

CHILDREN'S PERCEPTIONS OF SEX-ROLES  
RELATED TO ADULT ACTIVITIES

By

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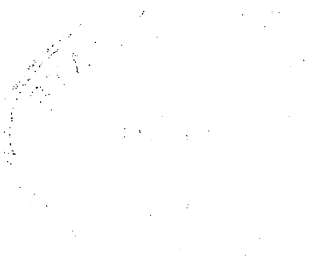
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## CHAPTER I

### INTRODUCTION

Research indicates that by the time a child reaches the age of five he or she is able to make sex-role distinctions and express sex-role preferences (Brown 1956; Hartley, 1959). Children also have learned what is "appropriate" behavior for their sex (Nilsen, 1970). They see the role of the male as one of wage earner and the role of the female as one of housekeeper (Hartley, 1959).

The roles presented young children through various literary media reinforce the stereotypic attitudes children have acquired from their social environment. Girls are portrayed as being observers, boys as doers (Blom, Waite and Zimet, 1968). Girls are pictured more frequently in quiet games, whereas, boys are pictured more frequently in active games (Frasher and Walker, 1972). Females are shown in occupations outside the home about one-fourth as many times as males are shown in occupations outside the home (Frasher and Walker, 1972). Females are shown in a limited number of traditional female occupations and males are shown in a variety of occupations (Frasher and Walker, 1972; Gilsdorf and Gilsdorf, 1975).

It is evident that many of the present models are



restricting young children in their options for social roles. It is believed by many that a variety of models should be presented which show realistic ways children in today's society can function as individuals without being restricted by sex-role stereotypes.

Therefore, the purposes of this study are:

- I. To develop an instrument for measuring children's perceptions of sex-role activities
- II. To pretest a group of first grade children
- III. To prepare and present to one group of first grade children a three-week teaching unit appropriate for first grade children showing men and women performing a wide variety of jobs in an attempt to help children understand that they are free to choose their own type of work
- IV. To measure any changes which may have occurred following the presentation of the curriculum unit.

The specific null hypotheses tested in this study are:

- I. There are no differences in the S-scores (stereotypic responses) between the experimental and control groups on the initial test.
- II. There are no differences in the N-scores (number of activities identified as being appropriate for both men and women) between the initial test and retest for the control group - total, boys, girls.
- III. There are no differences in the N-scores between the initial test and retest for the experimental group.

- IV. There are no differences between the number of stereotyped responses versus the number of non-stereotyped responses to each item by each group (total and boys and girls within each group).
- V. There are no differences in the number of activities with a significant number of stereotyped responses on the retest in the experimental group and in the control group.

## CHAPTER II

### REVIEW OF LITERATURE

A study conducted by Williams, Bennett and Best (1975) investigated the development of sex stereotypes among children at the kindergarten and elementary school levels. They found that children's knowledge of adult sex stereotypes increases until the second grade at which time it shows no further increase for the next two years. It further showed that children of both sexes appear to learn the male stereotype earlier than the female stereotype. Williams, et al (1975) also noted that there

. . . seems to be a greater degree of similarity between the adult male stereotype and the behavior expected of young boys than there is for the adult female stereotype and the behavior of young girls (p. 641).

In another study, conducted by Hartley (1959), children's perceptions of male and female roles were examined. Hartley concluded that although women's roles are changing children's views of these roles have not changed. Her research found that a significantly greater number of sons of working mothers perceived women in work-roles than did sons of non-working mothers. There seemed to be less influence on daughters than sons if the mother worked. When asked what girls wanted to be when they grew up, the response of

those who had non-working mothers was significantly more often "housewife" and the response of those who had working mothers was significantly more often a non-traditional profession. In addition, the proportion of girls who said that they planned to work was significantly higher than the boys who said that they might permit their wife to work.

Nelson (1963) suggests that children begin at an early age making their occupational choices. He warns that

. . . fantasy in occupational thinking of younger children comes partly from the questions asked of them and that relatively irreversible and damaging occupational concepts may be internalized because little effort is made to help children develop an early and objective understanding of the world of work (p. 754).

