CLOTHING LABORATORY MANAGEMENT PROBLEMS OF OKLAHOMA VOCATIONAL CONSUMER AND HOMEMAKING TEACHERS

By

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CHAPTER I

INTRODUCTION

Management of a clothing laboratory in the secondary school requires careful organization in order to insure that learning will occur. According to Kauffman (1930, p. 122) "management is the ability to look ahead and to think out plans that will give best results for the energy, time, and money used." Management is a complex process that is compounded when the areas to be managed are increased. Clothing laboratory teachers are faced with a multi-faceted unit involving the management of time, space, equipment and students. One teacher with 25 to 30 students may be faced with individual fitting problems, machine repairs, individual construction problems, and upkeep of facilities and supplies during a single class period (Mills, 1961).

Dolly and Meredith (1977) reported that many instructional models assume skills and knowledge on the part of teachers not normally provided in teacher education programs. Home economics teacher educators at Oklahoma State University indicated that clothing laboratory teachers lack high level competency in classroom management skills. Further research in the area of clothing laboratory management could contribute to the identification and solving of management problems, thus providing specific management tools for the clothing laboratory teacher.

Purpose

The purpose of the study was to identify problems related to and skills needed in managing a clothing laboratory on the secondary level and to make recommendations for a unit on clothing laboratory management to be used in clothing courses taken by students in the home economics teacher education program at Oklahoma State University.

Limitations

Participants in the study were limited to a random sample of secondary vocational consumer and homemaking teachers in the state of Oklahoma during the spring of 1979.

Definition of Terms

The following are definitions of terms as used in the study:

Clothing laboratory - Unit or area located in a teaching institution which provides space and equipment for the experimentation, manipulation and construction of clothing items.

Competency - Proficiency or skill in a given field or area.

Management - Planning the use of resources and then implementing the plans to meet demands (Deacon and Firebaugh, 1975).

Vocational consumer and homemaking teachers - Teachers certified to teach vocational consumer and homemaking education as defined in Public Law 90-576.

CHAPTER II

REVIEW OF LITERATURE

The study dealt with management of a clothing laboratory in the secondary school. Four major areas were reviewed and discussed: management problems of teachers, management problems of home economics teachers, management of classroom space, and management of time in the clothing laboratory.

Management Problems of Teachers

Many researchers have conducted studies to identify teacher perceived problems. Most of the researchers studied the problems of student teachers or first-year teachers. Problems of these teachers which were related to classroom management are discussed in this section.

Wey (1951) conducted a study to provide data for improving the pre-service and in-service teacher education program at Appalachian State Teachers College. The sample was composed of ninety-five first-year teachers and their principals or supervisors. Difficulties encountered by the first-year teachers were reported at three intervals during the teaching experience by both the teachers and their supervisors. A report form containing a space for describing the difficulty and a space for checking whether or not the difficulty had been solved was used. Half of all the problems noted were in only eight of the

fifty-five areas included on the report form. The eight difficulties were ranked in descending order and included:

1) Handling problems of pupil control and discipline
2) Adjusting to deficiencies in school equipment, physical conditions, and materials
3) Adjusting to the teaching assignment
4) Adapting to the needs, interests, and abilities of pupils
5) Motivating pupil interest and response
6) Keeping records and making reports
7) Handling broader aspects of teaching techniques
8) Being able to establish and maintain proper relations with supervisors and administrators (Wey, 1951, p. 33).

In conjunction with the National Education Association, Lambert (1956) surveyed 2,600 first-year teachers to determine the types of help they believed they needed. Those items pertaining to classroom management which were mentioned most often included keeping and completing required records and reports and handling problems of discipline. Segall (1966) also found that keeping records and completing reports was a common problem among first-year teachers.

Problems of beginning elementary school teachers in the Indianapolis public school system were studied by Tower (1956). Elementary teachers and consultants were asked to indicate the amount of help beginning teachers needed and received on 52 problems. The problems were classified as either personal, human relations, classroom management, materials and supplies, instruction, or evaluation. Beginning teachers believed they needed the most help with materials and supplies, while the principals and consultants believed help was needed with instructional problems. Participants were also asked to list the problems they believed were most pressing. Discipline and classroom organization were the problems listed most often. Other management related problems included keeping records and reports and teaching

large classes. The beginning teachers also noted that more help was needed than was received with all classroom management problems.

Management Problems of Home Economics Teachers

Research has been conducted in an attempt to identify competencies needed for successful teaching and some research in this area has been done in the field of home economics. A review of the literature did not reveal studies devoted entirely to clothing laboratory management; however, general home economics management competencies and problems have been identified.

Beasley (1969) studied the problems of first-year home economics teachers and found that more than one-half of the respondents noted problems in managing time and other resources. The six problems identified most frequently were:

1) keeping resource files organized and up-to-date
2) classes too large for effective learning
3) determining annual and long-term needs for facilities and equipment
4) overload in number of classes so that teaching is impaired
5) teaching space and facilities that interfered with learning
6) securing equipment and textbooks (Beasley, 1969, p. 28).

Williams (1969) studied the effectiveness of the student teaching experience and found that weaknesses existed in the areas of management, specifically in making reports, budgeting, maintaining professional files, and requesting and/or ordering equipment and supplies. The top ten problems of first and second year home economics teachers in Nebraska were identified by Rader (1961). Two of these pertained to equipment and management. Selecting new textbooks and equipment was ranked as the number one problem and determining long-time and annual

needs for facilities and equipment was ranked number four (Rader, 1961, p. 27).

Spencer (1963) surveyed twenty-one state and city home economics supervisors in Indiana and New York in an attempt to determine the professional attributes that contribute to successful teaching. The characteristics of successful teachers as identified by this group were "having well planned lessons, being able to manage a class well, having excellent rapport with the students, taking every opportunity to study and learn, and cooperation with the school and community" (Spencer, 1963, p. 18). The supervisors also noted that home economics teachers were weak in planning and organizing work and communicating the contributions and significance of home economics to others.

Problems of first-year home economics teachers as perceived by the teachers themselves, the supervisors, and the administrators were identified by Penrod (1974). In a composite list of problems as rated by the three groups, motivating students of all ability levels was ranked as the major problem. The management problems identified varied among the respondents. Lack of experience in handling discipline problems and developing a fair grading system were among the top ten problems identified by the teachers. The supervisors identified properly caring for all laboratory equipment and making minor repairs on sewing machines as two of the top ten problems. Administrators felt that anticipating and planning for change was an area that caused teacher problems.

Management of Classroom Space

Planning and using available classroom space is an educational

responsibility of the teacher in any learning situation. The classroom setting must meet the physical needs of today and be adaptable for the unforeseen demands of the future (Taylor and Christian, 1965). Chamberlain and Kelly (1975, p. 23) stated that "the physical facilities, including the amount and accessibility of available space and equipment, affect the learning activities that can be carried out." The arrangement of physical facilities affects the activities and work of the teacher and students.

Flemington (1932) found that improvements in space and equipment for home economics classes followed the development and revision of the home economics curriculum. The relationship between the teaching environment and the goals to be attained became an area of consideration. Factors to consider when measuring goals in relation to the home economics environment include:

1) the ideals considered important in homemaking
2) the standards present or attainable with reasonable effort
3) a definite idea as to what is good teaching in home economics (Spafford, 1935, p. 294).

Oppert (1972) indicated that the curriculum should be the basis from which physical plans for a department are made. The curriculum will dictate the specific features needed for instruction. Oppert (1972) also found that "curriculum-centered" planning resulted in flexibility and expansibility in school departments and buildings. Fundamentals for planning must include:

1) learning (basic goals of education)
2) school's philosophy
3) teacher's philosophy
4) home economics curriculum
   a. overall teaching objectives
   b. basic subject areas

c. objectives for each subject area
d. learning experiences

5) home economics space and equipment (p. 215).

Class size is an element in planning space and equipment. Chamberlain and Kelly (1975) found that in large classes a lack of space and insufficient equipment kept all students from working at once. Several researchers (Spafford, 1935; Chamberlain and Kelly, 1975) indicated that machine and table space with good lighting and fresh air should be available for each student.

Educational trends indicate that the modern school is becoming a flexible and informal place for students to learn and grow. Oppert (1972, p. 22) reported that flexibility is composed of various types of space including:

1) expansible space - space allowing for ordered growth
2) convertible space - space economically adaptable to program changes
3) versatile space - space serving many functions
4) malleable space - space that can be changed "at once and at will."

Storage space is a definite need in the clothing laboratory. Space is needed for student projects, supplies, equipment, and files. Spafford (1935) noted that adequate storage contributed to the ease and care of the department, protected unused supplies and equipment and aided in the teaching of system and order.

Management of Time in the Clothing Laboratory

Class length imposes a limitation on classroom activities.

Gaffney (1962) noted that the length of the class period, the time allotted for each unit, the requirements for acceptable standards and the capabilities of the students were factors to consider when planning time use in the clothing laboratory. Gaffney also stated that a clothing construction unit with emphasis in time management should provide students the opportunity to:

1) make decisions in the selection of patterns, fabrics, construction methods, and ways of expressing individuality
2) make a plan of work and follow that plan
3) develop a degree of self-sufficiency and independence
4) share and work cooperatively with others
5) evaluate personal progress
6) establish standards based on values
7) practice being a purchaser and user of consumer goods (p. 9).

Planning activities for a single period homemaking class involves adhering to objectives and planning so that more time is spent on laboratory work than on discussion (Wynn, 1934).

Summary

Classroom management problems have been studied by many researchers. Several found that completing required records and reports were common problems of first-year teachers. Discipline was also cited as a problem in classroom management.

