (verbal and nonverbal) techniques</p>	Imbedded in the overall training content, Field Work EDS 649, Curr. Int. course	Application & assess the meaningfulness
<p>17 To become aware of general speech problems, learning problems, and behavior handicaps in the regular classroom</p>	EDS 676 with modifications (inclusion of speech problems in regular classroom and exclusion of severe speech problems)	Application in the classroom
<p>18. To be able to understand the use of a wide variety of audiovisual materials</p>	A. V. Course and Field Work EDS 649	Application
<p>19. To know the importance of listening skill</p>	Seminar, overall program and Field Work (EDS 649)	Application
<p>20. To be able to stimulate language development</p> <p>a. become aware of language variations</p>	EDE 531	Application of principles
<p>21. Be able to demonstrate the understanding of mathematical concepts and procedures to prevent the learning disorders such as:</p> <p>a. The order of whole numbers and concept of sets in children</p> <p>b. The operation of addition, subtraction, multiplication and division</p> <p>c. The concept of time in young children</p> <p>d. The techniques for teaching elementary geometry (metric and non-metric)</p>	EDE 515/516	Application

IMPLEMENTATION

Objectives	College	School
<p>22. Be able to impart some scientific principles and procedures as it relates to self such as:</p> <ul style="list-style-type: none"> a. The earth is a very large place compared to his small neighborhood. The earth is very small in comparison to stars, moon, and space. b. Provide situations to deepen children's concepts of the surrounding world by feeling, touching, seeing, smelling, tasting, and hearing. Thus, helping children perceive qualities of objects or situations, gather impressions, make their own interpretations, and generalize from experiences. c. Develop concepts of interdependence and interrelationships of living things to other living things and of living things to the physical environment. d. Develop concept of variation and change in weather. 	<p>Individual project, small & large group discussion & project reports on topics decided by mutual agreement between instructor and graduate student</p>	<p>Same except topics & procedures will be decided by teacher/childrer & supportive service personne</p>
<p>23. Be able to help children seek information about the physical and personal world through literature and</p> <ul style="list-style-type: none"> a. Develop an appreciation of humor in literature. b. Discuss poetry and its use. c. Use various types of children's books such as: 1) fiction-picture books, folklore, realistic books, historical fiction, mysteries, animal stories; 2) non-fiction books in content areas. 	<p>Same</p>	<p>Same</p>
<p>24. Be able to develop reading skills such as</p> <ul style="list-style-type: none"> a. Systematic instruction and practice in performance of certain tasks involving eye-hand coordination. 	<p>Use ITPA Mariene Frostig & other perceptual aids plus reading materials</p>	<p>Same</p>

IMPLEMENTATION

Objectives	College	School
<ul style="list-style-type: none"> b. To follow a left to right visual progression, c. To recall story events in sequence and to express ideas in form of complete sentences, d. Make auditory discriminations involving sounds in young children e. To pick out single words from context and match words, f. Develop refinement of small muscle coordination for handwriting. 		

In addition to the above described objectives and implementation procedures, the training program also made attempts to make theoretical aspects of graduate program applicable by combining theoretical presentation with field work, providing skills in contextual (situation) analysis and continuous interdisciplinary seminars by: 1) bringing in parents of children to discuss how to make school programs more effective for their children; 2) student reports on novels, autobiographies and the history of diversified groups, 3) assignments to various community agencies such as going with a social welfare worker on her rounds for a day or two or listening to tapes of a guidance counselor helping an emotionally disturbed or learning disability youngster from a varied background area, 4) having nearby school district supervisory personnel talk about the problems of the diversified backgrounds of youngsters in their school systems. 5) having nationally

known experts talk about procedures seemingly helpful in combatting the various problems associated with diversified background youngsters; 6) surveying community agencies geared to the special needs children as to the kinds of services they offer and how teachers might cooperate with them in helping young clients and their parents more effectively.

Graduate students are involved in gaining insight about the:

- 1) principles of group dynamics and interaction analysis by applying these principles in analyzing video tapes of their own teaching;
- 2) principles of language development. Emphasis has been on motor and visual perception skills and the relationship of these skills to language development. The student also becomes familiar with assessment procedures and sequential instruction design. During their field work all students experience teaching at "success level", i.e., developmental tasks which children can perform successfully that will progress slowly in difficulty. The students also employ various methods of teaching language through the experiences of the children. Language that the children use is considered to be the language that is first used for development of more effective communication skills. The students use tapes of children's conversation and during seminars such tapes are used to analyze dialects, articulation, etc..
- 3) the importance of classroom situations in developing positive self-concepts and positive learning environments;
- 4) about behavior shaping in the classroom;
- 5) how to diagnose the individual children's learning and behavior problems and how to prescribe methods and curricula for individual learning styles.

