ASSESSING COMPETENCY ATTAINMENT IN PROSPECTIVE HOME ECONOMICS TEACHERS IN IMPLEMENTING INSTRUCTIONAL PLANS

By

BETTYE J. GAFFNEY

Bachelor of Science in Home Economics
Langston University
Langston, Oklahoma
1950

Master of Science
Oklahoma State University
Stillwater, Oklahoma
1962

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
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Thesis Approved:

Elaine Jorgenson
Thesis Adviser

Marguerite Scruggs

Lora Cacy

James P. Key

Norman N. Durham
Dean of the Graduate College

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CHAPTER I

INTRODUCTION

Assessment of teacher effectiveness has been pursued for many years. One major difficulty has been the lack of a solution to the criterion problem (Ryan, 1960). Morsh and Wilder (1958) found little evidence of particular teaching acts which could be consistently associated with learner achievement. Barr's Wisconsin Studies (1961) concluded that 'good' teachers could not be distinguished from 'poor' teachers on the basis of specific teaching behaviors. Later investigations have resulted in similiar findings (Openshaw and Cypert, 1966; Popham, 1971).

Educators have heard a great deal about competency-based teacher education lately. Seventeen states have passed legislation requiring competency-based certification and three-fourths of the colleges in the country are developing programs built on competency-based models (Schmieder, 1973). The United States Office of Education and the American Association of Colleges for Teacher Education (AACTE) have contributed to the development of the competency-based teacher education movement (Rosner, 1972).

Competency-based teacher education is in need of appropriate assessment measures. Krathwhol (1973), a vigorous supporter of the competency-based teacher education movement, recently predicted that the movement

> ... is certain to fail to reach its ultimate objective if it continues on its present course. This failure will be caused by the almost complete lack of attention given to the assessment of teaching competencies (p. v).

Insufficient knowledge about the relationship between teacher behavior and student gain made research for redesigning and adapting teacher education programs a needed factor. The rapidity of change in today's society encountered by both teachers and students increased the desirability for developing educational procedures that are relevant, not only for today but for the future as well.

Teacher education programs are challenged to face up to existing needs and to work toward means of accepting the challenge. McKenna (1972) emphasized this challenge as he projected competency-based education "as a promising approach for improving teacher education" (p. 77). This approach encouraged teachers in service, professors, and prospective teachers to work together in developing, testing, and trying new performances as solutions to unsolved teaching and learning problems.

One challenge facing teacher education programs and persons in the professional level of their training has been the competency-based movement. Of concern in this investigation was the assessment of professional competencies.

Popham (1971) has stated that one of the most elusive targets of educational research was a valid index of teacher effectiveness. Research on what makes an effective teacher has usually been inconclusive. Since about 1960, the trend toward studying teacher effectiveness has been to examine changes in student behavior that resulted from instruction--involved were outcomes of teaching acts rather than teaching acts or teacher characteristics. Changes in student behavior thus

became the criterion measure for assessing teacher competence (Morsh, Burgess, and Smith, 1958; McNeil, 1967; Hastings, 1969; and Popham, 1971). These studies provided evidence that measures of student achievement can serve as practical and effective indices of teacher competency.

Competency-based teacher education seemed to hold two encompassing promises: improved and increased relevancy for teacher training and increased knowledge about which teaching behaviors made a difference in student performance. Neither promise was likely to be realized unless teacher education programs considered all aspects of the competency-based education movement as curriculums were planned. One key factor in the fulfillment of the promises of the movement remained--the availability of adequate competency assessment measures.

Statement of the Problem

The investigation was concerned with the assessment of a selected competency component of the teacher education program in home economics education. The project was undertaken to assess the degree to which home economics education student teachers were capable of implementing instructional plans. Specific factors to be assessed in the implementation of instructional plans included motivational approaches--set induction; providing opportunities for learner participation--student involvement; utilization of instructional strategies and resources--in light of situation, availability, effectiveness, and efficiency; and pacing--involving questioning skills and closure.

Significance of the Problem

The case for developing professional competencies and its supporting components supported the need for valid and reliable assessment measures. Home Economics has long been performance/competency oriented and the thrust of competency-based teacher education has provided new insights for its program developers.

Specific factors which provided justification for the significance of this study included:

1) The commitment of the American Home Economics Association to the development of highly qualified facilitators of learning. Evidence of this commitment can be observed through the function of national workshops planned for identifying and specifying needed competencies in home economics (Conferences: Nevada, 1964; Nebraska, 1966; Iowa, 1974);
2) The declared intent of the Oklahoma State Department of Home Economics to move toward competency-based teacher education (King, 1970);
3) The present program in the Department of Home Economics Education at Oklahoma State University. Included in the program are components of a competency nature--specifically HEED 3313: Curriculum and Methods of Teaching Home Economics and HEED 4213: Media, Materials and Techniques in Home Economics Education; and
4) The desire to determine if home economics education student teachers facilitate learning among secondary students in their implementation of instructional plans.

Taken together, these factors lead to the need for definite assessment measures.

Assumptions

The following assumptions were basic to this study:

1) Competency-based teacher education as a concept is gaining impetus in educational programs.
2) Assessment, a component of the competency-based education movement, is essential to the successfulness of the movement.
3) Appropriate assessment measures will possibly aid in identifying levels of competency attainment in specified areas.

Objectives of the Study

This study was designed to assess competency attainment of prospective home economics teachers in implementing instructional plans. A number of enabling objectives were pursued to reach the main objective. The enabling objectives involved the development and/or adaptation and evaluation of assessment measures which had applicability for identifying minimal professional competencies in prospective home economics teachers in their ability to implement instructional plans. Evaluation of the assessment measures was determined by seeking answers to the following research questions:

1) Do home economics education student teachers exhibit
    a) competence in instructional planning?

b) specified competencies in implementing instructional plans?

2) Do secondary students gain in knowledge in classes taught by home economics education student teachers who exhibit specified competencies in implementing instructional plans?

3) Is there a relationship between home economics education student teachers' exhibition of specified competencies and secondary students' gain in knowledge?

Procedure

The procedure followed in this investigation, explained in detail in Chapter III, included identification of limits and variables. The development and evaluation of assessment measures, the establishment of rater reliability, and the identification of criterion for level of acceptable performance were also essential parts of the procedure.

Limitation of the Study

This study was limited to:

1) The development and/or adaptation and evaluation of assessment measures for identifying competency attainment in prospective home economics teachers.

2) The assessment of only one competency component--implementation of instructional plans.

3) A convenience sample of prospective home economics teachers during their student teaching experience.

4) A limited period of time thus making it necessary to restrict the research problem to short-term growth measurement.

Definition of Terms

Due to diversity in the use of educational terminology, the following terms have been defined in light of their use in this study:

1) Assessment measures--the procedures and devices used for obtaining and organizing evaluative data (AHEA, 1974).
2) Competency-- an attitude, behavior, skill, or understanding demonstrated by a participant at a specified performance level (AHEA, 1974).
3) Competency component--that portion of the teacher education program in home economics education designed to prepare prospective home economics teachers to exhibit specific teaching performance.
4) Competency-based Teacher Education--an approach to teacher training which involves stating competencies, developing content and methods to enable participants to attain desired outcomes; assessment of desired outcomes are specified.
5) Instructional plans--the general scheme by which prospective home economics teachers direct teaching-learning activities with secondary students.
6) Instructional strategies--the planned methods, procedures, and/or techniques employed in a teaching-learning situation to facilitate attainment of a competency (AHEA, 1974).

7) Pacing--rate of movement, progress, or development used by prospective home economics teachers in the teaching-learning situation in relation to the attending behavior and comprehension of secondary students.

8) Prospective home economists--home economics education student teachers.

9) Resources--teaching-learning helps, both human and non-human, appropriate for use in attaining a particular objective.

10) Set induction--the process of creating rapport, harmony, and an environment to facilitate learning.

CHAPTER II

REVIEW OF RELATED LITERATURE

The related literature selected for review for this study had implications for the research problem. Included in the review were literary reports reflecting the growth and development of competency-based teacher education, home economics competency-based teacher education, and developments in assessing professional competencies.

Competency-based Teacher Education

The Committee on Performance-based Teacher Education of AACTE reemphasized the contrast of performance-based teacher education to conventional teacher education in its recommendations (1974) by drawing on Elam's statement (1971, p. 1),

> In performance-based programs performance goals are specified, and agreed to, in rigorous detail in advance of instruction. The student must be able to demonstrate his ability to promote desirable learning or exhibit behaviors known to promote it. He is held accountable, not for passing grades, but for attaining a given level of competency in performing the essential tasks of teaching.

and clarifying its meaning by explaining the definition in a broad context. Questions resulting from the explanation of the context of performance-based education continued to be raised. Changes, over time, have consistently brought about the need for alternative routes in educational cycles. Competency-based teacher education is one

alternative being considered to meet the need which developed because of change.

Competency-based teacher education is a concept that has developed over a number of years and has been spurred on by increasing demands for accountability, relevance, and cost-effective schooling (Rosner and Kay, 1974). Teacher educators have identified technological readiness as one of the most important factors in the development of the movement--a readiness that advanced rapidly during the 1960's.

Brooks' (1974) rationale for the current changes in education gave added support to the readiness identified by Rosner and Kay (1974). He traced the present trend of educational change back to 1945 and rapid advancements in science and technology. Among the critical incidents leading to competency-based education listed by Brooks (1974) were:

1) social and political oppression of minorities following World War II;

2) the resulting backlash which created a cultural revolution among minorities;

3) financial and political support of the federal government to insure civil rights and equal opportunities for all; and

4) the outcry of taxpayers and critics for social and political accountability (p. 5).

Competency-based teacher education resulted from the culmination of many efforts and picked up characteristics which have been associated with other efforts. This variety of characteristics may account for some of the misconceptions and disagreements found among educators concerning the competency-based movement.

Of concern to educators were the various definitions of

competency-based education. Controversy over the meaning of competency-based education had caused some disparity in the development of the movement. Basically, competency-based teacher education has been accepted as a teacher training program in which specific competencies to be acquired have been identified. Accompanying the identified specific competencies were explicit criteria for assessing them. According to Arends, Masla, and Weber (1971) these criteria are knowledge, performance, and product and are suggested for use in assessing participants' cognitive understandings, teaching behaviors, and teaching effectiveness.

Elam's conception (1971) of competency-based teacher education was more detailed and gave emphasis to competencies, criteria for assessing competencies, assessment of student's competency, student's progress rate, and instructional program. Regardless of choice of definition of competency-based education, certain conditions are necessary for implementation. These conditions included: 1) specified competency to be measured, 2) assessment of outcomes, 3) extensive use of technology, and 4) flexible time requirements (Burdin, 1974).

Kelley (1974) has presented one example of identifying differences which seemed to provide an applicable approach for distinguishing performance-based teacher education from competency-based teacher education. In essence, the basic difference is the extension of demonstrated performance of specified teaching behavior--appropriate criterion--to repeated achievement of the specified competency. To further clarify his theory, the following example was presented:

> A common purpose of all three programs might be to have teachers provide positive reinforcement to pupils. In a traditional program of teacher education, the prospective

> teacher would be expected to discuss the rationale and purpose for using positive reinforcement. In a PBTE approach the prospective teacher would be required to demonstrate practice of positive reinforcement in actual work with students or in a simulated situation. In a CBTE approach, the teacher would be required to use reinforcement techniques but would be expected to show that the technique produced the desired results with pupils in actual classroom settings (Kelley, 1974, p. 14).

Accepting a thesis which distinguished the difference between performance-based and competency-based teacher education was one step toward facilitating development of the approach; for the use of the two terms have, and will continue to, create confusion. Both performance-based and competency-based are used in this review of literature because educators have used both terms. This study, however, was ultimately concerned with the broader, more extended approach--competency-based teacher education.

Houston and Jones (1974) tended to support Kelley's theory (1974) when they identified the distinguishing features of competency-based education as:

1) the way designers identify competencies,

2) the innovativeness of their approaches,

3) the congruence between program requirements and the needs of beginning teachers, and

4) the usefulness of instruction and assessment procedures.

In spite of the variance in definition, distinguishing features can be identified. Differences in opinions will continue to exist but acceptance of a common understanding is essential. Any movement that has attracted as much attention, as many advocates and antagonists, as much utilization of resources--human and nonhuman--as competency-based education is certain to create variance.

Although competency-based teacher education has been in the

spotlight for several years, few institutions have been able to implement the mode in their entire teacher education programs. This lack of implementation is not due so much to the unverified merits proposed by the movement as by the momentous tasks involved in such a transition. A transition which involved redefining philosophies, extensive inservice training, and cooperative endeavors among many groups of people.

Reaction to competency-based teacher education has been diverse. Rosner's and Kay's questioning of the level of educational response to competency-based teacher education (1974) revealed the extent of divergence in views about the movement. Support for competency-based education indicated that the movement developed 1) from within the ranks of teacher education rather than as a result of some outside influence, and 2) stronger relationships between colleges of education, public schools, and organized professions. On the other hand, reasons for opposition have been numerous but those which may be considered valid included 1) opposition of a philosophical nature which contended that the movement would fractionate learning, and 2) opposition of a theoretical base--the need to establish a sound base for identifying comptencies (Sandefur, Westbrook, and Deves, 1974).

The competency-based teacher education movement has developed rapidly and there has not been sufficient time to fully realize its potential or lack of potential; yet, educators have expressed strong belief in its potentiality and work is progressing toward realization of some of those potentialities. Competencies have been identified but these have not been sufficiently tested to demonstrate that they definitely lead to improved educational outcomes (McDonald, 1972).

Home Economics Competency-based Teacher Education

The procession of efforts to improve home economics education can be traced back to its early development. A time for reviewing the past, surveying the present, and making suggestions for the future preceded the fiftieth anniversary of the American Home Economics Association (Committee on Philosophy and Objectives of Home Economics, 1959). Home economics educators were identifying competencies for effective living even then. A series of seminars supportive of efforts to imporve home economics education were conducted at Iowa State University, Ames, Iowa, 1962; the University of Nevada, Reno, Nevada, 1964; and the University of Nebraska, Lincoln, Nebraska, 1966. Reference to these seminars here after will be made by locale, i. e., Nevada seminar, Iowa seminar, and Nebraska seminar.

During the academic year 1960-61 several seminars were conducted to develop a conceptual structure of home economics at the secondary school level (AHEA, 1967). In addition to the compilation of materials that were later published--Concepts and Generalizations: Their Place in High School Home Economics Curriculum Development--seminar participants recognized the need to identify content for home economics education. Consistent with the need for identifying concepts and generalization for the secondary school level was the need to develop within those who would teach in secondary schools the necessary competencies for effective teaching. Recognition of this need culminated in the publication--Concept Structuring of Home Economics Education Curriculum (AHEA, 1964).

