

DOCUMENT RESUME

ED 076 518

SP 006 395

TITLE Competency Based Teacher Education.
INSTITUTION Madonna Coll., Livonia, Mich.
PUB DATE 15 Nov 72
NOTE 55p.

EDRS PRICE MF-\$0.65 HC-\$3.29

DESCRIPTORS Field Experience Programs; Laboratory Schools;
Microteaching; *Performance Based Teacher Education;
*Performance Contracts; *Performance Criteria;
Program Descriptions; *Teacher Education; *Teacher
Education Curriculum

IDENTIFIERS *Distinguished Achievement Award Entry

ABSTRACT

This innovative, individualized program at Madonna College is based on a systems approach to learning. The primary objective of this program is providing the students with specific competency goals and helping them to acquire these goals. The most important component of the program is a selected list of critical competencies based upon a model of individualized instruction. The procedure is as follows: each term every student in education contracts with a faculty member to develop a certain competency; microteaching, field experiences, and other simulated exercises are the media both for acquiring competencies and for evaluating the process of the student. In addition to these, there are a) a developmental program of field experiences in the various private and public schools and b) feedback from evaluations from contracts. (Appendixes include a description of teaching competencies, a definition of goals, and a copy of the competency evaluation form.)
(JA)

FORM 8510

PRINTED IN U.S.A.

ED 076518

31

years + concept.

1st year of after -

T-L

*Subject Content
Personal Student Experiences*

Anna College
Livonia, Michigan

COMPETENCY BASED TEACHER EDUCATION

Distinguished Achievement Award Entry

Submitted: November 15, 1972

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

SP 006 395

100 students

F - S

*50
25
20
20*

Total

MADONNA COLLEGE

36600 Schoolcraft Road

Livonia, Michigan 48150

COMPETENCY BASED TEACHER EDUCATIONSummary

Recognizing that individualization of the learning process is placing greater demands now than in the past on the quality of human interaction between students and teachers and on a high level of accountability from colleges and its teacher graduates, Madonna College Education Department has developed an innovative, individualized program based on a systems approach to learning. The program has four basic components:

1. A selected list of critical competencies based upon a model of individualized instruction. -- This set of competencies gives direction to students preparing to be teachers; it also provides the College faculty with a framework for guiding and monitoring students in the acquisition of these competencies, and for evaluating its graduates' performance in the classroom. (See Appendix A. Description of teaching competencies)

2. A series of suggested experiences to facilitate the acquisition of competencies. -- Additional experiences may be designed by the cooperative effort of the student and faculty member to meet individual student needs. (See Appendix B. Collection of suggested activities)

3. A developmental program of field experiences in the various public and private school systems of the area. -- Participation as aides in the schools at least one half day per week for one term each year provides students with the opportunity for gradual growth and development in the teaching-learning process. (See Appendix C. Description of Educ. 200)

Summary (cont.)

l. A feedback system. -- The accumulation of evaluations from contracts will provide data on the student's growth and development as a teacher and on the effectiveness of this program for accomplishing the goal. The data will provide answers to such questions as the following: (a) how realistic are the situations and activities, (b) to what extent do they contribute to the development of the desired competencies, (c) which college courses foster the development of specific competencies, (d) how critical are these competencies for teacher success, (e) with what degree of difficulty do students acquire the competencies? (See Appendix D. Competencies and Contract evaluation forms.

MADONNA COLLEGE

36600 Schoolcraft Road
Livonia, Michigan 48150

COMPETENCY BASED TEACHER EDUCATION

Recognizing that individualization of the learning process is placing greater demands now than in the past on the quality of human interaction between students and teachers and on a high level of accountability from colleges and its teacher graduates, Madonna College Education Department has developed an innovative, individualized program based on a systems approach to learning. The program has four basic components:

1. A selected list of critical competencies based upon a model of individualized instruction. -- This set of competencies gives direction to students preparing to be teachers; it also provides the College faculty with a framework for guiding and monitoring students in the acquisition of these competencies, and for evaluating its graduates' performance in the classroom. (See Appendix A. Description of teaching competencies)
2. A series of suggested experiences to facilitate the acquisition of competencies. -- Additional experiences may be designed by the cooperative effort of the student and faculty member to meet individual student needs. (See Appendix B. Collection of suggested activities)
3. A developmental program of field experiences in the various public and private school systems of the area. -- Participation as aides in the schools at least one half day per week for one term each year provides students with the opportunity for gradual growth and development in the teaching-learning process. (See Appendix C. Description of Educ. 200)

4. A feedback system. -- The accumulation of evaluations from contracts will provide data on the student's growth and development as a teacher and on the effectiveness of this program for accomplishing the goal. The data will provide answers to such questions as the following: (a) how realistic are the situations and activities, (b) to what extent do they contribute to the development of the desired competencies, (c) which college courses foster the development of specific competencies, (d) how critical are these competencies for teacher success, (e) with what degree of difficulty do students acquire the competencies? (See Appendix D. Competencies and Contract evaluation forms)

Rationale

Madonna College has always maintained that it has a responsibility for the performance of its graduates as teachers. In accordance with this belief it has evaluated and supervised its graduates during their first years of teaching prior to recommending them for permanent or continuing certification.

In the past, graduates were certified on the basis of successful completion of course work and evaluation of their pre-professional and student teaching experiences. Standardized examinations were taken periodically by groups of graduates. Correlation between performance on these exams and successful teaching was difficult if not impossible to determine. As was common generally in the field of education, criteria for the evaluation of successful teaching were not clear. Much evaluation seemed to be based upon personal characteristics in relation to teaching performance rather than on the actual demonstrated performance. The standard for comparison

varied among individual evaluators, and among types of evaluators: cooperating teacher, college supervisor, principal, tenure coach, etc.

Programming performance objectives in rigorous detail in advance of instruction was not viewed as an ideal innovation for a variety of reasons:

1. A small student body makes such complex programming unnecessary since individual strengths and weaknesses can be readily identified.
2. Writing a volume of objectives was too elaborate a task for a small faculty. Accepting the objectives formulated by others leads to a loss of ownership essential for complete involvement in a project of this scope.
3. Evaluation of performance objectives requires a mammoth system of record keeping. The problem of measuring how well or how often a behavior should be performed or to what degree a skill should be acquired could not be determined a priori.
4. There is more to education than the ability to respond with a specified performance upon demand. The student behavior is secondary. It is the inference from the behavior which is primary.
5. Performance of isolated objectives defined as sub-skills of good teaching is no guarantee that the person can perform those skills in the context of a real classroom situation.