Stefflre (1969) conducted a study which showed how women workers were represented in elementary readers. He found that the readers did not present accurate occupational information. From Stefflre's results he recognizes that there is a real need to represent the current role of women workers in the elementary readers. He suggests

Exposure to role models of working women other than the ubiquitous teacher seems needed through the use of consultants from the community, through visits showing women at work, and through the resources of literature (p. 102).

In another study, Gilsdorf and Gilsdorf (1975) reported their findings on the content of career materials. Their findings conclude that both females and males are presented in career materials in the traditional sex roles. From the data gathered they found that females are frequently told

that their futures are relatively unimportant, non-productive, and service-oriented and require an attractive appearance. In concluding, Gilsdorf and Gilsdorf (1975) feel that the models being presented children through career materials are inadequate in presenting reality and in preparing boys and girls for career opportunities.

## CHAPTER III

### METHODS AND PROCEDURES

#### Subjects

The study involved a total of 43 children who were enrolled in two first grade classes at Trout Elementary School in Ponca City, Oklahoma. One class of 23 children served as the control group and one class of 20 children served as the experimental group. There were 14 boys and 9 girls in the control group and 11 boys and 9 girls in the experimental group.

#### Instrument

The first step in the development of an instrument to measure children's ideas of sex-roles related to adult activities was to identify categories of activities and activities related to each of the categories. The following categories were selected by the investigator:

1. Male-oriented vocations
2. Female-oriented vocations
3. Neutral-oriented vocations
4. Male-oriented avocations
5. Female-oriented avocations
6. Neutral-oriented avocations

7. Male-oriented recreation
8. Female-oriented recreation
9. Neutral-oriented recreation

Ten activities were chosen by the investigator for each of the nine categories. The 14 teachers at Trout Elementary School were asked to identify independently those five activities within each category which they felt were the ones the children would more readily recognize as being related to that specific category. The scores were totaled and the top five activities from each category were used in the test given to the children.

Pictures that showed something an adult might use in performing each of the 45 specific activities were put on  $2\frac{1}{2}$ " X  $2\frac{1}{2}$ " cards so that they would be easy for the children to hold. Extreme caution was taken to avoid using a picture of a person performing the task in order to eliminate possible cues. The cards were then placed in a specific order starting with a male-oriented vocation, a female-oriented vocation, a neutral-oriented vocation, a male-oriented avocation, a female-oriented avocation, a neutral-oriented avocation, a male-oriented recreation, a female-oriented recreation, and a neutral-oriented recreation. This was repeated four more times so that there would be an even ordering of male, female and neutral activities.

A description of each activity was made to go with each picture. The complete instrument may be found in the Appendix. The descriptions were read to the children and

they were asked whether a man, a woman, or both could perform the specific activity. The instrument developed will be referred to as the Male-Female Role (MFR) test.

A pilot test was given to 12 first grade children from Lincoln Elementary School, Ponca City, Oklahoma. The purpose of the pilot test was to assess the validity of the instrument and to determine a measure of reliability.

The pilot test was given to one group of three children by presenting each of the 45 activity cards one at a time, reading the description and then asking the children if a woman could do the specific activity. After the 45 activities had been completed for a woman then the same procedure was repeated once more asking whether or not a man could do the specific activity. If the answer to the questions was "yes" the child put the activity card in the box which had a picture of a man or a woman on it depending upon the questions. If the child's answer was "no" then the activity card was to be put on top of the desk.

The opposite of this procedure was done with one group of three other children. The list of activities was presented first by asking if a man could do the specific activity and then it was repeated asking if a woman could do the specific activity.

In order not to put the man or woman first all of the time and take the chance of biasing the results, it was planned that half of the children were to be asked if a woman could do the specific activity first and the other



half were to be asked if a man could do the specific activity first. This method of administering the instrument was found to take too long. It did not allow the children to say that both a man and a woman could do a specific activity and it did permit the child to leave items without a specific response.