Researchers in home economics have studied management in the home economics classroom. Managing time and other resources was a problem encountered by home economics teachers. The ability to motivate students of all ability levels was a major problem noted by one researcher. Another problem area was anticipating and planning for change in the classroom.

CHAPTER III

METHOD AND PROCEDURE

The purpose of the study was to identify problems related to and skills needed in managing a clothing laboratory on the secondary level and to make recommendations for a unit on clothing laboratory management to be used in clothing classes taken by students enrolled in the home economics teacher education program at Oklahoma State University. To accomplish this objective, data were collected by means of a questionnaire (Appendix A, p. 57).

Description of Sample

Participants in the study were Oklahoma vocational consumer and homemaking teachers. The study was conducted during the spring of 1979. A random sample of 300 was selected from the approximately 480 Oklahoma vocational consumer and homemaking teachers. Two-hundred thirty-nine questionnaires were returned (79.6% response). Nineteen were deleted because they were incomplete, leaving a total of 220 (73.3%) questionnaires which were used in the study.

Description of the Instrument

A questionnaire was developed by the researcher to identify problems related to and skills needed in managing a clothing construction laboratory. Items used on the questionnaire were based on findings

from selected curriculum guides, conversations with home economics teachers and from sources in the review of literature. The questionnaire was pilot tested with selected non-vocational consumer and homemaking teachers. The respondents were able to answer the questions adequately and made no suggestions for changes; therefore, no changes were made in the questionnaire.

The questionnaire was organized into the following categories for data analysis:

1. Collection of background information such as number of clothing laboratory classes, number of students enrolled in clothing laboratory classes, time period allocated to clothing laboratory classes, number of classes per week, number of years in teaching consumer and homemaking classes.
2. Identification of problems in managing a clothing laboratory such as managing equipment and facilities, performing instructional duties, budgeting, and guiding student performance.
3. Identification of sewing machine care and maintenance procedures and problems.
4. Identification of problems related to the use of space in a clothing laboratory.
5. Identification of department cleaning responsibilities.
6. Identification of the helpfulness of selected items used in managing a clothing laboratory.
7. Identification of skills needed in managing a clothing laboratory.

Collection of Data

The questionnaires were mailed to the participants together with a letter of transmittal (Appendix B, p. 63) and self-addressed stamped envelope on April 6, 1979. The participants were given 18 days to respond. One hundred sixty-six responses (55.33%) were received after the initial mail-out. A postcard (Appendix B, p.65) was then sent to non-respondents asking them to complete and return the questionnaire. Twenty-seven responses (9%) were received after the reminder postcard was sent. If no response had been received in 13 days after the second mail-out, a follow-up letter, duplicate questionnaire, and another self-addressed stamped envelope were sent. Forty-six responses were received after the final follow-up. The questionnaires were coded to facilitate recording of those that had been returned. Three hundred questionnaires were distributed, 239 questionnaires were returned and 220 were used in the study. Nineteen were deleted because they were incomplete. A majority of the participants not completing the questionnaire indicated that they taught only commercial foods; others taught only child care and guidance, special education students, consumer courses, or merchandising.

Data from the 220 questionnaires were analyzed on May 23, 1979. Fourteen additional responses were received between May 23, 1979, and June 27, 1979. This indicates that additional time could have been allotted for receiving participant responses.

Method of Data Analysis

Data were analyzed by the use of frequencies, percentages and mean

scores. Information gained was used to formulate recommendations for a unit on clothing laboratory management to be used in clothing classes taken by students enrolled in the home economics teacher education program at Oklahoma State University.

A ranking procedure was used to determine the degree of severity of the problems in items 7-33 on the questionnaire (Appendix A, p. 57). Means were calculated by multiplying the value of the rating (i.e., Not a problem=0, Major problem=3, etc.) by the number of responses to the rating, summing the products, and dividing by the total number of responses to the item. All problems were ranked according to mean score and are listed in descending order in Appendix C, p. 67. This ranking procedure was also used to determine the adequacy of department space in item 43, and the helpfulness of management aids in item 46.

CHAPTER IV

ANALYSIS OF DATA

A questionnaire (Appendix A, p. 57) was developed to obtain information concerning the problems related to and the skills needed in managing a clothing laboratory. Data were obtained from 220 randomly selected vocational consumer and homemaking teachers in Oklahoma during the spring of 1979. The questionnaire included items regarding the following: background information; managing equipment and supplies; performing instructional duties; budgeting; guiding student performance; sewing machine care and maintenance; use of space in the clothing laboratory; department cleaning responsibilities; helpfulness of items used in managing a clothing laboratory; and other skills needed in managing a clothing laboratory.

Background Information

Participant responses to items on the questionnaire regarding the number of clothing laboratory classes taught per semester, the student enrollment in clothing laboratory classes, the time allotted to clothing laboratory classes, the number of clothing classes taught per week, and the number of years experience in teaching consumer and homemaking classes are summarized in Table I. Not all participants completed every item in this section of the questionnaire.

TABLE I

BACKGROUND INFORMATION

Questions	N[a]	Range	$\bar{X}$[b]	Mode
How many clothing laboratory classes are you teaching this semester?	193	1-6	3.10	2
How many students are enrolled in all of your clothing laboratory classes?	211	5-136	57.55	70
How many students are in your largest clothing laboratory class?	214	5-36	19	20
How many students are in your smallest clothing laboratory class?	212	2-24	10	10
What is the time length in minutes of your clothing laboratory classes?	215	50-210	60.11	55
What is the number of clothing laboratory classes you teach per week?	220	1-25	4.14	5
How many years have you taught consumer and homemaking classes, including the current year?	220	1-36	4.5	1

[a]Number for each item represents the number of participants responding to the question.

[b]Mean given was calculated based on the number of responses to each item.

The number of clothing laboratory classes taught per semester by participants ranged from 1 to 6 with a mean of 3.1 classes taught per semester and a mode of two. One hundred ninety-three participants responded to this item. Some of the participants indicated that their clothing laboratories were all taught during the fall semester. Student enrollment in clothing laboratory classes ranged from 2 students in one class to 36 in another. The largest total enrollment in clothing laboratory classes in a single school with multiple laboratory sections was 136 students; the mean enrollment in all schools was 57.55 with a mode of 70. The mean in the largest class was 19 students and the smallest mean class contained 10. The mode for the largest class was 20 and the mode for the smallest class was 10.

The time allotted for clothing laboratory classes ranged from 50 minutes to three and one-half hours. Sixty minutes was the mean time length per class and 55 minutes was the time most frequently listed. A mean of four classes was taught per week, however, the majority of the participants (85.91%) indicated that they taught five classes per week. Teaching experience of the participants ranged from 1 to 36 years. Participants had taught a mean of 4.5 years; however the mode was one year of teaching experience.

Management of Equipment and Facilities

Participant responses concerning the management of equipment and facilities are indicated in Table II. Adapting plans when equipment breaks down was found to be the most serious problem in this category. Of the 214 responses to this item more than three-fourths (81.78%) indicated that it was a problem to some degree and sixteen participants

TABLE II

RESPONSES OF PARTICIPANTS REGARDING MANAGEMENT OF EQUIPMENT AND FACILITIES RANKED IN DESCENDING ORDER BY MEAN SCORES

Rating	N[a]	%[b]	$\bar{X}$[c]
Adapting plans when equipment breaks down			
Not a problem	39	18.22	1.21
Minor problem	106	49.53	
Problem	53	24.77	
Major problem	16	7.48	
Totals	214	100.00	
Keeping a supply of small equipment (bobbins, needles, etc.)			
Not a problem	65	29.55	.98
Minor problem	102	46.36	
Problem	45	20.46	
Major problem	8	3.64	
Totals	220	100.01	
Conducting inventory of laboratory items			
Not a problem	73	33.49	.89
Minor problem	101	46.33	
Problem	39	17.89	
Major problem	5	2.29	
Totals	218	100.00	
Ordering laboratory equipment			
Not a problem	93	43.06	.86
Minor problem	75	34.72	
Problem	33	15.28	
Major problem	15	6.94	
Totals	216	100.00	
Planning long-range equipment needs			
Not a problem	89	40.83	.80
Minor problem	90	41.28	
Problem	33	15.14	
Major problem	6	2.75	
Totals	218	100.00	

[a]Total for each item represents number of participants responding to this item.

[b]Percent was determined by dividing the total number responding to the question into the number selecting each rating. Percentage does not always equal 100% due to rounding.

[c]Mean was determined by multiplying the value of the rating (i.e., Not a problem=0, Major problem=3, etc.) by the number of responses to the rating, summing the products, and dividing by the total number of responses to the item.

indicated that it was a major problem. More than half (70.46%) of the participants indicated that keeping a supply of small equipment was a problem to some degree, however, the largest portion of the respondents (46.36%) considered this a minor problem. Approximately two-thirds (66.51%) of the participants rated conducting inventory of laboratory items as a problem to some degree. Ordering laboratory equipment was considered a problem by more than one-half of the respondents. Ninety-three respondents indicated that this was not a problem; however, 15 felt that it was a major problem. The planning of long-range equipment needs was considered a problem to some degree by 59.17 percent of the respondents.

Performing Instructional Duties

Responses related to the performance of instructional duties are presented in Table III. The majority (85%) of the participants indicated that keeping all students busy at once was a problem to some degree and 14 percent indicated that this was a major problem. Maintaining an instructional materials file, developing evaluation devices for laboratory projects, and supervising laboratory cleanup were each rated as problems to some degree by at least 70 percent of the respondents, however almost one-half indicated that these were minor problems.