Schedule for a Typical Week

(For Both Experienced and Prospective Teacher)

Monday	9-12 a.m.	Field work in a school, Neighborhood Service Center Nursery or Model Cities Day Care Center, guidance clinic, etc.
	1-5 p.m.	Study, consultation with faculty on research projects, curriculum questions, videotapes of their fieldwork, or time with the family as individual needs require.
	6-10 p.m.	Participation in a course work such as " <u>Speech and Language Disorders.</u> "
Tuesday	9-12 a.m.	Same as Monday A.M.
	1-5 p.m.	Same as Monday P.M.
	6-10 p.m.	Undertake the course " <u>Trends in Science Instruction.</u> "
Wednesday	9-12 a.m.	Same as Monday A.M.
	1-5 p.m.	Same as Monday P.M.
	6-10 p.m.	Undertake the course, " <u>Programs in Early Childhood Education.</u> "
Thursday	9-12 a.m.	No field work scheduled. See Monday P.M. schedule.
	1-5 p.m.	Same as Monday P.M. schedule.
	6-10 p.m.	Participation in the course, "Individualized Instruction and Prevention of Learning Disabilities."
Friday	9-12 a.m.	See Monday P.M. schedule.
	1-4 p.m.	Seminar--Reaction session on topics related to fieldwork, general college courses, and contextual (situation) analysis.

COMMUNITY, TEACHER AND STUDENT INVOLVEMENT. The initial community involvement in this program has been through individuals such as the Hillsborough County Assistant Superintendent of Schools in charge of Instruction and the head of the Educational Component of Model Cities, for their suggestions about preceding program content and procedures. They have also offered the public schools for laboratory experiences for graduate students. PTA-presidents and elected representatives of Follow-Through parent groups have performed similar roles. Visits by the staff to various community agencies during past training programs in order to secure information on the types of services available to pupils and their parents. Many agency directors have come and spoken to graduates and have welcomed visits by students to observe them in the field or in their offices.

During training, both Prospective and Experienced students visit community agencies, do field work and internships in the schools, etc.

The graduate students from previous years have been asked to evaluate their experiences (Follow-up report). Suggestions are carefully considered and frequently implemented. The students are also involved before the training program begins in an orientation session. Objectives of the program are presented and students are encouraged to interact and react to program goals. During the course of training, students frequently evaluate various aspects of the program and continue to evaluate it throughout the training. One year and again, two years after the completion of the training,

they are usually asked for their opinions of the strengths and weaknesses of their training and how effectively the objectives of the program were met.

EVALUATION*

The conceptual framework (definition of evaluation and the structure of evaluation systems) for the present evaluation procedure has been formulated through an intensive study of the literature available in the field (Cronbach, 1963 (2); Guba, E. G., 1967 (5) Scriven, 1967 (10); Tyler, 1967 (12); Grobman, 1968 (4); Stufflebeam, 1968 (11); Griessman, 1969 (3); Hammond, R., 1969 (6); Ott, J. M., 1969 (7); Popham, 1969 (8). In the following pages, an attempt has been made to describe the derived evaluation framework and the scheme for evaluation.

Definition of Evaluation: For the purpose of the present program, major aspects of the definitions of Cronbach, 1963 (2); Stufflebeam, 1968 (11); and Guba, 1969 (5) have been incorporated. Cronbach, 1963 (2) has conceived evaluation as "the collection and use of information to make decisions about an educational program." Stufflebeam, 1968 (11) has used six key terms: "Evaluation is the 1) process of 2) obtaining and 3) providing 4) useful 5) information for making 6) educational decisions. Guba, 1969 (5) described evaluation as determining the congruence between performance and objectives. While all these definitions have great merits, they are nevertheless, limited by the context within which they were conceived.

*Singh, S. P., A Strategy to Evaluate A Teacher Training Program, New Jersey, Education Technology Research, 1971.