Description

As a result of this past experience and research, the Teacher Education Department at Madonna College decided to develop a new accountability program through a critical list of competencies rather than a performance objectives based teacher education program. The ingredients of the new

program seemed to be the same as those defined by Elam for performance based teacher education.¹

1. The program is individualized. The rate of progress varies. The instructional package varies.
2. The program is field centered.
3. The program holds the student and the college accountable for teacher performance in a pre-determined set of competencies.
4. The program is open and regenerative. It has a built-in research component.
5. The emphasis in the program is on exit and not entrance.
6. Both faculty and students are the designers of the instruction.

Providing the students with specific competency goals and helping them to acquire these is the primary objective of this program. A better instrument and method of evaluating students as well as teacher graduates is the secondary objective of this project. Identifying and counting actual performances which give evidence of possessing specific competencies is the design for evaluating this project. The ultimate goal is greater accountability by the institution in the preparation of teachers, and ultimately greater teacher accountability.

The criteria to be used in assessing competencies and the expected levels of mastery are left open-ended and not prescribed. Collecting the types of evidence used to verify competence and the number of times a student gives evidence of demonstrating the competency will serve as the data for program evaluation and improvement. In the future it may be necessary to describe overt steps in acquiring some or all of the competencies. Performance objectives for these will be written.

¹Stanley Elam, A Resume of Performance-Based Teacher Education. Washington, D.C., A.A.C.T.E., 1972, p.5.

The program is a superstructure to the ordinary academic procedure. Courses on campus are offered as usual. Students register for courses as previously. Each instructor has freedom to conduct his classes to best meet the individual student needs. All define the course objectives in terms of student's final performance. Many education courses have a laboratory component.

Rather than specify instructional projects in relation to courses, simu-lab experiences are being designed to acquire the teaching competencies. Each student is required to contract for at least one simu-lab experience each semester. These experiences may be related to one or more courses taken on campus. They may be related to the laboratory component of a course or supplementary to the course work. Each such experience is designed to develop one or more of the competencies which the student identifies as the focus of the particular simu-lab experience he contracts to perform.

Development

An effort to revise instruments for evaluating student teachers and in-service teacher graduates of the College led to a serious consideration as to what makes a good teacher different from a poor one. The education faculty believed that competencies rather than personal characteristics should form the substance of an evaluation instrument. Behaviors that seemed to make a difference were identified. When arranged in a teaching-learning process model the competencies resembled the many good accountability models described in contemporary education literature.

Eighteen critical competencies were identified as essential to good teaching. The method of identification used was as follows:

1. informal interviews with principals, teachers, parents
2. formulation and organization of the comments into behaviors with the help of a team of consultants
3. sequencing, eliminating repetitions and behaviors which were specific examples of a more general behavior already identified
4. formal interview of twelve principals for interpretation of the meaning of the behavior and the importance of the behavior in terms of good teaching; the principals represented the following types of schools: lower and upper elementary, junior and senior high, public and private schools.
5. revision of the list of competencies to clarify language problems, replacing statements considered not too important by the principals with other stronger statements more reflective of their concerns
6. written explanation of each of these competencies and examples of evidence that could be observed to attest to some degree of demonstrated competence to help potential evaluators, instructors, cooperating teachers, principals, supervisors in the use of the instrument.

The competencies are broader than a single behavioral objective. They presume a number of prior skills or competencies and a degree of conceptual knowledge. (See Appendix D.)

Just how critical is this selected list of competencies remains to be determined by professional research. Validation of the instrument on "good" and "poor" teachers in the field is a sensitive subject and difficult area to trespass. Outside support - both financial and moral - would be necessary for such research.

The collection of simu-lab activities cannot be traced to any particular sources. (See Appendix B.) They represent ideas selected from education literature, from visitations to schools, from students' personal experiences, and from the most effective projects conceived by faculty members.

Three campus study sessions were planned to implement the competency based program. At the first session faculty and students were informed of the objectives of the program. A second session was held for the students

to help them set individual objectives. Currently faculty members are receiving on the job training in guiding and evaluating students in the project. A third session on evaluation of contracts and acquired competencies is being planned for the faculty at the end of the first semester.

Evaluation

Each term every student in education contracts with a faculty member to develop a certain competency. A situation conducive to developing the competency is either designed or chosen from a prepared set of simulation activities. Upon completion of the project the student is evaluated on the basis of:

1. meeting the objectives of the contract
2. giving evidence of having acquired other competencies in the process.

Micro-teaching, field experiences, and other simulated exercises are the medium both for acquiring competencies and for evaluating student progress. Accumulation of such evaluations at various stages of their preparation program will provide the data for determining the student's growth as a teacher as well as the effectiveness of the program.

A first sample of data will be available at the end of the Fall, 1972, semester. Data gathered will be of the following types:

1. verbal feedback from faculty and students on the effectiveness of the materials and the design of the project
2. student and faculty questionnaires on the same items as given above
3. student contracts completed and evaluated
4. evaluation of students by the faculty at the college or in the schools to identify the evidence that certain competencies are being developed

5. evaluation of graduates in the teaching field on the basis of the same list of competencies.

Case Study

A student in Education at Madonna College declares his intention to become a teacher upon admission to the College. Each semester the student contracts for an educational experience related to the acquisition of the eighteen competencies, according to the following procedure:

1. The student identifies the competency he desires to acquire.
2. The student chooses from the collection of suggested situations or he designs an experience that will help to develop this competency.
3. The student invites a faculty member to assist him in designing and completing his contract.

The contracted faculty will evaluate the student on the evidence he gives of having practiced the skill he wanted to acquire. The faculty member will also indicate areas for further growth and identify evidence of other competencies that the student already possesses.

Every student is required to have in his personal file a copy of the contract, the evaluation of the completed contract, and a competency evaluation for each term in which he is a full time student. Transfer and part-time students will be required to complete at least one contract before formal admission to the teacher education program and at least three competency evaluations before application to student teaching.

A conference with the college supervisor based upon accumulated evidence from the competency reports will give direction to the student teaching experience. The nature of this experience and possible supplementary experiences will be recommended on the basis of this evidence. Recommendations

for certification will depend upon this additional competency component.