An alternate method of administering the instrument was devised and was given to six children in two groups of three. These children were read the description of the activity and then they were asked if a man could do the specific activity, if a woman could do the specific activity, or if both a man and a woman could do the specific activity. They responded by either putting the card in a box representing a man, or in a box representing a woman, or in a box representing both a man and a woman. The questions can a woman do a specific activity and can a man do a specific activity were alternated throughout the entire list of activities.

The alternate method of administering the instrument seemed to be the best for several reasons. It was a quicker, easier way of administering the test. It gave the children an opportunity to answer either a man, a woman or both could perform a certain activity. It also facilitated recording the children's responses.

#### Scoring of the Instrument

The techniques for scoring of the MFR test are

described below:

N-score - total number of neutral responses (activities identified as being appropriate for both women and men).

Possible range is 0-45.

S-score - total number of stereotypic responses (activity identified as being appropriate only for a woman or only for a man). Possible range is -45 (all male) to +45 (all female).

SAR-score - number of stereotypic responses for each item in the MFR test. Possible range is 1 X total number of subjects.

#### Validity of the Instrument

Several factors were included in the design of the instrument to make it as valid as possible for use with young children.

1. Teachers in the school from which the subjects came were asked to identify independently five activities within each category which they felt were the ones the children would more readily recognize as being related to that specific category. These teachers were used because they reflected a point of view to which the children were exposed.

2. Three forms of the test (1M, 1F, 2MF) were administered to the pilot group to determine which form most effectively elicited responses from the children. Three children were given the 1F test which involved reading the

description of the activity and asking the children if a woman could do the activity. After the children were asked if a woman could do the 45 activities it was repeated once more asking this time if a man could do the activity. The test 1M is the reverse of 1F and it too was administered to three children. The other test, 2MF, was administered to six children. This form described the activity and then asked the children if a man could do the activity, if a woman could do the activity, or if both a man and a woman could do the activity. The test, 2MF, allowed the children to respond to the questions by indicating whether a man, or a woman or both could perform an activity. Test forms 1M and 1F did not allow the children to specifically say both a man and a woman could do the activity which was the response we wanted the children to elicit after the teaching unit.

3. The questions "Can a woman do this?" and "Can a man do this?" were alternated throughout the entire list of activities for the test form 2MF. This alleviated the possibility of biasing the children's responses by continually asking the questions of one sex first each time.

4. In order to eliminate possible cues the pictures used to illustrate the activities did not have people performing the tasks.

5. The activity cards were ordered male, female, and neutral activity. This was repeated throughout the 45 activity cards to eliminate the possibility of influencing

the children's responses.

#### Reliability of the Instrument

In order to establish a measure of reliability for the instrument, nine subjects in the pilot test were retested by the researcher, using the same technique, on the instrument one week after the initial test. The retest included five girls and four boys. A Spearman rank correlation coefficient was calculated from the N-scores on the initial test and on the retest. A rho of .81, significant at the .01 level of probability, was obtained. This correlation was judged to be significant and contributed to establishing the instrument as reliable.

#### Collection of the Data

The pretest was given to the control group by the investigator. Another first grade teacher administered the pretest to the experimental group. A dialogue had been prepared for use in administering the test in order to insure consistency in presentation.

Upon completion of the pretesting a three-week teaching unit entitled "Jobs People Do" was presented to the experimental group. The teaching unit was derived from a teaching unit prepared by Cindy Mitchell, former Oklahoma State University student, as a partial fulfillment of course work for a course in Non-Sexist Materials for Early Childhood Programs. After the three-week teaching unit was

completed, the control group and the experimental group were retested by the same persons using the same instrument as had been used for the pretest.