Other items in this category (grading student projects, ordering instructional supplies, and supervising laboratory work) were rated as problems to some degree by at least 60 percent of the respondents. Assisting students with garment construction problems, maintaining discipline in the classroom, and utilizing helpers were each rated as a problem to some degree by more than 45 percent of the respondents.

TABLE III

RESPONSES OF PARTICIPANTS REGARDING PERFORMANCE OF INSTRUCTIONAL DUTIES RANKED IN DESCENDING ORDER BY MEAN SCORES

Rating	N[a]	%[b]	$\bar{X}$[c]
Keeping all students busy at once			
Not a problem	33	15.00	1.47
Minor problem	82	37.27	
Problem	74	33.64	
Major problem	31	14.09	
Totals	220	100.00	
Maintaining an instructional materials file			
Not a problem	61	28.11	1.07
Minor problem	95	43.78	
Problem	46	21.20	
Major problem	15	6.91	
Totals	217	100.00	
Developing evaluation devices for laboratory projects			
Not a problem	65	29.68	1.06
Minor problem	90	41.10	
Problem	50	22.83	
Major problem	14	6.39	
Totals	219	100.00	
Administering or supervising laboratory cleanup			
Not a problem	53	24.20	1.05
Minor problem	107	48.86	
Problem	54	24.66	
Major problem	5	2.28	
Totals	219	100.00	
Grading student projects			
Not a problem	72	32.73	1.02
Minor problem	85	38.64	
Problem	49	22.27	
Major problem	14	6.36	
Totals	220	100.00	
Ordering instructional supplies			
Not a problem	78	35.78	.88
Minor problem	98	44.95	
Problem	32	14.68	
Major problem	10	4.59	
Totals	218	100.00	

TABLE III (Continued)

Rating	N[a]	%[b]	$\bar{X}$[c]
Supervising student laboratory work			
Not a problem	86	39.09	.84
Minor problem	90	40.91	
Problem	37	16.82	
Major problem	7	3.18	
Totals	220	100.00	
Assisting students with garment construction problems			
Not a problem	112	50.91	.75
Minor problem	63	28.64	
Problem	32	14.55	
Major problem	13	5.91	
Totals	220	100.01	
Maintaining discipline in the classroom			
Not a problem	104	47.49	.69
Minor problem	85	38.81	
Problem	24	10.96	
Major problem	6	2.74	
Totals	219	100.00	
Utilizing student helpers			
Not a problem	102	50.25	.67
Minor problem	71	34.98	
Problem	24	11.82	
Major problem	6	2.96	
Totals	203	100.01	
Maintaining attendance records			
Not a problem	159	72.60	.35
Minor problem	47	21.46	
Problem	10	4.57	
Major problem	3	1.37	
Totals	219	100.00	

[a]Total for each item represents number of participants responding to this item.

[b]Percent was determined by dividing the total number responding to the question into the number selecting each item. Does not always equal 100% due to rounding.

[c]Mean was determined by multiplying the value of the rating (i.e., Not a problem=0, Major problem=3, etc.) by the number of responses to the rating, summing the products, and dividing by the total number of responses to the item.

Maintaining attendance records was the only item in this category which was rated as a problem to some degree by fewer than 30 percent of the respondents. One hundred fifty-nine respondents indicated that this item was not a problem.

Two of the items in this category ranked among the top ten problems in managing a clothing laboratory as determined by mean score (Appendix C, p. 67). Keeping all students busy at once was ranked as number six, and maintaining an instructional materials file was ranked as number ten.

Budgeting

Teacher responses regarding budgeting are recorded in Table IV. No more than 35 percent of the respondents indicated that any budgeting item was a problem.

Preparing equipment budgets was perceived as the most problematic item in this category, with 72 (34.44%) respondents indicating that this was a problem to some degree. Several teachers noted that they were not responsible for budgeting, therefore they did not rate the items related to budgeting.

Guiding Student Performance

Participant responses in regard to guiding student performance are shown in Table V. All seven items in this category ranked among the top ten problems in managing a clothing laboratory as determined by mean score (Appendix C, p. 67).

Five items in this category were rated as a problem to some degree by at least 90 percent of the respondents. These items included:

TABLE IV

RESPONSES OF PARTICIPANTS REGARDING BUDGETING
RANKED IN DESCENDING ORDER BY MEAN SCORES

Rating	N[a]	%[b]	$\bar{X}$[c]
Preparing equipment budgets			
Not a problem	137	65.55	.44
Minor problem	56	26.79	
Problem	12	5.74	
Major problem	4	1.91	
Totals	209	99.99	
Maintaining financial records			
Not a problem	159	76.08	.32
Minor problem	34	16.27	
Problem	15	7.18	
Major problem	1	0.49	
Totals	209	100.02	
Budgeting allotted money			
Not a problem	156	75.36	.32
Minor problem	38	18.36	
Problem	11	5.31	
Major problem	2	0.97	
Totals	197	100.00	
Collecting laboratory fees (if any)			
Not a problem	154	78.17	.31
Minor problem	27	13.71	
Problem	14	7.11	
Major problem	2	1.02	
Totals	197	100.01	

[a]Total for each item represents number of participants responding to this item.

[b]Percent was determined by dividing the total number responding to the question into the number selecting each item. Does not always equal 100% due to rounding.

[c]Mean was determined by multiplying the value of the rating (i.e., Not a problem=0, Major problem=3, etc.) by the number of responses to the rating, summing the products, and dividing by the total number of responses to the item.

TABLE V

RESPONSES OF PARTICIPANTS REGARDING GUIDING STUDENT PERFORMANCE RANKED IN DESCENDING ORDER BY MEAN SCORES

Rating	N[a]	%[b]	$\bar{X}$[c]
Motivating students to utilize entire class period constructively			
Not a problem	14	6.36	1.72
Minor problem	74	33.64	
Problem	92	41.82	
Major problem	40	18.18	
Totals	220	100.00	
Motivating students to use classroom aids rather than step-by-step directions from the teacher			
Not a problem	13	5.91	1.68
Minor problem	86	39.09	
Problem	78	35.46	
Major problem	43	19.55	
Totals	220	100.01	
Motivating students to return equipment to proper places without being told			
Not a problem	10	4.57	1.64
Minor problem	91	41.55	
Problem	86	39.27	
Major problem	32	14.61	
Totals	219	100.00	
Motivating students to come to class with needed supplies			
Not a problem	20	9.09	1.61
Minor problem	81	36.82	
Problem	83	37.73	
Major problem	36	16.36	
Totals	220	100.00	
Motivating students to finish garments by designated times			
Not a problem	22	10.05	1.53
Minor problem	93	42.47	
Problem	69	31.51	
Major problem	35	15.99	
Totals	219	100.02	

TABLE V (Continued)

Rating	N[a]	%[b]	$\overline{X}$[c]
Keeping students from talking unnecessarily while working			
Not a problem	20	9.09	1.46
Minor problem	104	47.27	
Problem	70	31.82	
Major problem	26	11.82	
Totals	220	100.00	
Motivating students to use sewing tools correctly			
Not a problem	38	17.35	1.08
Minor problem	131	59.82	
Problem	45	20.55	
Major problem	5	2.28	
Totals	219	100.00	

[a]Total for each item represents number of participants responding to this item.

[b]Percent was determined by dividing the total number responding to the question into the number selecting each rating. Does not always equal 100% due to rounding.

[c]Mean was determined by multiplying the value of the rating (i.e., Not a problem=0, Major problem=3, etc.) by the number of responses to the rating, summing the products, and dividing by the total number of responses to the item.

motivating students to utilize entire class period constructively (93.64%); motivating students to use classroom aids rather than step-by-step directions from the teacher (94.10%); motivating students to return equipment to proper places without being told (95.43%); motivating students to come to class with needed supplies (90.91%); and keeping students from talking unnecessarily while working (90.91%). Two other items in this category were ranked as a problem to some degree by more than 80 percent of the respondents.

Sewing Machine Brands Represented

Teachers represented in the study had a large variety of sewing machine brands in their clothing laboratories. The number and percentage of clothing laboratories with each individual machine brand are shown in Table VI. The number and percentage of each machine brand in all of the clothing laboratories are shown in Table VII. One hundred eighty-five (84%) of the departments had Singer sewing machines with 2,153 machines included in the total sample. Bernina ranked second with 538 machines in 96 (44%) of the departments. White machines were identified in 15 (7%) of the departments and Viking machines in 12 (5%) of the departments. Kenmore, Elna and Pfaff machines were found in only 2 percent or fewer of the departments.

Respondents were allowed to list machine brands present in their departments which were not included on the questionnaire. Twenty-one different machine brands were listed representing 243 machines (Appendix D, p. 70). Fifteen departments (7%) had some type of industrial sewing machine.

Three thousand one hundred thirty-four sewing machines were

TABLE VI

NUMBER AND PERCENTAGE OF CLOTHING LABORATORIES WITH EACH INDIVIDUAL MACHINE BRAND (N=220)

Machine Brand	N[a]	%[b]
Singer	185	84.09
Bernina	96	43.64
Viking	12	5.45
White	15	6.82
Kenmore	5	2.27
Elna	4	1.82
Pfaff	3	1.36
Other	67	30.45

[a]Clothing laboratories may have more than one machine brand. The number given represents the number of clothing laboratories with each individual machine brand.

[b]Percent was determined by dividing the total number of participants into the total number of clothing laboratories with each individual machine brand.

TABLE VII

NUMBER AND PERCENTAGE OF EACH MACHINE BRAND
IN ALL OF THE CLOTHING LABORATORIES

Machine Brand	N[a]	%[b]
Singer	2153	68.70
Bernina	538	17.17
Viking	84	2.68
White	74	2.36
Kenmore	24	.77
Elna	15	.48
Pfaff	3	.10
Other	243	7.75
Totals	3134	100.01

[a]Number represents the total number of each machine brand found in all of the clothing laboratories.

