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ABSTRACT

The impact of a 6-week summer Computer Based Resource Unit writing workshop was investigated with 60 third-year preservice teachers during 1 year and 100 similar teachers during year 2. Thirty experimental Ss in the year 1 workshop focused on understanding individual differences with 30 objectives, 217 content items, 343 instructional activities, 273 materials suggestions, and 197 measuring devices. Both workshop and control Ss later were rated by supervising teachers and independent raters (for eliciting student participation with verbal behavior) during practice teaching assignments. Results of testing indicated significant improvement by workshop Ss in cognitive content (ability to identify and write objectives and prescribe strategies) and in self-concept, improvement in utilization of curriculum and classroom management strategies, and no significant difference resulting from verbal interaction. In the second year replication study, different instruments were used with 30 different experimental and 10 prior control (control/experimental) Ss in the workshop, and a control group consisting of 30 different control, 10 prior experimental (experimental/control), and 10 prior control (control/control) Ss. Ten prior experimental (experimental/experimental) Ss had a 1-week refresher workshop. Results indicated that experimental Ss scored significantly higher than controls on an instruction measurement instrument and lesson planning. Longitudinal results showed that control/experimental and experimental/experimental Ss tended to rank higher than control/control and control Ss. (Appendixes give instrument sample and procedures.) (MC)

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**A Two Year Study of the
Effects of a CBRU Workshop
on Instructional Decision-Making**

FINAL REPORT

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*A Two Year Study of the
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Introduction

Unit teaching is a philosophically sound educational practice whereby a teacher focuses her instruction on a given theme or topic instead of a given chapter in a textbook or some other defined and contained material. By focusing on a theme, the teacher is able to introduce a variety of materials and activities. Capitalizing on this process, she is able to provide instruction which includes materials and activities encompassing the range of interests and abilities of the students in her classroom. Therefore unit teaching is a pedagogically sound method for individualizing instruction.

The difficulty with unit teaching is related directly to its strongest feature, i.e., the more materials and activities which must be available to meet the many needs of the students, the more planning and preparation is forced upon the teacher.

Happily, however, the technology of the computer has been programmed so that numerous relevant suggestions of materials and activities are easily available to teachers. Computer Based Resource Units (CBRUs) have been written in many content areas from kindergarten through senior high school to provide such data to educators.

The CBRU concept is intended to facilitate and improve teacher-decision making in planning a superior curriculum for each student. The CBRU model is predicated upon diagnosis of student needs which are then translated into objectives. These objectives are measurable and are realistic in terms of the learner's characteristics. Then appropriate learning experiences, including exposure to relevant content through various educational materials and activities, are provided to the student. Finally, for evaluation purposes, the student is then observed for demonstration of attainment of the desired objective.

This model of diagnosis-prescription-evaluation through utilization of unit teaching is fulfilled by CBRUs in the following manner.

Teachers and/or student select desired objectives from a given CBRU. These objectives are indicated on a CBRU request form along with relevant teaching-learning variables. Reading level, mental age, chronological age, interests, physical handicaps (if any), and other learner characteristics, and teaching variables such as group vs. individual, classroom vs. laboratory setting, are also noted.

After submitting the request form, the teacher receives in return a printout which includes content items, instructional materials, instructional activities, and measuring devices for each student for each objective selected. All items on the printout have been screened so that they match the student profiles submitted on the request form.

Obviously, having access to such a large instructional data bank makes the teacher-user a more effective teacher.

There is, however, the generation of that data bank. The development of a CBRU includes not only the writing of the objectives and the content, activities, materials, and assessment items, but also the coding of each of these statements to the appropriate learning/teaching variable.

CBRUs have been developed by a wide variety of Western New York teachers for the last eight years. These writers of CBRUs have been most positive about the effects of their participation in CBRU writing. The Center for Curriculum Planning at the State University of New York at Buffalo conducted a survey of 89 inservice teachers who had participated in developing CBRUs. The 32 question instrument include Likert-type questions and opportunity to add comments where desired. A sample of responses to relevant questions follows:

- a) 68% of the respondents stated that they now had different ideas, persuasions, and view points about education and its processes. Comments included "increased clarity in understanding behavioral objectives", "increased interest in curriculum development", and a "need for less regimented curriculum."
- b) 72% of the respondents stated that they were more aware of problems in education, especially at the local level. Comments included "need for more planning time", "awareness of individual differences", and "need for more materials to allow for individualization."
- c) 39% of the respondents stated that their relationship with their students changed, and 54% stated that their classroom procedures had changed. The comments centered upon the awareness of individual differences and the need for activities and materials to teach these differences.
- d) 82% of the respondents stated that they are more willing to work with others to solve instructional problems, and 75% stated that they are now more able to evaluate certain educational practices. Comments indicated that the CBRU developers were now serving on various school curriculum writing committees, that they were now more critical of their own classroom and ". . . the workshop produced more insight than most education courses I've had in graduate school."

Results of this survey and comments made by CBRU writers to staff members of the Research and Development Complex at the State University College at Buffalo led to the conclusion that experiencing the process of constructing a CBRU is, in itself, a valuable educational exercise regardless of the unit developed.

The premise on which the present study is predicated is a logical extension of that conclusion. If the process of constructing a CBRU is a valuable

experience for inservice teachers, would not the experience also benefit pre-service personnel?

A two-year study to assess the impact of student teacher participation in CBRU development was undertaken by the Research and Development Complex at the State University College at Buffalo. The general hypothesis of the project was that participation in a CBRU writing workshop would result in positive modification of selected behaviors of pre-service education students.

This paper contains a summary of each of the two years of the project. The format of this paper handles each year of the study as though it were a separate entity although, in fact, it was conceived as a multi-year project, and the undertakings in Year II obviously are predicated on feedback obtained during Year I.

Year I

Introduction

Participation of pre-service teachers in a Computer Based Resource Unit writing workshop was viewed as the independent variable in the study. It was hypothesized that selected behaviors of workshop participants would be positively modified. These behaviors would include:

- a) ability to identify and write behaviorally stated objectives;
- b) ability to prescribe for given objectives, relevant instructional activities and materials which are appropriate to students' individual differences;
- c) demonstrations of improved self-concept;
- d) utilization in their student-teaching assignments of materials, activities, and grouping procedures which would indicate individualization of instruction; and
- e) demonstration in their student teaching situation of greater pupil participation as indicated by verbal interaction.

Methodology

Sample - From a pool of approximately 90 Exceptional Education students who were completing their junior year at the State University College at Buffalo, a total of 30 individuals were randomly selected to participate in a Computer Based Resource Unit writing workshop. This group was termed the experimental group. Simultaneously, from the same pool, 30 students were selected to be members of a control group. All members of both groups successfully completed their third year of studies but none had yet been involved in their student teaching situation.

Instruments - Measurement instruments were selected to test the hypotheses mentioned above. Scores on these instruments constituted the dependent variables in the study.

-Pre-interim-post tests - to assess hypotheses a, b, and c above, tests were written specifically for this project. Appendices A-1, A-2, A-3 are copies of the tests.

-A-1 was given to both groups as a pre-test.

-A-2 was given to the experimental group at the end of the workshop as an interim evaluation.

-A-3 was given to both groups as a post-test.

Each test had elements which were categorized into two components - cognitive and affective. Those multiple choice, fill-in, and choice from statement questions pertaining to the writing of objectives, materials, and activities constituted the cognitive component and measured hypotheses a & b. The last 6 items in each test, all of them utilizing the semantic differential format, constituted the affective component and were used to assess hypothesis c, self-concept.

-Form D - To measure hypothesis d, indications of individualization of instruction in the student-teaching situation, the rating scale used by supervisory professors at State University College at Buffalo was modified for this study. Appendix A-4 contains the modified Form D. Subscores available from the modified Form D include teacher planning, use of materials, classroom management, and teacher performance.

-Modified MOIR (Jason) - Also used to assess hypothesis d was a modification of the Medical Instruction Observation Record constructed by Hilliard Jason. Subscores available from the

modified Jason scale included attitude to student differences, sensitivity to physical setting, attitude to students, reactions to students' needs, use of instructional materials, and use of teaching methods. (see Appendix A-5)

-Modified Flanders Interaction Analysis - to assess hypothesis e, the FGESS modification of Flanders' Interaction Analysis was utilized. The FGESS system divides all verbal behavior in the classroom into 10 general categories. Seven of the categories focus on teacher behavior, while two of the categories focus on student verbal behavior. The tenth category contains the miscellaneous information not categorized by the other nine. Four of the nine categories are subscripted to total fourteen categories of classroom verbal interaction. The FGESS System was designed to enlarge the categories involved in teacher acceptance and use of student ideas, the use of broad and narrow responses, and the generation of pupil responses. Appendix A-6 contains the names and descriptions of the 14 categories in the FGESS System for observing classroom verbal interaction.

Those categories used as variables in the analysis are:

- student initiated response;
- broad student response;
- total teacher talk;
- expansive teacher talk; and
- indirect teacher talk.

Procedures - After the experimental and the control groups were randomly chosen, all members of each group were given a pre-test which included questions about specific curricular knowledge and items that assessed attitude toward selected curricular topics as well as self-concept.

The experimental group then participated in a six week workshop conducted during the summer preceding their senior year. The workshop met for three hours each day for thirty school days. The workshop, conducted by the Research and Development Complex staff, dealt with the development of a Computer Based Resource Unit by the pre-service teachers. The agenda of the workshop is in Appendix B-1.

Although the content instruction necessary for writing a CBRU was presented in a logical, structured manner, a democratic, open setting was the major thrust for the verbal interaction of the workshop sessions. Participants were encouraged to express their knowledge and opinions freely. Leadership by the participants was encouraged and direction from authority figures held to a minimum.

After much discussion, the group decided upon a topic for their CBRU and entitled it Understanding Individual Differences. The unit was designed specifically for spacial education classrooms and included objectives, materials, activities, and measuring devices which would help students understand why other people did not look or act the same way as they themselves did.

The completed unit contained 30 objectives, 217 content items, 343 instructional activities, 273 materials suggestions, and 197 measuring devices. In addition to these statements, all appropriate coding was completed.

At the end of the first, third and sixth week, the participants were asked to evaluate the workshop. The first and third evaluations were conducted through the use of structured, open-ended questionnaires, while the second evaluation consisted of the participants' written response to the statement, "Comment on your reaction to the workshop thus far." Appendices B-2 and B-3 contain the questionnaires used for the first and the third evaluations. Feedback from the first two evaluations, as well as information gathered from discussions with the participants, was used by the project director in planning for subsequent workshop meetings. In general the evaluation of the workshop was very positive as is indicated in the following quote from one of the questionnaires, "I can't even measure how everything that 7 semesters of education courses threw at me, finally fell into place."

Additionally, each participant was given a chance to anonymously evaluate each of his peers in the workshop. The form used for this purpose is found in Appendix B-4.

At the end of the workshop, the experimental group was given an interim test (A-2) to assess differences in cognitive and affective scores as an immediate effect of participation in the workshop.

During the fall and spring semesters of their senior year, the students participated in their student teaching assignments. The assignments were made by the college personnel following normal procedure with no knowledge of what students were in the experimental or control group.

The cooperating teachers, e.g. the teacher in the school system to which the student was assigned, were requested to complete the modified Form D and the modified Jason scale for each of the study participants. Not only didn't the cooperating teacher know which

group the student was in, the teacher was not even told of the study. Instead it was explained that the different forms were being studied by the college (which in fact they were.)

Additionally, twelve students from each of the two groups were randomly selected to be observed in their student teaching situation by trained observers using the FGESS System for classifying verbal behavior.

The six raters who were observers in this study completed approximately 30 hours of instruction in the FGESS System and trained with both taped and live observations. The range of observer reliability calculated during the training period was .79 to .81 using Scott's reliability coefficient.

At the end of the spring semester, members of the control group and the experimental group were administered the post-test (A-3).

A graphic presentation of the research design upon which the procedures were predicated is located in Appendix B-5.

The PERT chart indicating project events and the time of each event is located in Appendix B-6.

Method of Analyses - Data collected from the modified Jason, the modified Form D, and the FGESS observation instruments were analysed utilizing multivariate analysis of variance procedures.

A matched t technique was used to analyse the pre-interim test data.

Multivariate analysis of covariance procedures with pre-test as covariate was utilized to analyse the pre-post test data.

Results

Pre-Interim - The interim test (A-3) was administered to twenty-six members of the experimental group after they had completed the six-week workshop. Of the four missing persons, one was in the hospital, two had moved out of town to obtain jobs, and the fourth was in training in the National Guard and was not available.

This analysis compared scores obtained by the experimental group on the pre-test with those on the interim test.

All the questions pertaining to cognitive knowledge were combined into one score termed knowledge. The six semantic differential scores were scored separately. Means for each sub score on the pre and on the interim test are given below:

<u>Variable</u>	<u>Pre</u>	<u>Interim</u>
Knowledge	7.12	10.27
Behavioral Objectives	20.65	22.00
Self-written Objectives	19.85	20.50
Materials, Activities	20.12	20.69
Classroom Behavior	15.19	16.50
Ideal Teacher	42.08	43.96
Real Teacher	38.19	39.85

Table 1. *Mean of the sub score on the pre and the interim tests.*

The multivariate F (d.f. = 8, 18) = 10.15. The probability of this $F < .0001$. The univariate F and probability for each of the sub-tests are given below:

<u>Variable</u>	<u>Univariate F</u>	<u>P than</u>
Knowledge	54.1559	.0001*
Behavioral Objectives	4.2388	.0501*
Self-written Objectives	1.2754	.2695
Materials, Activities	.5098	.4819
Classroom Behavior	9.7900	.0045*
Ideal Teacher	3.4018	.0771
Real Teacher	5.7745	.0241*

*significant

Table 2. *Univariate F's and probabilities of sub scores on pre and interim tests. (d.f. = 8, 18)*

Note that the mean of all the sub scores is higher on the interim test indicating gain during the workshop. When looking at all the sub scores as a unit, the probability of obtaining that difference is less than .0001.

Looking at each of the sub scores, significant differences are noted for variables Knowledge (.0001), Behavioral Objectives (.05), Classroom Behavior (.0045), and Real Teacher (.024). The gain for the Ideal Teacher sub score approached significance (.07).

Pre-Post - This analysis compared the differences in the scores of the control groups with those of the experimental group on both the pre and the post-tests. A multivariate analysis of covariance was used with the pre-test score being the covariate. Scores for 26 experimental group members and 24 control group members were available.

Variables are knowledge (made up of I, II, and III on the test) and each of the semantic differentials.

The means for each group on the pre and on the post-test are given in Table 3.