During the first teaching experience of the graduate, a member of the college faculty, preferably the college supervisor of directed teaching, will visit and evaluate the neophyte teacher. Through observation in the classroom, discussions with the _____ and the principal, the evaluator will identify as much evidence as is possible of acquired competencies.

Hence the Teacher Education Department will accumulate information on the growth and development of the teacher in the competency areas, the degree to which the competencies are being maintained in the classroom of the graduates, the situations which foster maintenance and growth of the competency. These data will be the bases for departmental decision making.

Budget

The project has not been directly funded by either public or private organizations. It is operating on a departmental budget comparable to that of the previous academic year. The project design -- selecting the list of critical competencies, designing and identifying the experiences to aid in their development, the evaluation design -- was developed as a result of faculty participation at a workshop on the "Design and Validation of Instruction" sponsored by the Association of Independent Colleges and Universities of Michigan.

Personnel

Sr. Marie Karen Shirilla, Ph.D., Assistant Professor of Education, Chairman of Department of Education

Sr. Mary Lauriana Gruszczynski, Ph.D., Professor of Education, Academic Dean

Sr. Mary Martina Mastej, Ph.D., Professor of Education, Director of Psycho-Educational Center

Sr. Edith Marie Agdanowski, M.Mus., Instructor of Music Education
Sr. Dena Marie Baronn, M.S., Instructor of Biology and Science
Sr. Mary Rachel Bawol, M.A., Instructor of English
Mrs. Audrey Becker, M.A.T., Instructor of Instructional Media
Mr. Dennis Bozyk, Ph.D. Candidate, Instructor of Social Science
Sr. Mary Angeline Filipiak, Ph.D., Professor of Art
Mrs. Sandra Frayer, M.A., Instructor of Special Education
Dr. Edwin Page, Ph.D., Instructor of Speech Correction
Sr. Mary Bridget Roznowski, M.A., M.Ed., Assistant Professor of Home Economics
and Family Life

Contribution to the Improvement of Teacher Education

The program is viewed as a unifying force of the total teacher preparation at Madonna College. All courses and experiences will find their place in the framework of this program. The additional element of accountability will enter into all efforts in teacher preparation. Students are being directed to set realistic goals for themselves and not to wait for the faculty to prescribe instruction in specific courses. Students are beginning to see the education program as more than the sequence of courses that qualify them for the degree. They are recognizing the relevance of their college courses to their preparation as teachers. This program is also helping to bring current innovative instructional methods into wider use at the College.

Appendix A:

MADONNA COLLEGE
Livonia, Michigan 48150

~~TO BE REVIEWED BY STUDENTS OF THE COURSE~~

Description Of Teaching Competencies ~~TO BE REVIEWED BY STUDENTS~~

1. Sets general instructional goals for the student(s).

Reviews texts, administrative statements, etc., to specify what students should know in the field.

Evidence examples:

- Course syllabus specifies general goals.
- Teacher verbalizes an overview of the curriculum.
- Goals indicate consciousness of life skills goals.

2. Identifies prerequisite student skills or characteristics needed to achieve the goals.

Considers the course goals in order to specify what the student must be able to do or to know in order to receive instruction.

Evidence:

- Analyzes goals for skills needed to work toward achieving objectives.
- Applies principles of growth and development to determine the prerequisite skills or characteristics.

3. Determines student's entry skills or characteristics.

Examines records and/or tests student(s) to determine if he possesses the skills essential to receive instruction.

Evidence:

- Determines the student's performance level in the skills subjects such as reading, arithmetic, writing, spelling.
- Analyzes and verifies information available in student records, i.e. uses valid data.
- Diagnoses student needs, i.e. a student needs assessment.
- Pre-tests for skills and learning characteristics.

4. Assists the student in setting realistic course goals.

Considers student's needs, knowledge, and ability in order to specify what the student should gain from the course and to discuss this with the student when appropriate.

Evidence:

- Students can verbalize their goals, what they are striving to achieve.
- Goals are not consistently the same for each student in the class.
- Students recognize intermediate short term goals.

5. Prescribes appropriate skill development and/or remedial instruction.

Prescribes remedial instruction for those students who do not have the skills required to enter instruction with some assurance of success.

Evidence:

Refers student(s) to appropriate teachers, remedial programs and/or instructional materials that will help him develop the needed skills.
Works closely with various specialists, community agencies.
Works with other teachers, aides, student's peers to provide appropriate development or remediation.
Selects appropriate instructional materials which provide opportunities for success.

6. Specifies objectives in terms of student performance rather than teacher performance.

Translates goals into objectives which are specific in terms of what the student will be able to do, under what conditions, and to what level of performance. Sequences the objectives according to complexity, interest, and/or logic.

Evidence:

Develops performance objectives or selects them from an available set of behavioral objectives.
Plan book more reflective of student behavior than teacher behavior.
Daily lesson plan provides for individual differences.
Instruction is self-paced and individualized.

7. Determines through observation and/or testing which objectives the student is able to achieve at entry.

Pretests if necessary to determine which, if any, of the instructional objectives the student is able to achieve before instruction.

Evidence:

Provides for a varied rate of advancement in terms of levels of cognition; in terms of number of concepts or skills to be learned.
Provides for different entry points into instruction.

8. Selects and/or develops instructional materials.

Considers objectives, student skills, dispositions, availability, cost, etc., to select from existing printed materials, tapes, slides, films, etc., and/or develop instructional materials which help the student achieve the objectives.

Evidence:

Does not rely solely on a text-book.
Uses a wide variety of non-book materials.
Makes good use of the Instructional Materials Center (library).
Creatively designs appropriate non-book materials.

9. Selects appropriate instructional methods.

Considers availability, cost, effectiveness, efficiency, appropriateness, applicability to the objective, and student preference to select an instructional method.

Evidence:

Methods are related to the objective to be achieved.
Student activity rather than teacher activity predominates.
Uses a variety of appropriate technological AV aides.
Varies method with content.
Varies method with learning modes appropriate to student's needs.

10. Uses positive reinforcers appropriately and consistently to evoke or increase the frequency of desired student behaviors.

Makes access to rewards contingent upon desired behaviors; recognizes that reinforcers (incentives) may sometimes conflict.

Evidence:

Identifies reinforcers that are common to all or most students as well as reinforcers that are unique to individual students.
Uses a variety of rewards (a reinforcement menu) eg. praise, games, library privileges, activities, independent study corners, helping, etc.
Varies the rate of reinforcement from consistent to intermittent.