#### Analysis of the Data

In order to examine the data for evidence related to perceptions of sex-roles and adult activities, both descriptive and inferential statistics were used. More specifically, in testing the hypotheses the  $t$  test of differences between two independent samples was used for testing Hypothesis I; the Wilcoxon matched pairs, signed rank test for testing Hypotheses II and III; and the binomial test was used for testing Hypotheses IV and V.

## CHAPTER IV

### RESULTS AND DISCUSSION

The purpose of this study was to determine if a three-week teaching unit could help children understand that they and others are free to choose their own type of work without being restricted by sex-role stereotypes. The research instrument used was the Male-Female Role test. The instrument was designed by the investigator in an attempt to measure children's perceptions of sex-roles related to adult activities and to measure any changes that may have occurred due to the teaching unit.

Hypothesis I: There are no differences in the S-scores between the experimental and control groups on the initial test. The  $t$  test of differences between two independent samples was used to compare the experimental and control groups on the initial test. No significant difference ( $t = .219$ ) was found indicating that both groups of children appear to be samples of the same population.

Hypothesis II: There are no differences in N-scores between the initial test and retest for the control group - total, boys, girls. The Wilcoxon matched pairs, signed rank test was used to compare the N-scores between the initial test and retest for the control group. The results

showed a significant difference ( $p < .01$ ). A summary of comparisons on N-scores between initial test and retest among groups may be found in Table I. Therefore, the total control group responded with fewer N-(neutral or non-stereotyped) responses on the retest four weeks after the initial test suggesting that those children in the control group did in fact hold certain stereotyped ideas of sex-roles related to adult activities. A significant difference ( $p < .05$ ) between initial test and retest of N-scores was obtained for the girls in the control group indicating that these girls responded with fewer N-(neutral or non-stereotyped) responses on the retest four weeks after the initial test. The boys in the control group, however, were found to have no significant difference in the N-scores between the initial test and retest. This implies that no significant change occurred in the responses by the boys in the control group over the four-week period. These results showed that after four weeks the control group, who was not presented the curriculum unit "Jobs People Do", responded with more stereotyped responses than they had previously on the initial test. One possible explanation for the boys' responses not changing significantly between the initial test and retest and the girls' responses changing significantly between the initial test and retest would be that research has shown that children appear to learn the male stereotype earlier than the female stereotype (Williams, Bennett, Best, 1975). Another possible explanation is that

TABLE I  
COMPARISON OF N-SCORES BETWEEN INITIAL TEST AND RETEST  
BY WILCOXON MATCHED PAIRS, SIGNED RANKS TEST

Group	N	Wilcoxon T-Value	Level of Significance
Control			
Total	23	47	.01
Boys	14	24	n.s.
Girls	9	4.5	.05
Experimental			
Total	20	31	.01
Boys	11	21.5	n.s.
Girls	9	0	.01

the male stereotype appears to be more clearly defined, whereas, the female stereotype is a combination of both male and female roles and not as clearly defined.

Hypothesis III: There are no differences in the N-scores between the initial test and retest for the experimental group - total, boys, girls. As reported in Table I, the total experimental group was found to have responded with significantly more ( $p < .01$ ) N-(neutral or non-stereotyped) responses after a four-week period which included the presentation of a teaching unit "Jobs People Do". The boys in the experimental group were found to have no significant change but the girls in the experimental group were found to have changed their responses significantly



( $p < .01$ ) after the teaching unit. These results indicate that the teaching unit was effective in changing the stereotyped perceptions of first grade girls toward adult roles. The teaching unit, however, was not effective in changing the stereotyped perceptions of first grade boys toward adult roles. Findings of previous research have reported girls to be later in developing sex-role preferences than boys (Kohlberg and Zigler, 1967; Williams, Bennett and Best, 1975). It is possible that sex-role preferences may be related to perceiving options. If this is true, the girls perhaps had not completely developed their sex-role preferences so that the teaching unit was more effective with the girls, but the boys were closer to having developed their sex-role preferences so that the teaching unit was not as effective. Also, boys are able to identify with the male stereotype because of the similarities between the role of the adult male and the role of the young boy. Whereas, girls have a more difficult time identifying with the female stereotype because the similarities between the role of the adult female and the young girl are not as great (Williams, et al, 1975). Thus, boys roles would be more narrowly defined, offering fewer options of sex-roles related to adult activities and girls roles would be more widely defined, offering a greater number of options of sex-roles related to adult activities.