For the purpose of the educational program described herein, the author proposes the following definition: "Evaluation is an operational system which contains a 1) process of 2) compiling and 3) analyzing 4) information and 5) data 6) during a program as it progresses and 7) the aftereffect as the product makes an impact in its respective field to 8) determine the deviation of performance from the objectives to 9) make decisions about an educational program".

The above definition has adopted the relevant contents from definitions of Cronbach and Stufflebeam (such as process, compiling information for decision making) to suit the need of the present program. In addition, the present definition has provisions to analyze, not merely provide, hard data, as proposed by Stufflebeam. This definition also provides for a study of deviations from objectives and performance as proposed by Guba.

The Structure of Evaluation Design: The three most common ways in which programs are evaluated are as follows: 1) to gather information and data before and after they have been implemented for within group comparison 2) compare the results produced by other similar programs and 3) compare the results produced in a control situation where no program at all has been used. The fourth way in which programs may be evaluated is in terms of their rationale and how much sense the rationale makes based on the state of our knowledge about those programs at the moment of evaluation. Fifth, programs can be evaluated in terms of the attitude of both the staff and the trainees toward the program, and sixth, evaluation can refer to the simple description of the program and to an actual

account of its use. It wouldn't be out of place to discuss some of the ramifications of each of the above six ways in which the evaluative process may be approached.

In the empirical approach to evaluation, some attempt is made to gather data that will bear upon the efficacy of the program in question. These data represent trainees' performance levels at some specified time after having been exposed to the program in some form. The data are then used in a comparison with other data representing performance levels of trainees who have not had the benefit of the program in question. There are at least three ways in which this comparison can be made. First, the comparison can be made between those that have been exposed to the program and those that have not been exposed to any program. If the trainee progresses to a certain point within the program in a specified amount of time, this point can be compared with the progress of trainees who have not been introduced to a systematic program. The problem with this particular kind of comparison resides in the fact that it isn't practically possible over a long period of time to have a control group that is constituted of trainees who are given no systematic training.

Second, a comparison can be made between the performance levels of trainees having the target program and trainees having been subjected to other systematic programs. Apparently, much of the research relevant to the second type of comparison, that among two or more specific programs, has shown limited success in demonstrating the efficacy of one program over another. Further, it is very likely that two different programs will have different goals and will

certainly proceed along different avenues to reach these goals. This would mean that the comparison between the two programs would be difficult to assess, at least to the extent that the two programs taught different skills. One might argue that the goal of all teacher training programs is to train the trainees in a certain general proficiency when they encounter typical learning situations. However, it is doubtful whether we could expect experts to agree to what level of proficiency all training programs should lead. Even if they could agree, however, there is still the problem that when we deal with trainees, we must expect a great range in the proficiency of their skills. This means that one would be left in the position of comparing proficiency among groups of trainees that were at various stages of the program. It indicates that the intermediate goals set up by training programs are not directly comparable across programs and trainees' performance is difficult to compare across programs.

A third procedure involves comparisons within a single group. Comparisons can be made between trainees' initial and final performances. The question asked is: Does the trainee increase his teaching efficiency, as specified under the criteria of the program, from the point at which he started as a function of having been trained with a particular training program?

In each of the above three comparison situations, the experimental vs. control groups comparison, the between experimental groups comparison, and the within group subject as his own control comparison, there are at least three methods of documenting performance increase. The first method has to do with what might be called

the distance traveled, i.e., how much progress has an individual shown within a certain content area as a function of having been introduced to the training program in question. The specific tests used to assess distance traveled are carefully chosen to reflect the skills desired by the training program; thus they are program specific. The second method of documenting performance increase has to do with the retention of what was learned over a specified amount of time. Finally, the third method of ascertaining performance increase is in terms of the degree of transfer that is attendant upon the use of the particular training program in question.

Going back to the three ways in which comparisons can be made, two between-group comparisons and one within-group comparison, it would appear that the latter may turn out to be the most useful, as it gets around a number of the difficulties outlined above. However, it has a major difficulty of its own -- the problem of relativity. It is possible to document change across time as a function of having encountered a specific training program, but is this change adequate? We have no readily available guidelines that tell us when this change is enough.

This brings us to a discussion of the second major mode of evaluation of training programs. This mode is a rational approach and has to do with the rationale upon which the particular program in question is based. The most meaningful comparison that can be made here is not between training programs based upon different rationales, but rather between the actual results obtained with trainees on the one hand and the expectations as laid down in the rationale upon which the program is based on the other.