Following the Nevada seminar, steps were begun to identify major components of a sound home economics undergraduate teacher education program in terms of competencies needed by prospective home economists and to identify a conceptual framework of major concepts and generalizations (Dalrymple, 1973). Each of the planned seminars tended to point out need for further development thus emphasizing the challenges which change continually presented. Home economists were challenged to "...be willing--and equipped--to recognize and be guided by change..." (AHEA, 1959). The Nebraska materials--Home Economics Education: Objectives and Generalizations Related to Selected Concepts (Kreutz and Anthony, 1966)--were indicative of acceptance of the challenge.

Home economics teaching-learning has always been performance/competency oriented; the competency-based education movement in its broader perspective offered additional challenges; challenges which involved identifying and redefining specific competencies and developing appropriate and effective assessment measures.

Crabtree (1965) investigated the usefulness of selected predictors relative to criteria of effectiveness of first year homemaking teachers in Iowa. Selection of measures for predictors had begun in 1958 when it was hypothesized that personality, vocational interests, attitudes, and academic achievement were factors related to teacher effectiveness. Prediction data were collected during undergraduate training. Criterion measures utilized were Students' Estimate of Teacher Concern, Homemaking I and II, measuring teacher-pupil rapport; achievement tests, Homemaking I and II, forms A and B, for measuring pupil gain; and administrators' check list for obtaining data relative to teacher health, judgement in personal and professional problems, department management, and

school-community relations. Correlations were obtained for each predictor with composite criteria and specific criteria. These indicated that certain predictors had potential for use in predicting effectiveness of homemaking teachers.

Recommendation was made that a theoretical analysis be undertaken to identify other aspects of personality and attitude which may be important to teacher effectiveness; and that instruments be sought or developed to measure these aspects.

Other attempts at identifying teacher effectiveness in which competency attainment played a deciding role included an experiment with students in home economics education at Texas Technology College (Bell, 1968). Bell's work was planned to assist home economics student teachers acquire 'deliberate skills' through the use of microteaching. The findings of this study indicated that microteaching increased teaching effectiveness at a statistically significant level. Although Bell emphasized the need for further research to provide for more effectiveness in the use of microteaching in teacher education; the success of her experiment has been a key to understanding teacher preparation and developing a rational and scientific approach to teacher education.

Bell (1968) adapted skills used in microteaching research done at Stanford University during the summer of 1966 (Allen). Skills that were utilized included establishing set, questioning, reinforcement, appropriate frames of reference, and closure. An explanation of these terms should be beneficial for future involvement in this study.

1) Set refers to observable rapport or harmony between pupils and teacher that help obtain students' immediate involvement in the lesson

2) Questioning is a fundamental skill in teaching...effective questioning can guide learners into a variety of mental operations. Such a process can stimulate and challenge learners.

3) Reinforcement of desired pupil behavior through the use of rewards can influence learning. Rewards can be verbal and/or nonverbal.

4) A frame of reference serves as a structure through which the student can gain an understanding of the concept or principles in the lesson.

5) Closure is an act of pulling together the major points of the subject matter and using them as links between past knowledge and new knowledge (Bell, pp. 17-19).

Adaptations of these specific skills have been used repeatedly in other teacher education programs (Edwards, 1973; Vocational Education Trainees, OSU). Students in Home Economics Education at Oklahoma State University have been exposed to the total program as filmed by the Learning Laboratory Corporation but for the purpose of this study, adaptations have been made.

The West Virginia experience (Blankenship, Bennett, and Vickers, 1975) begun in 1971, continued efforts to develop competency-based teacher education in home economics. The West Virginia Council for Teacher Preparation and Certification granted the Home Economics Association permission to review competency criteria for home economics teachers. This committee defined terms and made decisions on competency criteria for teacher education and subject matter areas in both comprehensive homemaking courses and specialized courses for seconday schools. As committee work progressed, certain implications surfaced:

- much subject matter content in college courses would require reorganization and/or additions (p. 23);

- curriculum revision could be approached traditionally or through the development of self-instructional modules (p. 23);

- college faculty would have to decide if they could develop full competency-based programs while carrying their present teaching loads, (p. 24); and

- the realization that most programs will use a combination of alternatives, at least during the early stages of development.

This experience provided insight for home economics teacher educators considering transition to competency-based education. Among the problems which needed consideration were these:

1) suitable classroom space for modular instruction;
2) providing media and equipment;
3) changing the way classes are taught;
4) changing the way credits are established; and
5) supporting the program once it had been established (p. 24).

In addition to highlighting some of the problem areas that prospective program developers must consider, the experience evidenced some positive conclusions including the facts that

1) state home economics associations can be effective instruments in changing teacher preparation standards;

2) developing competency criteria can strengthen and unify home economics programs at all academic levels; and

3) states planning to develop competency-based certification standards should anticipate many changes in higher education (p. 24).

The conclusions of the West Virginia experience provided a route for eliminating the concern voiced by Hill (1971) who identified a central concern for the lack of effectiveness among home economists when she equated the criticism of home economics teacher educators on the part of secondary and adult teachers to a lack of understanding of the relationship between teaching performance and teacher preparation. Home economics teacher educators were urged to teach teachers to perform successfully. The joint planning of the West Virginia home economics

association showed that such an experience could strengthen and unify home economics programs at all academic levels.

The ongoing continuum toward improved teacher preparation was an effort to develop teachers who possessed the needed competencies for effectiveness; who were accountable. In keeping with the mission of home economics, the Teacher Education Section of the American Home Economics Association identified as its primary goal for 1972 'establishing criteria for competency-based teacher education programs in home economics.'

A workshop held at Iowa State University (AHEA, 1974) served as a culminating component for proceeding workshops and seminars. Participants representing home economics teacher education programs from throughout the nation were involved. Their chief mission was to develop competencies and criteria using the Nebraska materials as guidelines. The publication--Competency-based Professional Education in Home Economics: Selected Competencies and Criteria--resulted. This publication was intended as a guide for teacher education programs as they moved toward competency-based teacher education.

Gilbert (1974) sought to identify assessment items for use in competency-based teacher education and to determine if competency improved during student teaching. She used a 50-item instrument in assessing the competency of seventy-seven Iowa State and South Dakota State Universities home economics student teachers. Student teachers were evaluated at four, six, and eight week intervals (Iowa) and at four and eight week intervals (South Dakota). Twenty-four of the fifty items were identified as promising for future investigations relative to assessing student teachers' competency. Inspection of raw data

indicated overall improvement in student teacher achievement toward given competencies from fourth to eighth week in student teaching. Each inspection of the results of various analyses provided another dimension of the item; and it was recommended that each item should be examined from several approaches in making judgement as to the usefulness of the item in a competency-based teacher education program.

Kolhmann (1975) presented a model for competency-based education at the Iowa workshop (1974, see Appendix D). Her model is based on background materials from the work of Rosner and Kay (1974) who identified steps for program designing. Steps included in the Kolhmann model were:

- identifying tentative competencies
- developing an assessment system
- preparing instructional materials
- establishing a management system to monitor the flow of students through the program
- establishing plans for the management, design, and funding of the major research effort that is necessary (p. 20).

A follow-up workshop preceded the annual meeting of the American Home Economics Association in Los Angeles in a effort to acquaint more teacher educators with competency-based professional education in home economics. Crabtree and Hughes (1975) summed the results of the Iowa workshop (1974) when they shared identified future competencies needed.

This identification resulted from response to long expressed criticism and provided a new approach in preparing teachers in professional competency. Although five general areas of home economics competencies were identified, home economists were urged to keep these competencies updated. Social changes and needs as well as the discovery of new knowledge will necessitate that competencies be added, adjusted, or deleted periodically. Needed are specific assessment criteria for

evaluating the progress toward competency attainment and that was the thesis of this study.

Home economists have progressed in competency-based education; they have:

1) defined competencies and specified the context in which each is applicable;

2) identified competency areas;

3) identified criteria;

4) discussed incorporating competency-related behaviors; and

5) raised questions concerning assessment and evaluation.

Educators concerned with competency-based education in home economics generally agreed that although the movement was in its formative stage and progress had been evident; the matter of assessment was still an unsolved component.

Developments in Assessing Professional Competencies

Assessing the effectiveness of a competency-based teacher education program has presented many problems to those who plan for its implementation. Assessment of competency has not been given the attention that has been given prespecification of objectives and the design of instruction. Educators generally agreed, however, that the assessment of competencies was an integral part of competency-based teacher education (Dohl, 1973), and needed to be pursued.

Research efforts concerned with teacher effectiveness prior to the 1960's usually focused on analyzing instructional means rather than outcomes--changes in pupil behavior. The trend, since around 1960, has been toward studying teacher performance relative to student learning.

McNeil (1967) conducted three experiments: 1) supervision by objectives and supervisors' preception of teacher effectiveness; 2) supervision by objectives and pupil achievement; and 3) supervision by objectives and perception by student teachers of the supervisory process in an effort to judge teachers relative to their ability to facilitate learning among students. Seventy-seven university student teachers were used as samples in experiment number one. Each of the university student teachers taught for two days in public secondary schools. These student teachers were responsible for the major instructional activities while the regular teachers rated the university student teachers in terms of poise, personality, and application of the principles of learning. University student teachers were divided into two groups--experimental and control. Both groups received printed instructions; however, the experimental variable was the difference in instructions given to the two groups. Student teachers in the experimental group obtained agreement from the regular teacher in advance as to what constituted success in terms of pupil change; whereas those in the control group met with the regular teacher to become familiar with the activities of the class and then prepared and submitted lesson plans for the two days of teaching.

Results indicated that more of the experimental group were perceived by supervising teachers as achieving greater success as evidenced by pupil achievement. Those university student teachers who sought agreement as to criteria for success were more successful in application of the principles of learning according to supervisors' perceptions. No significant difference was perceived by supervisors as to poise and personality.

McNeil's second experiment involved 44 elementary student teachers in inner city schools who worked with third, fourth, and sixth grade students who had been identified as being deficient in one or more punctuation skills as a result of 'an exercise in creative writing'. Matched experimental and control groups of pupils were drawn from those learners characterized as deficient in one or more of the skills. Student teachers were randomly assigned as control or experimental. Student teachers in the control group submitted detailed lesson plans while student teachers in the experimental group submitted criteria for evaluating pupil change in punctuation skills. Difference in pupil scores between those taught by student teachers in the experimental and control groups was significant in terms of achievement in both overall range of punctuation skills and on particular skills in which learners has shown deficiency.

The third experiment involved completion of a questionnaire by the 44 elementary student teachers in experiment two. Student teachers responded to questions concerned with time spent in teaching puncuation skills, extent of pressure, freedom to select teaching procedures, and time given to individual pupils as opposed to time given the class as a whole. Student teachers exposed to supervision by objectives did not respond differently to student teachers who were subjected to conventional methods. Student teachers were almost unanimous (98%) in their preference to use pupil progress as the criterion for evaluating teaching.

Popham (1971) reported findings on the development and validation of performance tests of teaching proficiency. In the developmental phase, he selected a topic, identified objectives, assembled resource

materials, constructed test items, and established criteria. Performance tests were developed in social science, auto mechanics, and electronics. Students were randomly assigned to teachers and nonteachers for the experiment. No pretests were given because of the process of randomization. A t-test comparison of gross posttest scores revealed only a small magnitude of difference between teacher and nonteacher groups. Further analyses failed to confirm significant differences. Overall, no significant differences were found between the ability of teachers and nonteachers to promote student learning of prespecified instructional objectives.

Conclusions resulting from this project indicated the need for caution in evaluating teaching tasks and pupils. Further study is also indicated in the area of assessing teachers' skills in achieving preset behavioral changes in students' learning.

The idea of an outcome-focused approach has been proposed by Popham (1974). An outcome-focused approach emphasized the results that teachers' efforts produced in modifying learners' behavior. "The criterion is not what the teacher does, but what happens to pupils as a consequence of what the teacher does" (Popham, 1974, p. 69).

Along this trend of thought Dodl (1973) identified four levels at which competencies can be demonstrated. He has also presented suggested identifying ratings for each level:

Level 1 --low value--participant has demonstrated the knowledge thought to be requisite for these competencies (knowledge).

Level 2 --fair value--participant has demonstrated the competency in micro context (performance).

Level 3 --good value--participant has demonstrated the competency in real school setting given limited

responsibility and under close supervision (performance).

Level 4 --high value--participant has demonstrated these competences in real school setting; produced desired results with student taught (consequence) (p. 113).

Assessment at the high levels--three and four--was the concern of this research. Inherent in assessment development is the identification of those competencies that are most essential for prospective home economists.

According to Scholock (1974, p. 319), "Implications for competency definition are as great for assessment as they are for instruction." Implications involved included values, context, and techniques. One approach to the problem of assessment may be Popham's identification (1974) of minimal competencies. Although the number is few, each is broad and attainment of each may incorporate other competencies that have been identified. Included in the minimal competencies were these:

1) Teachers must be able to achieve prespecified instructional objectives with diverse kinds of learners.

2) Teachers must be able to both select and generate defensible instructional objectives.

3) Teachers must be able to detect the unanticipated effects of their instruction.

Suggested assessment measures for these minimal competencies were:

Competency 1

- teaching performance tests in which the teacher is given measurable objectives along with any necessary background information needed to understand the objective.

- allow teachers to posit their own instructional objectives, develop a mastery examination, and then instruct a group of students in attaining the objective.

Competency 2

- require teachers to generate a set of measurable objectives, then have them judged by others; using criteria of significance, suitability to learner.

- have teacher select a specified number of objectives from a larger pool of such objectives, then have the selection appraised by others.

- having teachers describe in exam-like setting alternative procedures for selecting and generating defensible objectives.

Competency 3

- employ a self-report inventory or an attitude assessment instrument.

- simulation approaches.

- having teachers describe their general evaluation strategies (Popham, 1974, pp. 70-73).

These suggested assessment measures have possibilities but will need further refining for application in a teacher education program. Assessment measures in a competency-based teacher education program may take a variety of forms. Educators should explore possibilities rather than limit themselves to one measure. Basing assessment on criterion reference as was the case in competency-based teacher education opened possibilities for resourcefulness and innovation on the part of teacher educators.

Lucio (1973) was supportive of the theory of pupil achievement as an index to teacher performance. His findings indicated that systematic efforts in the direction of analysis of teacher performance as a correlate of predicted change in learner behavior may be expected to:

1) establish appropriate criteria for assessing teacher performance;

2) improve teachers' skills in defining and achieving instructional objectives;

3) provide more explicit evidence of pupil learning;

4) define better the degree of accountability for school personnel in accomplishing the goals for schooling; and

5) provide evidence for the public that schools are achieving stated objectives (p. 77).