Hypothesis IV: There are no differences between the number of stereotyped versus the number of non-stereotyped

responses to each item by each group (total and boys and girls within each group). A summary of the stereotyped responses associated with activities will be found in Table II. Truck driver was found to be viewed as a stereotyped activity ( $p < .05$ ) by the control group girls on the initial test and retest and as a significantly ( $p < .01$ ) stereotyped activity by the total control group on the retest.

Gun collecting was also found to be viewed as a significantly stereotyped activity by the boys and girls and total group of the control group on the initial test and retest. Significance levels for responses to gun collecting are as follows for the initial test: boys, ( $p < .01$ ), girls ( $p < .05$ ) and total ( $p \ll .001$ ). For the retest they are: boys ( $p < .002$ ), girls ( $p < .005$ ) and total ( $p \ll .001$ ).

In the control group the activity of needlepoint was also considered a stereotyped activity. The initial test showed that the activity was significantly stereotyped by the boys ( $p < .01$ ), girls ( $p < .05$ ) and total group ( $p \ll .001$ ). On the retest the activity was significantly stereotyped by the girls ( $p < .05$ ) and the total group ( $p < .002$ ).

The activity of football was significantly stereotypic on the initial test by the control boys ( $p < .002$ ), the control girls ( $p < .05$ ), the total control group ( $p \ll .001$ ), the experimental boys ( $p < .01$ ), the experimental girls ( $p < .005$ ) and the total experimental group ( $p \ll .001$ ). On the retest only the control boys ( $p \ll .001$ ), the total

TABLE II  
SAR SCORES (STEREOTYPED RESPONSES) ASSOCIATED WITH ACTIVITIES

Activity	Initial Test						Retest					
	Control			Experimental			Control			Experimental		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
truck driver	7	8*	15	8	5	13	10	8*	18**	7	3	10
nurse	6	6	12	7	6	13	9	7	16	7	1	8
sales person	1	2	3	1	0	1	0	0	0	1	0	1
gun collecting	12**	8*	20***	7	6	13	13***	9***	22***	5	3	8
needlepoint	12**	8*	20***	7	6	13	11	8*	19***	8	5	13
painting	0	0	0	1	0	1	1	1	2	2	0	2
football	13***	8*	21***	10**	9***	19***	14***	7	21***	10**	3	13
ballet	13***	8*	21***	10**	9***	19***	13***	7	20***	8	7	15*
swimming	0	0	0	1	0	1	0	0	0	1	0	1
mechanic	13***	8*	21***	10**	6	16**	14***	9***	23***	10**	3	13
secretary	1	5	6	6	3	9	3	6	9	3	0	3

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .005$

TABLE II (Continued)

	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
movie star	4	2	6	3	2	5	3	4	7	4	2	6
models	9	8*	17*	8	6	14	12**	7	19****	10**	4	14
sewing	13****	8*	21****	10**	9***	19****	12**	8*	20****	9	5	14
reading	0	0	0	1	0	1	1	1	2	1	1	2
motorcycling	3	4	7	5	4	9	9	6	15	6	4	10
gymnastics	8	5	13	8	7	15*	11	8*	19****	5	3	8
bicycling	0	0	0	1	0	1	1	1	2	1	0	1
police officer	7	6	13	5	1	6	11	8*	19****	3	0	3
hairdresser	6	3	9	8	4	12	6	7	13	2	1	3
musician	3	4	7	4	1	5	4	4	8	4	0	4
antique cars	7	7	14	8	3	11	10	8*	18**	7	4	11
knitting	13****	9***	22****	11****	8*	19****	13****	9***	22****	10**	5	15*
puzzles	0	1	1	3	0	3	1	3	4	3	1	4
weight lifting	12**	9***	21****	11****	9***	20****	14****	9***	23****	11****	6	17****