The third major mode by which programs may be evaluated has to do with attitudinal and motivational variables of both the professional trainers and the trainees. Based upon the research findings of Bruner, 1955 (1) and Rosenthal, 1966 (9), it would appear that the degree of enthusiasm professionals have for the particular training being used is a major determinant of success or failure in that training. This would suggest that a way in which to increase the efficacy of training would be to change the attitude of the professional staff involved. Even though this possibility needs further exploration, the attitudes of the trainees engaged in the training programs and also the professionals' disposition toward the program would seem to be very important in determining the success of the program.

The fourth mode in which evaluation can be approached has to do with a description of the program and its use by those involved in its implementation.

In Summary, there are at least six major dimensions in which evaluation may proceed. First, the evaluation can be made in terms of the efficacy of a particular training program. This phase of the evaluation is based upon empirical evidence gained from individuals actually undergoing training in the program; second, compare the results with other similar programs; third, compare the results produced in a control situation where no programs have been used; fourth, evaluation can be made in terms of the rationale upon which a particular program is based; fifth,

an evaluation procedure can include an assessment of motivational and attitudinal variables relevant to the program and sixth, an evaluation can include an anecdotal description of the problems actually encountered in the front lines by the individuals implementing the program.

PLANNED OPERATIONAL SYSTEM FOR EVALUATION:

The scheme for evaluation described in the following pages is an outgrowth of the above discussion of the definition of evaluation and the structure of evaluation design. Since there is no single mode (as discussed above), that could provide comprehensive data and information, the proposed plan contains elements suitable to evaluate the program described herein. The present system has provisions to:

1. Collect empirical evidence to evaluate the efficacy of the program in meeting its objectives.
2. Gather information and data to evaluate the rationale upon which the program is based.
3. Assess the motivational and attitudinal variables relevant to the use of the program.
4. Include a description of the problems encountered in the front line by the individuals implementing the program.
5. Assess the after effect of the program.

Procedure: The above mentioned provisions are attained through a planned operational system for evaluation (see diagram I). The operational system has three phases: Planning (Phase I, implementation (Phase II), and feedback (Phase III). During Phase I, the program assumptions and format are planned.

It is implemented during regular university quarters. Feedback information and data are collected during the program (Phase II) and at the conclusion of the program (Phase III).

BEST COPY AVAILABLE**DIAGRAM II****RESEARCH AND EVALUATION DESIGN****SUBJECTS****PROSPECTIVE TEACHER FELLOWS****N = _____****EXPERIENCED TEACHER FELLOWS****N = _____**