[b]Percent was determined by dividing the total number of machines by the total number of each machine brand.

reported in the 220 departments sampled. The number of machines in working condition was also determined. Two thousand eight hundred fifty-two machines were reported to be in working condition, leaving 282 machines which were not useable. A list of the number of machines in each department, the number of machines in working condition, and the number of machines not in working condition is found in Appendix E, p. 72.

Sewing Machine Care and Maintenance Procedures

Information regarding the frequency of routine sewing machine checks made by a repairperson is presented in Table VIII. The majority of the teachers (65%) had a repairperson come for a routine check once a year. Twenty-one percent preferred that routine checks be made twice a year. Only seven participants (3%) reported that they never had a repairperson do a routine check. Several teachers indicated that checks were made as needed.

Teachers were asked to indicate how they preferred to handle routine machine care and maintenance. Their responses are shown in Table IX. Approximately two-thirds (68.35%) of the respondents preferred that a qualified repairperson repair their machines. Thirty-six teachers (16.51%) preferred to handle minor problems themselves and to have a repairperson handle the major problems. Thirty-three (15.14%) teachers preferred to maintain department machines themselves.

Participant responses regarding the frequency of problems in obtaining sewing machine repair service are shown in Table X. Almost half (44.39%) of the respondents indicated that obtaining repair service was sometimes a problem; however, 71 teachers (33.18%) indicated

TABLE VIII

RESPONSES OF PARTICIPANTS REGARDING FREQUENCY OF ROUTINE SEWING MACHINE CHECKS BY A REPAIRPERSON (N=220)

Frequency of Routine Check by Repairperson	N	%[a]
Once a year	144	65.45
Twice a year	47	21.36
4-5 times a year	3	1.36
Every 2-3 years	4	1.82
Every 4-5 years	4	1.82
When needed	11	5.00
Never	7	3.18
Totals	220	99.99

[a]Total does not equal 100% due to rounding.

TABLE IX

METHOD PREFERRED BY PARTICIPANTS FOR ROUTINE CARE AND MAINTENANCE OF THEIR DEPARTMENT SEWING MACHINES (N=218)

Method	N[a]	%
A qualified repairperson repairs machines	149	68.35
You handle minor problems; repairperson handles major problems	36	16.51
You maintain department machines	33	15.14
Totals	218	100.00

[a]Two participants failed to respond to this question.

that obtaining repair service was never a problem. Seventeen teachers (7.94%) indicated that obtaining repair service was always a problem, and 31 (14.49%) indicated that obtaining repair service was often a problem.

TABLE X

RESPONSES OF PARTICIPANTS REGARDING FREQUENCY OF PROBLEMS IN OBTAINING REPAIR SERVICE FOR DEPARTMENT SEWING MACHINES (N=214)

Frequency	N[a]	$\overline{X}$
Always	17	7.94
Often	31	14.49
Sometimes	95	44.39
Never	71	33.18
Totals	214	100.00

[a]Six participants failed to respond to this question.

Participants indicating that obtaining repair service was frequently a problem were asked to specify the cause or causes for this problem. The problems encountered by the participants in obtaining machine repair service are presented in Table XI. Approximately one-third (34.55%) of the participants noted that the lack of a repairperson in their area was a problem. Fifty-five (25%) of the teachers

indicated that problems were due to an incompetent repairperson. The unavailability of parts and the lack of money were both indicated as problems in obtaining repair service by approximately 10 percent of the participants.

TABLE XI

RESPONSES OF PARTICIPANTS REGARDING PROBLEMS ENCOUNTERED IN OBTAINING REPAIR SERVICE FOR DEPARTMENT SEWING MACHINES (N=220)

Problem	N[a]	%[b]
No repairperson in area	76	34.55
Incompetent repairperson	55	25.00
Parts not available	23	10.45
Lack of money	21	9.55
Other	26	11.82

[a]Not every participant responded to this question. Those responding were allowed to list one or more problems.

[b]Percent represents the percentage of total responses to each problem divided by the total number of participants.

Participants were asked to list other problems. Twenty participants (9%) indicated that there was too long a time lapse between requesting service and receiving service. Other problems identified

were the lack of recognition of need for routine care and service by the administration; the difficulties in obtaining repair service for industrial machines; and the development of new problems on working machines during routine checkups.

Participant responses regarding the machine care and maintenance procedures they have performed and those they have had a repairperson perform are presented in Appendix F, p. 78. Sewing machine care and maintenance procedures performed by more than 55 percent of the participants are shown in Table XII. The majority of the participants (75%-80%) indicated that they had cleaned the feed dogs, cleaned the bobbin case, adjusted the top thread tension, and cleaned inside the face plate. Slightly more than one-half of the participants (56%-59%) indicated that they had adjusted the bobbin tensions, replaced the throat plate, and oiled inside the face plate.

Sewing machine care and maintenance procedures that more than 55 percent of the participants had a repairperson perform are presented in Table XIII. Approximately three-fourths of the participants (73%-75%) indicated that they had a repairperson retime their machines and replace gears. More than half of the participants indicated that they had a repairperson perform the following care and maintenance procedures: replace take-up spring (66.82%), replace tension discs (66.36%), replace tension springs (65.46%), adjust belt tensions (63.64%), lubricate gears (61.82%), replace a worn hook (60%), replace a worn belt (58.64%), and replace worn cords (56.82%).

Participants were asked to indicate the frequency of several common sewing machine problems in their departments. Their responses are shown in Table XIV. Four problems which occurred daily or weekly

TABLE XII

SEWING MACHINE CARE AND MAINTENANCE PROCEDURES PERFORMED BY MORE THAN FIFTY-FIVE PERCENT OF THE PARTICIPANTS (N=220)

Procedures	N[a]	%[b]
Clean feed dogs	176	80.00
Clean bobbin case	172	78.18
Adjust top thread tension	166	75.46
Clean inside face plate	165	75.00
Replace throat plate	131	59.55
Adjust bobbin tensions	126	57.27
Oil inside face plate	124	56.36

[a]Not every participant responded to this question. Those responding were allowed to check more than one method of performing the procedure.

[b]Percent represents the percentage of total responses for each procedure divided by the total number of participants.

TABLE XIII

SEWING MACHINE CARE AND MAINTENANCE PROCEDURES THAT MORE THAN FIFTY-FIVE PERCENT OF THE PARTICIPANTS HAD A REPAIRPERSON PERFORM (N=220)

Procedure	N[a]	%[b]
Retime	166	75.46
Replace gears	161	73.18
Replace take-up spring	147	66.82
Replace tension discs	146	66.36
Replace tension springs	144	65.46
Adjust belt tensions	140	63.64
Lubricate gears	136	61.82
Replace worn hook	132	60.00
Replace worn belt	129	58.64
Replace worn cords	125	56.82

[a]Not every participant responded to this question. Those responding were allowed to check more than one method of performing the procedure.

[b]Percent represents the percentage of total responses for each procedure divided by the total number of participants.

were identified. Problems occurring most frequently on a daily or weekly basis included: tension maladjustment (34.95% and 38.84%, respectively), skipped stitches (22.71% and 42.51%), jammed bobbins (32.52% and 35.92%), and frequently breaking threads (23.04% and 38.73%). Eighty-seven (43.72%) of the respondents considered having machines out of time to be an annual problem. Approximately one-half of the respondents indicated that buttonhole mechanisms malfunctioned on a monthly (23.71%) or an annual (24.23%) basis; however, 72 respondents (37.11%) indicated that this was never a problem.

Participant responses regarding common sewing machine problems that they were able to correct themselves are presented in Table XV. A majority of the participants were able to correct the following problems: tension maladjustment (90.91%), skipped stitches (89.55%), jammed bobbins (88.64%), and continual breaking threads (81.36%). Forty-seven participants (21.36%) indicated that they could correct buttonhole mechanism malfunctions. Out of 220 responses, only nine participants (4.09%) could correct an out-of-time machine.

Adequacy of Space in the Clothing Laboratories

Participant responses regarding the adequacy of space in their departments are shown in Table XVI. Approximately one-half of all the participants felt that their departments had adequate space in all areas specified on the questionnaire; however, inadequate space was also reported in all of the areas specified. Ninety-four participants (43.32%) indicated that cutting space was inadequate in their clothing laboratory. Approximately one-third (31.31%) of the participants indicated that their clothing laboratory had inadequate storage space.

TABLE XIV

RESPONSES OF PARTICIPANTS REGARDING FREQUENCY OF COMMON SEWING MACHINE PROBLEMS

Problem and Frequency of the Problem	N[a]	%[b]
Tension maladjustment		
Never	13	6.31
Daily	72	34.95
Weekly	80	38.84
Monthly	27	13.11
Annually	14	6.80
Totals	206	100.01
Skipped stitches		
Never	13	6.28
Daily	47	22.71
Weekly	88	42.51
Monthly	37	17.87
Annually	22	10.63
Totals	207	100.00
Jammed bobbins		
Never	29	14.08
Daily	67	32.52
Weekly	74	35.92
Monthly	25	12.14
Annually	11	5.34
Totals	206	100.00
Out of time		
Never	44	22.11
Daily	11	5.53
Weekly	13	6.53
Monthly	44	22.11
Annually	87	43.72
Totals	199	100.00
Frequently breaking threads		
Never	21	10.29
Daily	47	23.04
Weekly	79	38.73
Monthly	43	21.08
Annually	14	6.86
Totals	204	100.00

TABLE XIV (Continued)

Problem and Frequency of the Problem	N[a]	%[b]
Buttonhole mechanism malfunction		
Never	72	37.11
Daily	7	3.61
Weekly	22	11.34
Monthly	46	23.71
Annually	47	24.23
Totals	194	100.00

[a]Total for each item represents number of participants responding to this item.