<u>Variable</u>	<u>Pre-test</u>		<u>Post-test</u>	
	<u>experimental</u>	<u>control</u>	<u>experimental</u>	<u>control</u>
Knowledge	16.03	16.29	21.69	17.29
Behavioral Objectives	20.65	21.08	21.34	21.04
Self-written Objectives	19.84	19.37	20.92	21.83
Materials, Activities	20.11	19.95	20.57	21.54
Classroom Behavior	15.19	15.79	17.03	17.45
Ideal Teacher	42.07	44.79	43.30	46.37
Real Teacher	38.19	38.75	40.88	43.33

Table 3. Means for control group and the experimental group on the pre and the post-test.

The multivariate F (d.f. = 8, 33) = 2.5449 ($p < .0281$) which is significant. The univariate F's and probabilities for each of the sub scores is given in Table 4.

<u>Variable</u>	<u>Univariate F</u>	<u>P than</u>
Knowledge	10.6397	.0023*
Behavioral Objectives	.0017	.9672
Self-written Objectives	.4053	.5280
Materials, Activities	1.1596	.2880
Classroom Behavior	.0000	.9974
Ideal Teacher	4.9334	.0321*
Real Teacher	2.5990	.1148

*significant

Table 4. *Univariate F's and probabilities for sub score differences between the experimental and control groups.*

The results of the pre-post test analysis when viewed as a unit indicate that the difference in scores is too great to be attributed to chance ($P < .0281$). Most of the difference can be accounted for by the gain in cognitive knowledge by the experimental group ($P < .0023$).

Form D - A post only multivariate analysis of variance generated the following tables. The experimental group included 20 students for whom data was available and the control group included 25 students for whom data was available.

<u>Variables</u>	<u>Means</u>	
	<u>Experimental</u>	<u>Control</u>
Teacher planning	86.10	81.16
Use of Materials	29.00	29.36
Teacher Performance	88.25	82.59
Evaluation	<u>28.30</u>	<u>29.44</u>
TOTAL	241.65	232.52

Table 5. *Means of the control group and the experimental group on the Modified Form D.*

The multivariate F (d.f. = 4, 40) = 2.61, and was significant ($P < .0492$). However, none of the univariate F 's was significant. The significant multivariate F was not due therefore to any single sub score, but instead was caused by a combination of the sub scores.

The means of the teacher planning and teacher performance were higher for the experimental group (approximately 5 points each) but the means of the usage of materials variable and evaluation is higher for the control group (approximately one point).

The univariate F for the total score is not significant ($P < .44$) but the mean was 9.13 points higher in favor of the experimental group.

Modified Jason - This post only analysis compared the scores of the experimental group and the control group on the modified Jason Scale. Complete information was received for 20 experimental group students and 25 control group students.

The means for each group for each of the variables sub scores and for the total are shown in Table 6.

<u>Variable</u>	<u>Group Mean</u>	
	<u>Experimental</u>	<u>Control</u>
Attitude to Student Differences	58.80	56.65
Attitude toward Students	63.55	60.05
Reaction to Student Needs	57.80	53.64
Use of Materials	62.00	57.84
Use of Methods	59.65	55.36
Use of Challenge	<u>62.85</u>	<u>57.96</u>
TOTAL	374.65	350.68

Table 6. Means of experimental and control group scores on variables and total of Modified Jason Scale.

Although all of the means for the experimental group were higher than those of the control group, neither the multivariate F nor the univariate F's were statistically significant.

Interaction Analysis - Utilization of the FCESS System involved the raters categorizing classroom verbal behavior for each 3 second interval observed. A unique computer program was written for this project which compiled all the responses for each variable for each of the four observations of the twelve control group students and the twelve experimental group students. Additionally, the program standardized the totals to control for variance in the total number of responses scored for each teacher.

The multivariate analysis was conducted on the following categories:

- student initiated responses;
- broad student response;
- total teacher talk;
- expansive teacher talk; and
- indirect teacher talk

Neither the multivariate F nor any of the univariate F 's generated in a multivariate analysis of variance program was statistically significant.

Conclusions and Recommendations

The first two hypotheses of the project (i.e. ability to identify and write behavioral objectives and ability to prescribe appropriate instructional strategies) were assessed through the first variable (i.e. knowledge) on the pre and post tests. Analysis of the results indicates that experience in a CBRU development workshop significantly improved student knowledge of curriculum oriented content.

The third hypothesis, improvement in self concept, measured by the real teacher semantic differential on the pre-interim tests, indicates that a significant improvement was noted in the attitude of the experimental students toward themselves as teachers. Apparently students know more and feel more confident of themselves as teachers as a result of their workshop experience.

Hypothesis d (i.e. utilization of varied curriculum strategies and varied classroom management techniques) was measured by the Form D and the modified Jason Scale. The results of the Form D indicate that the student teacher's classroom behavior was significantly more positive for the experimental student. Although this trend is confirmed by higher means for the experimental group on the Jason Scale, the difference using this measure was not statistically significant.

Hypothesis e (i.e. increased student individualization according to verbal interaction) was measured by the FGESS System for classroom observation of verbal interaction. The differences observed between the two groups was not statistically significant.

Therefore, it appears that the experimental teachers are cognitively better prepared and are more confident as they enter their student teaching situations, but that within the structured student teaching situation, various factors inhibit full demonstration of potential.

One possibility for the lack of significance on some variables measured by the Form D and/or the modified Jason Scale is the lack of reliability among the raters of the students. The Form D and the Jason were scored by the cooperating teacher. These teachers received no training for rating when using these instruments. Therefore it is possible that the variance within groups was so wide as a result of lack of reliability of the raters, that no differences could be observed between groups. Acting upon this assumption, the suggestion was made that alternate measures for assessing these hypotheses be utilized in future studies. It was suggested that these measures be such that they could be rated by trained raters who had demonstrated acceptable inter-rater reliability.

A second possibility for the lack of significant differences was also offered. It was suggested that because the student teaching situation is so structured and influenced by the cooperating teacher, these factors negatively influence the student teacher to restructure the classroom situation to individualize instruction and also limit the amount of verbal interaction in the classroom. These latter variables are obviously very important in a unit teaching approach since unit teaching (especially when utilizing CBRUs) implies a different style of grouping and interaction than that used in a traditional approach.

Therefore it was recommended that in order to empirically demonstrate the total effectiveness of CBRU workshop participation, the conditions during the criterion observations be modified. This could be accomplished by two different methods:

1. The student could be observed during his first year of teaching when the class and the curriculum is under his own control and not that of a cooperating teacher; or

2. Through some form of in-service training or workshop, the cooperating teacher could receive instruction in philosophical and practical aspects of unit teaching and CBRUs.

Results and recommendations of Year I of the study were used as input in designing the study for Year II.

Year II

Introduction

The first year of this two year study investigated cognitive and affective effects of participation in a CBRU development workshop on thirty pre-service education majors. Results of the first year indicate that experimental group students appear to be better prepared as measured on several cognitive variables and were more confident in themselves as teachers. However, although means were higher for the experimental group, hypotheses concerning classroom effects of the workshop were not confirmed by statistical analysis.

It was suggested that one reason why effects in the classroom were not evident was the inhibiting conditions caused by being in the student teaching situation. It is likely that the student teacher tends to follow the pattern established in the classroom by the cooperating teacher. Inasmuch as most teachers allow little verbal interaction in their classrooms, and most teachers do not use grouping techniques or multiple activities and/or materials to individualize instruction, the student teacher might have been inhibited from using teaching methods not similar to those of the cooperating teacher. It was therefore suggested that participants involved in the study be observed during their first year of teaching in their own classrooms where they would have more control over curriculum and classroom management.

Therefore the second year of the study followed that recommendation as well as the recommendation that a method of assessment not contingent upon the rating of untrained observers be utilized.

Additional hypotheses were also raised. Two of those were:

1. Since a year intervened between the workshop treatment and the

- actual first-year teaching situation, would a reinforcement (refresher) workshop just prior to teaching be of value? and
2. What is the optimal time for pre-service experience of the treatment -
 - a. prior to student teaching?
 - b. subsequent to student teaching?

Accordingly, the objectives of the second year of the study were:

1. To replicate the first year study with students who had not yet participated in student teaching;
2. To investigate the effects of the treatment of Year I participants in their first year of teaching;
3. To investigate the effects of a reinforcement (refresher) treatment on some of the first year participants; and
4. To investigate the effects of varying the temporal placement of the treatment.

Methodology

Sample -Sixty students at the State University College at Buffalo who had not yet participated in student teaching were selected for participation in Year II. Thirty of these students were randomly assigned to the experimental group and thirty to the control group. These groups are numbered 100 and 200 respectively in the design as shown in Appendix C-1.

Additionally, ten students from the experimental group in Year I and ten students from the control group in Year I were randomly selected for participation in Year II. The control group students were assigned to be involved in the second summer workshop and were termed the control/experimental group which is number 300 in Appendix C-1.

The experimental group students were assigned to the second year control group and were termed experimental/control. They are numbered 600 in Appendix C-1.

Ten more students from the control group from Year I were assigned to the control group of Year II. They were termed control/control and are numbered 500 in Appendix C-1.

Finally, 10 more students from the experimental group in Year I were assigned to participate in a one week summer refresher workshop. This group was labeled experimental/experimental and numbered 400 in Appendix C-1.

Therefore groups 100 and 200 would be the replication groups; groups 300 and 600 would test the temporal placement question; group 400 would test the reinforcement question; and group 500 would be a total control group.

Instruments

-Pre-post test - The pre-interim-post tests utilized in Year I were modified for the second year study. The cognitive section of the test was restructured and divided into two variables - knowledge and application.

The affective section of the second year test was identical to that used in Year I except that the semantic differential measuring classroom behavior was eliminated.

A copy of this test is located in Appendix C-2.

-Perceived Individualization of Instruction Scale - Two

Likert-type scales were written to assess perceptions of individualization of instruction. Each scale contained twenty-eight statements concerning indications of instructional individualization. One scale was to be completed in reference to perception of the ideal teacher. The second scale was to be completed in reference to self as teacher.

Appendix C-3 contains a copy of this instrument.

-Lesson Plans - All participants were asked to submit written lesson plans in their teaching or student teaching situation. These lesson plans were rated according to use of behavioral objectives, variety and relevancy of instructional materials and activities utilized within a given lesson, and on indications of grouping patterns used for individualization.

Verbal Interaction Analysis - The same instrument used in Year I, the FGESS modification of Flanders Interaction Analysis was utilized in Year II. Appendix A-6 contains the categories scored in that system. The categories analysed for this study were:

1. Student initiated response;
2. Broad student response;
3. Total teacher talk; and
4. Expansive teacher talk.

Procedure - Education students at the State University College at Buffalo who had completed their junior year of college but had not yet participated in student teaching were randomly assigned to the replication experimental and control groups.

Students who had graduated and were to begin their first year of teaching were assigned to the experimental/experimental, experimental/control, control/experimental, and control/control groups as appropriate.

The pre-test (Appendix C-2) was administered to all participants.

A six-week workshop devoted to theory and practice of unit teaching and to the development of Computer Based Resource Units was conducted for the experimental and the control/experimental groups. A one-week refresher workshop was conducted for the experimental/experimental group.

Students in the control and the experimental groups were observed in their student teaching situations. The participants who had been involved in the first year of the study were observed in their first in-service year teaching situations. Trained raters used the FGESS System when observing in the classrooms.

Lesson plan data was collected and the Perceived Individualization of Instruction Scale was administered.

The same test used as the pre-test was administered as a post-test.

Analysis of the data was then conducted.

Appendix C-4 contains a FLOW chart utilized during the study.

Method of Analysis - Statistics used for analysing the collected data include the following:

-Pre-post test - t and matched t tests, multivariate analysis of variance, and multivariate analysis of covariance;

-Perceived Individualization of Instruction Scale - t test and multivariate analysis of variance.

-Lesson Plans - t test and analysis of variance; and

-Verbal Interaction Analysis - multiple analysis of variance.

Results

The original research design for Year II anticipated the involvement of 100 subjects placed in the following groups:

<u>Group</u>	<u>N</u>
(100) Experimental	30
(200) Control	30
(300) Control/Experimental	10
(600) Experimental/Control	10
(500) Control/Control	10
(400) Experimental/Experimental	<u>10</u>
<u>TOTAL</u>	= 100

The total number of subjects for which complete, usable data was obtainable was somewhat smaller and varied from variable to variable.

A certain attrition rate is expected for a given study which continues over a time period of a year. The second year of this study mandated that those students involved in groups 300, 400, 500, and 600 would have graduated from college and obtained teaching positions in school districts. However, several of the students assigned to these groups went on to graduate school and therefore were not able to participate in the study. More significantly, many students were not eligible to participate in the study because they were unable to obtain teaching jobs following graduation.

Because of the attrition of students from Year I, insufficient

data was collected from the experimental/control group (600) to include that group in the statistical analysis of Year II. Therefore, in the results following, there are only five treatment groups analysed.

Since incomplete data was not analysed, the N per treatment group also varied.

Therefore when reading the following results, two conditions should be noted:

- a. The experimental/control group was dropped from all analyses; and
- b. The N for a given treatment group might vary from variable to variable.

-Pre-post test - Although only the pre-post test scores were desired for the final evaluation of the project, tests given to the control and the experimental at the end of the workshop were disseminated to provide immediate feedback to the project staff. This test, the same as that used for the pre-test, is referred to as the interim test.

-Interim Test Analysis - A matched t test of the cognitive section total of knowledge and application sub-scores of the interim test was utilized to analyse gain score for the experimental group. The t value was - 3.39. With 29 degrees of freedom, this value is significant with the probability $< .001$.

A post-only t test conducted on the cognitive section of the interim test for the experimental and the control group produced a t value of 6.94. With 44 degrees of freedom, this value is significant since the chance probability of obtaining such a

value is less than one in a thousand ($p < .001$).

This form of analysis rather than analysis of covariance was used at this time because under the circumstances it was more expedient to hand-calculate the statistic thereby providing immediate feedback to the students.

-Pre-Post Test Analysis - A multivariate analyses of covariance (pre-test being the covariate) on the cognitive section (total of knowledge plus application) produced an F value of 79.83. With degrees of freedom being 1 and 43, the probability of obtaining such an $F < .0001$. This analysis is the same variable as reported in the t test above.

The means of each of the groups is given in Table 7.

<u>Group</u>	<u>Pre-test</u>	<u>Post-test</u>
Experimental	29.37	53.73
Control	37.37	40.06

Table 7. Means on the pre and post test for experimental and control groups.