1. **PRE-TEST-KNOWLEDGE OF PROGRAM OBJECTIVES, ETC.**
2. **PRE-TEST-ACCORDING TO RESEARCH DESIGN**

TREATMENT
PLANNED TRAINING PROGRAM

POST-TESTS**TREATMENT OF DATA:****ANALYSIS & FINAL REPORT**

1. **EVALUATION =**

COMPARE PRE-TEST MEANS WITH POST-TEST MEANS BY "t" TESTS AND TERM ANALYSIS

2. **RESEARCH =**

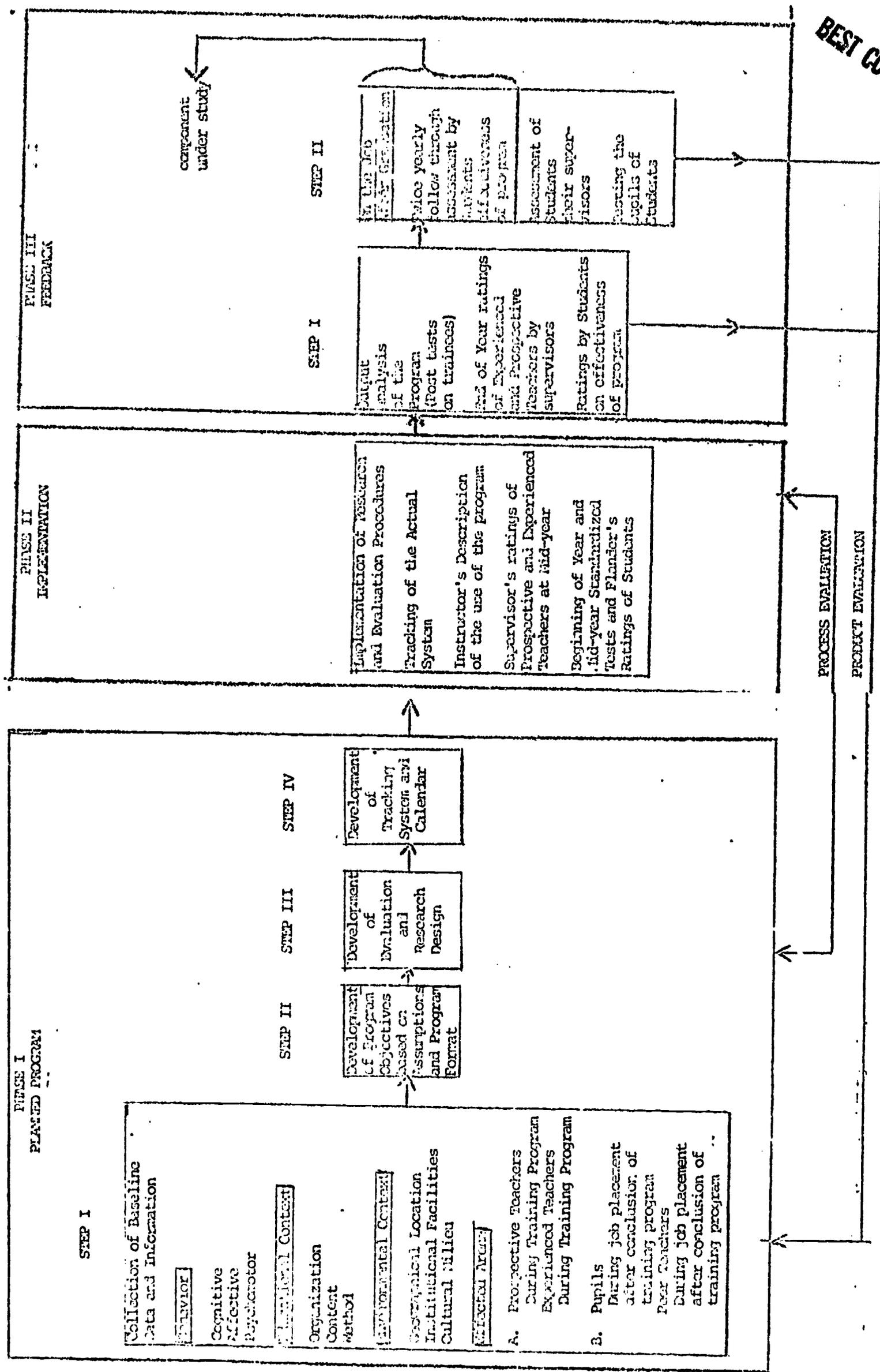
APPROPRIATE STATISTICAL TOOLS WILL BE USED TO ANALYZE DATA COLLECTED

Tracking System for Process and Product Evaluation

Components of the Program Include Work in:	Objective**	Instructional Setting	Contents	Procedure	Physical Setting & Work Setting
Check When Complete	Excellent <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d <input type="checkbox"/> e	Poor	Suggestions & Comments ***		
Check When Complete	Excellent <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d <input type="checkbox"/> e	Poor	Suggestions & Comments		
Check When Complete	Excellent <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d <input type="checkbox"/> e	Poor	Suggestions & Comments		

*Will be used by the faculty and the fellows as a guideline to check the implementation of the program as it progresses.
 **According to Bloom's and Guirard's Taxonomy.
 ***Use extra sheet of paper if needed.

BEST COPY AVAILABLE



*Singh's Modified Version of EPIC Model

PHASES TWO AND THREE: Implementation and Feedback

During these two phases, information and data are gathered following the sequence of the planned program.

1. The students at the beginning, and at the end of the program take such standardized tests as:
 - a. The Minnesota Teacher Attitude Test
 - b. The Edward's Personal Preference Scale
 - c. The Semantic Differential Scale (specially designed on the basis of Osgood's approach)
 - d. The California F Scale
 - e. The Rokeach Dogmatism Scale
2. Beginning, mid-year and end of year behavior of the Fellows in the classroom will be checked using such scales as The Flander's Interaction Analysis Scale and non-verbal scales such as those developed by Robeson at EPIC.
3. The students use the tracking system guide for assessing the effectiveness of the teacher training program as it progresses.
4. After completion of their studies and placement in teaching situations or supervisory positions (in the case of Experienced Teacher Fellows), students are contacted twice yearly and will be requested to assess the value of the program using the tracking guideline. They are also asked at that time in what ways the staff can help with any problem they are having.