[b]Percent was determined by dividing the total number responding to the item into the number selecting each rating. Percentage does not always equal 100% due to rounding.

TABLE XV

RESPONSES REGARDING COMMON SEWING MACHINE PROBLEMS THAT PARTICIPANTS WERE ABLE TO CORRECT THEMSELVES (N=220)

Problem	N[a]	%[b]
Tension maladjustment	200	90.91
Skipped stitches	197	89.55
Jammed bobbins	195	88.64
Continual breaking threads	179	81.36
Buttonhole mechanism malfunction	47	21.36
Out of time	9	4.09

[a]Not every participant responded to this question. Those responding were allowed to list one or more problems.

[b]Percent represents the percentage of total responses to each problem divided by the total number of participants.

TABLE XVI

RESPONSES OF PARTICIPANTS REGARDING THE ADEQUACY OF SPACE IN THEIR DEPARTMENTS RANKED IN ASCENDING ORDER BY MEAN SCORES

Adequacy of Space	N[a]	%[b]	$\bar{X}$[c]
Cutting space			
Inadequate	94	43.32	1.67
Adequate	100	46.08	
Excellent	23	10.60	
Totals	217	100.00	
Pressing space			
Inadequate	60	27.65	1.84
Adequate	132	60.83	
Excellent	25	11.52	
Totals	217	99.99	
Fitting space			
Inadequate	63	29.03	1.89
Adequate	115	53.00	
Excellent	39	17.97	
Totals	217	100.00	
Storage space			
Inadequate	67	31.31	1.90
Adequate	101	47.20	
Excellent	46	21.50	
Totals	214	100.01	
Sewing space			
Inadequate	60	27.52	1.93
Adequate	114	52.29	
Excellent	44	20.18	
Totals	218	99.99	
Teaching space			
Inadequate	36	16.74	2.07
Adequate	128	59.53	
Excellent	51	23.72	
Totals	215	100.00	

[a]Total for each item represents number of participants responding to this item.

[b]Percent was determined by dividing the total number responding to the question into the number selecting each rating. Percentage does not always equal 100% due to rounding.

[c]Mean was determined by multiplying the value of the rating (i.e., Inadequate=1, Excellent=3, etc.) by the number of responses to the rating, summing the products, and dividing by the total number of responses to the item.

Approximately 60 participants indicated that pressing space (27.65%), fitting space (29.03%), and sewing space (27.52%) were inadequate areas in their clothing laboratories. Teaching space was indicated as inadequate by 36 participants (16.74%).

The participants were asked to indicate the area or areas in which they needed help in planning better use of department space. Their responses are presented in Table XVII. The two areas where help was needed which were indicated by the largest number of participants were storage (35.91%) and cutting (31.82%). Approximately one-fourth of the respondents indicated a need for help in planning pressing space and sewing space. Sixteen percent or fewer of the respondents indicated a need for help in planning fitting space and teaching space.

Department Cleaning Responsibilities

Responses of participants regarding department cleaning responsibilities are shown in Table XVIII. More than three-fourths of the participants (78%) indicated that they were responsible for dusting their clothing laboratories. Seventy-four participants (33.64%) were responsible for cleaning department windows. Approximately one-fourth of the participants indicated that they had responsibility for one or all of the following: sweeping (24.55%), mopping (22.73%), and vacuuming (22.27%). Thirty-five participants (15.91%) reported that they were responsible for emptying department trash baskets. Thirty-five participants also indicated that they were responsible for waxing floors.

TABLE XVII

AREAS IN WHICH PARTICIPANTS INDICATED THAT THEY NEEDED HELP IN PLANNING THE USE OF LABORATORY SPACE (N=220)

Areas	N[a]	%[b]
Storage	79	35.91
Cutting	70	31.82
Pressing	57	25.91
Sewing	56	25.45
Fitting	35	15.91
Teaching	26	11.82

[a]Not every participant responded to this question. Those responding were allowed to list one or more areas.

[b]Percent represents the percentage of total responses to each area divided by the total number of participants.

TABLE XVIII

RESPONSES OF PARTICIPANTS REGARDING DEPARTMENT CLEANING RESPONSIBILITIES
(N=220)

Department Cleaning Responsibilities	N[a]	%[b]
Dusting	173	78.64
Cleaning windows	74	33.64
Sweeping	54	24.55
Mopping	50	22.73
Vacuuming	49	22.27
Emptying trash baskets	35	15.91
Waxing	35	15.91
Other	36	16.36

[a]Not every participant responded to this question. Those responding were allowed to list one or more department cleaning responsibilities.

[b]Percent represents the percentage of total responses to each department cleaning responsibility divided by the total number of participants.

Participants were allowed to list department cleaning responsibilities not included on the questionnaire. Other cleaning responsibilities included cleaning chalkboards, cleaning mirrors, cleaning table tops, stacking chairs, doing laundry, cleaning cabinets, cleaning bookcases, and cleaning storage areas.

Helpfulness of Selected Items Used in Managing a Clothing Laboratory

Participants were asked to indicate the degree to which certain items were helpful in managing a clothing laboratory. Their responses are shown in Table XIX. Out of 211 responses, 98.10 percent of the respondents felt that evaluation sheets for student and teacher use were helpful to some degree. Illustrative materials for teaching construction skills were indicated as helpful to some degree by 99.06 percent of the 213 respondents to this item. Two hundred eleven participants (95.26%) indicated that detailed student work plans for completing their garments were helpful to some degree.

Some participants listed other items they found helpful in managing their clothing laboratories. Items found to be helpful in clothing laboratory management included wall charts indicating student progress, daily diaries kept by students, and assignment sheets for setting up and putting away equipment.

Participants were asked to include check sheets, score cards, and other devices used in managing a clothing laboratory with their completed questionnaire. A variety of items was received. Items received included laboratory regulation sheets, construction competency checklists, garment evaluation sheets, sewing laboratory diaries, measurement

TABLE XIX

RESPONSES OF PARTICIPANTS REGARDING HELPFULNESS OF SELECTED ITEMS USED IN MANAGING A CLOTHING LABORATORY

Item	N[a]	%[b]	$\overline{X}$[c]
Evaluation sheets for student and teacher use			
Not helpful	4	1.90	2.22
Somewhat helpful	23	10.90	
Helpful	107	50.71	
Extremely helpful	77	36.49	
Totals	211	100.00	
Illustrative materials teaching construction skills			
Not helpful	2	.94	2.12
Somewhat helpful	37	17.37	
Helpful	108	50.70	
Extremely helpful	66	30.99	
Totals	213	100.00	
Detailed student work plans for completing their garments			
Not helpful	10	4.74	1.73
Somewhat helpful	71	33.65	
Helpful	95	45.02	
Extremely helpful	35	16.59	
Totals	211	100.00	

[a]Total for each item represents number of participants responding to this item.

[b]Percent was determined by dividing the total number responding to the item into the number selecting each rating.

[c]Mean was determined by multiplying the value of the rating (i.e., Not helpful=0, Extremely helpful=3, etc.) by the number of responses to the rating, summing the products, and dividing by the total number of responses to the item.

charts, daily progress sheets, clean up assignment sheets, and group activity plans.

Identification of Skills Needed in Managing a Clothing Laboratory

In an open-end question teachers were asked to list skills which they felt were needed in managing a clothing laboratory. The skills listed are presented in Appendix G, p. 80. Not all participants responded to this question. Patience was the skill listed most frequently. Other frequently listed skills included clothing construction, sewing machine repair, management, and organization.

Discussion

A random sample of 300 Oklahoma vocational consumer and homemaking teachers was surveyed to obtain data for this study. One hundred sixty-six responses (55.33%) were received after the initial mail-out, twenty-seven (9%) after the reminder postcard, and forty-six (15.33%) after the final follow-up letter. Nineteen of the returned questionnaires were deleted because they were incomplete. A majority of the participants not completing the questionnaire indicated that they taught only commercial foods; others taught only child care and guidance, special education students, or merchandising. Data were analyzed on May 23, 1979. Fourteen additional responses were received between May 23, 1979, and June 27, 1979. This indicates that additional time could be allotted for receiving participant responses.

During the course of the study, several shortcomings of the questionnaire were identified. Twenty-seven participants failed to respond

to item 1. The majority of those not responding indicated that they were not teaching a clothing laboratory class during the spring semester. An additional statement could be added to indicate the number of clothing laboratory classes taught by the participants during the previous semester.

Item 5 could be rewritten to specifically ask for the daily time length of the clothing laboratory classes rather than simply the time length. This change should clarify the question and result in consistent and reliable responses.

The number of weeks allotted to clothing construction units varied among the participants. A majority of the participants taught clothing construction the entire semester and others taught 10-week units or 2-week units. A question could be added to determine the exact number of weeks allotted to clothing construction units by each participant.

Several revisions could be made in the section dealing with sewing machine care and maintenance. Item 34 could be expanded to allow for specifying the number of each brand of sewing machine in working condition. The following time categories could be added to item 36: once a year, twice a year, and when needed. These time categories are based on results from the study which indicated that the majority of participants utilized these times most frequently when contacting a repairperson for routine checks. A third choice could be added to item 37 which would combine the methods previously listed; i.e., you handle minor problems and repairperson handles major problems. This combination of methods was preferred by 36 of the participants.