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .005$

TABLE II (Continued)

	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
figure skating	4	1	5	2	0	2	3	4	7	5	1	6
tennis	2	0	2	1	0	1	0	1	0	1	0	1
telephone lineperson	9	4	13	9	6	15*	11	8*	19***	8	4	12
teacher	2	0	2	2	0	2	1	4	5	1	0	1
writer	1	0	1	2	1	3	2	1	3	1	0	1
model airplane flying	11	5	16	9	6	15*	13***	7	20***	7	3	10
crocheting	13***	9***	22***	11***	8*	19***	9	9***	18**	11***	6	17***
cards	2	0	2	2	0	2	3	0	3	3	0	3
race car driver	13***	5	18**	9	8*	17***	14***	8*	22***	10**	5	15*
jump roping	5	5	10	8	6	14	10	7	17*	7	1	8
roller skating	2	1	3	2	0	2	1	4	5	2	0	2
construction worker	12**	8*	20***	10**	8	18***	13***	8*	21***	9	4	13

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\* $p < .005$

TABLE II (Continued)

	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
baby sitter	9	6	15	7	6	13	11	9***	20***	7	2	9
artist	4	1	5	2	2	4	2	3	5	3	0	3
mountain climber	8	4	12	7	2	9	8	7	15	3	0	3
doll collecting	13***	8*	21***	9	8*	17***	10	8*	18**	9	4	13
television	0	1	1	1	0	1	1	1	2	1	0	1
hunting	14***	9***	23***	9	8*	17***	12**	9***	21***	7	6	13
tap dancing	4	5	9	4	2	6	5	5	10	3	2	5
bowling	3	1	4	1	0	1	1	3	4	2	0	2

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .005$

control group ( $p \ll .001$ ) and the experimental boys ( $p < .01$ ) responded with stereotyped responses.

Ballet was also found to be a significantly stereotyped activity by the control boys ( $p < .002$ ), control girls ( $p < .05$ ), total control group ( $p \ll .001$ ), the experimental boys ( $p < .01$ ), the experimental girls ( $p < .005$ ) and the total experimental group ( $p \ll .001$ ) on the initial test. For the retest significantly stereotyped responses were recorded for the control boys ( $p < .002$ ), the total control group ( $p \ll .001$ ) and the total experimental group ( $p < .05$ ).

The activity of mechanic received significantly stereotyped responses on the initial test by the control boys ( $p < .002$ ), the control girls ( $p < .05$ ), the total control group ( $p \ll .001$ ), the experimental boys ( $p < .01$ ) and the total experimental group ( $p \ll .001$ ) and on the retest by the control boys ( $p \ll .001$ ), the control girls ( $p < .005$ ), the total control group ( $p \ll .001$ ) and the experimental boys ( $p < .01$ ).

Building models was perceived as being a stereotypic activity by the control boys ( $p < .05$ ) and the total control group ( $p < .05$ ) on the initial test and by the control boys ( $p < .01$ ), the total control group ( $p < .002$ ) and the experimental boys ( $p < .01$ ) on the retest.

For the activity of sewing stereotyped responses were recorded on the initial test for the control boys ( $p < .002$ ), the control girls ( $p < .05$ ) and the total control group

( $p << .001$ ), the experimental boys ( $p < .01$ ), the experimental girls ( $p < .005$ ), and the total experimental group ( $p << .001$ ) and on the retest the control boys ( $p < .01$ ), the control girls ( $p < .05$ ) and the total control group ( $p << .001$ ).

Gymnastics was seen as a stereotypic activity on the initial test by the total experimental group ( $p < .05$ ) and on the retest by the control girls ( $p < .05$ ) and the total control group ( $p < .002$ ).

Police officer was viewed only on the retest as being a stereotyped activity by the control girls ( $p < .05$ ) and the total control group ( $p < .002$ ).