One of the critical problems in designing and implementing a competency-based teacher education program was that of assessing teacher performance. This problem was not unique to competency-based education for all teacher education was faced with the problem of evaluating program effectiveness through assessment of the performance of its graduates. Evidence of such problems have been identified through the Wisconsin studies (Barr, 1961). Recommendations by the Committee on performance-based teacher education for the American Association of Colleges of Teacher Education (AACTE, 1974) gave strong emphasis to assessment. According to the Committee (AACTE, 1974), "assessment lies at the heart of performance-based teacher education." There have been few studies to provide a dependable knowledge base to devise teacher education program objectives. Studies which have been conducted have identified abstract or high inference variables which need further definitions to be useful (Rosenshine and Furst, 1971).

Educators have realized that assessment is both difficult and threatening. Agreement to this fact can be found in the explanation of efforts toward a valid, reliable, useful, and appropriate assessment procedure for competency-based teacher education (Kohlmann, 1975; Kay, 1975; Hughes and Fanslow, 1975; Medley, Soar, and Soar, 1975). If educators are to accept the philosophical belief that evaluation is an

integral part of the educational process, then provisions must be made for assessing educational programs as the programs are planned.

The Committee (AACTE, 1974) identified four major applications of assessment theory and skills in performance-based teacher education. Those included application in:

1) initially defining competencies (performance goals)
2) measuring candidates attainment of these competencies
3) evaluating the effectiveness of educational procedures and materials, and
4) validating competencies (performance goals) (p. 18).

Educators presently involved with research in human behavior and interested in identifying measures that validly assess teacher effectiveness generally agree with the application areas. Difficulty in assessing performance has been complicated by the interdependency of the various areas. As Kay (1975) pointed out, the crucial factor is the ability to assess the level of mastery of concepts and skills. Teaching, or rather, the process of teaching, presented an array of complex human and nonhuman interactions which affected the ultimate outcome of the process--teacher, students, environment including instructional materials and experiences (Barr, 1948). The type of assessment most appropriate and most lacking in the measurement of teaching performances under real life conditions where teachers must orchestrate all the knowledge and skills which are deemed necessary to bring about learning is still to be identified, developed, and implemented (Kay, 1975).

According to McNeil and Popham (1973) a focus on students revealed far more about the effectiveness of teachers than did direct study of teachers. Support for the position that the ultimate criterion of teacher effectiveness was teacher impact upon learners has been supplied

by both individuals and professional organizations (American Educational Research Association [AERA] 1952; Biddle and Ellena, 1964). However, the acceptance of student change as the major criterion of teacher effectiveness presented another set of problems both technically and philosophically. Were educators to accept change in student behavior as the essential criterion of teacher effectiveness, the time required for assessment would be prohibitive. When the complexity of the teaching process is considered, then educators must recognize the need for longitudinal research. Research in which students' progress is checked over time; or a continual assessment of the teacher is done over time to see if the process utilized by him/her is having consistent impact on students from year to year. Such a procedure is hardly feasible thus necessitating more applicable short-term research (Medley, Soar, and Soar, 1975).

An on-going effort toward assessment of competency-based teacher education has been the work initiated by the Home Economics Education Department at Iowa State University, Ames, Iowa. Central concern of those educators was assessing the reliability of the types of judges who rated student teachers in a competency-based teacher education program (Fanslow and Wolins, 1975). The observational device, composed of 50 items, was planned to measure student teachers' competencies in four aspects of the teaching-learning process. A 99-point scale was used by judges to indicate if student teachers functioned below or above average in specific areas. Judges recorded the degree of certainty relative to their decisions. Judges were trained through the use of micro teaching units to insure objectivity. Eighteen items were identified which appeared promising for reliably rating student teachers in

competency-based teacher education programs. Again, educators were cautioned to check interrelationships and interdependency of areas assessed in the complex teaching process.

Earlier Hughes and Fanslow (1975) had emphasized the necessity of an accurate validation process for use when developing, adapting, and using evaluative devices in a competency-based teacher education program. Accurate validation was not confined to competency-based teacher education, however, any educational program which is grounded in performance should be ever mindful of the reliability of its assessment measures. Characteristics of an effective evaluative device stressed by Hughes and Fanslow were content validity, objectivity, reliability, and usability. These characteristics have been assumed essential to good evaluative techniques and are recommended by any acceptable educational source of measurements.

Another problem posed in assessment was the purpose for which the results of the evaluative procedure were to be used. In essence, the 'process to product' route experiment at Bowling Green University (Chase, Harris, and Sakler, 1974) was basic to the questions raised: What evidence? Or in actuality--What evidence for whom? Needed to accurately answer this inquiry are guidelines for all involved. Definite guidelines have been emphasized by all educators concerned about the assessment component of competency-based teacher education.

Modules have been developed by staff and individuals for many competency areas, i. e., The Center for Vocational and Technical Education, Ohio State University; the Department of Home Economics Education, Iowa State University; Student Teaching Program, Bowling Green State University; and Weber State to name a few. Tests

accompanying these instructional modules tended to be narrow and as such provided only isolated bits of information. McNeil and Popham (1973) stressed that any single criterion of effectiveness is confounded. Several factors may cause this confounding--who is doing the measuring; the kind and quality of the instrument used; and purpose; how are data to be used. A suggested alternative for counter-attacking this problem was the collection of data from several sources in determining teacher effectiveness.

Menges (1975) attacked effectiveness from a 'readiness' approach which followed the lines identified in the competency-based approach. In essence, he equated the performance-based teacher education approach to a major effort to promote consistency from training to job performance. Stated another way, in competency-based teacher education, the competency (readiness, Menges) is judged by prospective teachers' ability to demonstrate his competency in certain specified areas (Roth, 1973). If evidence of demonstrated competencies is to be valid there is dire need for consistency to exist between predictor and criterion in instruments used in assessing the competency. Menge's review of studies concerned with assessing professional readiness produced several generalizations which concurred with identified specifications of other educators viewing assessment of competency attainment

- definitions of effective practice should emphasize many discrete behaviors and characteristics rather than global definitions;
- measures of these characteristics (predictors) should be as similar to the criterion itself as possible;
- multiple assessment devices should be used so that no single type is overemphasized;

- data should not be used for decision making until longitudinal studies demonstrate adequate predictive validity (Menge, 1975, p. 201).

One effort geared toward assessing professional readiness was the experimentation of Koran and Koran (1975) to obtain maximum information regarding the effects on students of teachers who had acquired a specified teaching skill. Koran and Koran used a two-phased investigatory model which involved an attempt to assess alternative methods of training teachers to use certain skills and then to assess the effect that teachers who had acquired the skill had on student behavior. Sixty-nine preservice teachers were randomly assigned to three treatment conditions designed to train them in using analytic questions: a written model--protocol form; a written model--transcript form; and placebo--control group. Eighth grade students were randomly assigned to groups and used as micro students. Each teacher taught a twenty-minute lesson which was recorded. Teachers were then tested on their ability to identify analytic questions on a written test. Reliability of the written measures ranged from .69 to .79. Trained raters rated the tapes which resulted in a rater reliability from .89 to .99. Conclusions resulting from the analysis of data indicated that written models were effective training procedures and that the protocol form exceeded the transcript form. Evidenced also was the fact that the best combinations of teacher behavior for predicting student performance varied for different student learning outcomes. Of great importance to educators as they strive to validate teacher competency is the admonition of Koran and Koran (1975, p. 5) "..the setting of teacher criterion performance in terms of its effect on student learning must necessarily consider the multivariante nature of learning outcomes."

Medley and Soar (1975) have developed a proposal which they felt may be useful to program developers as they proceed in assessing teacher competency. This approach has identified four levels in which teacher professional development can be assessed. These levels were:

Level 1 training experience--which includes courses taken, modules attempted, modules mastered, etc.

Level 2 teacher's performance--deals with teacher behavior while he/she is attempting to fulfill his/her role as a teacher: kinds of questions asked; organization of class for instruction; determination of objective of instruction.

Level 3 pupil learning experiences--which deals with the assessment of behavior of students under the guidance of teacher being assessed.

Level 4 pupil outcomes--deals with assessment of outcomes of instruction; those changes in behavior brought about through the educative process (pp. 22-24).

Each level is influenced by the preceding level as well as other factors--community, school, pupil, and teacher. Teacher education is based on the assumption that, despite extraneous factors, the influences assessed at each stage are potent enough to have appreciable effect not only on the level immediately following but on all subsequent levels. The concept of teacher effectiveness is based on the notion that pupil learning outcomes are affected by teacher behavior. And justification for the very existence of teacher education is the presumption that what happened to a teacher in training can somehow increase his/her effectiveness, that is, affect pupil learning outcome. Such a breakdown allowed for specifying the points at which assessment can take place. It further made clear why studies which examined relationships between teacher training and student outcome were likely to be unproductive because of the many unidentified steps. A distinct difference between competency-based teacher education and past practices is the shift of

evaluation from the training program to the behavior of teachers trained in the program.

Problems in evaluating teachers on the basis of student outcome are disabling--they involve considerable cost in time and other resources. Another procedure suggested by Medley and Soar was to measure teacher behavior.

Measuring teacher behavior is neither simple nor easy. There is the need for verification that the teacher behavior being emphasized does produce desired outcomes in students taught. Using the Medley-Soar paradim (see Appendix E) as a dynamic model for evaluating training experiences or programs in terms of teacher behavior and student behavior; student outcomes may then be used to validate teacher behavior. Using the results of both processes can then provide a continuous process of train, evaluate, validate, feedback, modify, and retrain. Such a process may provide the key to what a teacher can do to help students learn and what training programs can do to teach teachers these skills.

Educators are at the stage which required valid decisions as to route or choice of alternative. Menges (1973, p. 203) stated it well when he said, "The imperative for assessment is to attend more adequately the predictive validity while moving toward more open, collaborative evaluation".

Teaching performance is a complex of knowledge and skill extending over time (McDonald, 1972) thus making assessment extremely complex. Lack of universal agreement on what is to be measured has caused further conflict in assessment procedures. Analysis of progress in the competency movement have indicated an extremely weak research basis

(Heath and Nielson, 1975). Heath and Nielson have found that two important types of variables have not been recognized in the research reviewed. These were the variables that deal with what is taught and who is taught. Both types should be considered in valid and reliable research for it is unlikely that one set of teacher behavior will prove most effective in teaching everything to everybody.

Kemble (1975) identified three conclusions from a recent analysis of research literature on teacher effectiveness. Included were the facts that:

a) research literature on the relation between teacher behavior and student achievement does not offer an empirical bases for prescription of teacher-training objectives;

b) such a basis is lacking not because of minor flaws in statistical analysis but because of sterile operational definitions of both teaching and achievement and because of weak research designs; and

c) given the well documented strong association between student achievement and variables such as socioeconomic status and ethnic status, the effects of techniques on teaching on achievement is likely to be inherently trivial (pp. 22-23).

One basic need of the competency movement in education is a better research basis. Medley and Mizzel (1963) found that researchers had arrived at the same findings regardless of techniques or methods employed, e. g., rating scales, self analysis, classroom visitation. No method of measuring competence of educators had been accepted and no method of promoting growth, improvement, and development had been generally accepted. Ten years later, Lewis (1973) advocated a management by objective approach to performance apprasial which involved clear precise identification of performance objectives, establishment of realistic action plans, and evaluation in terms of measured results in

achieving identified objectives. Lewis' projection related favorably with assessment techniques identified by Medley, Soar, and Soar (1975) for utilization in competency-based education.

Summary

Chapter II presented an overview of the state of the art of competency-based education with special emphasis in the area of assessment. It has shown the birth of a movement; shared its excelerated growth; identified some of its inherent problems; investigated home economics' involvement and concern; and disclosed progress in assessment in a competency-based setting. Assessment needs were identified--a good working classification system, techniques for assessing teacher performance, and criteria for evaluating performance.

CHAPTER III

METHOD AND PROCEDURE

This investigation was concerned with the assessment of a selected competency component of the teacher education program in home economics education. To accomplish the objective of such an investigation necessitated the development and/or adaptation and evaluation of assessment measures that were utilized with prospective home economics teachers.

Verification of the reliability and validity of the assessment measure was sought through utilization of the measures in centers by prospective home economics teachers to find answers to three research questions:

1) Do home economics education student teachers exhibit
   a) competence in instructional planning?
   b) specified competencies in implementing instructional plans?
2) Do secondary students gain in knowledge in classes taught by home economics education student teachers who exhibit specified competencies in implementing instructional plans?
3) Is there a relationship between home economics education student teachers' exhibition of specified competencies and secondary students' gain in knowledge?

Identifying Limits

The wide range of variables that can influence an educational assessment process (Medley, Soar, and Soar, 1975) plus time and cost necessiated establishing clearly defined limitations for the study. Specific factors being assessed in implementing instructional plans in this study were (1) motivational approaches--set induction; (2) opportunities for learner participation--student involvement; (3) utilization of instructional strategies and resources; and (4) pacing--including questioning skills and closure.

One limit set for this study was the assessment of only one component in the range of variables relative to teacher effectiveness--implementing instructional plans. Although it was assumed that prospective home economics teachers could make effective instructional plans, educators felt it desirable to assess plans prior to implementation. Instructional plans were developed by participants with reference to specific factors identified for this study.

In order to establish a basis for comparing results of the assessment process, a subject matter area was identified. Thus the second limit dealt with the content area for which instructional plans were developed for implementation. The subject matter area chosen for study was consumer education; however, further constraints were identified, e. g., grade level to be taught. As secondary students have been exposed to some aspects of consumer education, an effort was made to select an aspect that presented some degree of novelty (Popham, 1971); something to which the secondary student had not been formally exposed. A search of literature relative to consumer education at Home

Economics II level revealed that these students would probably have been exposed to formal learning experiences in such aspects of consumer education as budgeting, banking, and credit. In an effort to incorporate something of a novel aspect, "consumer rights, responsibilities, and protections" was selected as the content area to be utilized.

The decision to capitalize on students at Home Economics II level was based on several considerations associated with the development of students at this stage:

1) frequently, these students are just entering senior high school;
2) these students have opportunities to handle more money than in previous years;
3) these students are assuming more responsibility;
4) these students are striving to become more independent and want to make decisions for themselves;
5) these students are more actively involved in the interactive process of living, both in families and with peers.

Taken together, these characteristics tend to place students at this level at a strategic point for being receptive to learning experiences that enhanced their state of maturity. Thus the third limiting consideration was that of grade level at which to have the prospective home economics teachers implement their instructional plans.

Fourthly among limiting factors were circumstances under which implementation occurred. Although all implementation was performed in centers of vocational home economics in Oklahoma, such factors as urban/rural, socio-economic status, and educational orientation of the

locale influenced the effectiveness of choice of content, approaches, and strategies. Performance in implementing instructional plans by prospective home economics teachers was assessed by three persons--cooperating teachers, student teacher, and researcher. Two of these assessments-student teacher's and researcher's--were made from audio tape recordings of the performance. Audio taping limited choices of teaching strategies to those which were most conducive for this purpose; conducive in that taped recording of performance had to be actively considered in picking up as much of the classroom interaction as possible to permit accurate assessment.