11. Does not reinforce undesirable student behaviors.

Withholds reinforcement or presents mild punishment for undesirable behaviors.

Evidence:

Providing a student who misbehaves with a diversion is reinforcing undesirable behavior.
Sending a child out of a room reinforces both the teacher and student for bad behavior.
Reinforcers sometimes conflict, eg. peer approval.
Relates to behavior problems on a 1-1 basis.
Discipline problems on the decrease.

12. Encourages students to respond to internal motivators rather than external rewards.

Pairs external reinforcers with consciousness of feelings of success and satisfaction so as to move students from a dependency on external reinforcers.

Evidence:

Recognizes that success is a very powerful motivator.
Students are happy at their work.
Students are self-motivated; self-directed.

13. Demonstrates consistency when making agreements, promises, and/or threats.

Exercises care to be true to his word.

Evidence:

If contracts are made between teacher and student(s), they are kept.
Teacher is responsible for what he says.
Reward system is congruent with the importance of the objective.

14. Demonstrates positive attitude toward students.

Uses actions and words, eg. smiling, displaying physical affection, avoiding critical, sarcastic, and threatening remarks, so that students recognize that they are respected as persons, and/or liked by the teacher.

Evidence:

Listens to students.
Respects cultural differences.
Gives signs of reassurance, affection, warmth, a smile.
Avoids sarcasm, threats, negative criticism.

15. Demonstrates adequate knowledge of content.

Makes no obvious errors, does not repeatedly say "I don't know".
Adequate knowledge as judged by a content expert.

Evidence:

- Is up-to-date and informed.
- Feels comfortable in the teaching field.
- Recognizes the inter-relatedness of knowledge.
- Encourages student's freedom of choice in pursuing related topics.
- Communicates effectively in oral and written English.
- Encourages student self-learning.

16. Evaluates the student on his accomplishment of objectives rather than on a set of norms.

Monitors student progress toward achieving objectives. Accordingly interim and terminal test items reflect the objectives of the course.

Evidence:

- Prepares a plan of how to observe and record relevant behavior.
- Test items are based upon the objectives of the course or a sampling thereof.
- Keeps a student record of objectives achieved.
- Informs students when objectives are reached.
- Periodically communicates with parents regarding student progress.

17. Evaluates the instructional process on the degree to which students were able to accomplish objectives.

Analyzes those instructional objectives which students were unable to achieve to see what steps should be taken to improve the instructional process, eg. delete, resequence, or rewrite the objectives; provide additional or different instructional materials and/or activities.

Evidence:

- Collects and records appropriate student data.
- Maintains an efficient record keeping system for each student with respect to objectives to be achieved.
- Keeps a class record of objectives achieved.

18. Redesigns program based on evaluation and examination of goals and objectives.

From feedback obtained through evaluation, deletes, resequences, or rewrites goals and objectives for the course; adds, deletes, or modifies instructional materials and activities.

Evidence:

- Alters objectives on the basis of the evidence i.e. valid data collection.
- Adjusts to the unexpected and deals with the unsuspected.
- Continuously revises the program of instruction on the basis of evaluation not just at the end of a fixed period.

MADONNA COLLEGE
36600 Schoolcraft Road
Livonia, Michigan 48150

Student's Name: _____

Project: _____

Please evaluate the student on the following teaching competencies:

- | | <u>Yes</u> | <u>No</u> | <u>No evidence</u> |
|--|------------|-----------|--------------------|
| 1. Sets general instructional goals for the student(s). | _____ | _____ | _____ |
| <u>Evidence:</u> | _____ | | |
| 2. Identifies prerequisite student skills or characteristics needed to achieve the goals. | _____ | _____ | _____ |
| <u>Evidence:</u> | _____ | | |
| 3. Determines student's entry skills or characteristics. | _____ | _____ | _____ |
| <u>Evidence:</u> | _____ | | |
| 4. Assists the student in setting realistic course goals. | _____ | _____ | _____ |
| <u>Evidence:</u> | _____ | | |
| 5. Prescribes appropriate skill development and/or remedial instruction. | _____ | _____ | _____ |
| <u>Evidence:</u> | _____ | | |
| 6. Specifies objectives in terms of student performance rather than teacher performance. | _____ | _____ | _____ |
| <u>Evidence:</u> | _____ | | |
| 7. Determines through observation and/or testing which objectives the student is able to achieve at entry. | _____ | _____ | _____ |
| <u>Evidence:</u> | _____ | | |
| 8. Selects and/or develops instructional materials. | _____ | _____ | _____ |
| <u>Evidence:</u> | _____ | | |
| 9. Selects appropriate instructional methods. | _____ | _____ | _____ |
| <u>Evidence:</u> | _____ | | |

Over

Name of student: _____

Please evaluate the student on the following teaching competencies:

- | | <u>Yes</u> | <u>No</u> | <u>No evidence</u> |
|---|------------|-----------|--------------------|
| 10. Uses positive reinforcers appropriately and consistently to evoke or increase the frequency of desired student behaviors. | _____ | _____ | _____ |
| <u>Evidence:</u> | _____ | | |
| 11. Does not reinforce undesirable student behaviors. | _____ | _____ | _____ |
| <u>Evidence:</u> | _____ | | |
| 12. Encourages students to respond to internal motivators rather than external rewards. | _____ | _____ | _____ |
| <u>Evidence:</u> | _____ | | |
| 13. Demonstrates consistency when making agreements, promises and/or threats. | _____ | _____ | _____ |
| <u>Evidence:</u> | _____ | | |
| 14. Demonstrates positive attitude toward students. | _____ | _____ | _____ |
| <u>Evidence:</u> | _____ | | |
| 15. Demonstrates adequate knowledge of content. | _____ | _____ | _____ |
| <u>Evidence:</u> | _____ | | |
| 16. Evaluates the student on his accomplishment of objectives rather than on a set of norms. | _____ | _____ | _____ |
| <u>Evidence:</u> | _____ | | |
| 17. Evaluates the instructional process on the degree to which students were able to accomplish objectives. | _____ | _____ | _____ |
| <u>Evidence:</u> | _____ | | |
| 18. Redesigns program based on evaluation and examination of goals and objectives. | _____ | _____ | _____ |
| <u>Evidence:</u> | _____ | | |

Other Competencies:

Evaluator's Signature: _____

Date: _____

MADONNA COLLEGE
Livonia, Michigan 48150

1

DEFINING GOALS

Activity

Contact a teacher who is willing to be interviewed for 20-30 minutes about a classroom goal or problem on which he would like to work toward a solution. Your goal is NOT to propose a solution for any problem. Instead it is to get the problem out in the open, state it in clear behavioral terms and set up a method of measuring the relevant student behavior.