Antique cars was also viewed as a stereotyped activity on the retest by the control girls ( $p < .05$ ) and by the total control group ( $p < .01$ ).

Knitting was seen by most of the groups as a stereotyped activity. On the initial test the significance levels are as follows: control boys ( $p < .002$ ), the control girls ( $p < .005$ ), the total control group ( $p << .001$ ), the experimental boys ( $p << .001$ ), the experimental girls ( $p < .05$ ) and the total experimental group ( $p << .001$ ). On the retest the significance levels are as follows: the control boys ( $p < .002$ ), the control girls ( $p < .005$ ), the total control group ( $p << .001$ ), the experimental boys ( $p < .01$ ) and the total experimental group ( $p < .05$ ).

Weight lifting was also viewed as a strongly stereotyped activity on the initial test by the control boys



( $p < .01$ ), the control girls ( $p < .005$ ), the total control group ( $p < < .001$ ), the experimental boys ( $p < < .001$ ), the experimental girls ( $p < .005$ ) and the total experimental group ( $p < < .001$ ) and on the retest the control boys ( $p < < .001$ ), the control girls ( $p < .005$ ), the total control group ( $p < < .001$ ), the experimental boys ( $p < < .001$ ) and the total experimental group ( $p < .002$ ).

A telephone lineperson was perceived as a stereotyped activity on the initial test by the total experimental group ( $p < .05$ ) and on the retest by the control girls ( $p < .05$ ) and the total control group ( $p < .002$ ).

For model airplane flying the results were similar to a telephone lineperson. Model airplane flying was significantly a stereotypic activity on the initial test by the total experimental group ( $p < .05$ ) and on the retest by the control boys ( $p < .02$ ) and the total control group ( $p < < .001$ ).

The activity of crocheting was seen as significantly stereotypic on the initial test by the control boys ( $p < .002$ ), the control girls ( $p < .005$ ), the total control group ( $p < < .001$ ), the experimental boys ( $p < < .001$ ), the experimental girls ( $p < .05$ ), and the total experimental group ( $p < < .001$ ) and on the retest by the control girls ( $p < .005$ ), the total control group ( $p < .01$ ), the experimental boys ( $p < < .001$ ) and the total experimental group ( $p < .002$ ).

For the activity of race car driving significantly

stereotyped responses were found on the initial test for the control boys ( $p < .002$ ), the total control group ( $p < .01$ ), the experimental girls ( $p < .05$ ) and the total experimental group ( $p < .002$ ) and on the retest for the control boys ( $p < .001$ ), the control girls ( $p < .05$ ), the total control group ( $p < .001$ ), the experimental boys ( $p < .01$ ) and the total experimental group ( $p < .05$ ).

Jumping rope had only one significant response. This was on the retest for the total control group ( $p < .05$ ).

Construction worker was perceived on the initial test as a stereotyped activity by the control boys ( $p < .01$ ), the control girls ( $p < .05$ ), the total control group ( $p < .001$ ), the experimental boys ( $p < .01$ ), the experimental girls ( $p < .05$ ) and the total experimental group ( $p < .001$ ) and on the retest by the control boys ( $p < .002$ ), the control girls ( $p < .05$ ) and the total control group ( $p < .001$ ).

The activity of baby sitter was viewed as a stereotyped activity on the retest by the control girls ( $p < .005$ ) and by the total control group ( $p < .001$ ).

Another activity that was viewed as stereotypic by many of the groups is that of doll collecting. The results on the initial test are as follows: the control boys ( $p < .002$ ), the control girls ( $p < .05$ ), the total control group ( $p < .001$ ), the experimental girls ( $p < .05$ ) and the total experimental group ( $p < .002$ ). The results for the retest are: the control girls ( $p < .05$ ), and the total

control group ( $p < .01$ ).