Fifthly, time served as another limiting factor. Plans for implementing instructional plans had to be built into the planned instructional activities within participating centers. Contacts were made with cooperating teachers during the spring of 1975 and the majority of them agreed to participate in the study. The number of cooperating teachers agreeing to participate afforded sufficient centers for field testing developed instruments during the fall of 1975 and for collecting data in the spring of 1976.

Prospective student teachers were contacted during the early part of the semester in which they planned to student teach. There were sufficient volunteers from this group to carry out the proposed plans. Permission was granted by cooperating teachers for a one week minicourse in the area of "consumer rights, responsibilities, and protections" during the time that student teachers were in the centers. Time allowance was allotted so that student teachers would have one class period for introducing the unit and pretesting secondary students; three class

periods for implementing instructional plans; and one class period for summarizing and posttesting.

Assessment Measures

Once decisions had been reached concerning subject matter area, level, and time constraints; thoughts were directed toward means of assessing (1) instructional plans, (2) implementation of instructional plans, and (3) secondary student learning. A search of the literature did not produce a measure that assessed the identified factors of the component being studied in implementing instructional plans. It thus became necessary to generate assessment measures for the study. In essence, three assessment measures were needed to provide answers to the research questions posed.

Assessing Instructional Plans

Items for rating instructional plans that were being implemented by prospective home economics teachers were developed in light of those specific factors identified as important in implementing instructional plans. If motivational approaches, student involvement, strategies and resources, and pacing were to be considered in assessing implementation; then instructional plans should show indications of consideration of these factors.

A 10-item rating scale was finally decided upon. Items in the rating scale (Appendix B) are consistent with the components of the format utilized by prospective student teachers in professional courses taken in home economics education at Oklahoma State University. The format was so structured that student teachers planned in depth and included concept, objectives, rationale, set induction, generalizations,

content, learning experiences, evaluation, teaching aids, summary, assignments, and preparation tasks. Such a breakdown enabled student teachers to be able to readily analyze their plans.

Assessing Implementation of Instructional Plans

Items for performance assessment were generated as a result of a search of literature following identification of specific factors to be assessed in determining competency. Adaptations were made from items in the works of a number of educators who had done previous work in assessing teacher effectiveness (Allen, 1966; Bell, 1968; Clawson and Scruggs, 1975; Gilbert, 1974). Items were chosen on the basis of appropriateness for assessing identified factors in implementing instructional plans--set induction, student involvement, strategies and resources, pacing. Likewise, similar traits were important in selecting items for assessing instructional plans--items that indicated student teachers had planned for creating a learning environment conducive to accomplishing the desired objectives of lessons planned. A 26-item rating scale was constructed for assessing the student teacher's performance in implementing instructional plans (Appendix B).

Scoring Method Used in Assessing Plans and the Implementation of Plans

A 99-degree-certainty scale was used to assess competency attainment of prospective home economics teachers participating in the study as well as instructional plans being utilized. This choice of rating scale was made for several reasons (Warren, Klonglan, and Sabri, 1969):

1) the certainty method is applicable to a wide range of variables, e. g., attitudes, knowledge, and behavior (p. 7);

2) the certainty method is applicable to different data collection situations, e. g., self evaluation, observation situations, deferred evaluation (p. 28);

3) the certainty method allows the respondent to make two decisions--directional and certainty. Not only does the respondent indicate his directional judgement (he agrees or disagrees) but he indicates the degree of certainty of his directional judgement (p. 30).

In addition to these reasons, the range of scoring points--1 to 99--was one with which both cooperating teachers and student teachers were familiar.

Directions for using the certainty method were clearly explained to both cooperating teachers and student teachers. Cooperating teachers have long been key figures in the home economics teacher education program at Oklahoma State University and have served as prime determinants in endeavors of improvement and enhancement of the program. They have come to the campus for seminars each year in which mutual sharing was a prime objective. Such involvement has helped to keep communication channels open. Cooperating teachers are kept informed of program plans which enabled them to know their roles with student teachers and the total educational training process. Opportunities have been provided for interaction among cooperating teachers and college staff in program development, curricula improvements, and other activities designed to improve their competency as teacher educators.

It was during such a cooperating teachers' seminar that cooperating teachers were oriented in the use of the certainty method. Copies of the scale with directions were given to them and the directions were explained with time for questions, answers, and discussion. Teachers were permitted to keep rating scale and directions for more study and opportunity to seek further clarity in its use.

Student teachers were instructed in the use of the scale during their experience in the course HEED 4213--a course in Media, Materials, and Techniques in Home Economics Education taken on the "block". Block courses are those professional education courses taken for a period of eight weeks during the semester student teachers go into field experience. During the course, students were involved in simulated techniques of classroom situations--they planned lessons, developed instructional materials, experimented with techniques, and gained proficiency in operating audio visual equipment. Performances were video taped so that each performance could be self-evaluated. Students not only participated in self-evaluation, they were evaluated by peers and instructor. This procedure allowed the prospective student teacher to develop competency in self-evaluation and evaluation of others thus developing a degree of objectivity in the evaluative process.

Assessing Secondary Student Gain

A final aspect of the assessment process in determining the effectiveness of student teachers' implementation of instructional plans was a check on knowledge gain of secondary students. Gain score was identified as the method for determining this aspect. Popham (1971) advocated the use of student gain as one measure of teacher effectiveness. It was thus necessary to develop a bank of test items from which pre- and posttest could be constructed for use in obtaining secondary student gain.

After searching a variety of consumer education texts, curriculum guides, The Illinois Teacher, What's New in Home Economics, Forecast for Home Economics, Better Business Bureau releases, Extension releases, and other current sources of consumer education materials; and a committee

review of proposed items, a bank of 99 objective type test items were selected for field testing. Analysis of field test results was utilized to produce pre- and posttests of comparable difficulty. Test items were constructed to evaluate knowledge gain on each of the objectives identified in the common instructional plan (Appendix C) used by student teachers. These items were compared on the basis of number of secondary students answering correctly. Test items of the same or similar rankings based on student response in the field test were distributed between pre-and posttests.

To insure content validity of test items used, study was made of investigations which included creating special teaching units for the purpose of studying teaching (Berliner and Ward, 1975; Joyce, 1975; Popham, 1971). An experimental unit of this type contained curricula materials, objectives, and sample test items. The student teacher was asked to teach to the objectives. Under these conditions, every student teacher had similar materials and objectives with which to work. Secondary students were pretested and posttested with carefully constructed test items designed to tap many dimensions of the material in the teaching unit. In an attempt to eliminate as much carry-over as possible that could result in a time span as short as the three day period between tests, two separate tests were developed and utilized. Both pre- and posttests covered the same content but questions over the content differed.

Although there has not been sufficient time to determine if short term research of this nature--using mini units of short duration--provides an estimate of teacher effectiveness over a longer period; it does provide identification of teachers who differ in measured

effectiveness. This effectiveness is restricted; for it involved teaching a common unit with common objectives for controlled time periods (Popham, 1971).

The pre- and posttests were scored on the basis of one point for each correct answer. The highest possible score on either test was 31.

Field Testing

The developed assessment instruments--lesson plan rating scale, performance rating scale, and test items for secondary students--were field tested in five cooperating centers during the fall of 1975. Analysis of input and results of field testing identified the following weaknesses:

- too much material had been included for the one week period allowed for the mini-unit;
- student teachers felt some inadequacy in teaching consumer education;
- materials needed to be geared more specifically to Home Economics II level;
- more applicable approaches were needed for the interest and age level of the secondary students;
- student teachers were not given sufficient consumer information nor was the information given to them early enough to allow for sufficient study and planning;
- some Home Economics II students resented the unit because it interrupted a unit in which they were already involved and interested; and
- the test was too long.

As a result of these findings, the following steps were taken:

- content for the mini-unit was restricted to consumer rights and responsibilities, deleting aspects concerned specifically with consumer protection. The choice of area to delete was contigent with the assumption that if students were made sufficiently aware of their consumer rights and responsibilities; they would seek protection for their rights and responsibilities;
- objectives for the mini-unit were restricted to the cognitive domain for time constraints did not permit observation of higher level performances for assessment;
- student teachers were more thoroughly oriented as to objectives and purposes of the study;
- a more extensive compilation of resource materials was provided for student teachers. Materials included resources that could help student teachers incorporate consumer rights and responsibilities into existing units. Content was structured so as to be general enough to apply to specific areas, e. g., food, clothing, housing, child development through the use of examples, bulletin boards, and other illustrative materials relative to specific areas;
- pre- and posttests were constructed using field tested results from the bank of 99 objective test items:

a) test items were allocated on the bases of difficulty,

b) position of alternatives were changed to avoid a definite response pattern,

c) terminology was adapted,

d) negatively/positively stated statements/questions were balanced.

Since there was an ever present possibility that certain teaching behaviors had differential effectiveness for different types of materials and for students of different levels (Medley, Soar, and Soar, 1975) efforts were undertaken to develop assessment measures in which curriculum, teaching behavior, and criterion instruments were as closely related as possible. The following precautions were undertaken to assure as comparable setting for each participating prospective teacher as possible:

1) each was provided the same resource materials;

2) each had been oriented in the criterion-specific behavior before going into respective centers;

3) each had been provided a broad general conceptual frame within which to perform.

Every possible effort was made to stabilize the behavior of the prospective student teachers before their performance began so that there would be as much congruence between criterion test and teacher behavior as possible. Prospective home economics teachers could use their own chosen strategies in effecting change in secondary students within a common framework. They were afforded sufficient opportunity to exhibit evidence of their knowledge relative to planning for, analyzing, interpreting, implementing, and evaluating their individual performance in implementing instructional plans.

Rater Reliability

In conjunction with the reliability of the assessment measures was the need for rater reliability. As plans of student teachers were rated by different cooperating teachers, and performance of student teachers was rated by different cooperating and student teachers; there was no rater common to all student teachers in these two sets of raters. It was thus desirable to establish reliability of the rater who would be the one rater common to all student teachers throughout the assessment process--the researcher. Although both student teachers and cooperating teachers were instructed in the use of the assessment measures; individual differences, areas of subject matter emphasis, environmental settings, and other variables could influence their ratings.

The researcher and one of the faculty members of the Department of Home Economics Education independently rated instructional plans which were developed by student teachers who were not included in the final analysis. The interrater reliabilities determined by the formula (Downie and Heath, 1974, p. 92)

$$r = \frac{N\Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{[N\Sigma X - (\Sigma X)^2]\,[N\Sigma Y - (\Sigma Y)^2]}}$$

were .86, .93, and .78 respectively. Interrater (researcher, cooperating teachers, student teachers) reliability was assessed as explained in Data Analysis.

Criterion Level

The criterion level of evidence of acceptable competency attainment was arbitarily set as 80 by the researcher. The choice of 80 was made on the basis of the requirement of a 2.5 grade point average for entry into the teacher education program at OSU. The level of acceptable performance identified by the State Department of Vocational Education in Oklahoma was also considered in the decision. As student teachers were working with secondary students in vocational homemaking centers, it was highly probable that the cooperating teachers and secondary students were acquainted with this criterion level. Further, a criterion level of 80 provided opportunity for student teachers to incorporate a criterion level which is quantified similarly in a number of teaching-learning situations in their own store of learning experiences.

Sample Selection

Home Economics Education student teachers of Oklahoma State University served as samples for identifying competency attainment in implementing instructional plans. Student teachers participated on a voluntary basis thus forming a convenience sample. Twenty student teachers in 11 cooperating centers were involved in the study. Due to enrollment and available home economics sections of Home Economics II level students, not all 20 were actively involved in the assessment process. Of the 20 volunteering student teachers, 17 participated in the study, however, because of taping malfunctions and some assessment problems, six of those participating were not utilized in the present study. Complete data sets were collected and used from 11 of the

actively participating student teachers and their sections of Home Economics II students in answering the research questions. These answers served as a basis for verifying the assessment measures.

Demographic data on the 11 participating student teachers showed 10 of them were from Oklahoma with nine of them graduating from Oklahoma high schools. The student teachers came from locales ranging in population from 789 to 366,481 (U. S. Census, 1970). A more specific breakdown revealed that three were from towns of less than 5,000 population; three from towns ranging from 5,000 to 10,000; three from urban areas ranging from 35,000 to 75,000; and one from a metropolitan area of more than 300,000.

Student teachers performed in eight centers in Oklahoma towns of varying sizes and characteristics including extent of rural and urban orientation. Four of the center sites had populations of less than 5,000; one was in the population range from 10,000 to 20,000; two in the range of 20,000 to 30,000; and one with more than 30,000.

A check on secondary school program structure revealed that home economics was an elective course in the majority of the participating centers and students of all ranges of intellectual ability were enrolled. Because of the probability of all intellectual levels participating, no effort was made for adjustment in score range or achievement level.

Seven of the 11 participating student teachers were transfers from junior colleges or other four-year colleges in Oklahoma. One had graduated from an Oklahoma four-year college but had planned her course of study so that she could complete vocational certification at Oklahoma State University. Two had periods of "stop-out". Stop-out indicated periods of absence from formal education training because of marriage,

family mobility, childbearing, or some other reason not directly connected with the educational environment.

The grade point averages (GPA) of the student teachers ranged from 2.98 to 3.82 out of a possible 4.00. Of the 11, two were in the range from 2.98 to 3.31; four from 3.32 to 3.65; and five from 3.66 to 4.00. A GPA of 2.5 is required for admission to the teacher education program at OSU.

Data Collection

Three assessment measures provided data needed to answer the research questions posed for this study. They dealt with instructional plans, performance, and secondary student learning.

Student teachers developed instructional plans for three days that were implemented during a mini-unit taught on consumer rights and responsibilities. The mini-unit, planned for a period of one week, allowed one day for introducing the unit and pretesting, three days for implementing instructional plans, and one day for summarizing and posttesting. The instructional plans were assessed on a 10-item rating scale (Appendix B) using a 99-degree-of certainty method by both cooperating teachers and researcher.

Performance of student teachers was audio taped during the three class sessions for which instructional plans were assessed. Audio taping was used to facilitate self-assessment by student teachers and to permit the researcher to have access to all sessions of all student teachers. Audio taping also provided student teachers a degree of objectivity superior to recall in the assessment of their own performance. A 26-item measure (Appendix B) was utilized in assessing performance.

This measure was used by three judges--cooperating teachers, student teachers, and the researcher. Four factors deemed essential to implementing instructional plans were assessed on the 26-item assessment measure. Factors considered were motivational approaches, student involvement, utilization of strategies and resources, and pacing.

Evidence of secondary students' gain was determined through the administration of pre- and posttests. Tests were administered to secondary students with whom student teachers had worked as they implemented their instructional plans. Data from tests were collected to see if performance of student teachers affected learning among secondary students.

Table I shows a breakdown of data sources utilized in this study.