5. Prospective Teachers are rated during the middle of the training program and at the end of the program by their supervisors (Master Teachers) on their teaching effectiveness.
6. Administrators are asked to assess the success of the teachers of the Potentially Handicapped within their schools during the year following graduation. In the case of TT's (Experienced Teacher Students), the administrators will be asked how well they conduct in-service workshops, how good their relationships are with the teachers they supervise, etc.

However, the best single index for the assessment of the effectiveness of any teacher preparation program is the amount of change or growth in the children it serves. It is suggested that comparisons be made between randomly chosen groups of children taught by teachers prepared through the program and groups of similar children taught by teachers not so prepared. Investigation will be made at the beginning and end of the year in areas such as:

1. Speech and language intelligence of the children as measured by such instruments as the Templin, Illinois Test of Psycholinguistic Ability, and Peabody Picture Vocabulary Test.

2. Social maturity as reflected on tests such as The Vineland Social Maturity Scale.
3. Academic readiness as reflected by the Metropolitan Readiness Tests or academic achievement as reflected by The Stanford Achievement Test.
4. Divergent thinking ability as measured by such instruments as The Torrance Tests.
5. Perceptual development and improvement in psycho-motor coordination as measured by materials like Kephart and Frostig have authored.
6. Mental health as measured by such instruments as The Brookover Self Concept Scale and The California Test of Personality.

Other custom made devices such as Informal Reading Inventories will also be used.

BEST COPY AVAILABLE**Conclusion:**

The aim of the evaluation plan described herein is to find the most suitable procedure that provides for both process and product evaluation. The present evaluation scheme has provisions to evaluate the program as it progresses (process evaluation) in order to provide data and information in regard to "causal claims" and in order to "discover deficiencies and successes in the intermediate versions of a new curriculum" (Formative Evaluation) (Scriven, 1967). The scheme also evaluates the trainees at the end of the program for 1) immediate outcome evaluation (product evaluation) and 2) the impact which the trainees make in the following year on children's performance. This information and data collected during (process) and at the conclusion of the Training Program (product) is used for summative evaluation to make decisions about the educational assumptions.

REFERENCES

BEST COPY AVAILABLE

1. Bruner, J.S., and A. L. Minturn; "Perceptual Identification and Perceptual Organization". Journal of Genetic Psychology, 1955, 53, pp. 21-28.
2. Cronbach, Lee J "Course Improvement Through Evaluation", Teachers College Record, 64 (May 1963), pp. 672.
3. Griessman, Eugene B "An approach to Evaluating Comprehensive Social Projects", Educational Technology Vol. IX, No. 2, 1969, pp. 16-19.
4. Grobman, Hulda, Evaluation Activities of Curriculum Projects, AREA Monograph Series On Curriculum Evaluation, No. 2. Chicago, Rand McNally and Company, 1967, pp. 1-126.
5. Guba, Egon G.; "The Failure of Educational Evaluation", Education Technology, Vol. IX, No. 5, 1969, pp. 29-38.
6. Hammond, R.; "Context Evaluation of Instruction in Local School Districts", Educational Technology, Vol. IX, No. 1, 1969, pp. 13-18.
7. Ott, J M. "Classification System for Decision Situations: An Aid to Educational Planning and Evaluation", Educational Technology, Vol. IX, No. 2, 1969, pp. 20-23.
8. Popham, James W.; "Objectives and Instruction", AERA Monograph Series on Curriculum Evaluation, No. 3. Chicago, Rand McNally and Company, 1967, pp. 32-52.
9. Rosenthal, R; Experimenter Effects in Behavioral Research., New York; Appleton-Century-Croft, 1966.
10. Scriven, Michael; "The Methodology of Evaluation," AERA Monograph Series On Curriculum Evaluation, Chicago, Rand McNally and Company, 1967, pp. 39-83.
11. Stufflebeam, Daniel L "Evaluation: The Process of Stimulating, Aiding, and Abetting Insightful Action", An Address Delivered at the Second National Symposium for Professors of Education Research, Phi Delta Kappa, November 21, 1968.
12. Tyler, Ralph W ; "Changing Concepts of Educational Evaluation", AERA Monograph Series On Curriculum Evaluation, No. 1, Chicago, Rand McNally and Company, 1967, pp. 13-18.