Performance Criteria:

You will be evaluated on achievement of the following objectives:

1. stating goals in measurable terms
2. setting priorities among goals
3. developing rudimentary measurement plan(s) for collecting relevant data
4. maintaining rapport during the interview
5. writing brief record(s) useful to the teacher.

You are responsible for:

- a) making an audio-tape of the interview
- b) completing an Interview Memo and a Problem Document
- c) completing a self-analysis of the interview tape
- d) arranging for a conference within the week following completion of the project.

The following aids are provided to help you achieve the objectives:

- a) A set of guidelines for interviewing
- b) Two forms: (1) Interview Memo
- c) (2) Problem Document
- e) Guidelines for writing the memo
- d) A checklist for determining your interview rapport.

Source: Geis, George, Chapman, Reuben, and Smith, Chauncey W. Improving Instructional Systems, Foreign Language Innovative Curricula Studies OEO 3-7-70(431 (056), Michigan State Dept. of Education, 1969.

PROBLEM DOCUMENT

Meeting date _____ Interviewee _____

Date of next meeting _____ Interviewer _____

I. List below all problems interviewee presents. Rank them in order of importance. Select one problem to work on and note how many students it concerns.

II. Describe the goal.

1. Is the goal to: _____ reduce, _____ eliminate, _____ increase,
_____ replace current behavior?

2. Give an example showing how the student(s) should behave while engaging in the desired future behavior:

3. Does the teacher agree that the specification of the future behavior is complete? _____. If not, list specifically what she would add or delete:

An Explanation of Guidelines for Interviewing

Step 1 - LIST ALL PROBLEMS

Make a list of all the problems you and the teacher bring up in the interview. A record of these problems will be useful in the future.

Try to get the problems out in the open early in the session.

Step 2 - SELECT ONE PROBLEM

From your list select one problem. Choose it on the basis of: (a) its importance to the teacher and students; (b) time available to work on it; (c) the likelihood of fairly rapid solution; (d) constraints and resources available.

Sometimes it is wise to look only at a part of a problem, especially if it can easily be divided into sub-problems.

Cooperation on this problem and future ones is more likely if the first problem chosen is fairly simple and leads rapidly to an acceptable solution.

Step 3 - DESCRIBE THE GOAL

Get as many examples as you can of what the student(s) or situation will look like when the problem is solved.

The more specific, the better. A description of a single student or the examination papers of a class will be more valuable than lots of general statements.

Step 4 - GET EXPLICIT DESCRIPTIONS

Make sure that the examples and problems you obtain in steps 1 and 3 are stated in measurable terms. When the teacher says: "They just have to get more work done in class", try to get her to state exactly what kinds of work and how much more.

Like a physician searching for symptoms of an illness so that he can produce a better diagnosis and measure the severity, you should search for specific symptoms of the problem.

Step 5 - CONSTRUCT A MEASUREMENT PLAN

Work out a way of observing and recording the present behavior of the students relevant to the goal. This may involve counting occurrences of a behavior in class, totaling how many homework assignments are completed each week, recording test marks, etc. Of course, the same measure can be used in determining whether students are approaching the goal.

Suppose you want your living room at home to have a constant temperature of 72. Your thermometer is needed to tell you the present temperature (i.e. is it below 72 degrees now?) and to tell you when your room reaches 72. Without the thermometer you cannot accurately tell: (a) whether or not you have a problem (i.e. temperature is below or above 72) or (b) whether your solution to the problem (e.g. turning on the heat) is really working! The measurement plan is like the thermometer.

Step 6 - ARRANGE TO MEET AGAIN

At this interview arrange a next meeting time to review the measurement, and continue working.

MEMO GUIDELINES

Your Memos to teachers should include the following points:

1. A statement of the goal that has been chosen.
2. An example of the problem occurring (i.e., present situation).
3. An example of what the objective will be like (goal situation).
4. A description of the measurement plan.
5. A statement asking for information about Problem Document items that were not answered or for which information was not available.
6. Specific things the teacher will do before the next meeting.
7. Date of next meeting.

Advantages of Memos are the following:

- Memos are a handy reminder to you of the facts of a problem.
- Memos remind the teacher that you are interested in helping her.
- Memos remind the teacher what she has agreed to do.
- Questions in a Memo structure the next interview.
- Memos may be read by visitors and supervisors as signs of your work.

INTERVIEW MEMO

Interviewer _____ Date _____ Person Interviewed _____

Summary of Interview and Problem

Action to be taken by Interviewer and Person Interviewed

MADONNA COLLEGE
Livonia, Michigan 48150

2

TUTORING

SETTING GOALS - EVALUATING PROGRESS

Activity

Identify a student(s) in a subject area and grade level of your choice and tutor him on at least eight different occasions. Determine his entry level skills, his strengths and weaknesses. Help him toward a higher level of achievement than he had when you began to work with him.

Performance Criteria

You will keep a log of your work with the student. The log which will be submitted to the instructor should include the following:

1. a statement of the problem you selected to handle
2. a description of what you and the student did during each session
3. your observations about the child
4. a record of changes in your plan of action as a result of observations and other valid data.

A conference after the initial and final session is required in which you will briefly explain your performance objectives and measurement plan, and what motivational techniques you are employing.

MADONNA COLLEGE
Livonia, Michigan 48150

3

TEACHING VALUES

MULTI - CULTURE

Activity

Given a multi-cultural group of teenagers (about 20) prepare and teach a lesson in values related to one of the social problem areas, (such as drugs, alcohol, abortion, pilfering, pollution, etc.).

Evaluative Criteria

You will be evaluated on both the planning procedure and on the actual classroom performance.

1. The planning should consider:

- a) objectives
- b) materials
- c) technique
- d) evaluation

2. The classroom performance will be judged upon demonstration of such skills as:

- a) asking provocative questions which encourage thinking
- b) stimulating all students to participate
- c) accepting other persons point of view
- d) holding a personal value system
- e) not inflicting ones value system on others by verbal or non-verbal behaviors.