TABLE I

SOURCES OF DATA

Rater	Planning			Performance			Pre-Posttest	
	1	2	3	1	2	3[a]		
Cooperating teacher	x	x	x	x	x	x		
Student teacher				x	x	x		
Researcher	x	x	x	x	x	x		
Secondary student							x	x

[x] indicates source

[a] indicates number of the plan and session

Data Analysis

Data Reduction and Interrater Reliabilities

First steps in analysis of data were undertaken to verify most appropriate analytical processes and which variables to combine for the final analysis. Means of each of the three raters for each student teacher over three sessions were computed for the 26-items on the performance scale. Analyses of variance were performed by item over three raters' assessments. The analyses of variance using data from the measure of performance and general observations revealed the assessments on either of the measures for a given student teacher were more similiar across sessions than they were across raters. It was thus decided to combine scores for the three sessions of a given rater.

Paired comparison t-tests were utilized in determining if significant gain were evident in secondary student learning. Correlations were also computed to determine reliability among raters for student teachers' plans and performance.

Answering the Research Questions

Correlations were run to identify relationships between secondary students' gain and student teachers' ability in planning and performance. Scatter plots were constructed to portray the extent of relationship among variables because of the small number of student teachers (Appendix H). As the researcher was the only rater common to all student teachers on all variables, her assessments were used to construct the scatter plots. Data generated from all three measures--scored instructional plans, scored performance, and secondary student

gain score--were utilized in answering the research questions.

Summary

In Chapter III, the researcher discussed some of the limiting factors encountered in assessing competency attainment; discussed the assessment measures including an explanation of the rating scale that was utilized; and explained the procedure followed in generating test items for secondary students. A report of results from field testing assessment measures as well as interrater reliability of the researcher and the rationale for the identified criterion level of acceptable performance were included. An explanation of sample selection, procedure for data collection, and the procedure utilized in analyzing the data were also included. A more detailed report of the findings is presented in Chapter IV.

CHAPTER IV

FINDINGS AND DISCUSSION

This study was planned specifically to assess competency attainment of prospective home economics teachers in implementing instructional plans. However, as previously stated, instrumentation for the assessment process had to be developed. Data collected in the evaluative process have been analyzed to determine if assessment measures were germane for the intended purpose. The findings and subsequent discussion presented in this chapter resulted from the related processes in evaluating the measure. These have been categorized and are presented in the following manner:

1) instructional plans
2) implementation of instructional plans: performance
3) secondary student learning
4) relationships among plans, performance, and secondary students learning.

Instructional Plans

The assessment of the instructional plans by the cooperating teachers and the researcher resulted in two scores for each of the three plans for each student teacher. A mean for each student teacher was computed for scores on the plans for the three sessions as assessed by each rater. The mean scores for all student teachers on ability to

plan as assessed by the cooperating teachers and the researcher are shown in Table II.

TABLE II

MEAN OF ASSESSED INSTRUCTIONAL PLANS FOR ALL STUDENT TEACHERS OVER ALL SESSIONS

Rater	Mean	Min. Value	Max. Value	SD
Cooperating teachers	92.32	77.73	96.53	5.47
Researcher	91.88	78.77	95.77	4.87

Evidence indicated that the researcher and cooperating teachers assessed the plans similarly. The correlation between the two sets of ratings was .97, significant beyond the .01 level. The means shown in Table II also reflect the similarity of ratings.

Instructional plans developed by student teachers for implementation in the three sessions were thus deemed sufficient based on the overall mean. The minimum value of scores on student teachers plans as assessed by the two raters (77.73 and 78.77) were somewhat lower than the criterion 80 identified.

Implementation of Instructional Plans: Performance

Student teachers were assessed over three periods by three raters on implementing instructional plans--performance. The 26-item assessment measure covered the four essential factors--motivational approaches, student involvement, use of strategies and resources, and pacing. Performance data were analyzed to compare raters and to describe the performance of student teachers.

Comparison of Raters

The first step in the analysis involved analyses of variance by items over three raters' assessments. Results of analyses of variance and general observations revealed that assessments on any of the measures for a given student teacher were more similar across sessions they were across raters. Mean scores for the three sessions for each student teacher were used in further analyses.

Results of analyses of variance showed raters as a significant source of variance in judging performance for 10 of the 26 items on the assessment measure (Table III). Of the 10 items on which raters differed significantly, four related to motivational approaches (Factor 1); one related to student involvement/participation (Factor 2); one related to use of strategies and resources (Factor 3); and four related to pacing including questioning and closure (Factor 4).

TABLE III

RESULTS OF TEST OF SIGNIFICANCE OF RATERS AS SOURCE OF VARIANCE IN JUDGING PERFORMANCE

Factor	Item	F value	Probability level
Motivational Approaches	1	5.27*	.048
	2	2.01	.214
	3	5.27*	.048
	4	1.36	.325
	5	512.48**	.001
	6	2.36	.172
	7	6.72*	.029
Student Involvement	8	2.27	.184
	9	6.70*	.030
	10	1.57	.284
	11	3.21	.112
	12	4.64	.060
	13	4.45	.065
Use of Strategies and resources	14	1.58	.281
	15	3.61	.093
	16	4.86	.055
	17	8.77*	.017
	18	4.70	.059
	19	3.55	.096
	20	4.69	.059
	21	4.76	.058
Pacing including questioning and closure	22	1.24	.356
	23	8.20*	.019
	24	6.69*	.030
	25	17.99**	.004
	26	26.71**	.002

*significant at or beyond the .05 level

**significant at or beyond the .01 level

Further analyses of data regarding performance utilized mean scores for student teachers on each of the four factors in the assessment measure. Mean score for a factor is the mean score on items making up that factor. Table IV presents the overall mean for all student teachers on the four factors as assessed by different raters.

TABLE IV

MEANS BY RATERS BY FACTORS RELATIVE TO IMPLEMENTING INSTRUCTIONAL PLANS

Factor	Rater	Mean	Min. Value	Max. Value	SD
1. Motivational approaches					
	C.T.[a]	90.39	81.43	95.05	4.43
	S.T.[a]	88.32	69.48	97.33	7.84
	Res.[a]	86.90	81.67	91.62	2.83
2. Student Involvement					
	C.T.	88.21	78.72	93.89	5.51
	S.T.	87.40	76.50	96.94	7.21
	Res.	92.68	85.00	97.33	3.72
3. Use of strategies and resources					
	C.T.	90.05	82.25	95.33	3.96
	S.T.	87.61	75.08	96.42	6.70
	Res.	93.45	86.54	97.75	3.37
4. Pacing					
	C.T.	86.68	78.60	94.27	5.91
	S.T.	83.76	66.47	97.53	9.47
	Res.	87.70	76.87	97.53	5.76

[a]C.T. denotes cooperating teacher; S.T., student teacher; Res., researcher.

As shown in Table IV, the researcher's mean assessments of all factors except motivational approaches were higher than assessments of either cooperating teachers or student teachers. The researcher assessed student teachers' performance from audio tapes. The magnitude of the assessment of motivational approaches by the researcher was affected by one item (item 5, Table III) which she consistently assigned a score of 50 (neither agree nor disagree) because of inadequate information for anyone not present in the class sessions. With the exception of the first factor, student teachers assessed their own performance lower than the other two raters based on the means. Both the cooperating teachers and the student teachers were on the scene of action and viewed environmental and situational involvement which were not readily available to the researcher in her assessment using the audio tapes.

Student teachers' mean assessments were closer to those of the cooperating teachers than of the researcher on factors of student involvement and use of strategies and resources but differed similarly from the other two raters on motivational approaches and pacing. Cooperating teachers and the researcher assess the factor pertaining to pacing which involved some questioning techniques and closure more nearly alike than did student teachers (Table IV).

The fact that student teachers' mean assessments for these factors were a compilation of perceptions of 11 individual raters and the cooperating teachers' mean assessments were a compilation of perceptions of nine raters should be remembered as the results are studied. Only the researcher made assessments of all variables for all student teachers.

The range between minimum and maximum values as well as the

TABLE V

MEAN ASSESSMENT OF PERFORMANCE BY ITEM BY RATER

Item	Rater		
	Cooperating teacher	Student teacher	Researcher
1	87.03*	86.67*	91.27*
2	89.82	85.79	90.48
3	90.52*	83.88*	93.82*
4	90.48	91.76	93.67
5	90.18**	89.00**	50.00**
6	95.00	93.00	95.64
7	89.67*	88.15*	93.45*
8	91.58	91.18	94.97
9	81.79*	82.97*	91.21*
10	84.64	86.00	90.00
11	90.36	89.52	93.97
12	89.88	85.12	92.39
13	89.03	89.64	93.52
14	90.36	88.91	93.45
15	88.12	87.15	91.03
16	86.64	83.39	90.12
17	88.79*	88.15*	93.88*
18	93.03	88.58	95.36
19	91.00	87.70	93.55
20	92.12	88.97	95.18
21	90.30	88.03	95.06
22	87.79	85.91	89.55
23	88.64*	86.58*	91.85*
24	88.55*	84.94*	93.88*
25	88.03**	83.61**	90.82**
26	80.42**	77.76**	72.39**

*raters differed significantly at the .05 level.

**raters differed significantly at the .01 level.

standard deviations reported in Table IV indicate wide variation in self-assessments. Student teachers assessed themselves considerably lower than they were assessed by the other raters (Table V). This was attributed in part to the student teacher's self concept; in part to how the student teacher perceived the factor in her implementation; and in part to a desire not to overrate herself. However, the range of means for all factors by all raters, 83.76 to 93.45, (Table IV) evidenced that student teachers as a group exhibited specified competencies in implementing instructional plans as assessed by three raters at or above the criterion 80.

A more precise breakdown of mean scores by all raters over all items is shown in Table V. The three raters assessed performance on all but two items above the criterion level. Items assessed below criterion level are items five and 26. An explanation of the possible reason for the researcher's assessment of item five was given earlier. Both student teachers and the researcher assessed performance on item 26--capitalizing on opportunities for teaching which occur unexpectedly--below the criterion level. Assessment means as portrayed by raters in Table V give credence to the findings that student teachers exhibited competency as judged by raters.

A correlation matrix (Table VI) was constructed to portray significant correlations among raters and factors. The matrix reveals that each rater's own assessments of the various factors were significantly intercorrelated at and beyond the .01 level. The intercorrelations among raters across different factors were not as high as those by raters across the same factors, but the intercorrelations among raters across factors which evidence significance at and beyond the .05 level

are recorded on the matrix.

The assessments of cooperating teachers and student teachers as well as cooperating teachers and researcher were significantly correlated at or beyond the .05 level for each of the four factors. Correlation between assessments of each of the four factors by student teachers and the researcher was significant at or beyond the .05 level on only one factor--pacing. These findings indicate that assessments of cooperating teachers had more in common with the assessments of the other two raters than the other two had with each other.

The magnitude of the interrater correlations on the same factors indicates a need for more in depth training of raters. Such training should be undertaken to insure that raters are in agreement on points to be assessed during performance. Further, such training would tend to clarify terminology, increase comprehension, and facilitate unbiased assessments that are as free as possible from excessive inference. Fewer raters with more extensive training as well as refinement of the instruments should improve the assessment process.

The high intercorrelations among factors shown in Table VI suggest that the factors could have been combined and assessed as one variable rather than four. Improving the assessment process could result in increased differentiation among the factors in future research.

TABLE VI

SIGNIFICANT CORRELATIONS BETWEEN FACTORS AND RATERS

Variables		Cooperating teacher				Student teacher				Researcher			
		1[a]	2	3	4	1	2	3	4	1	2	3	4
C.T.	1[a]												
	2	.93**											
	3	.85**	.78**										
	4	.93**	.94**	.84**									
S.T.	1	.62*		.64*	.70*								
	2	.87**	.76**	.80**	.88**	.84**							
	3			.64*		.90**	.79**						
	4	.79**	.70*	.73**	.88**	.92**	.95**	.85**					
Res.	1	.60*											
	2	.70*	.71**	.72**						.79**			
	3			.61*						.86**	.87**		
	4	.85**	.74**	.87**	.75**		.76**	.61*	.65*	.80**	.85**	.83**	

*significant at .05 level

**significant at .01 level

[a]single digit numbers represent factors: 1 - motivational approaches; 2 - student involvement; 3 - use of strategies and resources; 4 - pacing.

C.T. - cooperating teacher; S.T. - student teacher; res. - researcher

Description of Performance

The size of the sample for this investigation (n = 11) coupled with the number of items on which raters differed significantly (Table III) prompted the researcher to describe performance. Performance description in the context of the student teachers' professional training may provide some insight.

Motivational Approaches. Information gathered from previous studies and authors on teaching (Learning Laboratory Corporation, 1969; Bruner, 1963; Hall and Paolucci, 1971) have shown the importance of motivational approaches to effective teaching. The components of this factor, identified and assessed by items one through seven on the assessment measure (Appendix B) were directed toward setting the stage for learning. Educators generally agree that setting the stage for learning is an essential facet of the teaching-learning situation, yet the three raters differed significantly in their assessments of items making up this factor as shown in Table III. This difference raises questions about the measuring instrument and the raters' interpretation of the instrument.

Motivation, according to DeRoche (1971), is a teaching technique; and student teachers are in the process of developing teaching techniques. Student teachers are involved in experiences to promote competency attainment in developing instructional plans and implementing these plans. There are indications that student teachers need opportunities to develop expertise in visualizing what learners know and do when learning is accomplished. Student teachers, like other apprentices, find themselves in a state of becoming. They have studied

developmental tasks of learners; and have been exposed to the nature of environmental conditions that professional teachers should consider relative to the teaching-learning act; but they have not had sufficient opportunity to put their knowledge and skills into practice. As one student teacher said, "simulated situations with one's peers are fine but a class of 20 high school students presented a different situation." That revelation summed the situation accurately. Student teachers found themselves in an alien situation; one that required rapid role transformation--a transformation that required them to draw upon all their resources. The ability to utilize higher levels of actions from all three domains was needed. Involved was the need to synthesize aspects from a variety of sources including the total teaching-learning environment--learner, learning process, content (Goodlad, 1958).

Items one and three (Appendix B), capturing the student's attention and interest at the beginning of the class and establishing a frame of reference are closely related as indicated by their placement in factor 1--motivational approaches. Yet, raters differed significantly in their assessments of these items (Table III). This finding strengthened the need for refinement of the assessment measure.

Closely associated with items one and three is item seven which dealt with providing stimuli during the class. Observations of student teachers reveal that they have not fully accepted the fact that learning cannot be poured into students; that students must actively desire to learn; and that one of their great challenges is to provide stimuli for students.

The greatest magnitude of difference was observed in assessments of item five--exhibiting concern for students' needs. The researcher

assessed this item neutrally despite some recommendations for using high inference in determining teacher effectiveness (Rosenshine, 1970). The area under study--consumer rights and responsibilities--provided a source for meeting students' needs; but not particularly the felt needs of secondary students. Such a situation presented a greater challenge to student teachers in their ability to motivate students than would have been the case had the subject matter emphases been more concerned with students' felt needs or immediate goals.