A multivariate analysis of covariance procedure on the sub-scores of the pre and the post tests for the control and the experimental group produced an overall F value of 7.43 (d.f. = 7,31), $p < .0001$. The pre-test was used as the covariate.

Means and univariate F's of each of the sub-scores are listed in Table 8.

<u>Variable</u>	<u>Means</u>		<u>Control</u>		<u>Univar- iate F</u>	<u>P<</u>
	<u>Experimental Pre</u>	<u>Post</u>	<u>Pre</u>	<u>Post</u>		
Knowledge	14.43	19.00	14.50	16.94	15.7370	.0004*
Application Knowledge	14.93	34.53	17.87	23.12	31.2434	.0001*
Behavioral Objectives	20.86	23.03	19.44	20.37	10.0316	.0031*
Self-Written Objectives	21.16	22.50	21.56	21.94	.0003	.9867
Self-Written Materials, Activities, and Cri- terion Items	21.46	22.90	22.00	22.18	.0078	.9302
Ideal Teacher	72.43	74.90	71.06	71.06	3.9276	.0050*
Real Teacher	67.86	70.33	66.81	66.68	7.4281	.0098*

*Significant

Table 8. Pre-post means, univariate F's, and probabilities of pre-post sub-scores of control and experimental groups.

It can be seen that all sub-score tests are significantly different in favor of the experimental group except the sub-scores for attitudes toward self-written items where no significances are indicated.

An analysis of variance on the cognitive section (total of knowledge and application) was used to analyse the post-test scores of four treatment groups. These were: The experimental, the control, the control/experimental and the experimental/experimental. In addition to the loss of the experimental/control group, insufficient data for the control/control group was available for the analysis with the instrument.

The overall F obtained was 18.49. With degrees of freedom of 3 and 58, the probability of such as F is less than .0001. The means for each of the groups is given in Table 9.

<u>Group</u>	<u>Mean</u>
Experimental	53.73
Control	40.06
Control/Experimental	54.62
Experimental/Experimental	53.88

Table 9. Means on the cognitive section of the pre-post test for four treatment groups.

A multivariate analysis of variance procedure used to analyse the post-test sub-scores of the four treatment groups produced an overall F of 3.37. With degrees of freedom 21 and 149.87, the probability of such an F is less than .0001.

Table 10 contains statistics for each of the sub-scores in this analysis.

<u>Variable</u>	<u>Mean</u>				<u>Univar- iate F</u>	<u>P <</u>
	<u>exper- mental</u>	<u>'con- trol</u>	<u>con/ exp</u>	<u>exp/ exp</u>		
Knowledge	19.20	16.84	19.25	20.50	5.3861	.0025*
Application	34.53	23.13	35.38	33.38	17.6386	.0001*
Behavioral Objectives	23.03	20.38	24.40	22.13	5.6135	.0019*
Self-Written Objectives	22.50	21.93	24.37	21.25	2.5252	.0664
Self-Written Materials, Activities and Criterion Items	22.90	22.19	23.75	21.00	2.0693	.1142
Ideal Teacher	74.90	71.06	74.62	72.00	2.4856	.0696
Real Teacher	70.33	66.68	69.50	63.87	3.4272	.0229*
*significant	N =	30	16	8	8	

Table 10. Means, univariate F's and probabilities for post-test sub-scores of four treatment groups.

It can be seen that the means for the three experimental groups are higher for every variable and that significance was obtained for four of the variables. In two other variables, self-written objectives and ideal teacher, significance was approached ($p < .0666$ and $.0696$ respectively).

-Perceived Individualization of Instruction - The five treatment groups obtained the following means on the "Myself as Teacher" section of the self report Perceived Individualization of Instruction.

<u>Group</u>	<u>N</u>	<u>Mean</u>
Experimental	18	98.17
Control	20	85.30
Control/Experimental	8	82.50
Experimental/Experimental	7	83.00
Control/Control	8	85.00

Table 11. Means on the "Myself as Teacher" section of the Perceived Individualization of Instruction Scale for the five treatment groups.

A t test between the control and the experimental group produced a value of 19.24. With 36 degrees of freedom the probability of such a $t < .0001$. Therefore there was a significant difference in favor of the experimental group.

An analysis of variance comparing the control/experimental, experimental/experimental, and the control/control produced an $F = .2838$. (d.f = 3, 39, $p < .8368$).

An analysis of variance including all five groups produced an $F = 7.6729$. (d.f. = 4, 56, $p < .0001$).

-Lesson Plans - Trained raters (inter-rater reliability = .90 and .91) scored lesson plans using teacher's utilization of behavioral objectives, variety and relevancy of instructional materials and activities, and indications of grouping patterns as criteria of individualizing instruction. Table 12 gives the means for each treatment group.

<u>Group</u>	<u>N</u>	<u>Mean</u>
Experimental	18	46.33
Control	16	33.31
Control/Experimental	7	46.57
Experimental/Experimental	7	54.85
Control/Control	8	41.00

Table 12. Means for five treatment groups on lesson plans.

A t test between the control and the experimental group produced a $t = 11.71$. With 32 degrees of freedom, the probability $< .0017$.

An analysis of variance with all five groups produced an $F = 6.36$. With degrees of freedom being 4 and 51, the probability $< .0004$.

-Verbal Interaction Analysis - Table 13 contains the means for each of the four categories of the FGESS System selected as indication of individualization of instruction.

Group	N	student initiated respon.	broad student respon.	total teacher talk	expansive teacher talk
Experimental	22	108.14	118.14	574.00	253.82
Control	17	89.64	94.53	564.41	208.53
Control/Experimental	6	173.00	193.50	534.50	205.00
Experimental/Experimental	8	171.75	177.75	579.25	253.38
Control/Control	8	130.00	138.13	563.63	231.75

Table 13. Means for each of the five treatment groups on the four categories of the FGESS selected for analysis.

Analysis of variance produced an overall F of 2.3763. With 16 and 162 degrees of freedom, the probability $< .0033$.

Table 14 contains the univariate F's for each of the categories.

<u>Category</u>	<u>F</u>	<u>P <</u>
Student Initiated Response	3.7135	.0095*
Broad Student Response	3.8405	.0080*
Total Teacher Talk	.1834	.9462
Expansive Teacher Talk	1.8739	.1278

*significant

Table 14. F values and probabilities of FGESS System categories.

Conclusions

A table was constructed to indicate the ranking of means for each of the treatment groups on each of the dependent variable measures. On that table (table 15) the group with the highest mean received first place, the group with the second highest mean received second place, etc. An exception to this was the total teacher talk category which was reversed so that the highest mean received the lowest ranking. Consequently assigning first place one point, second place two points, etc., a second table was constructed by summing the points obtained for each group (table 16). Column one in Table 16 contains totals for all variables including interim and two group analysis. Column two contains totals for four groups on each of the variables. (The control/control group was not analysed on the pre-post instrument because the number of completed instruments was too small.) Column three presents the totals for all five groups on all the variables except the pre-post instrument. In any one column, a lower score indicates a higher ranking.

The purpose of these two tables is to present a graphic representation of trends and relationships among treatment groups and dependent variables. The fact that a group ranks higher than another group does not however necessarily indicate that differences between groups are significant.

Objective one of Year II was to repeat the Year I study but utilizing different assessment instruments. A comparison of experimental and the control group provides data to evaluate the objective.

Table 16 indicates that the experimental group totaled 20 points on the two group analyses whereas the control group totaled 37. Table 15 shows that the experimental group had the lower total score because it ranked better than the control group in every single analysis except the total teacher talk category. However, in the total teacher talk category no significant differences were generated.

In the two-group interim and the two-group final analysis of the cognitive section of the pre-post test, the experimental group scored significantly higher than the control group. In the two-group analysis of the affective section of the pre-post test, the experimental group had higher means on every sub-score, the difference being significant on two sub-scores and approached significance on a third. On the Perceived Individualization of Instruction Scale, the experimental group scored significantly higher than the control group. Significance was also produced by the lesson plan analysis. On three of the four categories of the verbal interaction analysis, the experimental group performed better than the control group with the difference being significant in the expansive teacher talk category.

Therefore it can be concluded that participation in the CBRU workshop was beneficial cognitively, affectively, and practically.

The second objective of Year II was to investigate the effects of the treatment on Year I students in their first year of teaching. Examining the results of the control/experimental, the experimental/control, and the control/control provides an evaluation of this

objective. However, because of the small number of available participants with completed data, statistical analysis of the experimental/control group was not possible. Therefore a complete evaluation of the second objective is not possible. Study of the control/experimental and the control/control group does, however, provide insight into the effect of workshop participation on first year teaching.

Table 16, column 3, indicates that the control/experimental group totaled 15 points whereas the control/control group totaled 19.

Table 15 indicates that the control/experimental group ranked higher on the lesson plan variable and on three categories of the verbal interaction variables. Although insufficient data was available to include the control/control group in the analysis, the control/experimental group did rank highest of four groups analysed on both sections of the pre-post variable.

The control/control group ranked higher on the Perceived Individualization of Instruction Scale and on the expansive teacher talk variable of the verbal interaction measurement. Explaining how a lower amount of expansive teacher talk generated a higher amount of student responses is difficult.

Regardless of a lack of any explainable pattern within the teacher talk categories, it is interesting to examine the results of the student categories. The control/experimental group ranked higher on both student response categories which is noteworthy in light of the student centered-focus on the study's objective. This result also indicates that student initiated talk was expansive and generated a significant amount of broad student response.

On the Perceived Individualization of Instruction Scale, all three groups in their first year of teaching ranked lower than the

experimental and control groups. This is difficult to explain when lesson plans (table 11) indicates that they in fact did individualize more. Apparently, their "real world" experiences in some way dampened their perception of how much individualization they did. These results are similar to the "myself as real teacher" semantic differential on the pre-post test (table 8). The control/experimental and the experimental/experimental groups ranked third and fourth of the four groups analysed. Possibly the workshop participants perceived themselves favorably because they had higher expectations of themselves. When they felt that they were not reaching that high level, they perceived that they weren't doing well. The workshop might have exposed the student's to many methods of individualizing, but not being able to implement all of those methods, were discouraged and led to a poorer perception.

However, analysis of Table 15 indicates that overall, the control/experimental group ranked higher than the control/control group, and therefore the workshop participation was beneficial.

The third objective was to investigate the effect of a one week reinforcement (refresher workshop) on Year I workshop participants. Examining the scores of the experimental/experimental group permits evaluation of this objective.

Table 16 indicates that the experimental/experimental group totalled 17 points while the control/control group scored 19.

Lesson plan analysis, the measure of how well the participant did, in fact, individualize instruction, indicates that the experimental/experimental group individualized more than any other group. In fact, t tests show a significant difference between the experimental/experimental group and the control/control group, and between the experimental/experimental group and the control group.

However, group members didn't perceive themselves to be individualizing. Again, apparently the discrepancy between how much they learned about the possible methods of individualizing, and the amount of individualizing they did (even though more than the other groups) caused the group members to score themselves lower on the Perceived Individualization Instruction Scale. This low score and low perceptions of their abilities on the pre-post test (even though the lesson plan analysis indicated that they did the best of any group) forced a lower ranking of the experimental/experimental group in Table 15 and therefore in Table 16.

However, the effects of the reinforcement workshop on the experimental/experimental group when compared to the scores of the control/experimental group indicate that the reinforcement is not necessary.

The fourth objective was to investigate the effects of the temporal placement of the workshop. This analysis would have compared the control/experimental group with the experimental/control group. However, since insufficient data was available to include the experimental/control group, this analysis was not possible.

Analysing results variable by variable, those groups who participated in a workshop ranked higher than the control group on both sections of the pre-post test except in one situation. In that instance the experimental/experimental group ranked below the control group in the affective section. This could be explained by the experimental/experimental groups members' lower perception of their ability in contrast to what they had learned could be done. That is, because they know of more possibilities to individualize (and in fact do individualize according to lesson plan data) they feel that they do not individualize enough.

On the Perceived Individualization of Instruction Scale, the experimental group scored better than the control group, but the control/control scored higher than the control/experimental and the experimental/experimental. Apparently, the pre-service workshop participants (experimental group) perceived themselves capable of individualizing instruction to a much greater degree than the other participants. The fact that in-service workshop participants (control/experimental; experimental/experimental) did not perceive themselves in as idealistic manner as did the pre-service workshop participants (experimental groups), could be attributed to their real world experience as classroom teachers. Perception differences between the two groups of in-service teacher participants (control/experimental; experimental/experimental) and the two control groups (control; control/control) can be explained by the supposition that the workshop experience not only instilled a desire to individualize but also created an awareness of the difficulties inherent in the successful implementation of the approach.

On the lesson plan data, that objective data which indicates how much individualization did, in fact, take place in the classroom, the three groups having workshop participation scored better than the two control groups.

On the verbal interaction data, in those three categories where some significant differences were observed, the workshop groups tended to score better than the control groups.

Therefore, it appears that attendance at a CBRU development workshop is beneficial for the participants.

Summary

This two year study investigated the effects of involvement in a six-week workshop devoted to development of a Computer-Based Resource Unit and the concepts of individualizing instruction. It was hypothesized that workshop participants would indicate higher scores on measures of relevant cognitive content, on self-concept, on application of skills in a classroom situation, and on classroom verbal interaction.

The results from Year I and Year II indicate that the experimental group scored significantly higher on the cognitive measures, and tended to have higher means on the affective measures although the differences were not always significant.

The instruments used to assess classroom application during Year I failed to produce significant differences. It was concluded that since the instruments (the modified Jason and the modified Form D) were scored by untrained observers, the lack of reliability of the raters produced excessive error thereby observing any differences between the groups. Following recommendations that different instruments (i.e. lesson plans and the Perceived Individualization of Instruction Scale) be used during the second year, the Year II experimental group scored significantly higher than the control group on the classroom application variable.

Although Year I failed to produce significant differences on the classroom verbal interaction variable, the Year II experimental group scored higher than the control group.

Year II of the study also investigated the effects of the workshop treatment in a longitudinal design. Utilizing the same assessment instruments as for the experimental and the control groups, the control/experimental group and the experimental/experimental group tended to rank higher than the control/control group and the control group. The differences were especially noticeable in the lesson plan analysis.