In item 43 the researcher would suggest assigning different values to the degrees of space adequacy and also putting them in reverse order

(Excellent=2, Adequate=1, Inadequate=0). This change would make this item consistent with other items of its kind on the questionnaire.

Finally, the questionnaire should be restructured to allow for ease in keypunching the responses. As presently designed, responses must be pre-coded before keypunching can take place.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of the study was to identify the problems related to and the skills needed in managing a clothing laboratory on the secondary level. Data were collected through the use of a questionnaire which 220 randomly selected vocational consumer and homemaking teachers in Oklahoma completed during the spring of 1979. Data were tabulated and analyzed using frequencies, percentages and mean scores.

Conclusions

All aspects of managing a clothing laboratory, with the exception of budgeting, were rated as problems to some degree by approximately 50 percent of the participants. Guiding student performance was seen as the most problematic area. This finding supported previous research. Penrod (1974) indicated that motivating students of all ability levels was a major problem in classroom management. Seven of the top ten clothing laboratory management problems as determined by mean score related to guiding student performance and included motivating students to utilize the entire class period constructively, to use classroom aids rather than step-by-step directions from the teacher, to return equipment to proper places without being told, to come to class with needed supplies, to finish garments by designated times, to refrain from talking unnecessarily while working, and to use sewing tools

correctly.

Two items regarding performing instructional duties were ranked among the top ten problems of managing a clothing laboratory. Keeping all students busy at once was ranked as number six, and maintaining an instructional materials file was ranked as number ten. One item regarding the management of equipment and facilities was among the top ten. This item was adapting plans when equipment breaks down and was ranked as number eight.

When consumer and homemaking teachers were asked in the form of an open-end question to list skills they perceived as necessary in managing a clothing laboratory, the most prevalent responses provided by the teachers were patience, clothing construction skills, and sewing machine repair skills. Several respondents indicated that they had difficulty in obtaining sewing machine repair service, thus explaining the perceived need for skills in repairing department machines. Past research has indicated that home economics teachers have problems making minor sewing machine repairs. In regard to clothing construction teachers indicated that a knowledge of skills such as tailoring and the use of quick sewing techniques were needed, however these skills relate to subject matter rather than to management.

Departments represented in the study contained a large variety of sewing machine brands. The two machine brands identified most frequently were Singer and Bernina.

In regard to sewing machine care and maintenance, the majority of respondents preferred that a qualified repairperson maintain their department machines. More than one-half of the respondents had all of the department machines checked once a year. Sixty-five percent of the

participants indicated that they had problems in obtaining sewing machine repair service. The most frequently listed problem in obtaining repair service was the lack of a repairperson.

A majority of the participants indicated that they could perform minor sewing machine repair skills including cleaning feed dogs and the bobbin case, adjusting the top and bobbin thread tension, and oiling inside the face plate. Maintenance and repair skills involving the inner parts of a sewing machine were most often referred to a repairperson.

Approximately one-half of all the participants indicated that their departments had adequate space for cutting, fitting, pressing, sewing, storage, and teaching; however, more than one-fourth of the participants indicated that space was inadequate in these areas. Participants indicated the greatest need for help in planning storage and cutting space.

A majority of the participants were responsible for some department cleaning duties. The most prevalent responsibilities included dusting, cleaning windows, sweeping, mopping, vacuuming, and emptying trash baskets.

The use of various items such as evaluation sheets, illustrative materials, and detailed work plans were found to be helpful by 95 percent of the participants. In addition, laboratory regulation sheets, cleanup assignment sheets, and group activity plans were found to be helpful.

Recommendations for a Unit on Clothing Laboratory Management

Findings from the study indicated that approximately 50 percent or more of the teachers had problems in most areas of clothing laboratory management. This finding indicates the need for a college level unit emphasizing aspects of clothing laboratory management.

In planning the unit, major emphasis should be placed on those items which ranked among the top 13 problems of managing a clothing laboratory (Appendix C, p. 67). Two-thirds or more of the participants indicated that these items were a problem to some degree. Emphasis should also be placed on items ranked 14-22 since 50 percent or more of the participants indicated that these were problems. Very little emphasis could be placed on items ranked below 22. These items were considered problems by less than one-third of the participants.

More than three-fourths (81.78%) of the teachers had problems adapting plans when equipment failed. Thirty-four percent of the teachers also indicated that they had problems in obtaining repair service because of the lack of a repairperson in their area. Based on these findings the unit should include instruction in sewing machine care and maintenance. The participants should be required to become competent in correcting the common sewing machine problems listed in Table XIV, p. 36, and in performing those machine care and maintenance procedures listed in Table XXIII, p. 78 as being performed by 10 percent or more of the teachers.

Thirty percent or more of the participants indicated that they had inadequate space for cutting and storage and also indicated a need for

help in planning space for cutting and storage areas. Planning space for these two areas could be included in the unit.

The results of the study indicated that at least 78 percent of the participants were responsible for some department cleaning activities. Administering or supervising laboratory cleanup ranked in twelfth place among the problems in managing a clothing laboratory (Appendix C, p. 67), and 75 percent of the participants indicated that this was a problem to some degree. Developing skill in presenting the needs of the department to school officials could result in identification of other means of cleaning the department; these skills could be taught in the unit.

Evaluation sheets for student and teacher use, illustrative materials for teaching construction skills, and detailed student work plans for student completion of garments were found to be helpful by more than 95 percent of the participants. Motivating students to use classroom aids rather than step-by-step directions from the teacher was ranked as number two, and maintaining an instructional materials file was ranked as number ten among the problems in managing a clothing laboratory (Appendix C, p. 67). These findings would indicate a need for including instruction in developing and using these types of clothing laboratory management aids. Participants were asked to include check sheets, score cards, and other devices used in managing a clothing laboratory with their completed questionnaire. These items will be placed on file in the Clothing, Textiles and Merchandising Department at Oklahoma State University for use in this section of the unit.

In an open-end question teachers were asked to list skills which they felt were needed in managing a clothing laboratory. Some emphasis

should be placed on development of those skills listed by the teachers (Appendix G, p. 80).

Recommendations for Further Research

The following recommendations are suggested for further research.

1. Survey college and university teachers to determine whether courses in clothing laboratory management are taught and if so, to obtain information concerning content of these courses.
2. Replicate the study in other states to determine whether findings from this research can be generalized to other geographical locations.
3. After the unit has been developed and taught evaluate it among teachers who have taken it and are on the job to determine its effectiveness.
4. Conduct a study to determine whether clothing laboratory management problems differ in classes containing both males and females.
5. Conduct a study to determine the clothing laboratory management problems of occupational home economics teachers.
6. Replicate this study and expand the sample to include non-vocational home economics teachers.

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APPENDIX A

CLOTHING LABORATORY MANAGEMENT

QUESTIONNAIRE

CLOTHING LABORATORY MANAGEMENT QUESTIONNAIRE

Directions: Please answer the following questions by writing the answers in the space provided.

1. How many clothing laboratory classes are you teaching this semester? _____

2. How many students are enrolled in all of your clothing laboratory classes? _____

3. How many students are in your largest clothing laboratory class? _____

4. How many students are in your smallest clothing laboratory class? _____

5. What is the time length of your clothing laboratory classes? Specify: Minutes per class _____; Number of classes per week ____

6. How many years have you taught consumer and homemaking classes, including the current year? _____

Directions: Listed below are aspects of managing a clothing laboratory. Please read and circle the number representing the extent to which each aspect is or has been a problem to you in management of a clothing laboratory.

Not a problem - Circle 0 Problem - Circle 2
Minor problem - Circle 1 Major problem - Circle 3

	Not a Problem	Minor Problem	Problem	Major Problem
Managing Equipment and Facilities:				
7. Keeping a supply of small equipment (bobbins, needles, etc.)	0	1	2	3
8. Conducting inventory of laboratory items	0	1	2	3
9. Planning long range equipment needs	0	1	2	3
10. Ordering laboratory equipment	0	1	2	3
11. Adapting plans when equipment breaks down	0	1	2	3
Performing Instructional Duties:				
12. Maintaining an instructional materials file	0	1	2	3
13. Ordering instructional supplies	0	1	2	3

	Not a Problem	Minor Problem	Problem	Major Problem
14. Grading student projects	0	1	2	3
15. Developing evaluation devices for laboratory projects	0	1	2	3
16. Maintaining attendance records	0	1	2	3
17. Assisting students with garment construction problems	0	1	2	3
18. Maintaining discipline in the classroom	0	1	2	3
19. Supervising student laboratory work	0	1	2	3
20. Keeping all students busy at once	0	1	2	3
21. Utilizing student helpers	0	1	2	3
22. Administering or supervising laboratory cleanup	0	1	2	3
Budgeting:				
23. Collecting laboratory fees (if any)	0	1	2	3
24. Budgeting allotted money	0	1	2	3
25. Maintaining financial records	0	1	2	3
26. Preparing equipment budgets	0	1	2	3
Guiding Student Performance:				
27. Motivating students to finish garments by designated times	0	1	2	3
28. Motivating students to utilize entire class period constructively	0	1	2	3
29. Motivating students to return equipment to proper places without being told	0	1	2	3
30. Motivating students to use classroom aids rather than step-by-step directions from the teacher	0	1	2	3
31. Motivating students to come to class with needed supplies	0	1	2	3

	Not a Problem	Minor Problem	Problem	Major Problem
32. Motivating students to use sewing tools correctly	0	1	2	3
33. Keeping students from talking unnecessarily while working	0	1	2	3

Directions: Items in the following section deal with care and maintenance of the sewing machine. Please answer the questions by placing a check in the appropriate blank or by writing the answer in the appropriate space.