MADONNA COLLEGE
Livonia, Michigan 48150

4

GROUPING

LIFE SKILLS

Activity

Given a group of about 30 youngsters at a grade or age level and a subject area of your choice (eg. reading) the teacher candidate will group the youngsters to study a topic or concept, will identify and give reasons for such choice. Design and monitor an instructional package for each group so that all may individually achieve the same life skills major objective.

Performance Criteria

You will be evaluated upon

1. the appropriateness of the grouping procedure.
2. the appropriateness of the learning modes and materials for each group.
3. the appropriateness of the learning sequence to the life skills objective.

You may either simulate the situation on paper or execute the behavior in a classroom situation.

MADONNA COLLEGE
Livonia, Michigan 48150

5

EVALUATION

RECORD KEEPING

Activity

Develop and maintain an individual student progress chart and an evaluation record-keeping system for a group of 30 youngsters in a subject area and grade level of your choice. The evaluation system is to be kept over a period of at least two weeks. The record-keeping system should provide information about each students' progress as well as the groups' performance in acquiring the set of objectives or basic skills.

Performance Criteria

You will be evaluated on:

1. the efficiency of the record keeping system
2. the appropriateness of the objectives or basic skills you chose to evaluate.

MADONNA COLLEGE
Livonia, Michigan 48150

6

DESIGN AND VALIDATION OF INSTRUCTION
INDIVIDUALIZATION

Activity

Choose an area of achievement appropriate to a particular grade level and develop a unit of instruction to achieve its mastery. Design a strategy to individually analyze the entry skill deficiencies of at least five students and to validate the instructional package. Individualize the unit with students in a group situation.

Performance Criteria

You will be evaluated on the following:

1. pre-test identification of the basic skills necessary to receive instruction.
2. fulfillment of the components of a validated unit of instruction.
 - a) identification of the criterion items
 - b) provision for the differentiated entry levels of students
 - c) sequencing the instruction
3. the percentage of students in the group who acquire the desirable concept or skill mastery from your validated unit of instruction.

MADONNA COLLEGE
Livonia, Michigan 48150

7

BEHAVIOR MANAGEMENT

REINFORCEMENT

Activity

Observe a classroom(s) in operation in order to identify and describe 4 or 5 different kinds of disruptive behavior situations. With help from talking with the child, his peers, the teacher and/or parents

1. describe the behavior
2. seek to determine the cause of the behavior
3. suggest a possible treatment or describe the treatment used
4. analyze the possible or actual effects of the treatment.

Performance Criteria

You will be evaluated on the above criteria. You may either simulate the situation on paper or execute the behavior in an actual classroom situation. Choose an appropriate media for your report, eg. case study, outline and conference, small group discussion with tape.

ALMA COLLEGE
Livonia, Michigan 48150

6

TEAM WORK

Activity

In a group of 3 or 4 working together, choose a skill or concept area at an appropriate grade level and:

1. identify a set of basic skills needed to achieve mastery
2. design a device for assessing students' entry skills
3. construct a sequence of activities to help students achieve these basic skills.

Performance Criteria

1. Submit all work as a group giving credit to persons where it is due.
2. Log the time taken to reach decisions and accomplish the tasks.
Eg. a) to get the group together
b) to decide upon the concept or skill to be learned
c) to develop the list of basic skills or concepts
d) to produce a list of activities
e) to collect and locate the materials needed
f) to identify or construct measuring devices
3. Arrange for a conference with the coordinator to discuss the effectiveness of the effort in terms of time taken and task accomplished.

MADONNA COLLEGE
Livonia, Michigan 48150

9

LEARNING GAMES

VALIDATED INSTRUCTION

Activity

In a grade level and subject area of your choice develop a learning game that will motivate the students either to

- a) develop mastery of a skill or
- b) develop a higher level of cognition, eg. application, analysis, synthesis.

The game must have an instructional performance objective. Be sure to validate the game with a number of playings in which you have had an opportunity to observe and record the feedback.

Performance Criteria

Submit the game with purpose, rules, procedure, technique for scoring.

Evaluate the game and indicate the revisions or areas where improvement was made as a result of game playing. The game will be evaluated for:

- 1) its internal consistency
- 2) evidence of your analysis of the learning task
- 3) creativity, or power of motivation.

MADONNA COLLEGE
Livonia, Michigan 48150

10

MULTI - MEDIA

Activity

Prepare a 5 to 10 minute presentation in a specific skills area at a grade level of your choice using three types of audio-visual materials. Plan and direct a follow-up instructional project to be completed or performed by the children.

Performance Criteria

You will be evaluated on the basis of:

1. the effect of the multi-media presentation in motivating the children
2. the children's success in reaching the objective through the medium of the instructional project in which they were engaged.

WALTONIA COLLEGE
Livonia, Michigan 48150

11

INTERPERSONAL RELATIONS

GROUP WORK

Activity

Given a group of students (6-30) conduct a group meeting with the children to identify and seek a solution to a problem in order to demonstrate the ability to promote successful interaction in the classroom.

Performance Criteria

You will be evaluated on your demonstrated ability to achieve the objective of the meeting and:

1. to involve many children in the group discussion
2. to integrate the isolated disliked child
3. to develop positive feelings in the students toward each other

MADONNA COLLEGE
Livonia, Michigan 48150

12

MOTIVATION

Activity

Observe a classroom for a few days to identify 3 or 4 students having motivational problems. Analyze their behavior. Classify and describe the factors which seem to account for their negative motivation or lack of motivation. Personally talk with the child in order to discover sources or reasons for the behavior, to help the student realize what is happening, and to help the teacher with cues for designing an environment conducive for change.

Performance Criteria

You will be evaluated on the basis of the case studies you report.

They should give evidence of

- 1) understanding growth and development
- 2) nature and effect of reinforcement
- 3) nature of the interpersonal relations
- 4) understanding the effect of the treatment if one was being administered.

13

READING

DIAGNOSIS AND REMEDIATION

Activity

Given a child at any grade level with reading deficiencies, identify through testing the child's reading skill needs and help the student during the term overcome to some degree his deficiencies by using an appropriate reading approach. The degree of improvement required will be decided by the instructor and student candidate after the child's needs have been determined.

Performance Criteria

A log or diary of the learning sessions should be kept. The log should include the following:

- 1) Diagnosis of the reading deficiencies
- 2) Performance objective to be achieved
- 3) Daily lesson plans including objective, materials, procedure and evaluation
- 4) Over-all evaluation

A conference must be scheduled after the first and final session and whenever else it is considered necessary or useful.