APPENDIX A - YEAR I INSTRUMENTS

- A-1 Pre test**
- A-2 Interim test**
- A-3 Post test**
- A-4 Modified Form D**
- A-5 Modified Jason (MOIR) Scale**
- A-6 FGESS Interaction Analysis System**

Pre-Service Project on Instructional Decision Making

- I. 1. From each of the following groups of objectives, or goals, circle the number of the one that is most nearly stated in behavioral terms.
- A. To understand the principles of salesmanship.
 A. To be able to understand the meaning of Ohm's Law.
 A. To appreciate the impact of technology upon man.
 A. To be able to list the four types of production.
- B. To teach the fundamentals of diagraming electrical circuits.....
 B. To learn the fundamentals of diagraming electrical circuits.....
 B. To diagram an electric circuit with all the fundamentals.....
 B. To know how to diagram an electrical circuit.....
- C. To explore the identification of various types of vegetation.....
 C. To name and describe in writing ten types of vegetation.....
 C. To learn the names of ten different types of vegetation.....
 C. To know the names of ten different types of vegetation.....
2. Which of the following terms is not classified in Bloom's Three Domains of Learning:
- A. Cognitive
 B. Overt
 C. Psychomotor
 D. Affective
3. In Bloom's Domain dealing with mental knowledge, name five of the categories or levels.
- A. _____ D. _____
 B. _____ E. _____
 C. _____
4. Which of the following phrases is not a component of a behavioral objective?
- A. It implies action
 B. It identifies conditions
 C. It defines levels of performance
 D. It states covert behavior
5. Which of the following verbs should not be used in writing behavioral objectives?
- A. Understand
 B. List
 C. Differentiate
 D. Identify
6. A behavioral objective may best be defined as:
- A. A specific statement of student performance that is not observable.
 B. A goal which is achieved by a group of learners.
 C. A specific statement of student performance that is measurable.
 D. All of the above.

7. Generally, the most valid indications of student behavior that are related to a behavioral objective are those which:
 - A. Reflect the objective indirectly
 - B. Foster democratic ideals
 - C. Allow the student to transfer learning
 - D. Are linked directly with the objective

8. Which of the following objectives specify the level of performance?
 - A. Is able to leap tall rocks in a single bound.
 - B. Demonstrate the squaring principle.
 - C. List five of the six managerial positions found in a typical enterprise.
 - D. None of the above.

II. Select from the following 20 statements those which are valid behavioral objectives. Circle the number of those objectives that meet the criteria.

1. To understand the principles of reading readiness.
2. To exemplify good grooming and personal hygiene as a daily necessity.
3. To identify various intra-family roles of each family members.
4. To list some appropriate ways feelings can be expressed.
5. To determine awareness of family roles, have the children list responsibilities and privileges of each member.
6. To look for and record activities which indicate the child's cognizance of the need to make their behavior acceptable such as reducing over-aggressiveness and increasing use of compromise.
7. To explain the effect of contaminated air on lung ailment.
8. To help students understand the principles of evaporation and condensation.
9. To apply the criteria for a balanced diet in the preparation of a meal or menu.
10. To know the plays of Arthur Miller.
11. To be able to complete a 100 item multiple choice examination on the subject of mental retardation with the lower limit of acceptable performance set at 80 items answered correctly within an examination period of 60 minutes.
12. To come to school only when in good health.
13. To practice safety when using sidewalks and streets.
14. To associate some words and symbols with danger.
15. To recognize and say own name and home address.
16. To list the geographical and environmental factors which account for men's choice of housing.
17. During the final examination and without reference, the student must be able to translate 16 of 20 English sentences into grammatically correct French.
18. To let the children take turns serving as messenger for the classroom.
19. To use the opaque projector to show pictures of traffic accidents, policemen at work, or children waiting for the bus and discuss points in traffic safety, community helpers, bus safety, conduct, etc.
20. To read the children safety stories.

III. Relate the following instructional materials, activities, content items or assessment techniques to the valid behavioral objectives selected from the above statements by placing the number(s) of the appropriate objective(s) in the blank at the left.

- _____ 1. Proper lavatory habits are important. These habits include handwashing, respect for privacy and neatness.
- _____ 2. Make a map of the neighborhood. Have the children tell about the route they take to school. Make traffic lights, stop signs, etc. on the way which must be used.
- _____ 3. Have the children make a little booklet called "About Me". Included in the booklet should be a picture of the child, the child's house, bus, etc. with appropriate data under each picture.
- _____ 4. Record routine lavatory habits. Children can construct individual charts and observe certain patterns.
- _____ 5. Discuss topics such as "How to Keep a Cold to Yourself" and "Why We Wear Coats in Winter".
- _____ 6. Booklet and Film: "Always say "No! No! to a Stranger".
- _____ 7. Have children construct a chart showing proper clothing combinations and appropriateness of dress.
- _____ 8. Have a child stand behind a desk and call to one or two children at a time by name. The children respond "I'm here", or "Here I am".
- _____ 9. Make a list of family duties for which a child may assume responsibility.
- _____ 10. Film. "Your First Six Years"-12 min. Color 1968. Sterling Ed. Films, P., El., Jr. Describes the process of growth from birth to age six. Explains physical and mental growth relationships with family members and friends, and the variations within these aspects. The film uses a variety of racial groups as examples of families. (BOCES)
- _____ 11. Film. "How Much Affection"-20 min. Jr., Sh. B/W. McGraw-Hill Films. 330 West 42nd St., N.Y., N.Y. 10036. How much affection should there be between a couple that is going steady. How far in petting and still stay within bounds of social and personal mores.
- _____ 12. A good family member is one who does his or her share of family work.
- _____ 13. Explain the meaning of the different colors of the traffic light.
- _____ 14. Each member of a family should be interested in the well-being of every other member.
- _____ 15. Discuss safety practices for group travel. Take a trip to a public building. After the trip have the class evaluate how well safety was practiced.

IV. 1. You are familiar with flash cards. Assume that you have consonant flash cards. Write three (3) specific objectives for which you could use this material.

- A. _____

- B. _____

- C. _____

2. Describe the student(s) for which you could use it. (Include age range, reading level, disability)

3. From number 1 in this question, select one of the objectives and develop 3 criterion referents for that objective.

OBJECTIVE NUMBER _____

A. _____

B. _____

C. _____

4. You have a group of 6 primary age children to whom you are to teach the following objective: "To order events by sequence of occurrence". Write three (3) activities you would use to achieve this objective. Describe at least one activity for large group instruction and at least one for individual instruction.

5. Name or describe 3 materials appropriate for achieving this objective.

V. For the next six questions, circle the number on the line between the two adjectives that best reflects your judgment. 1 would mean strongly leaning toward the adjective on the left; 2 would be mildly inclined to the adjective located on the left; whereas 5 would be strongly inclined to that adjective located on the right, etc.

1. If I were hired by a school district to begin teaching tomorrow, my classroom behavior would be:

Ineffective	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Effective
Weak	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Strong
Excitable	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Calm
Dull	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Stimulating
Negative	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Positive

2. Objectives that I could write for that class would be:

Irrelevant	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Relevant
Impractical	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Practical
Impersonal	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Personalized
Confusing	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Clear
Subjective	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Objective

3. Materials, activities and/or criterion referents that I could devise for those objectives would be:

Irrelevant	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Relevant
Trite	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Imaginative
Impractical	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Practical
Foolish	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Wise
Confusing	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Clear

4. The value of the following attributes reflect my conception of a "good" teacher:

Foolish	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Wise
Weak	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Strong
Rigid	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Flexible
Unfair	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Fair
Unpredictable	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Predictable
Passive	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Active
Irrelevant	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Relevant
Impersonal	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Personal
Anxious	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Calm
Unsure	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Confident

5. I see myself having the following value in reference to my qualities while teaching:

Foolish	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Wise
Weak	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Strong
Rigid	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Flexible
Unfair	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Fair
Unpredictable	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Predictable
Passive	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Active
Irrelevant	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Relevant
Impersonal	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Personal
Anxious	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Calm
Unsure	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Confident

6. Behavioral Objectives are:

Unimportant	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Important
Useless	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Useful
Meaningless	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Meaningful
Impractical	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Practical
Dull	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Stimulating

Name _____

Workshop on Instructional Decision Making

- I. 1. From each of the following groups of objectives, or goals, circle the number of the one that is most nearly stated in behavioral terms.
 - A. To understand the principles of salesmanship.
 - A. To be able to understand the meaning of Ohm's Law.
 - A. To appreciate the impact of technology upon man.
 - A. To be able to list the four types of production.
 - B. To teach the fundamentals of diagraming electrical circuits.....
 - B. To learn the fundamentals of diagraming electrical circuits.....
 - B. To diagram an electric circuit with all the fundamentals.....
 - B. To know how to diagram an electrical circuit.
 - C. To explore the identification of various types of vegetation.....
 - C. To name and describe in writing ten types of vegetation.....
 - C. To learn the names of ten different types of vegetation.....
 - C. To know the names of ten different types of vegetation.....

2. Which of the following terms is not classified in Bloom's Three Domains of Learning:
 - A. Cognitive
 - B. Overt
 - C. Psychomotor
 - D. Affective

3. In Bloom's Domain dealing with mental knowledge, name five of the categories or levels.
 - A. _____
 - B. _____
 - C. _____
 - D. _____
 - E. _____

4. Which of the following phrases is not a component of a behavioral objective?
 - A. It implies action
 - B. It identified conditions
 - C. It defines levels of performance
 - D. It states covert behavior

5. Which of the following verbs should not be used in writing behavior objectives.
 - A. Understand
 - B. List
 - C. Differentiate
 - D. Identify

6. A behavioral objective may best be defined as:

- A. A specific statement of student performance that is not observable.
- B. A goal which is achieved by a group of learners.
- C. A specific statement of student performance that is measurable.
- D. All of the above.

7. Generally, the most valid indications of student behavior that are related to a behavioral objective are those which:

- A. Reflect the objective indirectly
- B. Foster democratic ideals
- C. Allow the student to transfer learning
- D. Are linked directly with the objective

8. Which of the following objectives specify the level of performance?

- A. Is able to leap tall rocks in a single bound.
- B. Demonstrate the squaring principle.
- C. List five of the six managerial positions found in a typical enterprise.
- D. None of the above.

II. You are constructing a CBRU entitled, "Communities of Man", the focus of which deals with people and their roles in the community, geographic factors in the location of communities, language and communication, and community needs and services.

A. Write two valid instructional objectives which you believe could be used in this CBRU.

B. For each objective, write two content items.

C. For each objective, specify two activities, one group and one individual.

D. For each objective, specify two materials that might be appropriate.

E. For each objective, write two measuring devices.

F. Describe the students for which your suggestions would be valid.
(Student variables - mental age range, reading level, etc.)

V. For the next six questions, circle the number on the line between the two adjectives that best reflects your judgment. 1 would mean strongly leaning toward the adjective on the left; 2 would be mildly inclined to the adjective located on the left, whereas 5 would be strongly inclined to that adjective located on the right, etc.

1. If I were hired by a school district to begin teaching tomorrow, my classroom behavior would be:

Ineffective	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Effective
Weak	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Strong
Excitable	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Calm
Dull	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Stimulating
Negative	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Positive

2. Objectives that I could write for that class would be:

Irrelevant	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Relevant
Impractical	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Practical
Impersonal	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Personalized
Confusing	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Clear
Subjective	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Objective

3. Materials, activities and/or criterion referents that I could devise for those objectives would be:

Irrelevant	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Relevant
Trite	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Imaginative
Impractical	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Practical
Foolish	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Wise
Confusing	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Clear

4. Behavioral Objectives are:

Unimportant	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Important
Useless	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Useful
Meaningless	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Meaningful
Impractical	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Practical
Dull	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Stimulating

5. The value of the following attributes reflect my conception of a "good" teacher:

Foolish	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Wise
Weak	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Strong
Rigid	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Flexible
Unfair	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Fair
Unpredictable	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Predictable
Passive	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Active
Irrelevant	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Relevant
Impersonal	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Personal
Anxious	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Calm
Unsure	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Confident

6. I see myself having the following value in reference to my qualities while teaching:

Foolish	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Wise
Weak	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Strong
Rigid	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Flexible
Unfair	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Fair
Unpredictable	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Predictable
Passive	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Active
Irrelevant	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Relevant
Impersonal	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Personal
Anxious	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Calm
Unsure	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Confident

Name _____

Date _____

PRE-SERVICE PROJECT ON INSTRUCTIONAL DECISION MAKING

- I. 1. From each of the following groups of objectives, or goals, circle the number of the one that is most nearly stated in behavioral terms.
- A. To understand the principles of salesmanship.
 - A. To be able to understand the meaning of Ohm's Law.
 - A. To appreciate the impact of technology upon man.
 - A. To be able to list the four types of production.

 - B. To teach the fundamentals of diagramming electrical circuits.
 - B. To learn the fundamentals of diagramming electrical circuits.
 - B. To diagram an electric circuit with all the fundamentals.
 - B. To know how to diagram an electrical circuit.

 - C. To explore the identification of various types of vegetation.
 - C. To name and describe in writing ten types of vegetation.
 - C. To learn the names of ten different types of vegetation.
 - C. To know the names of ten different types of vegetation.
2. Which of the following terms is not classified in Bloom's Three Domains of Learning:
- A. Cognitive
 - B. Overt
 - C. Psychomotor
 - D. Affective
3. In Bloom's Domain dealing with mental knowledge, name five of the categories or levels.
- A. _____
 - B. _____
 - C. _____
 - D. _____
 - E. _____
4. Which of the following phrases is not a component of a behavioral objective?
- A. It implies action
 - B. It identifies conditions
 - C. It defines levels of performance
 - D. It states covert behavior

5. Which of the following verbs should not be used in writing behavioral objectives.
- | | |
|---------------|------------------|
| A. Understand | C. Differentiate |
| B. List | D. Identify |
6. A Behavioral objective may best be defined as:
- A. A specific statement of student performance that is not observable.
 - B. A goal which is achieved by a group of learners.
 - C. A specific statement of student performance that is measurable.
 - D. All of the above.
7. Generally, the most valid indications of student behavior that are related to a behavioral objective are those which:
- A. Reflect the objective indirectly
 - B. Foster democratic ideals
 - C. Allow the student to transfer learning
 - D. Are linked directly with the objective
8. Which of the following objectives specify the level of performance?
- A. Is able to leap tall rocks in a single bound.
 - B. Demonstrate the squaring principle.
 - C. List five of the six managerial positions found in a typical enterprise.
 - D. None of the above.

II. Select from the following 20 statements those which are valid behavioral objectives. Circle the number of those objectives that meet the criteria.

- 1. To understand the principles of reading readiness.
- 2. To exemplify good grooming and personal hygiene as a daily necessity.
- 3. To identify various intra-family roles of each family member.
- 4. To list some appropriate ways feelings can be expressed.
- 5. To determine awareness of family roles, have the children list responsibilities and privileges of each member.
- 6. To look for and record activities which indicate the child's cognizance of the need to make their behavior acceptable such

as reducing over-agressiveness and increasing use of compromise.