Student Involvement. Student teachers' plans for and involvement of secondary students in the teaching-learning act evidenced competency attainment as assessed by all raters (Table V). Items eight through 13 were included in this factor and only one, item nine, revealed raters differing significantly in mean assessments (Table V). Item 9 dealt with open-ended inquiry; a technique which can lead far afield. Student teachers may have structured the learning activities to avoid an excess of this type of inquiry due to constraints. Constraints considered include time, amount of content to be covered, feelings of inadequacy on the part of the student teacher, and situational conditions.

Questioning as a fundamental skill is useful to students as well as teachers. Proficiency in questioning skills aids students in getting out of themselves and helps teachers stimulate and challenge learning. Creative thought-provoking questions which include open-ended inquiries have been useful in helping students use their imagination (Bell, 1969), e. g., process of synthesizing. As students seek answers to open-ended inquiries, they are aided in reorganizing information and experiencing phenomena.

Use of Strategies and Resources. Student teachers exhibited competency in utilizing a variety of strategies and resources in implementing instructional plans according to mean assessments of raters (items 14 - 21; Appendix B). These mean assessments (Table V) indicated that student teachers presented learning experiences so that each built upon previous experiences to provide a comprehensive whole (14); that they clarified statements when questioned so as to increase understanding among secondary students (15); and that student teachers worked toward developing a few generalizations in depth (16). Further, the raters' mean assessments show that student teachers had a variety of necessary and appropriate materials readily available (18); that they utilized a variety of methods to clarify ideas (19); that they planned for and provided varied and meaningful learning experiences to develop principles (20); and that the learning experiences made transfer of learning easy for secondary students (21).

Of the eight items (items 14 - 21, Appendix B) making up factor three--use of strategies and resources, raters differed significantly in their rating of only one, item 17 (Table V). Student teachers have perhaps had opportunity to experience more realistic involvement in the area of strategies and resources in their professional training than in areas relative to other factors. The structure of some courses in the professional home economics component of courses is of such nature as to provide these experiences--HEED 3313, HEED 4213.

Pacing Including Questioning Skills and Closure. Items 22 through 26 concerned with pacing as assessed by all raters (Table V) revealed one of the greatest sources of difference among raters. Four of the

five items making up this factor, reveal significant difference in rater assessments (Table V). Yet, all items except number 26 have mean assessments above the criterion level as assessed by all raters (Table V). Both the student teachers and the researcher's mean assessments for item 26 were below 80.

Pacing as used in this investigation, is rate of movement, progress, or development used by prospective home economics teachers in the teaching-learning situation in relation to the attending behavior and comprehension of secondary students. Student teachers have not had opportunity to develop the feel for rate of movement or "flow". Flow, according to Furlong (1976), results when one becomes immersed in what he is doing, thus losing a self-conscious sense of self. A person gains a heightened awareness of his involvement, his concentration increases, and his feedback is enhanced as he attains flow. As student teachers gain in experience they will probably be able to reach a state of flow more often and thus be able to do a more efficient job of pacing.

Pacing, like questioning, can help students project themselves into the process of learning. As a teaching strategy, pacing can allow student teachers to keep communication channels open so that thinking and interaction can be promoted. Student teachers expressed difficulty in pulling ideas together at strategic points and capitalizing on opportunities for teaching which occur unexpectedly. This condition was attributed to a lack of experience coupled with fear of failure. Student teachers have not become sufficiently confident in their own abilities to vary far from planned routines. Pacing skills are required if teachers are to help students experience phenomena and student teachers are in the process of developing these skills.

Secondary Student Learning

Pre- and posttests were administered to all secondary students who were members of the classes in which student teachers implemented instructional plans for this study. A total of 264 secondary students were tested; however, only 230 paired pre-posttests were utilized in the analysis. Some secondary students took the pretest but not the posttest; while some took the posttest but not the pretest. This accounted for the difference between students tested and the number of tests used in the final analysis. As stated earlier (Chapter III), different tests were used for pre- and posttesting; however, the same subject matter content was assessed by both tests. Gain scores resulting from testing were used as evidence of learning. Results of the testing revealed that an improvement of approximately three percent over all classes of all student teachers was recorded. It is assumed this gain, in part, can be attributed to competencies exhibited by student teachers. The whole of the gain cannot be attributed to influence of student teachers because other influences must be considered in a realistic situation, e. g., intellectual ability, environmental conditions, individual needs.

Scores on the pretest ranged from 11 to 30 points out of a possible 31 points. Range on the posttest was from a low of seven to a high of 31. An example of the pre- and posttest scores for one class can be found in the appendix (Table IX). A composite of the pre- and posttests scores, both ranges and means, is presented in Table VII.

Some student teachers expressed concern for the low percentage increase in scores of secondary students. However, with a pretest mean

of 21.49 and a ceiling of 31, the gain could not be large. There were 143 secondary students scoring 21 points or above on the pretest. The posttest mean was 23.89 which was a mean gain of 2.40. Of the 230 post-test scores used in the final analysis, 131 students scored 23 points or more on the posttest.

No provisions were made to counterattack absenteeism; but the problem of absenteeism was one that gave considerable concern to some of the student teachers. The question was raised as to how to deal with students who were present for both pre- and posttests, yet missed two of the three sessions in which implementation of instructional plans occurred. Such a situation can affect student response to test questions and ultimately affect the outcome of improvement for that class. In the process of coding and utilizing data for analysis, all paired pre- and posttests were used.

Evidence of student's regression toward the mean was also present as students who scored particularly high on the pretest tended to score somewhat lower on the posttest. The fact that pre-and posttests were scored on a right-wrong basis allowing only one possible alternative provided greater odds for guessing than would have been the case has possible answers been determined on a point graduating basis (Murphy, 1974).

Relationships Among Plans, Performance, and Secondary Student Learning

This investigation provided three sources of data for the final phase of the analysis--assessment of instructional plans, assessment of implementation of instructional plans, and secondary student learning.

Correlations computed between secondary student learning and other factors--assessment of instructional plans and implementation of these

TABLE VII

RANGES AND MEANS OF SCORES ON PRE- AND POSTTESTS FOR EACH STUDENT TEACHER

Student Teacher	Pretest Range	Pretest Mean	Posttest Range	Posttest Mean
1	11-30	21.75	12-29	23.82
2	12-26	22.43	14-31	23.91
3	12-23	17.27	7-26	16.87
4	12-31	21.82	16-28	22.45
5	20-29	24.23	20-30	24.69
6	13-28	21.64	11-30	23.14
7	10-28	21.29	10-29	22.68
8	16-29	22.96	13-28	22.81
9	11-24	17.75	8-30	23.75
10	19-31	24.42	15-31	24.96
11	13-28	20.70	12-29	21.50

Possible Score: pretest 31, posttest 31.

plans show no significant relationships (Table VIII). Correlations between student gain and only two factors as rated by the researcher even approached an acceptable level of significance (Table VIII). These factors are motivational approaches and use of strategies and resources.

Scattergrams of the researcher's assessments are found in Appendix H (Figures 1 and 2). These findings reveal no relationship between secondary student learning and competence in instructional planning or in implementing instructional plans.

TABLE VIII

CORRELATION OF SECONDARY STUDENT GAIN WITH FACTORS BY RATERS

Factor	Rater	Correlation	Significance level[a]
Instructional plan			
	Cooperating teacher	.09	.78
	Researcher	.06	.86
Motivational approaches			
	Cooperating teacher	.20	.57
	Student teacher	-.24	.52
	Researcher	.52	.10
Student Involvement			
	Cooperating teacher	.22	.53
	Student teacher	-.21	.54
	Researcher	.26	.55
Use of strategies and resources			
	Cooperating teacher	.08	.80
	Student teacher	-.12	.73
	Researcher	.52	.10
Pacing			
	Cooperating teacher	.07	.82
	Student teacher	-.18	.61
	Researcher	.28	.59

[a]Observed significance level for the test of the hypothesis.

Summary

Chapter IV has provided a detailed analysis and discussion of the findings of this investigation. The summary, conclusion, and recommendations are presented in Chapter V.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This investigation was concerned with the assessment of competency attainment of home economics education student teachers in implementing instructional plans. Assessment of teacher effectiveness has long been a concern of educators and educational training institutions. Recent developments in educational methods with trends toward competency-based education; trends toward accountability; and the desire of educators to continually increase the proficiency of graduates of educational institutions prompted the researcher to pursue this problem. The competency orientation of the home economics education program at Oklahoma State University and the declared intent of the State Department of Vocational Home Economics to move toward competency-based education were further influences in the choice of a study area. The researcher wanted to know if student teachers trained in the home economics education program had developed specified competencies in implementing instructional plans.

Literature reviewed relative to areas that were essential for pursuance of this study--competency-based teacher education, home economics education, assessment--revealed a great deal of confusion and conflict throughout the history of assessment of teacher effectiveness. Conflicting theories were also encountered in review of literature as to definition of competency-based teacher education, its criteria, and

processes. Likewise, the assessment/evaluation component of the education process presented its share of conflicts and uncertainties. The researcher could visualize possibilities for improving teaching methods in home economics professional courses through exploration and experimentation in the area of assessment. This study provided opportunities for the researcher to work with student teachers, cooperating teachers, and other teacher educators in verifying the appropriateness of developed assessment measures.

Summary

In an attempt to assess competency attainment in home economics education student teachers, three research questions were posed:

1) Do home economics education student teachers exhibit
   a) competency in instructional planning?
   b) specified competencies in implementing instructional plans?
2) Do secondary students gain in knowledge in classes taught by home economics education student teachers who exhibit specified competencies in implementing instructional plans?
3) Is there a relationship between home economics teachers' exhibition of specified competencies and secondary students' gain in knowledge?

Attempts to seek answers to these questions necessitated the development of three assessment measures and the training of raters to assess both plans and performance of student teachers.

Data were collected on 11 student teachers in eight participating vocational home economics centers in Oklahoma. These home economics

education student teachers volunteered to plan and implement plans in centers in which cooperating teachers had agreed to allow their student teachers and secondary students to participate in such a study. Student teachers developed instructional plans for a one week mini-unit on consumer rights and responsibilities. The scheduled mini-unit allowed one day for introducing the unit and pretesting; three days for implementing instructional plans; and one day for summarizing and posttesting.

Instructional plans were assessed by cooperating teachers and the researcher on a 10-item rating scale using a degree-of-certainty method. Student teachers then implemented their plans with secondary home economics II students who were pretested prior to implementation. Performances were assessed by cooperating teachers during implementation periods on a 26-item rating scale using the 99 degree-of-certainty method.

The 26-item rating scale was planned to assess four factors deemed essential to effective implementation of instructional plans. These factors were motivational approaches, student involvement, use of strategies and resources, and pacing. Performances, which had been audio taped, were later assessed by student teachers and the researcher from the tapes using the 26-item assessment measure.

Secondary students were posttested after the student teachers had implemented the three instuctional plans assessed for the study. Both pre- and posttests were developed by the researcher expecially for the mini-unit used for this study. The researcher also assessed instructional plans when the plans were returned to her; thus providing bases for comparison with the cooperating teachers' assessment of

instructional plans for establishing rater reliability.

Analyses of variance were performed over the two raters' assessments of instructional plans and over three raters' assessment of student teachers' performances in implementing instructional plans. Results of paired comparison t-tests revealed no significant gain in secondary student learning. Gain score was identified as evidence of learning. Correlations were computed to determine reliability among raters and to show relationships between secondary student learning and student teachers' ability in planning and performance.

Results from these analyses were used to answer the research questions and reveal the following answers.

Question I_a was concerned with student teachers' ability in instructional planning. Home economics education student teachers exhibited competency in developing instructional plans as assessed by cooperating teachers and the researcher. There was a high correlation ($r = .97$) between mean assessments of the two raters (92.32 and 91.88). Means revealed that student teachers, as a group exhibited ability to do planning well above the criterion level of 80.

Question I_b dealt with student teachers' performance--exhibiting specified competencies in implementing instructional plans. Student teachers as a whole exhibited specified competencies in implementing instructional plans as revealed by mean assessment scores of all raters on all factors (Table IV). However, a review of the minimum and maximum mean values reveal that individual performances as assessed by different raters were not always up to the criterion of 80.

Question II was concerned with secondary student learning. Secondary student learning was evidenced by gain score of posttest over

pretest. The gain as reported, approximately three percent, was for all classes of all student teachers. Not all secondary students' pre- and posttest results showed gain. Overall, there was gain which indicated that secondary students did gain in knowledge in classes taught by student teachers while implementing their instructional plans.

The emphasis of Question III was the relationship between student teachers' exhibition of specified competencies and secondary students' gain in knowledge. Correlations computed between secondary student learning and other factors--assessments of instructional plans and performance showed no significant relationships.

These findings are discussed more fully in the conclusions and recommendations.

Conclusions

The findings of this study indicated that the assessment measures developed for assessing competency attainment have applicability for the assessment of student teachers' ability in planning and performance. The utilization of the measures in this investigation provided information on assessments by three raters and the measure of secondary student learning.

The assessments of cooperating teachers and the researcher on instructional plans revealed a high correlation between raters. This correlation indicated that raters--cooperating teachers and researcher--were assessing similar aspects with similar comprehension and interpretation. Assessment of performance by three raters--cooperating teachers, student teachers, and researcher--revealed significant difference on several of the items on the assessment measure. This

difference among raters indicated the need for refinement of the assessment measure, revision of the rating system, changes in the method of training raters, or a combination of several of these aspects.

Student teachers as a whole evidenced competency attainment in both planning and performance as assessed by raters. The gain score of secondary students indicated that learning occurred. However, the analysis of data revealed no significant relationships between secondary student learning and student teachers' abilities in planning and performing in the classroom.

Recommendations

The completion of this study with its many limiting facets and its small sample size provided insights into many of the intrinsic as well as extrinsic problems in the assessment process. The researcher recognized that the study took place under two restricting influences, small sample and the inability to randomize. In spite of these restrictions, certain valuable guidelines have emerged.

It seems feasible to the researcher that the study should be repeated until a creditable sample size can be accumulated. Both the rating system and the training of raters should be improved. With these recommendations are several sub-recommendations which seem advisable at this point:

1) confer with participating cooperating teachers and student teachers either verbally or through correspondence for feedback on the process utilized by them. Such conferences should provide information that would be helpful in improving rating

systems, rating scales, and rater training for future investigations.

2) share findings from conferences with home economics education staff and then plan with staff for improving the assessment process.

3) revise assessment measures as needed.

4) plan and implement training sessions for all persons who may assess performance of student teachers in future investigations including college supervisors.