Advanced Activity

Given a group of 3 to 5 children considered not to be reading at expectancy level identify (eg. through testing) their areas of weakness (eg. auditory or perceptual development), list the principles and procedures to follow with each student in order to help him overcome his deficiencies. Individualize the learning of this group of students to meet their needs. Design a record keeping device to monitor their progress.

MADONNA COLLEGE
Livonia, Michigan 48150

11

PARENT-TEACHER RELATIONS

Activity

Prepare an audio tape of at least 30 minutes, of at least 3 different parent teacher conferences. Identify the purpose of the discussion.

- Eg. a) to interpret child's capabilities to parents
b) to tell parents their child has serious problems
c) to help a student with a destructive home situation
d) to get parents to take an interest in the child's work
e) to contact an unresponsive parent.

Identify the level of the interpersonal relationship established.

Identify the amount and nature of the cooperation to be expected.

Performance Criteria

You will be evaluated on the basis of your analysis of the conferences, or on your own behavior during the conferences, if these are tapes of yourself. You may simulate the conference by having a teacher take the role of a parent and you role-play the teacher. Prepare the script of the nature of the problem in advance.

MADONNA COLLEGE
Livonia, Michigan 48150

15

CURRICULUM DEVELOPMENT

TEXT BOOK EVALUATION

Activity

Choose a selected area of the elementary and/or secondary curriculum eg. measurement, sentence construction, cultural differences, and do an in-depth study of at least three text-book series of the sub-concepts and skills treated, the sequencing of instruction, creativity of materials, teacher aids, cognitive level of development, grade placement, etc.

Performance Criteria

You will be evaluated either on:

- 1) an oral defense of one of the sets of textbooks or materials
- or 2) a comparative study of the series on the criteria you judge important.

MADONNA COLLEGE
Livonia, Michigan 48150

16

TEST CONSTRUCTION

Activity

Develop an end of a year examination, capable of being administered in one hour period for a subject matter area and grade level of your choice based upon a clear statement of performance objectives and criterion items appropriate to that performance.

Performance Criteria

You will be evaluated on the basis of an analysis of the test items in relation to the criterion items. Explain your choice in the sampling of items.

Provide the scoring key and a system of grading as well as a guide for evaluative feedback to the student.

MADONNA COLLEGE
Livonia, Michigan 48150

17

JUDGING STUDENT PROGRESS

Activity

Given a target population, write a series of behavioral objectives to achieve an instructional goal. Choose a specific standardized test considered appropriate for the goals and the given population and determine whether the test is appropriate to measure achievement of the objectives.

Performance Criteria

You will be evaluated on the following:

1. appropriateness of the set of objectives to achieve the instructional goal.
2. analysis of the test items to determine their appropriateness for measuring achievement of the objectives.
3. modification of the test, i.e. add, delete, rewrite items to meet the objectives.

Your project report should include:

- a) a description of the population
- b) identification of the instructional goal
- c) the list of objectives
- d) the test items in conjunction with each of the objectives.

MADONNA COLLEGE
36600 Schoolcraft Road
Livonia, Michigan 48150

Educ. 200.1

Participation Guidelines

This list has been developed to serve as a guide for the student and supervisor. It suggests experiences that may assist the student in becoming better informed of the classroom teacher's role in the school. The participation experience should help to develop a more competent and effective student teacher.

Planning and Instruction

1. Become familiar with policies and practices of specific school system with respect to planning instruction. Eg. availability of teacher's guides, courses of study, resource units, calendar of instruction, etc.
2. Work individually with one child to help with developing reading or arithmetic skills.
3. Make a short lesson for presentation to the class, with the supervision and cooperation of the teacher.
4. Work with a small group on a particular learning project.
5. Prepare the proposed instructional materials for or with the teacher prior to the teacher's lesson.
6. Plan instructional activities suited to stated lesson objectives.
7. Participate in pupil-teacher planning.
8. Discuss proposed instructional activities with teacher prior to teacher's lesson (to prepare for coming instructions, to relate these to objectives, to supplement these with aids).

Child Development

1. Assist in the social learning of one child, perhaps one who is unusually shy or hostile.
2. Supervise children at recess or lunch playtime, perhaps organize a group game.
3. Help produce a play, teach a dance, baton twirling, (coordination activities) with a small group of students.

Classroom Management

1. Observe methods of instruction, classroom management, housekeeping activities, and organization for instruction eg. drill, motivation, assignments, time control, participation.
2. Supervise the classroom or school activities eg. dismissal, playground, lunch, gym.
3. Assist in housekeeping activities eg. get materials ready, assist in distribution, etc.
4. Observe, to learn different techniques of social reinforcement, such as through teacher control and/or peer group control.
5. Observe and learn about different aspects of maintaining and fostering good discipline.

Evaluation and Record Keeping

1. Become familiar with support systems in the school, eg. nurse, librarian, psychologist, school social worker, special area teachers.
2. Discuss evaluation procedures with the teacher, i.e. the purposes they serve, basis of judgment, policies governing promotion, etc.
3. Assist in keeping classroom records.
4. Assist in preparation of reports.
5. Assist in administering and scoring tests.

General

1. Witness a faculty meeting, or staff conference of teachers and/or administrators.
2. Have the opportunity to visit and observe other grade levels within the same school.
3. Participate in extra-curricular activities for pupils, committee assignments.
4. Assist students in the Instructional Materials Center.

MADONNA COLLEGE

Benefits from Participation in Schools

To the Schools:

1. Aides are useful to teachers and other personnel.
2. The interchange of questions and suggestions between aides and school personnel tends to invigorate and update the staff.
3. Schools participate more in the preparation of future teachers as their personnel act as resource persons.

To the College:

1. Students combine continuous ongoing experiences from the perceptual set of teachers to relate to the theory presented in the college courses.
2. Teacher candidates are especially well prepared to do their student teaching in the same local school system.
3. The community is served as the student obtains experience.
4. The school assumes a major role in preparing teachers.

To the Student:

1. The variety of experiences develop convictions as to grade-level preference.
2. The student discovers through participationⁱⁿ the classroom environment whether he can effectively function as a teacher.
3. The student discovers the kind of classroom environment in which he best functions, eg. open, self-contained, team, etc.
4. Education courses are less tedious because theory is built by studying models from the classroom.
5. Students develop a feel for the school system in which they would like to work.