7. To explain the effect of contaminated air on lung ailment.
8. To help students understand the principles of evaporation and condensation.
9. To apply the criteria for a balanced diet in the preparation of a menu or menu.
10. To know the plays of Arthur Miller.
11. To be able to complete a 100 item multiple choice examination on the subject of mental retardation with the lower limit of acceptable performance set at 80 items answered correctly within an examination period of 60 minutes.
12. To come to school only when in good health.
13. To practice safety when using sidewalks and streets.
14. To associate some words and symbols with danger.
15. To recognize and say own name and home address.
16. To list the geographical and environmental factors which account for man's choice of housing.
17. During the final examination and without reference, the student must be able to translate 16 of 20 English sentences into grammatically correct French.
18. To let the children take turns serving as messenger for the classroom.
19. To use the opaque projector to show pictures of traffic accidents, policemen at work, or children waiting for the bus and discuss points in traffic safety, community helpers, bus safety, conduct, etc.
20. To read the children safety stories.

III. Relate the following instructional materials, activities, content items or assessment techniques to the valid behavioral objectives selected from the above statements (from II) by placing the number(s) of the appropriate objective(s) in the blank at the left.

1. Proper lavatory habits are important. These habits include handwashing, respect for privacy and neatness
2. Make a map of the neighborhood. Have the children tell about the route they take to school. Make traffic lights, stop signs, etc. which must be observed along the route.

3. Have the children make a little booklet called "About Me". Included in the booklet should be a picture of the child, the child's house, bus, etc. with appropriate data under each picture.
4. Record routine lavatory habits. Children can construct individual charts and observe certain patterns.
5. Discuss topics such as "How to Keep a Cold to Yourself" and "Why we wear coats in winter".
6. Booklet and Film: "Always say 'No! No! to a Stranger'".
7. Have children construct a chart showing proper clothing combinations and appropriateness of dress.
8. Have a child stand behind a desk and call to one or two children at a time by name. The children respond "I'm here", or "Here I am".
9. Make a list of family duties for which a child may assume responsibility.
10. Film. "Your First Six Years" 12 min. Color 1968. Sterling Ed. Films, P., El., Jr. Describes the process of growth from birth to age six. Explains physical and mental growth relationships with family members and friends, and the variations within these aspects. The film uses a variety of racial groups as examples of families. (BOCES)
11. Film. "How Much Affection" 20 min. Jr. Sh. B/W. McGraw Hill Films, 330 West 42nd St. N.Y., N.Y. 10036. How much affection should there be between a couple that is going steady. How far in petting and still stay within bounds of social and personal mores.
12. A good family member is one who does his or her share of family work.
13. Explain the meaning of the different colors of the traffic light.
14. Each member of a family should be interested in the well-being of every other member.
15. Discuss safety practices for group travel. Take a trip to a public building. After the trip have the class evaluate how well safety was practiced.

- IV. 1. You are familiar with flash cards. Assume that you have consonant flash cards. Write three (3) behavioral objectives

for which you can use this material:

- A. _____

- B. _____

- C. _____

2. Describe the student(s) for which you could use the flash card materials. (Include age range, reading level, disability)

3. From number 1 in this question, select one of the objectives and develop 3 criterion referents for that objective.

Objective _____

- A. _____

- B. _____

- C. _____

4. You have a group of 6 primary age children to whom you are to teach the following objective: "To order events by sequence of occurrence". Write three (3) activities you would use to achieve this objective. Describe at least one activity for large group instruction and at least one for individual instruction.

NOTE: The size of the intended target group.

Name or describe 3 materials appropriate for achieving the objective selected for number 3 above.

- V. For the next six questions, circle the number on the line between the two adjectives that best reflects your judgment. 1 would mean strongly leaning toward the adjective on the left; 2 would be mildly inclined to the adjective located on the left, whereas 5 would be strongly inclined to that adjective located on the right, etc.

1. Behavioral Objectives are:

Unimportant	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Important
Useless	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Useful
Meaningless	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Meaningful
Impractical	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Practical
Dull	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Stimulating

2. Objectives that I could write for that class would be:

Irrelevant	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Relevant
Impractical	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Practical
Impersonal	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Personalized
Confusing	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Clear
Subjective	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Objective

3. Materials, activities and/or criterion referents that I could devise for those objectives would be:

Irrelevant	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Relevant
Trite	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Imaginative
Impractical	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Practical
Foolish	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Wise
Confusing	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Clear

-7-

4. If I were hired by a school district to begin teaching tomorrow, my classroom behavior would be:

Ineffective	1	2	3	4	5	Effective
Weak	1	2	3	4	5	Strong
Excitable	1	2	3	4	5	Calm
Dull	1	2	3	4	5	Stimulating
Negative	1	2	3	4	5	Positive

5. The value of the following attributes reflect my conception of a "good" teacher:

Foolish	1	2	3	4	5	Wise
Weak	1	2	3	4	5	Strong
Rigid	1	2	3	4	5	Flexible
Unfair	1	2	3	4	5	Fair
Unpredictable	1	2	3	4	5	Predictable
Passive	1	2	3	4	5	Active
Irrelevant	1	2	3	4	5	Relevant
Impersonal	1	2	3	4	5	Personal
Anxious	1	2	3	4	5	Calm
Unsure	1	2	3	4	5	Confident

6. I see myself having the following value in reference to my qualities while teaching:

Foolish	1	2	3	4	5	Wise
Weak	1	2	3	4	5	Strong
Rigid	1	2	3	4	5	Flexible
Unfair	1	2	3	4	5	Fair
Unpredictable	1	2	3	4	5	Predictable
Passive	1	2	3	4	5	Active
Irrelevant	1	2	3	4	5	Relevant
Impersonal	1	2	3	4	5	Personal
Anxious	1	2	3	4	5	Calm
Unsure	1	2	3	4	5	Confident

STATE UNIVERSITY COLLEGE AT BUFFALO

Modified FORM D

Name _____ Date _____

Teaching period from _____ to _____ Level or Grade taught _____

School and Place _____

Days Absent _____ Hours of Teaching _____

Supervising Teacher _____

College Supervisor _____

DIRECTIONS:

In each of the divisions in this form is a scale reading "N 1 2 3 4". On the scale "1" is the lowest score whereas "4" represents the highest score; "N" means the item is not appropriate in your situation. After each item in each of the divisions of the form, please write the appropriate symbol as it would apply to your student teacher. A "4" would indicate that the student was outstanding in that competency; a "1" would indicate that the student was lacking in that particular competency.

1. PERSONAL TRAITS

The student teacher;	N	1	2	3	4
1. maintains good health	_____	_____	_____	_____	_____
2. shows intelligence in meeting problems	_____	_____	_____	_____	_____
3. dresses neatly and appropriately	_____	_____	_____	_____	_____
4. possesses a pleasant voice	_____	_____	_____	_____	_____
5. speaks clearly and maintains satisfactory pitch and volume	_____	_____	_____	_____	_____
6. reacts with enthusiasm and vitality	_____	_____	_____	_____	_____
7. displays initiative	_____	_____	_____	_____	_____
8. possesses poise and self-confidence	_____	_____	_____	_____	_____
9. adapts readily to new ideas and situations	_____	_____	_____	_____	_____
10. possesses a sense of humor	_____	_____	_____	_____	_____
11. maintains high standards of oral and written English	_____	_____	_____	_____	_____
12. evidences a wide range of outside interest.	_____	_____	_____	_____	_____
13. shows sympathy and understanding in dealing with children	_____	_____	_____	_____	_____
14. displays tact	_____	_____	_____	_____	_____
15. shows fairness in all relations with children	_____	_____	_____	_____	_____
16. evidences an interest in others - particularly children	_____	_____	_____	_____	_____
17. displays interest in school activities	_____	_____	_____	_____	_____
18. assumes his share of responsibility	_____	_____	_____	_____	_____
19. possesses the integrity expected of a member of the teaching profession	_____	_____	_____	_____	_____

COMMENTS:

II. PROFESSIONAL COMPETENCIES

A. Planning - The Student Teacher;

N 1 2 3 4

- 1. Plans ahead for teaching activities _____
- 2. Considers individual differences of children when planning lessons and units _____
- 3. Encourages students to help plan lessons and units _____
- 4. Plans adequate objectives for lessons and units _____
- 5. Plans appropriate content to include in lessons and units _____
- 6. Plans satisfactory lessons _____
- 7. Relates new lessons to previous lessons and experiences _____
- 8. Uses specific objectives to plan work and to evaluate progress _____
- 9. Plans satisfactory units _____
- 10. Plans a variety of activities to help achieve a single objective _____
- 11. Plans relevant activities for large groups of students _____
- 12. Plans relevant activities for small groups of students _____
- 13. Plans relevant activities for individual students _____

COMMENTS:

-4-

B. Materials - The Student Teacher;	N	1	2	3	4
1. Prepares materials which consider individual differences of children					
2. Uses a variety of resources when selecting materials for instructional purposes .					
3. Uses a variety of materials as teaching aids.					
4. Uses audio visual aids effectively					
5. Uses blackboards effectively					
6. Uses bulletin boards effectively					
7. Uses texts, books, and magazines effectively					
8. Shows initiative in finding pertinent materials					
9. Involves students in selecting materials when appropriate					

COMMENTS:

D. Evaluation - The Student Teacher:

	N	1	2	3	4
1. Adequately assesses the extent to which stated objectives are accomplished	_____	_____	_____	_____	_____
2. Uses a variety of effective techniques to evaluate children's progress	_____	_____	_____	_____	_____
3. Systematically evaluates own teaching performance	_____	_____	_____	_____	_____
4. Provides for student participation in lesson and unit evaluation	_____	_____	_____	_____	_____
5. Accepts criticism and suggestions of the supervising teacher	_____	_____	_____	_____	_____

COMMENTS:

B. Classroom Management - The Student Teacher:

N 1 2 3 4

1. Gives attention to physical condition of the room

2. Adequately manages behavior of children

3. Establishes meaningful limits and consistently adheres to them

4. Deals objectively with children

5. Shows accuracy and promptness with reports and records

6. Adjusts easily to changes in classroom routine

COMMENTS:

Directions for Using the Modified Jason Scale

When constructing this instrument, it was realized that teaching is a delicate, difficult and complicated task, and, to be rated completely, would require a prolonged observation and lengthy, refined scoring instrument. However, certain observable behaviors can be measured; it is understood that we are not measuring specific activities but rather providing a global representation of the teacher's typical instruction.

The seven scales included in this instrument are each to be regarded as a 20 point continuum with equal distances between points. The four descriptive paragraphs, A through D in each scale, are to be viewed as guides and are located at the midpoint of each subcontinuum. Two scoring continuums are provided with each scale of the instrument - one for reference to large or total group instruction and the other for small group or individual instruction.

You are to place one checkmark (✓) on each of the scoring continuums on each of the scales of the instrument.

To mark a continuum, first determine which paragraphs imply a picture of teaching behaviors generally exhibited by the student teacher. Teachers often exhibit aspects of more than one paragraph.

Second, decide which of these paragraphs is most representative of the teacher's typical instruction. The checkmark will go within the subcontinuum aligned with the chosen paragraph.

Third, decide where on the five point subcontinuum the checkmark would best depict a global view of the student's performance.

For example: a checkmark at score 11 indicates that paragraph C most closely describes the student's performance and that the behavior is closer to the description in paragraph B than to paragraph D.

It should be understood that the behaviors to be rated are recognizable and behavioral, and a result of actual performance by the student, rather than implied.

Two of the scales V and VI, contain an extra grid. These are provided because, over a period of time, use of instructional materials and/or methods might vary considerably, depending upon purpose. The grid allows you to indicate the use of other methods and/or materials.

At the end of the instrument, space is provided for comments. Again, comments should be predicated upon student performance and should not be subjective or based upon implied student behavior.

INSTRUCTION

ATTITUDES TO DIFFERENCE Scale I

Ind. or
Large Gp. small gp.

1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20

Insults a student who disagrees with his own opinions.
Rejects questions that reflect poor understanding on the part of the student.

Indicates by innuendo and gesture that differences are not desirable. Without directly saying so, makes it clear to the students that disagreement with him is not encouraged, and that poor understanding is not acceptable.

Without showing much pleasure or displeasure, deals patiently with disagreements, and with differences in degrees of understanding.

Actively encourages group disagreement and discussion. Reacts to criticism and differences of opinion with interest and understanding. Encourages individuals to express their points of view regardless of level of understanding.

21

Insufficient evidence

22

Inappropriate for this session.

Ind. or
Large Gp. Small Gp.

SENSITIVITY TO PHYSICAL SETTING Scale II

1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20

No attention is paid to the physical comfort or needs of the group, in terms of - need for temperature change in the room, better view of the front, or a short recess.

Goes through the motions of checking some of the physical aspects, such as lighting and temperature. Once involved in the teaching pays no attention to the setting, unless the disturbing factor is extreme.

While involved in the teaching session, is aware of the more obvious factors that influence the class setting. May correct a disturbing influence such as a developing draft, or may provide a needed break, but does not recognize the less obvious - such as light glare on the chalk board.

Assures that everyone can hear all that is said, can see all that is written, and is comfortable. Within the physical limitations of the room, placement of both furniture and participants is utilized to maximum advantage.

21

Insufficient evidence.

22

Inappropriate for this session.

Large Gp. Inv. or Small Gp.

ATTITUDE TO STUDENTS Scale III

1	1
2	2
3	3 A
4	4
5	5
6	6
7	7
8	8 B
9	9
10	10
11	11
12	12
13	13 C
14	14
15	15
16	16
17	17
18	18 D
19	19
20	20
21	21
22	22

Active hostility to students is evident. Derogatory remarks are used, and an air of austere formality pervades the situation.

In general there is an approach of indifference to the students. The teaching seems to be a matter of course, and very little interaction - verbal or otherwise - takes place other than the formal, information-getting variety.

The atmosphere is a moderately relaxed one. The teacher tends to greet his students in a friendly manner. During the meeting, a personal comment, pleasantry, or shared joke, is not considered out of place.

Acceptance and friendliness can be sensed at all times. Without necessarily being an accomplished humourist, the teacher sets a happy tone in his interaction with students. His interest in the students is readily felt.

Insufficient evidence.

Inappropriate for this session.

REACTION TO STUDENTS' NEEDS Scale IV

1	1
2	2
3	3 A
4	4
5	5
6	6
7	7
8	8 B
9	9
10	10
11	11
12	12
13	13 C
14	14
15	15
16	16
17	17
18	18 D
19	19
20	20
21	21
22	22

The teacher forges ahead with the material he has prepared. He rejects student attempts at asking questions. He does not stop to question himself or the students as to whether his speed or his subject matter is actually geared to their interests and needs.