The researcher recommends that for future assessments of student teachers' performance, assessment periods should be planned and scheduled to allow college supervisors to do the assessing while visiting student teachers in participating centers. The thrust toward competency-based education and the cry for accountability make it desirable for prospective teachers to develop competency in assessing programs, students, and themselves. The researcher, therefore, recommends that rater training be incorporated into the methods classes taken by home economics education majors at OSU--particularly Curriculum and Methods of Teaching Home Economics and Media, Materials and Techniques in Home Economics Education.

The researcher also recommends that the possibilities of cooperative endeavors in assessment should be investigated. The process of effective evaluation is both time consuming and expensive. A cooperative venture with other teacher training institutions in the state, could lighten the burden of all institutions as well as provide a data bank which could be utilized by a great number of people. Such a step would necessitate the development of sufficient controls as well as a design permitting cooperative research. An acceptable extension of the

research effort could broaden the scope of persons and institutions sampled thus creating greater generalizability of results.

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APPENDIX A

CORRESPONDENCE FOR OBTAINING DATA

OKLAHOMA STATE UNIVERSITY • STILLWATER

Department of Home Economics Education
372-6211, Ext. 486

74074

2 May 1975

Dear Cooperating Teacher:

In an effort to meet one of the challenges confronting Teacher Education, I am proposing to assess a specific competency component of Home Economics Teacher Education at Oklahoma State University. In order to assess this component, I must develop and evaluate an assessment measure. But, I need your cooperation. The specific competency to be assessed is "Implementing Instructional Plans"--a vital aspect of teacher effectiveness.

Your role in the development and evaluation of this assessment measure will involve your

1) scheduling so as to allow the student teacher to introduce and teach a one week unit in consumer education at Home Economics II level;

2) checking rating scales
   a) rating the proposed instructional plans of the student teacher, and
   b) rating the performance of the student teacher in implementing the instructional plans; and

3) permitting the student teacher to audio tape her performance for self assessment and for review by the researcher.

This assessment is not to influence the overall evaluation of the student teacher's performance while practicing in your center. This component of her experience is to check the validity and reliability of the assessment measure.

This phase of the student teaching experience should be planned for the latter part of the student teaching period so as to give the student teacher an opportunity to become familiar with the students, the environment, and teaching--preferably the fifth or sixth week of the student teacher's stay in the center.

I would greatly appreciate your cooperation. Specific details of the project will be shared with you at our fall cooperating teachers' conference.

May I count on your cooperation in this project? Will you take a few minutes to read and check the enclosed postal card and return it to me at your earliest convenience? If you have questions, please write them on the card that you are returning.

Sincerely,

Bettye J. Gaffney

Bettye J. Gaffney,
Graduate Student.

Elaine Jorgenson

Elaine Jorgenson,
Major Advisor.

Enclosure

Date _____

I will participate in the assessment project. _____

I will not participate in the assessment project. _____

Signed _____

School _____

OKLAHOMA STATE UNIVERSITY • STILLWATER
Department of Home Economics Education 74074
(405) 372-6211, Ext. 486

7 February 1976

Dear Cooperating Teacher:

Last spring we appealed to you for your cooperation in a research project planned to assess competency attainment of student teachers in implementing instructional plans. Details of the project were shared with you during the fall cooperating teachers meeting. Materials developed for the project were field tested in some of the centers during the fall student teaching period and are presently being refined for use this spring.

There are a few answers we need from you in order to have all of the needed supplies ready for smooth operation in implementing the project. Will you answer the questions on the enclosed postal card and return it to us at your earliest convenience?

The mini-unit is planned in consumer education--specifically "Consumer rights and responsibilities". The content is general enough that student teachers, with your guidance, can incorporate it into almost any area of study by using specific examples from the area of study planned following its completion.

Do let us have your reply soon and thank you for participating. Please feel free to contact us if you have questions.

Sincerely,

Bettye J. Gaffney

Bettye J. Gaffney,
Graduate Student,

Elaine Jorgenson

Elaine Jorgenson,
Major Advisor.

G..
Enclosure

Please fill in the blanks and circle the appropriate type identifying the recorder you have in your school.

1. There is/are _____ section(s) of Home Economics II in our school.

2. There are _____ students enrolled in Home Economics II in our school.

3. We have a cassette reel-to-reel tape recorder available for use.

Signed _____

School _____

M E M O R A N D U M

DATE 10 June 1976

TO Home Economics Education Staff

FROM Bettye J. Gaffney

SUBJECT Establishing Reliability: Assessing Instructional Plans.

Will you please assess the attached lesson plans on the bases of the accompanying rating scale. This is an attempt to establish my reliability in rating lesson plans.

Your cooperation will be greatly appreciated.

APPENDIX B

RATING SCALES

RATING SCALE

COMPLETED LESSON PLAN

The purpose of this rating scale is to provide you an opportunity to assess the student teacher's completed lesson plan in relation to her choice of learning experiences; choice and use of resources; adjustment to and modification of constraints in the learning environment; and plans for assessing student progress. Please respond to each of the following statements.

If you agree with the statement completely, write 99 in the space near the statement.

If you disagree with the statement completely, write 1 in the space near the statement.

If you neither agree nor disagree with the statement, write 50 in the space near the statement.

A recording from 51 to 98 indicates the degree of your agreement with the statement.

A recording from 2 to 49 indicates the degree of your disagreement with the statement.

You are free to use any number from 1 to 99 which best reflects your opinion. Please respond to each statement. The general scale is shown below.

1	50	99
Disagree completely	Neither agree nor disagree	Agree completely

The student teacher selected learning experiences, strategies, and resources that are

1. relevant to the content area being emphasized. _____ 1.
2. appropriate for aiding students in reaching specific objectives. _____ 2.
3. feasible in terms of resources and constraints. _____ 3.
4. sequential in that they lead to greater depth of understanding. _____ 4.
5. planned to make transfer of learning to real life situations easy. _____ 5.
6. planned to facilitate continuity in the teaching-learning situation. _____ 6.
7. capable of providing full meaning and use of significant concepts, values, and skills. _____ 7.
8. stimulating and motivating to the students. _____ 8.
9. planned to increase student involvement and student learning. _____ 9.
10. developed to allow for assessment of student progress. _____ 10.

IMPLEMENTING INSTRUCTIONAL PLANS

RATING SCALE

The purpose of this questionnaire is to provide you an opportunity to assess the student teacher's competency in implementing instructional plans. Please respond to each of the following statements in terms of your agreement in light of the student teacher's performance in implementing instructional plans.

If you agree with the statement completely, write 99 in the space near the statement.

If you disagree with the statement completely, write 1 in the space near the statement.

If you neither agree nor disagree with the statement, write 50 in the space near the statement.

A recording from 51 to 98 indicates the degree of your agreement with the statement.

A recording from 2 to 49 indicates the degree of your disagreement with the statement.

You are free to use any number from 1 to 99 which best reflects your judgement. Please respond to each statement. The general scale is shown below.

1	50	99
Disagree completely	Neither agree nor disagree	Agree completely

The student teacher

1. captured the student's attention and interest at the beginning of the class. ____ 1.
2. clearly defined the objectives at the beginning of the class. ____ 2.
3. established a frame of reference for the concepts and generalizations to be studied. ____ 3.
4. explained the relationship between the lesson being taught and real life situations. ____ 4.
5. exhibited concern for students' needs. ____ 5.
6. evidenced conscientious preparation for teaching the lesson. ____ 6.
7. provided continual stimuli during class to motivate students and encourage them to carry through their ideas. ____ 7.
8. involved students in the learning process. ____ 8.
9. provided opportunities for open-ended inquiry. ____ 9.
10. guided students to state generalizations or conclusions. ____10.
11. asked for and accepted student's viewpoints. ____11.
12. asked questions that required students to use higher cognitive processes, i.e., describe, translate, apply, analyze, evaluate, justify ____12.
13. asked questions to pinpoint important information. ____13.
14. presented learning experiences so that each built upon previous experiences to provide a comprehensive whole. ____14.

IMPLEMENTING INSTRUCTIONAL PLANS

RATING SCALE

The purpose of this questionnaire is to provide you an opportunity to assess the student teacher's competency in implementing instructional plans. Please respond to each of the following statements in terms of your agreement in light of the student teacher's performance in implementing instructional plans.

If you agree with the statement completely, write 99 in the space near the statement.

If you disagree with the statement completely, write 1 in the space near the statement.

If you neither agree nor disagree with the statement, write 50 in the space near the statement.

A recording from 51 to 98 indicates the degree of your agreement with the statement.

A recording from 2 to 49 indicates the degree of your disagreement with the statement.

You are free to use any number from 1 to 99 which best reflects your judgement. Please respond to each statement. The general scale is shown below.

1	50	99
Disagree completely	Neither agree nor disagree	Agree completely

15. clarified statements when questioned on specific points or rephrased content when it was not understood. ____ 15.
16. provided comprehensiveness by developing a few generalizations in depth. ____ 16.
17. presented information in different ways to clarify intent for students. ____ 17.
18. had a variety of necessary and appropriate materials readily available. ____ 18.
19. used a variety of methods to clarify ideas, i.e., questions, examples, comparisons. ____ 19.
20. planned and provided varied meaningful learning experiences to develop principles presented. ____ 20.
21. provided learning experiences that made transfer of learning easy for students. ____ 21.
22. asked thought provoking questions to stimulate student thinking. ____ 22.
23. made questions clear and easily understandable. ____ 23.
24. exhibited an excellent sense of pacing by changing the mode of presentation as needed to promote thinking and interaction among students. ____ 24.
25. pulled ideas together at strategic points. ____ 25.
26. capitalized on opportunities for teaching which unexpectedly occur. ____ 26.

APPENDIX C

INSTRUCTIONS FOR STUDENT TEACHERS

COMMON INSTRUCTIONAL PLAN

Content Area: Consumer Education

Concepts: Consumer Rights
Consumer Responsibilities

Terminal Objective: At the completion of this unit students will be informed of their consumer rights and responsibilities. This informative stage is intended to motivate students to seek further insights and means for developing their own consumer competencies.

Specific Objectives: Learning activities are planned so that students will be better able to:

1. Define selected consumer terms.
2. Identify consumer rights.
3. Cite consumer responsibilities.
4. Match consumer responsibilities with related consumer rights.
5. Examine consumer situations and select appropriate measures for handling these situations.

Rationale

Through the teaching-learning activities of this consumer education unit, it is hoped that students will be better able to improve their quality of living. The typical consumer today has become so specialized that he must rely on others to help him make meaningful free choices. There are so many goods and services available that it is necessary to know about many in order to take advantage of a few. By the time a consumer learns the proper selection, use, care and maintenance of a product, it may either no longer be available or has changed drastically.

Although students spend a large part of their time in consumer related activities, they often are taught very little that will be

helpful to them in the marketplace. Often they are not informed of their consumer rights; where to go to have their grievances resolved; or how to get information. Educators really cannot blame young people for doubting the relevance of their school work. As students watch television, they are reminded of consumer rip-off, contaminated foods, health and safety hazards, and environmental breakdown. Yet, little in their daily studies may deal with these critical problems.

Educators generally agree that it is more important to help students develop a philosophy of values and purposes than to spend time training for specific skills in buymanship. Intelligent attitudes toward consumer problems when bolstered with current facts and information provide a sound approach to the problems of consumers. Awareness of consumer problems, consumer rights, and consumer responsibilities; and an understanding of consumer protection and where to get help are of more value than knowing what product has the highest consumer rating.

People of all ages are consumers and need to be informed of their rights and responsibilities. The best way for the consumer to protect himself is to know his consumer rights and accept his consumer responsibilities. He is then more likely to seek consumer protection; thus increasing his consumer competency.

SUGGESTIONS FOR STUDENT TEACHERS

Here are suggestions that are intended to facilitate the process as you progress through this teaching-learning experience.

1. Plan specific objectives to reach the identified broad specific objectives listed on the guide plan.

2. Plan teaching strategies for helping your students reach the objectives you have identified. Make sure these are expressed/explained in your lesson plans.

3. Your lesson plans should follow the format used in HEED 3313 and HEED 4213.

4. Have your lesson plan evaluated by your cooperating teacher before implementing it with your students.

5. Revise your lesson plan in light of suggestions from your cooperating teacher.

6. Remind your cooperating teacher to assess your lesson plan on the rating scale provided for this purpose.

7. Experiment with the tape recorder before the class period to be recorded so that you are familiar with its operation and can try out different placement locations for best results. Tape a session prior to the sessions to be evaluated.

8. Introduce the unit and pretest your students.

9. Teach three lessons--one each day--taping each performance. Evaluate your performance by listening to the tape and assessing the performance on the rating scale provided.

10. Rating scales for both the lesson plan and your implementation of that plan have been colored coded to identify the session, i.e., first performance--green; second performance--yellow; third performance--pink.

11. Posttest your students.

12. Return all materials to the researcher--lesson plans, lesson plan assessments, performance assessments for both cooperating teacher and student teacher, and tapes of the student teacher's performance.

13. Work cooperatively with your teaching partner to be sure that the tape recorder is in good working condition and that it is turned on for each of your recording sessions.

14. Do not forget to turn the cassette during the middle of the session as you only have 31 minutes of recording time on each side.

15. Remember that all of the information requested is required if it is to be utilized in final report.

16. Be sure that you reply to each question on the rating scale. If you have uncertainties, write 50 in the blank provided for answering the question concerned.