34. Please specify the number of each brand of sewing machine in your department.

___Bernina ___Kenmore ___Singer ___White

___Elna ___Pfaff ___Viking ___Other: Please list _____

___Other: Please list _____

35. How many sewing machines in your department are in working condition? _____

36. How often do you have a repairperson come for a routine check?
_____

37. How do you prefer that routine care and maintenance of department machines be handled?
____You maintain department machines
____A qualified repairperson repairs machines
____Other: Please list _____

38. Do you have problems getting repair service for your sewing machines? ____Always ____Often ____Sometimes ____Never

39. If you have problems getting repair service, check all of the following that have caused these problems: ____Lack of money;
____Parts not available; ____No repairperson in area;
____Incompetent repairperson; Other: Please list _____

40. Below is a list of machine care and maintenance procedures. Check (√) the items you have performed and those which you have had a repairperson perform.

You	Repairperson		You	Repairperson	
____	____	Adjust belt tensions	____	____	Lubricate gears
____	____	Adjust bobbin tensions	____	____	Replace gears
____	____	Adjust top thread tension	____	____	Replace throat plate
____	____	Balance tensions	____	____	Replace take-up spring
____	____	Clean bobbin case	____	____	Replace tension discs
____	____	Clean feed dogs	____	____	Replace tension springs

You	Repairperson		You	Repairperson	
____/____	Clean inside face plate		____/____	Replace worn cords	
____/____	Oil inside face plate		____/____	Replace worn belt	
____/____	Clean inside top of head		____/____	Replace worn hook	
____/____	Clean underneath head		____/____	Retime	
____/____	Oil underneath head				

41. Below is a list of common sewing machine problems. Using the rating scale, circle the number that represents the frequency of the problem in your department.

	Never	Daily	Weekly	Monthly	Annually
Tension maladjustment	0	1	2	3	4
Skipped stitches	0	1	2	3	4
Jammed bobbins	0	1	2	3	4
Out of time	0	1	2	3	4
Frequently breaking threads	0	1	2	3	4
Buttonhole mechanism malfunction	0	1	2	3	4

Other: Please list _____

42. Which of these common sewing machine problems are you able to correct yourself?

____Tension maladjustment
____Skipped stitches
____Jammed bobbins
____Out of time
____Continual breaking threads
____Buttonhole mechanisms malfunction
____Other: Please list _____

Directions: Specific space areas usually found in clothing laboratories are listed below. Circle the number that best describes your available space. Please write in and rate any space area which is not listed.

43.	Inadequate	Adequate	Excellent
Cutting space	1	2	3
Fitting space	1	2	3
Pressing space	1	2	3
Sewing space	1	2	3
Storage space	1	2	3
Teaching space	1	2	3
Other: Please list _____	1	2	3
Other: Please list _____	1	2	3

44. In which area or areas do you need help in planning better use of space? ____Cutting space; ____Fitting space; ____Pressing space; ____Sewing space; ____Storage space; ____Teaching space

45. In regard to keeping your department clean, for which of the following are you responsible?

____Cleaning windows ____Sweeping
____Dusting ____Vacuuming
____Emptying trash baskets ____Waxing
____Mopping
____Other: Please list _____
____Other: Please list _____

46. Indicate the degree of helpfulness you feel the following items have on clothing laboratory management.

	Not Helpful	Somewhat Helpful	Helpful	Extremely Helpful
Detailed weekly work plans for completing garments	0	1	2	3
Illustrative materials teaching construction skills	0	1	2	3
Evaluation sheets for student and teacher use	0	1	2	3
Other: Please list _____ _____	0	1	2	3

47. List skills you feel are needed in managing a clothing construction laboratory.

APPENDIX B

COVER LETTERS AND FOLLOW-UP POSTCARD

OSU
Oklahoma State University
Department of Clothing, Textiles & Merchandising

Stillwater, Oklahoma 74074
Home Economics West 312
(405) 624-5034

April 6, 1979

Dear Consumer and Homemaking Teacher,

The Clothing, Textiles and Merchandising Department at Oklahoma State University is currently planning a unit on managing a clothing laboratory to be included as a part of the course taken by the Home Economics Education majors. We are presently surveying Oklahoma Vocational consumer and homemaking teachers to obtain data for this teaching unit.

You have been selected to participate in this study. It should take no longer than 15 minutes of your time. All responses will be kept anonymous. Your input as an active consumer and homemaking teacher will offer valuable information for improving this portion of the teacher education program.

Thank you for your time and cooperation. Please return the survey as soon as possible in the self-addressed stamped envelope. Please feel free to include any check sheets, scorecards, or other devices used in managing your clothing laboratory.

Sincerely,

/s/ Laura A. Dunn

Laura A. Dunn
Graduate Assistant

/s/ Grovalynn Sisler

Grovalynn Sisler, Ed.D.
Professor and Head of Department

Enc.

OSU
Oklahoma State University
Department of Clothing, Textiles & Merchandising

Stillwater, Oklahoma 74074
Home Economics West 312
(405) 624-5034

May 7, 1979

Dear Consumer and Homemaking Teacher,

Earlier this spring you were sent a questionnaire on managing a clothing laboratory. At this point we have not received your response. If you have returned it we appreciate it. If not, a duplicate questionnaire and self-addressed stamped envelope is enclosed.

The response has been excellent and much valuable information has been gained. However, we are striving to receive information from as many teachers as possible and hope that you will assist us by completing the questionnaire and returning it promptly.

Thank you for your time and cooperation. Please feel free to include any check sheets, scorecards, or other devices used in managing your clothing laboratory.

Sincerely,

/s/ Laura A. Dunn

Laura A. Dunn
Graduate Assistant

/s/ Grovalynn Sisler

Grovalynn Sisler, Ed.D.
Professor and Head of Department

Enc.

April 24, 1979

Dear Consumer and Homemaking Teacher:

Recently you received a questionnaire on clothing laboratory management. If you have returned it we appreciate your prompt response. If not, please do so. If you have misplaced the questionnaire please contact me and I will provide another one. We want to get information from as many teachers as possible and your ideas are very important.

Thank you again for your cooperation and assistance.

Sincerely,

/s/ Laura A. Dunn

Laura A. Dunn

APPENDIX C

PROBLEMS IN MANAGING A CLOTHING LABORATORY

RANKED IN DESCENDING ORDER

BY MEAN SCORES

TABLE XX

PROBLEMS IN MANAGING A CLOTHING LABORATORY
RANKED IN DESCENDING ORDER
BY MEAN SCORES

Ranking	Problem	N[a]	$\bar{X}$[b]
1	Motivating students to utilize entire class period constructively	220	1.72
2	Motivating students to use classroom aids rather than step-by-step directions from the teacher	220	1.68
3	Motivating students to return equipment to proper places without being told	219	1.64
4	Motivating students to come to class with needed supplies	220	1.61
5	Motivating students to finish garments by designated times	219	1.53
6	Keeping all students busy at once	220	1.47
7	Keeping students from talking unnecessarily while working	220	1.46
8	Adapting plans when equipment breaks down	214	1.21
9	Motivating students to use sewing tools correctly	219	1.08
10	Maintaining an instructional materials file	217	1.07
11	Developing evaluation devices for laboratory projects	219	1.06
12	Administering or supervising laboratory cleanup	219	1.05
13	Grading student projects	220	1.02
14	Keeping a supply of small equipment (bobbins, needles, etc.)	220	.98
15	Conducting inventory of laboratory items	218	.89
16	Ordering instructional supplies	218	.88

TABLE XX (Continued)

Ranking	Problem	N[a]	$\bar{X}$
17	Ordering laboratory equipment	216	.86
18	Supervising student laboratory work	220	.84
19	Planning long-range equipment needs	218	.80
20	Assisting students with garment construction problems	220	.75
21	Maintaining discipline in the classroom	219	.69
22	Utilizing student helpers	203	.67
23	Preparing equipment budgets	209	.44
24	Maintaining attendance records	219	.35
25	Maintaining financial records	209	.32
26	Budgeting allotted money	207	.32
27	Collecting laboratory fees (if any)	197	.31

[a]Number given represents number of participants responding to this item.

[b]Mean was determined by multiplying the value of the rating (Not a problem=0, Minor problem=1, Problem=2, Major problem=3) by the number of responses to the rating, summing the products, and dividing by the total number of responses to the item.