The teacher restricts his presentation to just the material he had intended. However, he spends more time, and attempts to explain, items that he believes will be difficult for the student. No opportunity is provided for the student to ask questions.

Flexibility is evident, and an effort is made to explain properly points of difficulty brought up by the students. May fail to recognize more subtle student reactions, such as waning interest, or students asking questions of each other.

Repeatedly checks to insure that all students are grasping the material under discussion. Encourages questions when students begin to look puzzled, and detects students who are not participating.

Insufficient evidence

Inappropriate for this session.

USE OF INSTRUCTIONAL MATERIALS Scale V

Types of Materials

- | | | |
|---------------------------|--------------------------|--------------------|
| A. Blackboard | D. Examinations | I. Resource Places |
| B. Charts and/or Diagrams | E. Movies | J. Resource People |
| C. Demonstrations | F. Overhead Projector | K. Slide Projector |
| a. Equipment | G. Reproduced Material | L. Tape Recorder |
| b. Instruments | H. Resource Information | M. Other (specify) |
| c. Models | (texts, journals, maga- | 1. _____ |
| | zines, newspapers, etc.) | 2. _____ |

Analysis of Materials Used

1. Specific Materials Used (code letter, above)
2. Percentage of observed class time devoted to each
3. Code letter for "effectiveness" (below)

	a	b	c

Effectiveness of Material

Large Gp. Ind. or Small Gps

- | | | | |
|----|----|---|--|
| 1 | 1 | A | The material is poorly adapted to the situation, no introductory explanation is given, and no discussion accompanies or follows its presentation. It does not serve the purpose for which it was selected. |
| 2 | 2 | | |
| 3 | 3 | | |
| 4 | 4 | | |
| 5 | 5 | B | The material may be largely inappropriate but some value is derived from the explanation and discussion that accompanies it. Or, there may be little attempt at elucidation although the material itself is sufficient effective of its own right to lend value to its presentation. |
| 6 | 6 | | |
| 7 | 7 | | |
| 8 | 8 | | |
| 9 | 9 | C | The specific material, and the use to which it is put, appear fairly well geared to the apparent objectives in having employed it. There are some limitations, e.g., projected slides may be appropriate and well explained but are too cluttered to be readily understood. |
| 10 | 10 | | |
| 11 | 11 | | |
| 12 | 12 | | |
| 13 | 13 | D | The material is well adapted to the apparent objectives of the session, its significance is made very clear, and the discussion during or following its use serves to highlight it. |
| 14 | 14 | | |
| 15 | 15 | | |
| 16 | 16 | | |
| 17 | 17 | | Insufficient evidence. |
| 18 | 18 | | |
| 19 | 19 | | |
| 20 | 20 | | |
| 21 | 21 | | Inappropriate for this session. |
| 22 | 22 | | |

USE OF TEACHING METHODS Scale VI

Use of Methods

- | | | |
|---------------------|------------------|------------------------------|
| 1. Conference | 4. Drill Session | 7. Panel Presentation |
| 2. Demonstration | 5. Laboratory | 8. Problem Solving Situation |
| 3. Discussion Group | 6. Lecture | 9. Recitation |
| A. Teacher led | | 10. Review Session |
| B. Pupil led | | |

Analysis of Methods Used

- Specific Method Used (code number, above)
- Percentage of total class time devoted to each
- Code letter for "effectiveness" of method

	a	b	c

Effectiveness of Methods

Ind. or
 Large Gp. Small Gp.

- | | | | |
|----|----|---|---|
| 1 | 1 | | |
| 2 | 2 | | |
| 3 | 3 | A | The method is poorly adapted to the size of the group, the teacher is not sufficiently familiar with it to have control of the situation, and it is not in keeping with the apparent objectives of the session. |
| 4 | 4 | | |
| 5 | 5 | | |
| 6 | 6 | | |
| 7 | 7 | | |
| 8 | 8 | B | The teaching method may be poorly suited to the occasion but has some value because of the adeptness of the teacher, or it may be poorly put to use and still have some worth through its inherent suitability to the class size, objectives, and subject matter. |
| 9 | 9 | | |
| 10 | 10 | | |
| 11 | 11 | | |
| 12 | 12 | | |
| 13 | 13 | C | The method and the use to which it is put appear fairly well geared to the apparent objectives in having employed it. Some limitations are evident, e.g., a lecture is used-it is appropriate for the class size and apparent objective of transmitting information-but may have been made more effective by use of reproduced materials. |
| 14 | 14 | | |
| 15 | 15 | | |
| 16 | 16 | | |
| 17 | 17 | | |
| 18 | 18 | D | The subject matter, group size, objectives, physical setting, and nature of the group are all well served by the selected method. Appropriate materials are used to supplement the method; e.g., a motion picture is used to illustrate effectively points being presented. No ineptness in the use of the method can be detected. |
| 19 | 19 | | |
| 20 | 20 | | |
| 21 | 21 | | Insufficient evidence. |
| 22 | 22 | | Inappropriate for this session. |

TABLE 1

FGESS Interaction Analysis SystemTeacher Behaviors

1. Accepts Feelings
The teacher must include the emotional state of a student or a group of students into a verbal statement.
2. Praise or Encouragement
The teacher praises or encourages students' verbal behavior. Jokes that release tension but not at the expense of another individual are included in this category.
3. Acceptance and Use of Pupils' Ideas
Superficial-The teacher repeats the student's statement, rephrases the content of a statement, or reports the behavior that has been performed by a student.
Responding-The teacher answers a student's question.
Questioning-The teacher asks the student a question based on the student's statement.
Elaboration-The teacher uses the student's statement to develop her own statement. She would generally be clarifying or elaborating the student's ideas or developing a question based on his idea.
4. Asks Questions
 1. Narrow-The teacher's question has only one acceptable or correct response. The teacher's purpose is to elicit factual information.
 2. Broad-The question has two or more acceptable or correct responses. The questions are generally either thought-provoking or require expression.
5. Lecturing
The teacher states facts or opinions about content or procedure, expresses her own ideas, or asks rhetorical questions.
6. Giving Directions
The teacher gives directions, commands, or orders to which a student or students are expected to comply.
7. Criticizing or Justifying Authority
Statements intended to change student behavior from non-acceptable to acceptable patterns, bawling someone out, stating why the teacher is doing what he or she is doing, extreme self-reference.

Student Behaviors

8. Response
 1. Narrow Response-The student answers the teacher's question with a single, narrow, factual response as part of a recitation.
 2. Broad Response-The student answers the teacher's question with a broad idea, concept or generalization.
9. Initiation
 1. Student-Teacher Initiation-Student initiates statements based on his or her own ideas and thinking.
 2. Student-Student Initiation-The student initiates statements based on his or her own ideas to another student.

No Effective Communication

10. Silence or Confusion
 1. Silence-A period of no communication
 - Confusion-Irrelevant, disorganized conversation & behavior, lack of discipline.

APPENDIX B - YEAR I PROCEDURES

- B-1 Workshop Agenda**
- B-2 Workshop Interim Evaluation Form**
- B-3 Workshop Final Evaluation Form**
- B-4 Peer Evaluation Form**
- B-5 Research Design**
- B-6 PERT Chart**

- Day 1 General Introduction
-personnel forms
-unit teaching
-pre-test
- Day 2 A. Slide-tape presentation
B. Contrast resource guides vs. resource unit
C. Examine existing resource guides
- Day 3 Select and define a unifying theme (unit)
around which groups can begin to write
behavioral objectives
- Day 4 Present theory relating to structuring
behavioral objectives (nature of objec-
tives - kinds - criteria, etc.)
- Days 5 & 6 A. Begin writing behavioral objectives
for unit topics
B. Evaluate and restructure behavioral
objectives written for selected unit
- Days 7, 8, & 9 Construction of content items relating to
objectives
- Day 10 A. Instruction on coding
B. Begin coding content items
- Days 11-15 A. Construction of activities portion of unit
B. Coding
- Days 16-20 A. Research of appropriate materials relevant
to objectives, content and activities
B. Coding
- Days 21-24 A. Discussion of criterion-referenced measures
B. Construction of criterion-referenced
measuring devices
C. Coding
- Day 25 Evaluation of procedures
- Days 26-28 Analyse unit(s)
-Beta
- Day 29 Revision and addition in light of prior analysis
- Day 30 General Evaluation
A. Possible alternatives in construction of
units
B. Suggestions for other units
C. General discussion

Workshop Evaluation Sheet

So you've been here four days already. You must have formed some ideas about the experience. What is your reaction concerning --

The purpose of the workshop (writing CBRUs)

CBRUs - their theory and worth

The interaction of the participants

The organization and presentation of the workshop (Monday thru Thursday)

The unit topic of consensus - Understanding Individual Differences

If you were running this workshop, what would you do differently?

Pre-Service Workshop Final Evaluation Form

Your feedback is an important contribution to this study. It is not necessary to sign your name to this questionnaire, so please be explicit and frank.

1. What do you believe were the predetermined objectives for this workshop? Were they attained?

2. The unit topic had to do with Individual Differences. Do you now feel that the topic had value enough to be the basis for a unit? If so, do you feel that we fully developed the unit to encompass the topic? With your new experience and expertise, how do you feel we could improve the unit?

3.

Strongly	Mildly	Mildly	Strongly
Agree	Agree	Neutral	Disagree

 - a. The topic of the unit I helped to develop was significant to me.
 - b. I was provided with ample opportunity to communicate with the participants regarding my decision-making.
 - c. There was an atmosphere of mutual respect and cooperation between myself and other participants.
 - d. Progress was continually assessed by all active participants throughout the program.
 - e. Individual differences among the participants were accepted by all.
 - f. My activities were significant and meaningful to the project.

4. Please comment upon the interaction among the participants in the workshop.

5. The attendance of the participants was outstanding. How many days, if any, were you absent? How much influence did the salary have on your attendance? If you were not being paid, or if this were a credit granting college course, would the involvement in CBRU construction have been enough motivation to keep your attendance approximately the same as it was during the workshop?

6. What is your reaction to the operation and organization of the workshop? How would you have modified it?

7. Would you consent upon the involvement and competencies of the faculty members and of the coordinator? Since this questionnaire is anonymous, feel free to name names in your comments.

8. The three predetermined objectives of the workshop were:

-To expose pre-service teachers to a situation that would aid them in making competent instructional decisions and see the relationship of materials, content, activities, and measuring devices to the attainment of specific instructional objectives;

-to expose pre-service teachers to methods of individualizing instruction and to become aware of the need for such individualization;

-to construct a CBRU.

Do you feel that the objectives were met? Comment.

9. Do you feel that your involvement in the workshop was valuable to you? Do you feel that such an approach (i.e. constructing a CBRU) to curriculum making and planning would have value if it were integrated into the undergraduate course of studies?