Appendix D: Competency Evaluation form

To the Evaluator:

You have observed the teacher (candidate) in the classroom in a teaching capacity, or in teaching-learning related situations or activities. Kindly identify evidence that the teacher (candidate) has demonstrated one or more of the following competencies.

Place a check under the appropriate heading: yes, no, or no evidence. If you checked yes describe the behavior (what the teacher/candidate did) that caused you to infer development of a certain level of that competency.

In case the meaning of any of these competency statements is not clear to you, the additional materials provide a glossary of terms, an explanation and examples of behaviors that may be suggestive that the teacher (candidate) has acquired a degree of that competency.

MADONNA COLLEGE
36600 Schoolcraft Road
Livonia, Michigan 48150

Teacher (Candidate):
~~STUDENT'S NAME:~~ _____

Situation:
~~Address:~~ _____

teacher (candidate)

Please evaluate the ~~student~~ on the following teaching competencies:

- | | <u>Yes</u> | <u>No</u> | <u>No evidence</u> |
|---|------------|-----------|--------------------|
| 1. Sets general instructional goals for the student(s).
Evidence: _____ | _____ | _____ | _____ |
| 2. Identifies prerequisite student skills or characteristics needed to achieve the goals.
Evidence: _____ | _____ | _____ | _____ |
| 3. Determines student's entry skills or characteristics.
Evidence: _____ | _____ | _____ | _____ |
| 4. Assists the student in setting realistic course goals.
Evidence: _____ | _____ | _____ | _____ |
| 5. Prescribes appropriate skill development and/or remedial instruction.
Evidence: _____ | _____ | _____ | _____ |
| 6. Specifies objectives in terms of student performance rather than teacher performance.
Evidence: _____ | _____ | _____ | _____ |
| 7. Determines through observation and/or testing which objectives the student is able to achieve at entry.
Evidence: _____ | _____ | _____ | _____ |
| 8. Selects and/or develops instructional materials.
Evidence: _____ | _____ | _____ | _____ |
| 9. Selects appropriate instructional methods.
Evidence: _____ | _____ | _____ | _____ |

Over

teacher (candidate):
Name of ~~student~~ _____

Please evaluate the student on the following teaching competencies:

- | | <u>Yes</u> | <u>No</u> | <u>No evidence</u> |
|---|------------|-----------|--------------------|
| 10. Uses positive reinforcers appropriately and consistently to evoke or increase the frequency of desired student behaviors. | _____ | _____ | _____ |
| Evidence: _____ | | | |
| 11. Does not reinforce undesirable student behaviors. | _____ | _____ | _____ |
| Evidence: _____ | | | |
| 12. Encourages students to respond to internal motivators rather than external rewards. | _____ | _____ | _____ |
| Evidence: _____ | | | |
| 13. Demonstrates consistency when making agreements, promises and/or threats. | _____ | _____ | _____ |
| Evidence: _____ | | | |
| 14. Demonstrates positive attitude toward students. | _____ | _____ | _____ |
| Evidence: _____ | | | |
| 15. Demonstrates adequate knowledge of content. | _____ | _____ | _____ |
| Evidence: _____ | | | |
| 16. Evaluates the student on his accomplishment of objectives rather than on a set of norms. | _____ | _____ | _____ |
| Evidence: _____ | | | |
| 17. Evaluates the instructional process on the degree to which students were able to accomplish objectives. | _____ | _____ | _____ |
| Evidence: _____ | | | |
| 18. Redesigns program based on evaluation and examination of goals and objectives. | _____ | _____ | _____ |
| Evidence: _____ | | | |

Other Competencies:

Evaluator's Signature: _____

Date: _____

Position: _____

Appendix D: Contract forms

To the Student:

Continuous progress in acquiring the teaching-learning competencies is an essential component of the teacher education program. Please complete at least one contract a semester.

To complete the contract:

1. Identify the competency you desire to acquire.
2. Choose from a collection of activities available in the departmental office, R. 247, or design an experience that will provide you the opportunity to develop the competency.
3. Invite a faculty member to approve your contract and agree to evaluate you upon its completion.
4. If placement in a school is essential, arrangements are to be made through the departmental office.
5. Contracts are to be completed by the last day of the semester.

A glossary of terms is available to help you in developing the contract.

MADONNA COLLEGE
Teacher Education Department

Term and Year _____

Date Completed _____

Long Term Contract

As part of my Madonna College Teacher Program, I, _____ want
to acquire the following behavior pattern characteristic of effective teaching:

In order to acquire this pattern I will investigate the following concepts:

I will need to develop the following skills to implement the behavior pattern:

Evaluation of my progress will be based on my ability to do the following:

I plan to complete contract # _____ by _____

We agree to assist this student by serving as a resource to him, assisting him
in setting up experiences in which he will demonstrate his achievement of his
objectives, and assisting in the evaluation of his progress.

_____ Coordinator

_____ Supervising Teacher

MADONNA COLLEGE
Teacher Education Department

Term and Year _____

Date Completed _____

Evaluation of Contract

Performance Objectives:

Self Evaluation:

Faculty Evaluation: Name _____

Other: Name _____

Summary Evaluation:

Student: _____

GLOSSARY

- Behavior (performance) - any act, or collection of acts, by a person; a visible activity displayed by the learner.
- Competency - knowledge, skills, behavior patterns characteristic of effective teaching. Competencies are derived from explicit conceptions of teacher roles and made public in advance to the student.
- Criterion - standard or test by which terminal behavior is evaluated.
- Evidence - Criteria applied in assessing the competency:
performance - demonstration of a required teaching behavior
knowledge - demonstration of a required cognitive understanding
product - demonstrated changes in pupil behavior as a result of the teaching act.
- Goal - a broad statement of direction or intent without reference to time or specific behavior; statement that proposes desired and valued competencies, states of being and/or general levels of proficiency to be achieved. Goals are achieved through the accomplishment of objectives.
- Level (degree) of mastery - related to objectives which are quantifiable. Mastery is inferred from a demonstration of a set of performances.
- Objective (behavioral objective), (performance objective) - statement which clearly and explicitly specifies a student behavior which will suggest that the student has mastered a desired learning; a quantifiable and/or observable achievement accomplished under specifiable conditions
- An objective has four identifiable parts:
- (1) it specifies who the learner is,
 - (2) what terminal behavior is required,
 - (3) under what conditions it is to be performed, and
 - (4) the criteria of acceptable performance.
- Systems approach - self-correcting and logical methodology of decision making to be used for the design and development of man-made entities.