APPENDIX D

SEWING MACHINE BRANDS NOT SPECIFIED ON THE QUESTIONNAIRE WHICH WERE LOCATED IN CLOTHING LABORATORIES OF THE PARTICIPANTS

TABLE XXI

SEWING MACHINE BRANDS NOT SPECIFIED ON THE QUESTIONNAIRE WHICH WERE LOCATED IN CLOTHING LABORATORIES OF THE PARTICIPANTS

Machine Brand	Total No. of Departments With Each Machine Brand	Total No. of Each Machine Brand in All Departments
Nelco	13	87
Union Special Industrial	3	38
Dressmaker	6	37
Universal	4	14
New Home	2	12
Union Special Lockstitch	1	8
Penney's	1	8
Brother	2	7
Necchi	1	7
Columbia Industrial	1	4
U.S. Blind Stitch Hemmer	3	4
Consew Industrial Lockstitch	1	4
Union Special Serger	2	3
Rimoldi Chainstitch Machine	1	2
Union Special Overlock	1	2
Commercial Bernina	1	1
Cutline Industrial	1	1
Fleetwood	1	1
Remington	1	1
Riccar	1	1
Sew-Mor	1	1
Total		243

APPENDIX E

RESPONSES OF PARTICIPANTS REGARDING NUMBER OF MACHINES IN DEPARTMENT AND WORKING CONDITION

TABLE XXII

RESPONSES OF PARTICIPANTS REGARDING
NUMBER OF MACHINES IN DEPARTMENT
AND WORKING CONDITION

Participant	No. of Machines in Department	No. of Machines in Working Condition	No. of Machine Not in Working Condition
1	18	18	-
2	11	11	-
3	20	20	-
4	20	18	2
5	23	23	-
6	12	12	-
7	14	14	-
8	14	10	4
9	14	9	5
10	12	12	-
11	10	10	-
12	22	22	-
13	14	14	-
14	12	6	6
15	22	19	3
16	13	9	4
17	12	9	3
18	25	25	-
19	6	6	-
20	12	12	-
21	13	13	-
22	3	3	-
23	25	10	15
24	14	14	-
25	4	--	-
26	18	14	4
27	22	20	2
28	14	14	-
29	11	11	-
30	9	9	-
31	14	14	-
32	11	11	-
33	10	4	6
34	19	18	1
35	16	16	-
36	14	14	-
37	9	9	-
38	18	--	-
39	14	9	5
40	6	6	-
41	13	12	1
42	--	10	-

TABLE XXII (Continued)

Participant	No. of Machines in Department	No. of Machines in Working Condition	No. of Machines Not in Working Condition
43	11	11	-
44	17	12	5
45	8	8	-
46	9	8	1
47	14	14	-
48	11	11	-
49	11	10	1
50	11	10	1
51	11	10	1
52	15	6	9
53	13	11	2
54	15	12	3
55	27	27	-
56	12	11	1
57	5	5	-
58	14	14	-
59	16	15	1
60	12	12	-
61	12	12	-
62	17	17	-
63	21	21	-
64	11	10	1
65	11	11	-
66	11	11	-
67	21	21	-
68	21	21	-
69	10	10	-
70	15	15	-
71	13	13	-
72	10	8	2
73	15	15	-
74	19	17	2
75	14	12	2
76	15	15	-
77	12	10	2
78	13	12	1
79	16	16	-
80	10	10	-
81	12	12	-
82	8	7	-
83	13	12	1
84	15	14	1
85	15	13	2
86	20	20	-
87	16	--	-
88	11	11	-

TABLE XXII (Continued)

Participant	No. of Machines in Department	No. of Machines in Working Condition	No. of Machines Not in Working Condition
89	15	15	-
90	14	14	-
91	16	16	-
92	21	19	2
93	18	18	-
94	12	12	-
94	11	10	1
96	10	9	1
97	16	16	-
98	10	8	2
99	6	--	0
100	15	15	-
101	24	24	-
102	16	14	2
103	2	7	-
104	16	16	-
105	16	15	1
106	16	16	-
107	11	11	-
108	11	11	-
109	6	6	-
110	8	6	2
111	10	9	1
112	15	14	1
113	19	18	1
114	15	15	-
115	15	12	3
116	14	14	-
117	15	13	2
118	13	11	2
119	9	9	-
120	9	7	2
121	20	20	-
122	13	13	-
123	14	10	4
124	20	20	-
125	18	18	-
126	9	9	-
127	13	11	2
128	16	10	6
129	14	14	-
130	19	13	6
131	17	17	-
132	14	14	-
133	12	12	-
134	20	20	-

TABLE XXII (Continued)

Participant	No. of Machines in Department	No. of Machines in Working Condition	No. of Machines Not in Working Condition
135	8	8	-
136	12	12	-
137	10	10	-
138	14	10	4
139	18	18	-
140	28	28	-
141	11	11	-
142	10	10	-
143	10	10	-
144	13	13	-
145	13	13	-
146	19	16	3
147	28	16	12
148	11	9	2
149	9	8	1
150	13	13	-
151	15	13	2
152	17	10	7
153	22	22	-
154	22	22	-
155	15	12	3
156	20	20	-
157	12	10	2
158	10	10	-
159	12	10	2
160	--	5	-
161	19	19	-
162	15	15	-
163	24	20	4
164	7	4	3
165	15	10	5
166	7	7	-
167	10	10	-
168	16	16	-
169	11	10	1
170	11	11	-
171	17	17	-
172	10	10	-
173	15	15	-
174	22	19	3
175	30	25	5
176	12	12	-
177	16	16	-
178	8	8	-
179	18	18	-
180	13	8	5

TABLE XXII (Continued)

Participant	No. of Machines in Department	No. of Machines in Working Condition	No. of Machines Not in Working Condition
181	18	18	-
182	15	15	-
183	16	16	-
184	23	16	7
185	15	14	1
186	21	21	-
187	16	12	4
188	20	18	2
189	26	26	-
190	13	13	-
191	20	19	1
192	15	10	5
193	13	13	-
194	15	15	-
195	18	18	-
196	9	8	1
197	18	--	-
198	16	12	4
199	18	18	-
200	8	8	-
201	1	1	-
202	15	15	-
203	16	16	-
204	9	9	-
205	24	24	-
206	12	12	-
207	21	21	-
208	15	15	-
209	17	16	1
210	16	10	6
211	15	12	3
212	--	--	-
213	10	10	-
214	15	14	1
215	21	20	1
216	16	16	-
217	10	10	-
218	17	17	-
219	15	15	-
220	16	16	-
Totals	3134	2852	282

APPENDIX F

RESPONSES OF PARTICIPANTS REGARDING PERSON PERFORMING MACHINE CARE AND MAINTENANCE PROCEDURES

TABLE XXIII

RESPONSES OF PARTICIPANTS REGARDING THE PERSONS WHO HAVE PERFORMED MACHINE CARE AND MAINTENANCE PROCEDURES

Procedures	You		Repairperson		Both	
	N	%	N	%	N	%
Adjust belt tensions	17	7.73	140	63.64	4	1.82
Adjust bobbin tensions	126	57.27	46	20.91	39	17.73
Adjust top thread tension	166	75.46	18	8.18	32	14.55
Balance tensions	97	44.09	72	32.73	31	14.09
Clean bobbin case	172	78.18	10	4.55	35	15.91
Clean feed dogs	176	80.00	8	3.64	31	14.09
Clean inside face plate	165	75.00	13	5.91	27	12.27
Oil inside of face plate	124	56.36	51	23.18	33	15.00
Clean inside top of head	68	30.91	107	48.64	25	11.36
Clean underneath head	89	40.46	80	36.36	33	15.00
Oil underneath head	79	35.91	94	42.73	33	15.00
Lubricate gears	47	21.36	136	61.82	17	7.73
Replace gears	4	1.82	161	73.18	--	--
Replace throat plate	131	59.55	41	18.64	20	9.09
Replace take-up spring	9	4.09	147	66.82	3	1.36
Replace tension discs	9	4.09	146	66.36	1	0.46
Replace tension springs	65	29.55	144	65.46	3	1.36
Replace worn cords	29	13.18	125	56.82	13	5.91
Replace worn belt	23	10.46	129	58.64	6	2.73
Replace worn hook	9	4.09	132	60.00	3	1.36
Retime	8	3.64	166	75.46	4	1.82

APPENDIX G

SKILLS AND ATTRIBUTES IDENTIFIED BY THE PARTICIPANTS AS NECESSARY FOR MANAGING A CLOTHING LABORATORY

TABLE XXIV

SKILLS AND ATTRIBUTES IDENTIFIED BY THE PARTICIPANTS AS NECESSARY FOR MANAGING A CLOTHING LABORATORY

Skill or Attribute	Number
Patience	45
Clothing construction	41
Sewing machine repair	41
Management: time, money, business	33
Organization: students, materials, equipment, space	32
Student motivation	22
Identification of machine parts and their operation	15
Machine maintenance	14
Identification of fabrics and finishes	13
Ability to explain construction techniques	13
Demonstration	12
Planning	11
Alteration and fitting	7
Student project evaluation	7
Teaching students to use guide sheets	6
Disciplinary	6
Use of quick sewing techniques	4
Interpersonal: relating to students	4
Correcting clothing construction errors	4
Determination	4
Willingness to let students correct their own mistakes	3

TABLE XXIV (Continued)

Skill or Attribute	Number
Flexibility	3
Creating a pleasant working atmosphere	3
Helping students on an individual basis	3
Dealing with a large group	3
Resourcefulness	2
Creativity	2
Working with male students	2
Detecting individual differences in students	2
Using student helpers	1
Helping students define and realize goals	1
Teaching those who have never sewn	1
Using specific job sheets	1
Teaching students responsibility	1
Helping students choose proper pattern sizes	1
Persuading the superintendent to expand the budget	1

VITA 2

Laura Ayers Dunn

Candidate for the Degree of

Master of Science

Thesis: CLOTHING LABORATORY MANAGEMENT PROBLEMS OF OKLAHOMA VOCATIONAL CONSUMER AND HOMEMAKING TEACHERS

Major Field: Clothing, Textiles and Merchandising

Biographical:

Personal Data: Born in Belzoni, Mississippi, December 25, 1955, the daughter of Mr. and Mrs. Monroe Dunn.

Education: Graduated from Humphreys Academy, Belzoni, Mississippi, in May, 1973; received the Associate of Arts degree from Mississippi Delta Junior College, Moorhead, Mississippi, in May, 1975; received the Bachelor of Science degree in Vocational Home Economics Education from the University of Mississippi, Oxford, Mississippi, in December, 1977; completed requirements for the Master of Science degree at Oklahoma State University in July, 1979.

Professional Experience: Graduate teaching assistant, Clothing, Textiles and Merchandising Department, Oklahoma State University, 1978-79.

Professional Organizations: American Home Economics Association, Mississippi Home Economics Association, Association of College Professors of Textiles and Clothing, Kappa Omicron Phi, Omicron Nu, Phi Upsilon Omicron.