10. What is your overall reaction to the workshop?

Name _____

Highest to lowest

1 2 3 4 5

Involvement

Cooperation

Work contribution - large group

Work contribution - small group

Idea contribution - quality

Idea contribution - quantity

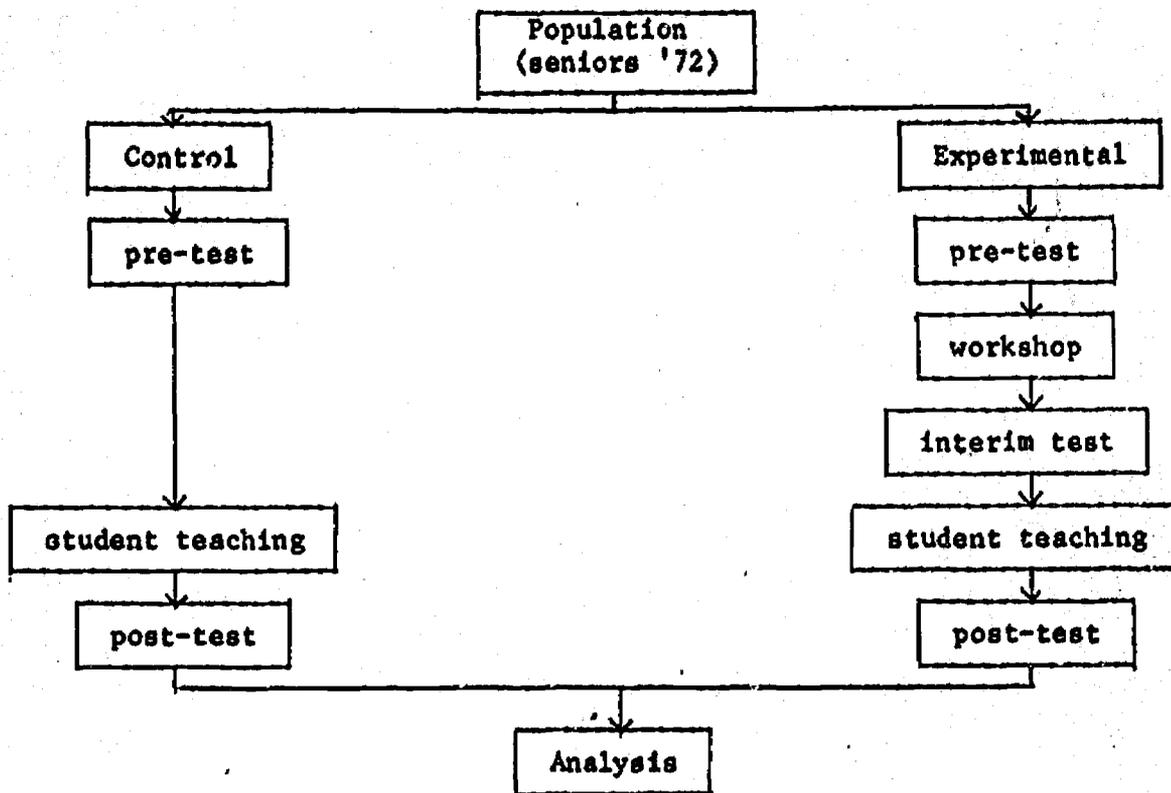
Leadership ability

Facilitating ability

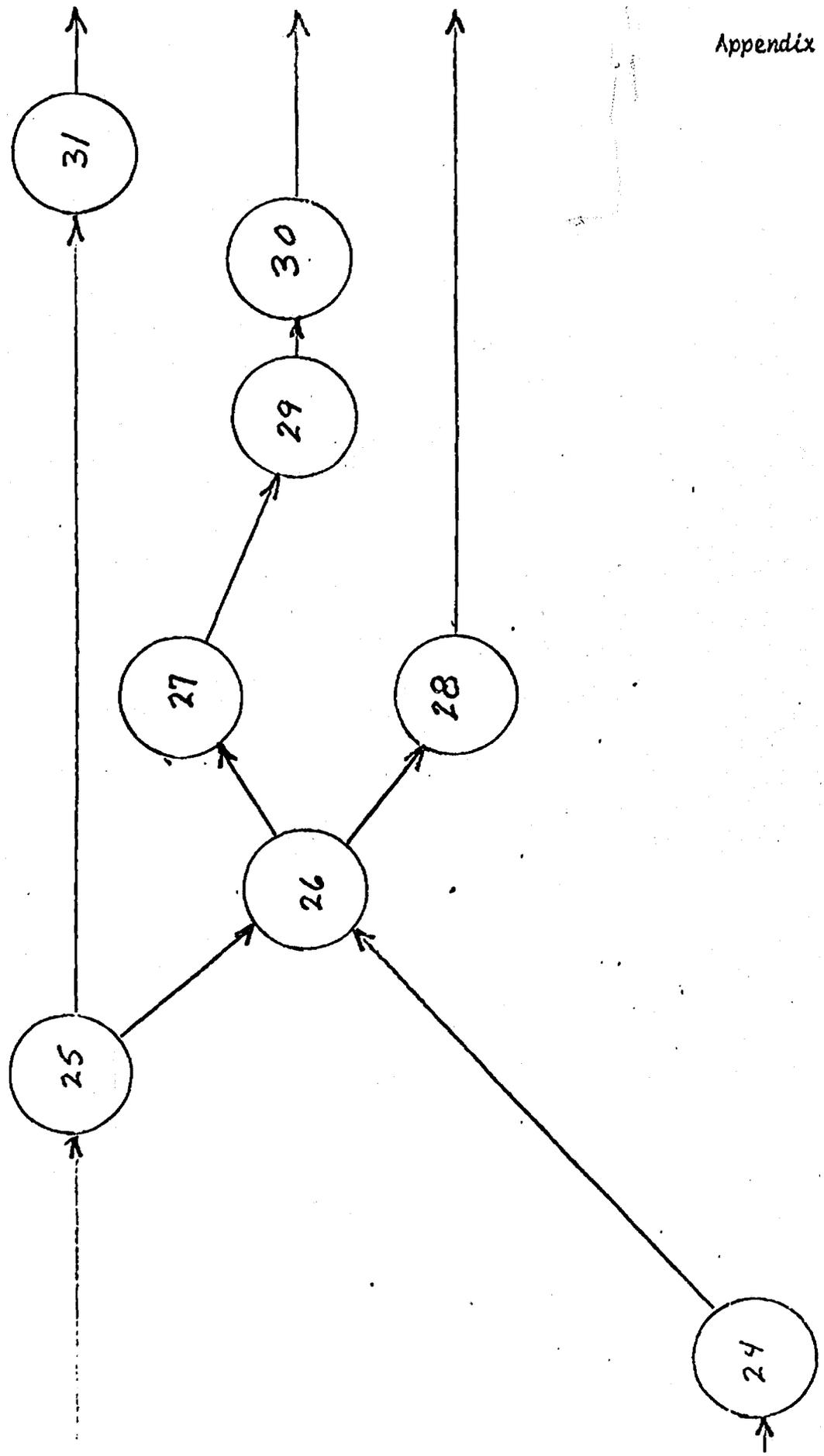
Consistency of performance

Please list those strong, positive characteristics which could be the basis for role identity.

Research Design - Year I



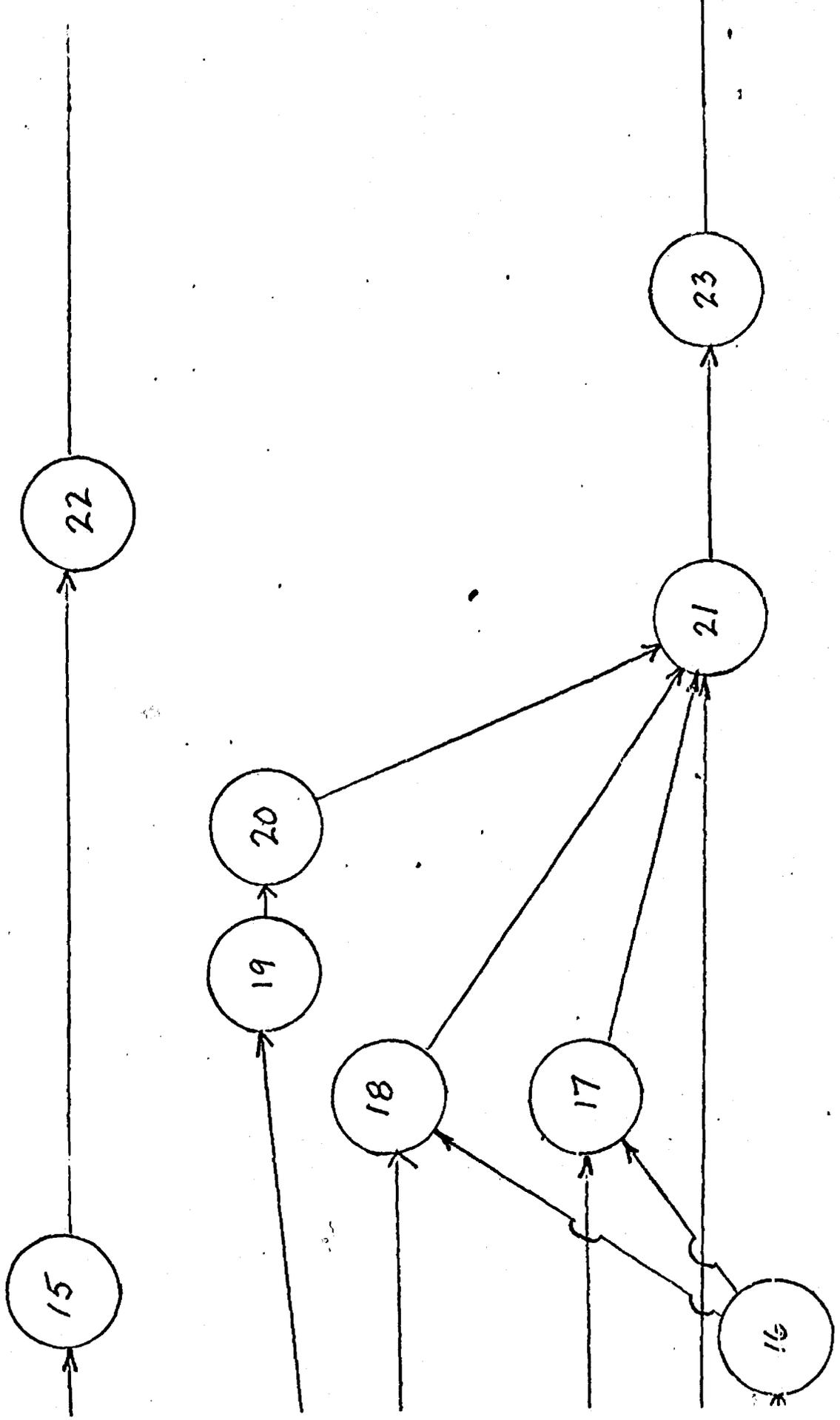
Nov 1 Apr 1 May 1 June 1 July 1



DEC 1

JAN 1

FEB 1

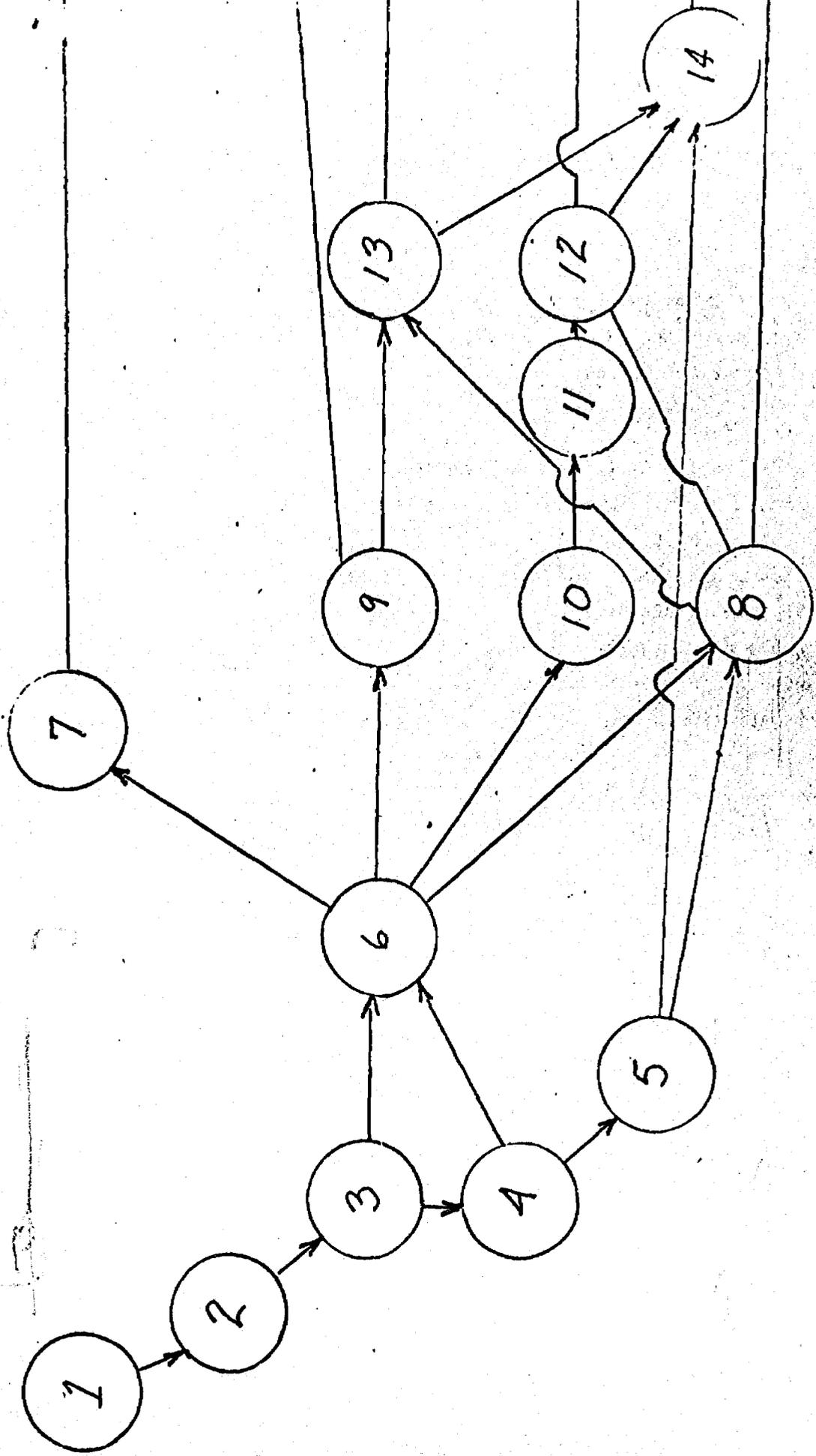


NEW 2

OCT 1

SEPT 1

AUG 1

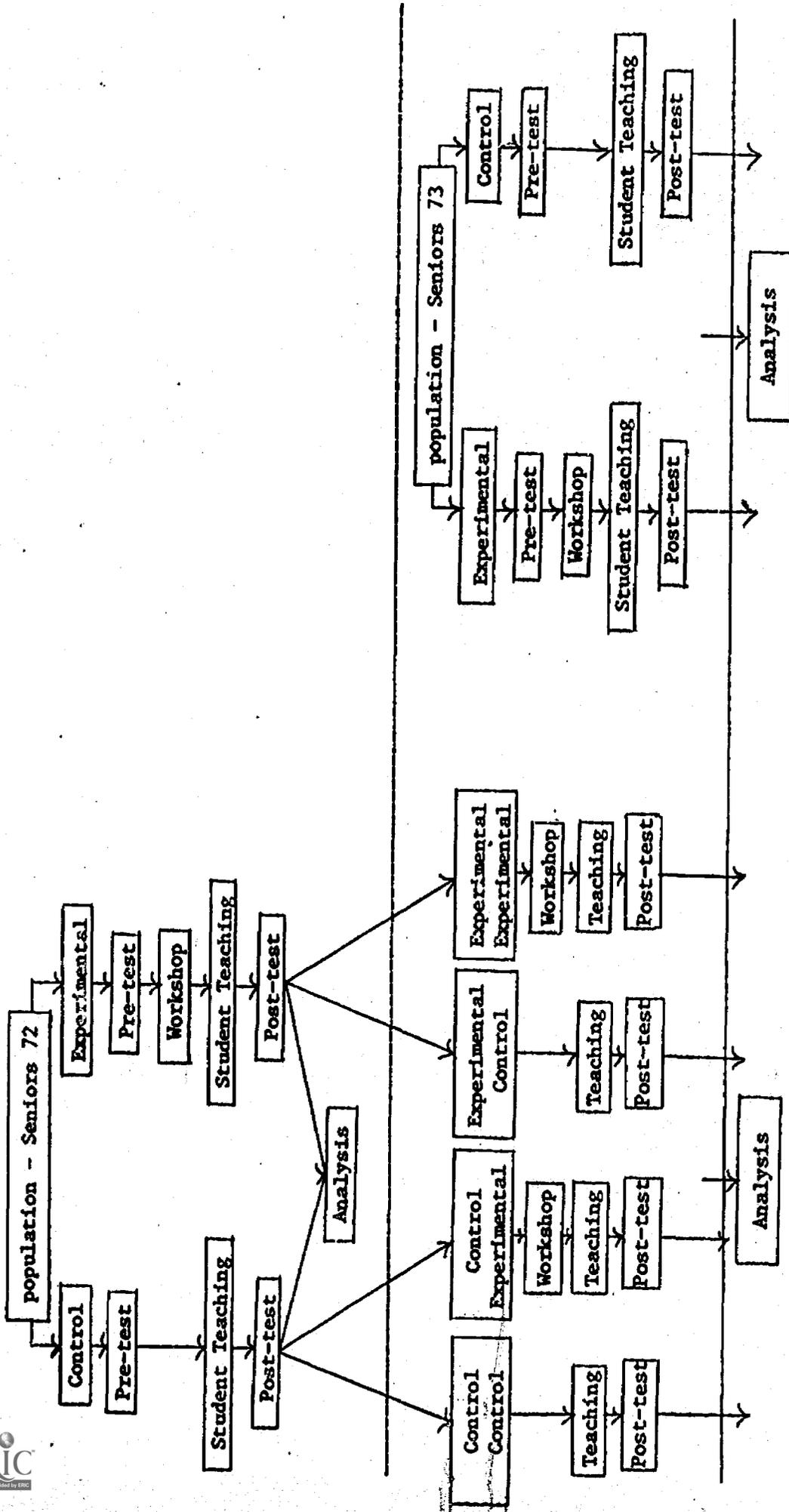


Pre-Service PERT

1. Design Program
2. Selection of Participants
3. Preparation for Workshop
4. Construct Pre-test
5. Pre-test Control Group
6. Workshop
7. Modification of Developed CBRU
8. Design for and Placement of Students in Student Teaching Situation
9. Instrument Modification
 - Jason Scale
 - Form D
10. Modification of FGESS Computer Program
11. Training of Interaction Analysis Raters
12. Observation by raters - 1st Situation
13. Dissemination of Instruments to Teachers
14. Data Collection
15. Entry of CBRU into Computer
16. Students Rotate Cooperating Teachers
17. Observation by raters - 2nd Situation
18. Dissemination of Instruments
19. Construction of Post-test
20. Post-test of all students
21. Data Collection
22. Study of Unit in Schools
23. Correction and Compilation of data
24. Statistical Analysis
25. Modification of CBRUs
26. Report of Findings
27. Preparation of Proposal for Second Year
28. Study of Feasibility as Undergraduate Course
29. Selection of Students for Year II
30. Pre-test Students for Year II
31. CBRU Availability on Computer for National Dissemination

APPENDIX C - YEAR II INSTRUMENTS AND PROCEDURES

- C-1 Research Design**
- C-2 Pre-Post test**
- C-3 Perceived Individualization of
Instruction Scale**
- C-4 Flow Chart**



Pre-Service Project: Instructional Decision Making

Name _____

Date _____

- I. For the following five questions, circle the number on the line between the two adjectives that best reflects your judgment. 1 would mean strongly leaning toward the adjective on the left, 2 would be mildly inclined to the adjective located on the left, whereas 5 would be strongly inclined to that adjective located on the right, etc.