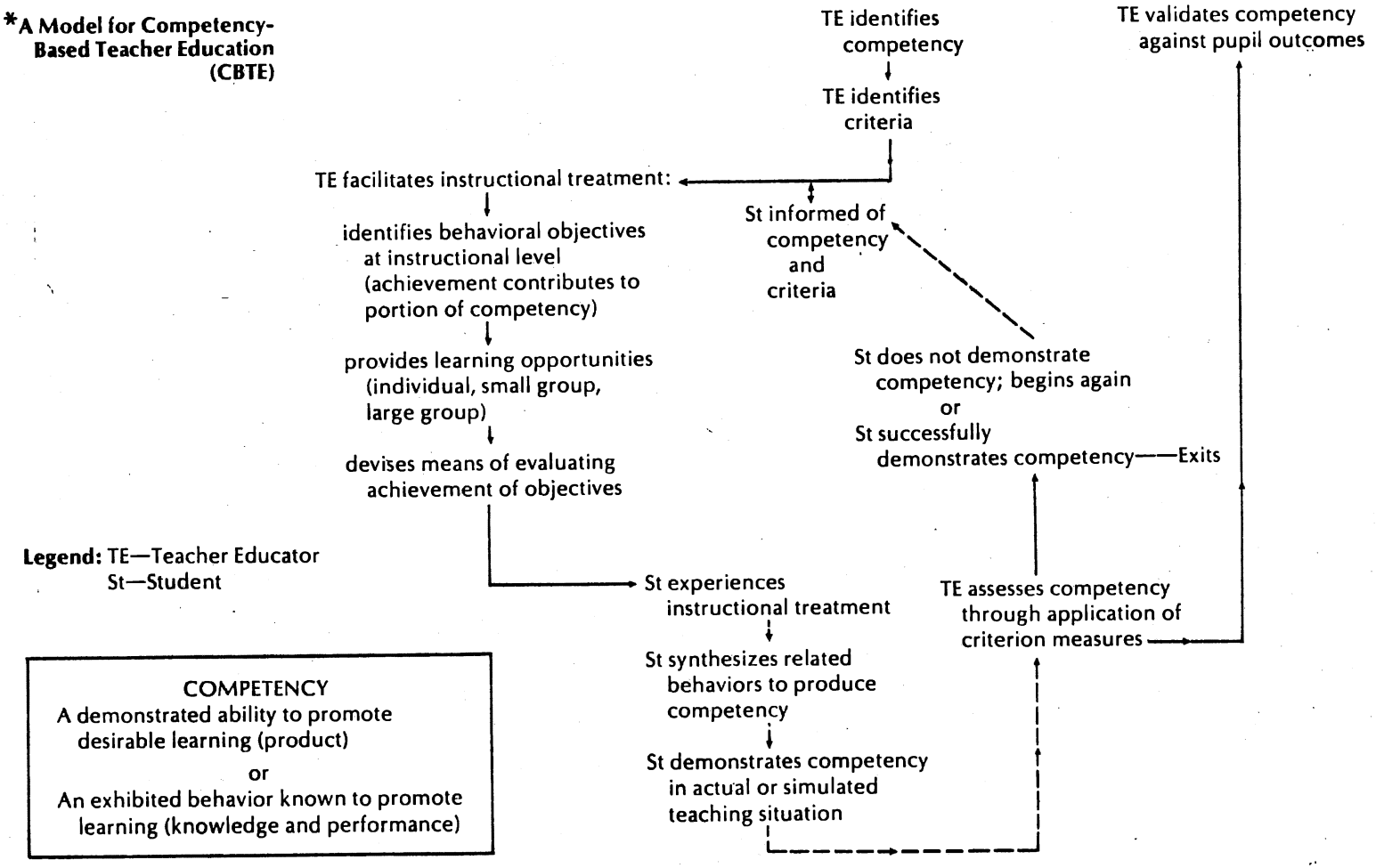
You are being supplied with a compilation of consumer education materials to help you plan and teach this mini unit. You will find illustrative ideas, enrichment activities, and information to help you select concrete examples for home economics content areas that you may teach following this unit.

Good luck and thank you for participating in this experiment.

APPENDIX D

MODEL FOR COMPETENCY-BASED TEACHER EDUCATION

***A Model for Competency-Based Teacher Education (CBTE)**

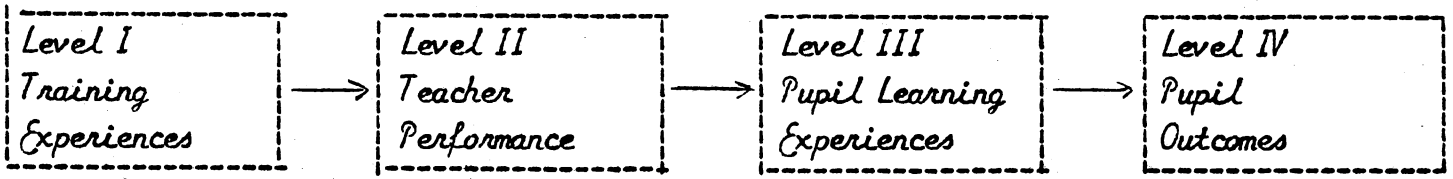


* Kohlmann, L. A Model for competency-based teacher education. Journal of Home Economics, 1975, 8 (4), p. 20.

APPENDIX E

A SIMPLE PARADIGM

A SIMPLE PARADIGM*



Assessment Levels in Teacher Education

* Medley, D. M., Soar, R.S., and Soar, R. Assessment and Research in Teacher Education. PBTE Series. Washington, D. C.: American Association of Colleges for Teacher Education, 1975., p. 2.

APPENDIX F

REFERENCES: CONSUMER EDUCATION

REFERENCES: CONSUMER EDUCATION

Books

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APPENDIX G

ADDITIONAL TABLES

TABLE IX

PERFORMANCE OF SECONDARY STUDENTS
OF ONE STUDENT TEACHER

Secondary student	Student teacher	Pretest	Posttest
001	1	11	12
002	1	15	17
003	1	22	27
004	1	30	28
005	1	21	19
006	1	28	26
007	1	20	22
008	1	29	26
009	1	27	28
010	1	21	28
011	1	16	23
012	1	20	22
013	1	24	24
014	1	25	29
015	1	21	23
016	1	24	26
017	1	15	25

Pretest Mean: 21.71

Posttest Mean: 23.82

Mean Gain: 2.11

TABLE X

ANALYSIS OF VARIANCE FOR ITEM 1 ON
ASSESSMENT MEASURE

Source	D.F.	Mean Square	F
Rater	2	216.4040	5.27*
Session[a]	6	41.0505	
Residual	90	115.3393	
Total corrected	98	112.8536	

[a]used as error term

*significant at the .05 level

APPENDIX H

SCATTERGRAMS

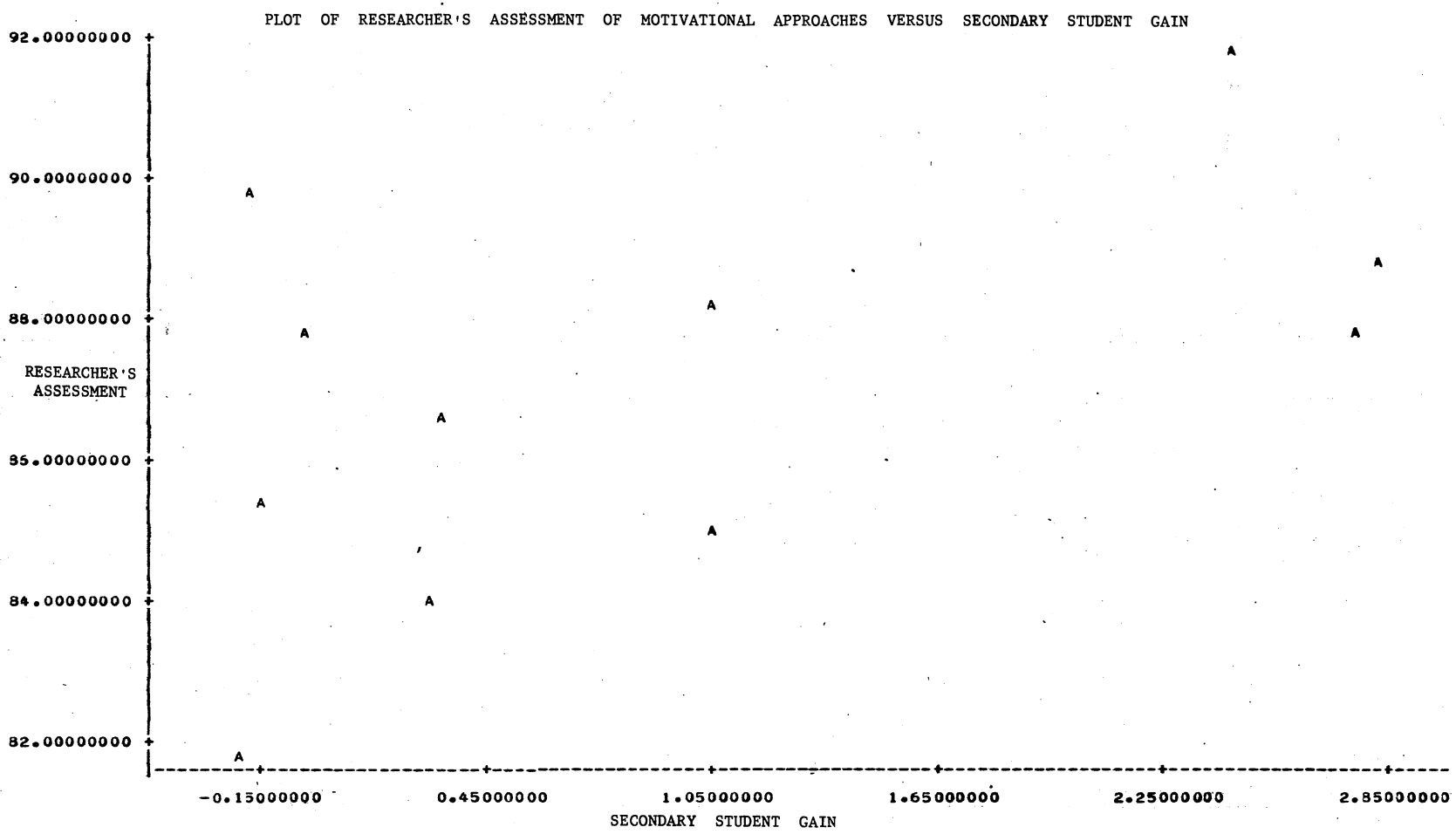

Figure 1. Plot of Researcher's Assessment of Motivational Approaches Versus Secondary Student Gain

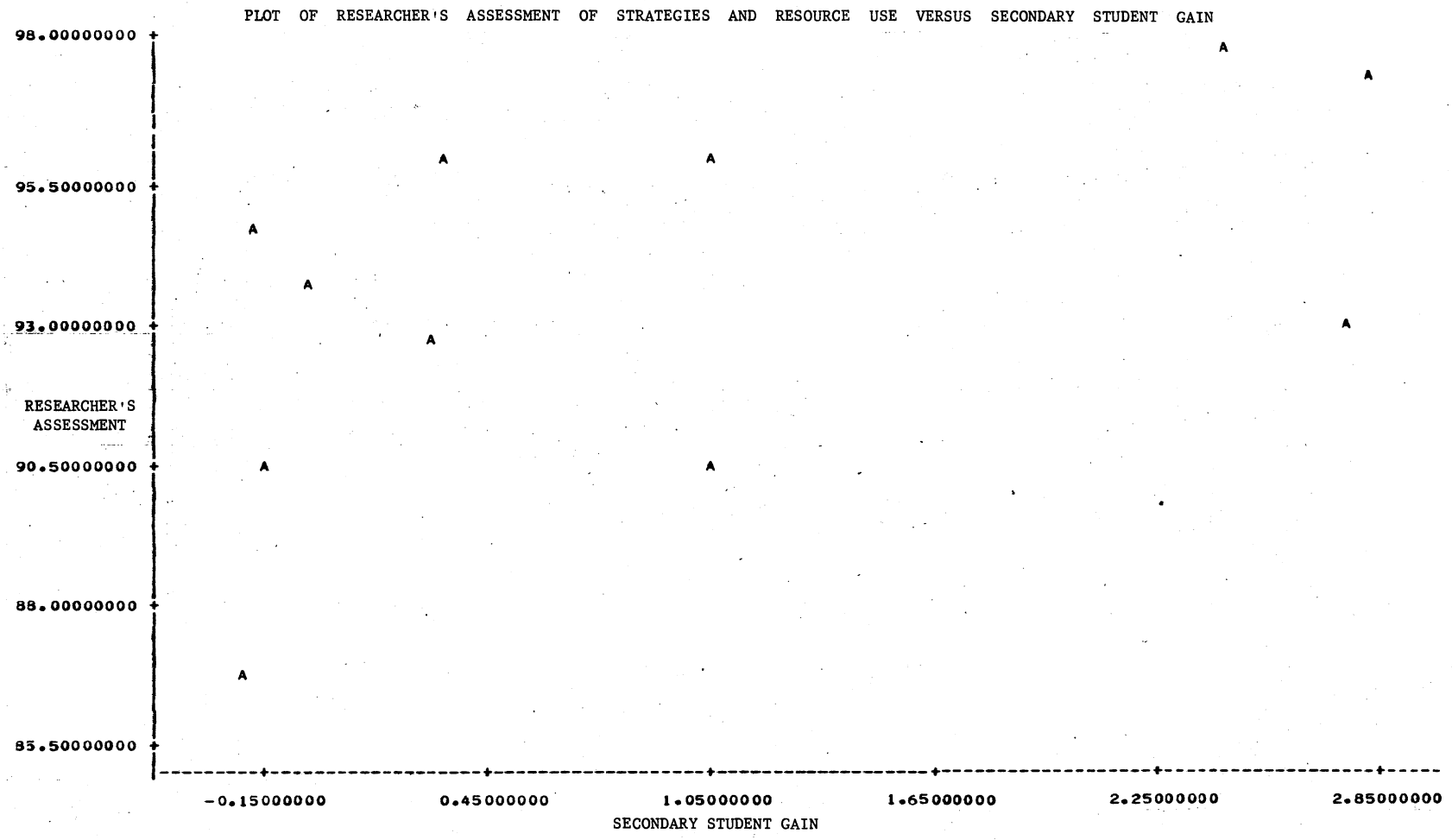

Figure 2. Plot of Researcher's Assessment of Strategies and Resource Use Versus Secondary Student Gain

VITA 2

Bettye J. Gaffney

Candidate for the Degree of

Doctor of Education

Thesis: ASSESSING COMPETENCY ATTAINMENT IN PROSPECTIVE HOME ECONOMICS TEACHERS IN IMPLEMENTING INSTRUCTIONAL PLANS

Major Field: Home Economics Education

Biographical:

Personal Data: Born in Idabel, Oklahoma, 3 December 1928.

Education: Attended elementary school in Laredo, Texas, and Idabel, Oklahoma; graduated from Booker T. Washington High School, Idabel, 1946; received the Bachelor of Science degree from Langston University, Langston, Oklahoma, with a major in Vocational Home Economics, 1950; attended school at Miami University, Oxford, Ohio, summer 1953; received the Master of Science degree from Oklahoma State University with a major in Home Economics Education, summer 1962; attended Iowa State University, Ames, Iowa, summer 1975; completed requirements for the Doctor of Education degree, fall 1976.

Professional Experience: Taught Vocational Home Economics at Tatums School, Tatums, Oklahoma, 1950-1960; taught Vocational Home Economics at L'Ouverture High School, McAlester, Oklahoma, 1960-66; taught Vocational Home Economics at McAlester Senior High School, 1966-73; coordinated 4-C Day Care Centers, McAlester, summer 1970; taught as part-time Instructor in Home Economics Education at Oklahoma State University, 1973-76; presently am Assistant Professor in the Department of Home Economics Education in the Division of Home Economics at Oklahoma State University.

Professional Organizations: American Home Economics Association, Oklahoma Home Economics Association, National Education Association, Oklahoma Education Association; American Vocational Association, Oklahoma Vocational Association, American Association of University Women, National Association of

Teacher Educators of Home Economics, Oklahoma Association of Teacher Educators, National Association of Postsecondary and Adult Home Economics Educators, Alpha Kappa Alpha, Phi Delta Kappa, Phi Upsilon Omicron, Omicron Nu.