A. Behavioral Objectives are:

Unimportant	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Important
Useless	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Useful
Meaningless	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Meaningful
Impractical	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Practical
Dull	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Stimulating

B. Objectives that I could write for that class would be:

Irrelevant	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Relevant
Impractical	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Practical
Impersonal	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Personalized
Confusing	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Clear
Subjective	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Objective

C. Materials, activities and/or criterion referents that I could device for those objectives would be:

Irrelevant	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Relevant
Trite	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Imaginative
Impractical	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Practical
Foolish	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Wise
Confusing	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Clear

D. I think the ideal teacher is:

Wise	1	2	3	4	5	Foolish
Strong	1	2	3	4	5	Weak
Flexible	1	2	3	4	5	Rigid
Fair	1	2	3	4	5	Unfair
Predictable	1	2	3	4	5	Unpredictable
Active	1	2	3	4	5	Passive
Relevant	1	2	3	4	5	Irrelevant
Personal	1	2	3	4	5	Impersonal
Calm	1	2	3	4	5	Anxious
Sure	1	2	3	4	5	Unsure
Open	1	2	3	4	5	Closed
Warm	1	2	3	4	5	Cold
Consistent	1	2	3	4	5	Inconsistent
Friendly	1	2	3	4	5	Unfriendly
Positive	1	2	3	4	5	Negative
Good	1	2	3	4	5	Bad

E. As a Teacher I see myself as being:

Wise	1	2	3	4	5	Foolish
Strong	1	2	3	4	5	Weak
Flexible	1	2	3	4	5	Rigid
Fair	1	2	3	4	5	Unfair
Predictable	1	2	3	4	5	Unpredictable
Active	1	2	3	4	5	Passive
Relevant	1	2	3	4	5	Irrelevant
Personal	1	2	3	4	5	Impersonal
Calm	1	2	3	4	5	Anxious
Sure	1	2	3	4	5	Unsure
Open	1	2	3	4	5	Closed
Warm	1	2	3	4	5	Cold
Consistent	1	2	3	4	5	Inconsistent
Friendly	1	2	3	4	5	Unfriendly
Positive	1	2	3	4	5	Negative
Good	1	2	3	4	5	Bad

PART B

Pre-Service Project: Instructional Decision Making

Name _____

Date _____

I. Assume that you are teaching a unit on Nutrition for a class of elementary or junior high school students. Formulate five (5) instructional objectives which might be appropriate for this unit.

A.

B.

C.

D.

E.

II. You have a group of 6 primary or intermediate age children who will concern themselves with the following objective: TO ORDER EVENTS BY SEQUENCE OF OCCURRENCE.

A. Write three (3) activities you would use to achieve this objective. Describe at least one activity for large group instruction and at least one for individual instruction. Label each activity appropriately.

1.

2.

3.

B. Name or describe three (3) materials appropriate for achieving this objective.

1.

2.

3.

PART CPre-Service Project: Instructional Decision Making

Name _____

Date _____

I. From each of the following groups of statements, circle the one which most nearly meets the criteria of an instructional objective.

Group A

1. To describe the components of Ohm's Law
2. To assist students in understanding Ohm's Law
3. To be able to understand the meaning of Ohm's Law
4. To understand the principles of salesmanship

Group B

1. To appreciate the importance of a technically accurate electric circuit
2. To know how to diagram an electric circuit
3. To diagram an electric circuit
4. To teach the fundamentals of diagraming electric circuits.

Group C

1. To identify and compare the advantages and disadvantages of the democratic process.
2. To know five characteristics of the democratic process
3. To analyze the characteristics of the democratic process
4. To value the democratic process

Group D

1. To describe the technological skills needed for the development of certain forms of communication
2. To comprehend that through communication, ideas come from far away and are spread all over
3. To give the requirements for effective communication
4. To identify that under given conditions the communication process may be an entity

PART DPre-Service Project: Instructional Decision Making

Name _____

Date _____

I. Identify each statement below by indicating the appropriate letter before each statement. Make your choice from the following: A = Activity, C = Content; M = Material; O = Objective; D = Measuring Device.

- _____ A. Prescriptions are ordered by a physician for a specific person with a specific illness and should not be used by other family members or neighbors.
- _____ B. Institute of life Insurance. Educational Division. The Search for economic security. New York, The Institute, 1968. Problems and progress at the beginning of the 19th Century, Economic Risks, the great depression and economic security of today are discussed.
- _____ C. Awareness of the dangers of self-medication is one of the most important goals of consumer health education. Administering medical treatment of oneself with the benefit of a physician's advice can be very dangerous. A parent can treat some minor ailments, such as the common cold, without contacting the physician. A child, however, should never prescribe for himself. The primary dangers of self-medication include:
1. Incorrect diagnosis and treatment
 2. The self-treatment used may be contra-indicated and may worsen the illness.
 3. Self-medication may mask the symptoms that indicate illness and not treat the actual illness.
 4. The actual illness may worsen while the symptoms disappear.
 5. Self-medication causes delay in seeking professional advice until the disease has progressed beyond the point when it would be most responsive to medical treatment.
- _____ D. Poster - Avoid self-medication - Have student depict at least one consequence of self-medication.
- _____ E. To describe the characteristics of a health consumer.
- _____ F. Have a clear idea of what you need before you purchase a health product. If you base your purchases on need, rather than impulse, you are more apt to make wise decisions. Buying to take advantage of bargains, or to store up products one may use "some day" may be good practice for some items you purchase, but is seldom wise where a health product is concerned.
- _____ G. To identify techniques used by advertisers that take advantage of the psychological make-up of consumer groups.

- _____ H. Given a condition where teen-age consumers were not longer able to spend any money on health products and services, indicate the various industries and service professions which would be affected, how and why. Five or more examples would indicate achievement.
- _____ I. It is important to take prescription medicine exactly according to the directions given on the label. Taking more medicine than directed, or taking medicine more often than directed will often be harmful to the individual. An overdose of a potent medicine may result in death.
- _____ J. To evaluate the roles which professional, volunteer and commercial groups play in protecting the consumer.
- _____ K. U.S. Department of Commerce. National Bureau of Standards. The Federal Basis for weight and measures by Ralph W. Smith. Washington, D.C., Government Printing Office, 1957. Circular 593. 23 p. 30 cents. Historical review of legislative action from 1776 to 1956 regarding weights and measures.
- _____ L. The term doctor is used to refer to practitioners of a number of health and allied professions.
- _____ M. Given a list of limitations and characteristics of drugs, students are to indicate whether these are prescription drugs, non-prescription drugs, or whether they can be both.
- _____ N. Over-the-counter medicines are considered quite safe for most people to use providing the directions on the label are followed.

II. For each objective listed below, write two appropriate activities. Below each activity indicate four (4) characteristics of a pupil for whom this activity would be appropriate.

A. To describe some of the characteristics of the concept known as the generation gap.

B. To evaluate the rationale for allowing 18 year olds to vote.

III. Write two (2) measuring devices which would be appropriate for two (2) of the objectives listed below.

A. To analyze the causes for the rise and fall of commodity prices.

B. To evaluate the accomplishments of the Nixon administration in terms of its stated goals.

C. To describe the characteristics of a polluted river.

IV. Circle the Appropriate Answer

1. An instructional objective
 - A. Should contain at least two behaviors
 - B. Should be affective in nature
 - C. Is directed toward the student
 - D. Is directed toward the teacher

2. Instructional objectives should contain verbs such as
 - A. List, discuss
 - B. Appreciate, understand
 - C. Analyze, describe
 - D. Comprehend, value

3. Once the instructional objective has been written, the strategy(ies) for achieving the objective
 - A. Should be rather specific in nature and limited in number
 - B. Should be rather general in nature and limited in number
 - C. Should be rather specific in nature and numerous
 - D. Should be rather general in nature and numerous
 - E. Should involve only one well defined option

4. Needs and interests of students
 - A. Should not be criteria for curriculum planning at the college level
 - B. Should be criteria for curriculum planning at the college level
 - C. Can be easily identified by a competent institution
 - D. Are not the responsibility of the college instructor

5. The achievement of an objective
 - A. May occur in a variety of ways
 - B. Must occur in one specific way
 - C. Should be determined by the student
 - D. Should be determined by the instructor

Please check appropriate treatment group

_____ Experimental

_____ Control

We need some additional information about your Exceptional Education student teaching situation which you have just completed, and we thought it would be easier for you this way rather than to have more in-class observations.

DIRECTIONS

The next several pages contain lists of statements that a person might make about the teaching habits of teachers. Each page should contain the same 28 statements. The pages differ, however, in that a different subject is listed at the top of each page. Therefore, do each scale in relation to the subject listed at the top. Complete each item on each page before continuing to the next page. Decide the degree to which the subject at the top of the page typically engages in the behavior described in each item. In the blank at the left of the statement please indicate your decision by placing either 1,2,3,4,5. Use the following code to indicate your decision.

5 means always

4 means usually

3 means sometimes

2 means seldom

1 means never

Please mark each statement with your honest feelings. Your answers will be kept confidential by us and, since this opinionnaire is anonymous, will not in any way effect your grades. We assume, of course, that you will also keep the confidentiality of your responses.

THE IDEAL TEACHER

- 1. The decision to move students to another task is based on the readiness of the majority of the group.
- 2. A variety of criteria (such as ability level, instructional need, age, sex, interest) are used to determine small group membership.
- 3. Pupil teamwork is used so that students often receive help from one another.
- 4. Different students use different materials in studying the same unit.
- 5. Students are tested individually and allowed to move on to another task as soon as the test result indicates that they are ready.
- 6. Different students work on a given unit in different learning settings.
- 7. Instructional level is the criterion used for determining small group membership.
- 8. Most of the students work on a particular unit in the same learning setting.
- 9. Lesson planning is done for individual students rather than for a group.
- 10. Prior diagnosis (pretests, teacher observation, etc.) is used to determine subsequent instruction.
- 11. Different tasks are assigned different students at any given time.
- 12. The instructional sequence is uniform for the majority of students.
- 13. Different evaluation techniques are used for different students studying the same unit.
- 14. Students receive help from the teacher rather than from each other.
- 15. The teacher chooses the learning tasks for her students.
- 16. The teacher uses different instructional techniques with different students.
- 17. The lesson plan appropriate for a majority of the students is utilized.
- 18. The teacher determines the method in which a given unit will be studied.
- 19. Students receive help in groups rather than individually.
- 20. At any given time, most of the students are engaged on the same task.
- 21. The teacher chooses the unit which the class will study.
- 22. The students participate in choosing their learning tasks.
- 23. The students have a hand in planning an approach to conducting the learning task.
- 24. Students help decide the units which they are to study.
- 25. Most of the students use the same material when studying a particular unit.
- 26. One evaluation technique is used for all students who are studying a given unit.
- 27. One instructional technique is used to teach a particular skill to all students.
- 28. Help is offered students individually rather than in group settings.

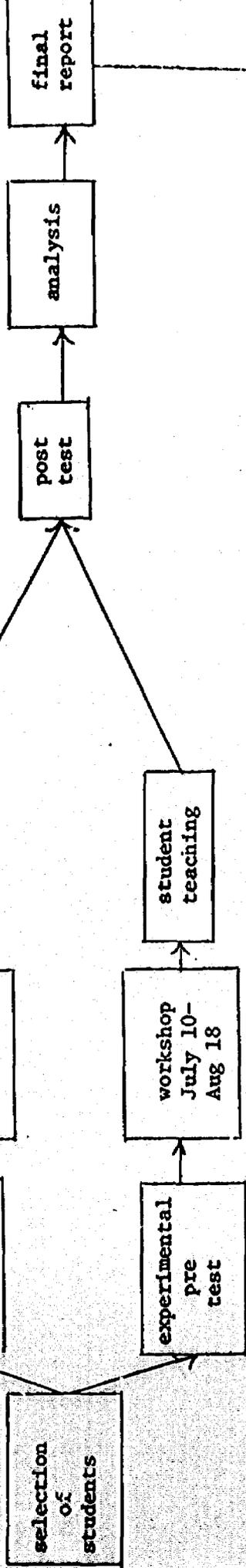
MYSELF AS TEACHER

- 1. The decision to move students to another task is based on the readiness of the majority of the group.
- 2. A variety of criteria (such as ability level, instructional need, age, sex, interest) are used to determine small group membership.
- 3. Pupil teamwork is used so that students often receive help from one another.
- 4. Different students use different materials in studying the same unit.
- 5. Students are tested individually and allowed to move on to another task as soon as the test result indicates that they are ready.
- 6. Different students work on a given unit in different learning settings.
- 7. Instructional level is the criterion used for determining small group membership.
- 8. Most of the students work on a particular unit in the same learning setting.
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FLOW

Apr May June July Aug Sept Oct Nov Dec Jan Feb Mar Apr May

YEAR II



YEAR I