Finally, the last activity which had been viewed by some of the children as a stereotyped activity was hunting. On the initial test the control boys ( $p < < .001$ ), the control girls ( $p < .005$ ), the total control group ( $p < < .001$ ), the experimental girls ( $p < .05$ ), the total experimental group ( $p < .002$ ) had significantly stereotyped responses and on the retest the control boys ( $p < .01$ ), the control girls ( $p < .005$ ) and the total control group ( $p < < .001$ ) had significantly stereotyped responses. The results showed that 22 of the 45 activities were viewed by at least one group as a stereotyped activity and 23 were viewed as neutral activities or those in which both men and women may participate.

Hypothesis V: There are no differences in the number of activities with a significant number of stereotyped responses on the retest in the experimental group and in the control group - total, girls, boys. The binomial test was used to compare the S-scores between the experimental group and the control group. The results showed a significant difference ( $p < .001$ ) between the S-scores of the control group and the experimental group. This indicated that on the retest the experimental group had fewer S-scores for the total group than did the control group. A significant difference ( $p < .001$ ) was found to exist for the girls but no significant difference was found to exist for the boys. This implies that the experimental girls had fewer

S-scores than did the control girls but there was no significant difference between the S-scores for the experimental boys and the control boys. These results indicate that the teaching unit was effective in changing the stereotyped perceptions of first grade girls toward adult roles, but it was not effective in changing the perceptions of first grade boys toward adult roles.

## CHAPTER V

### SUMMARY AND IMPLICATIONS

The purpose of this study was to determine if a three-week teaching unit could help children understand that they and others are free to choose their own type of activities without being restricted by sex-role stereotypes. The sample was comprised of 43 children who were enrolled in two first grade classes at Trout Elementary School in Ponca City, Oklahoma. One class of 23 children served as the control group and one class of 20 children served as the experimental group. There were 14 boys and 9 girls in the control group and 11 boys and 9 girls in the experimental group. The test used was the Male-Female Role (MFR) test developed by the investigator. It was a test used to measure children's perceptions of sex-roles related to adult activities, initially and four weeks later.

The results of the analysis of the data of this study were as follows:

1. Significantly more ( $p < .01$ ) N-(neutral or non-stereotyped) responses were given by the experimental group on the retest after the three-week teaching unit.
2. Significantly more ( $p < .01$ ) N-(neutral or non-stereotyped) responses were given by the experimental girls

on the retest after the three-week teaching unit.

3. There was no significant difference of N-(neutral or non-stereotyped) responses for the experimental boys on the retest after the three-week teaching unit.

4. Significantly fewer ( $p < .01$ ) N-(neutral or non-stereotyped) responses were given by the control group on the retest after four weeks.

5. Significantly fewer ( $p < .05$ ) N-(neutral or non-stereotyped) responses were given by the control girls on the retest after four weeks.

6. There was no significant difference on N-(neutral or non-stereotyped) responses for the control boys on the retest after four weeks.

7. These activities were given a significant number of stereotyped responses by at least one section of the control or experimental groups: truck driver, gun collecting, needlepoint, football, ballet, mechanic, models, sewing, gymnastics, police officer, antique cars, knitting, weight lifting, telephone lineperson, model airplane flying, crocheting, race car driver, jumping rope, construction worker, baby sitter, doll collecting and hunting.

8. Twenty-three out of the 45 activities were viewed by the children as neutral activities or those in which both men and woman may participate.

9. Significantly fewer ( $p < .001$ ) S-scores (stereotypic responses) were given by the experimental group than the control group on the retest.

10. Significantly fewer ( $p < .001$ ) S-scores (stereotypic responses) were given by the experimental girls than the control girls on the retest.
11. There was no significant difference in the S-scores for the experimental boys and control boys on the retest.

#### Implications for Future Research

The investigator feels that further study of children's perceptions of sex-roles related to adult activities is indicated as a result of this study. It is suggested that the retest be administered at a later time (other than the four weeks) to determine if their perceptions of sex-roles related to adult activities remain the same or change.

The investigator also recommends that a different method of presenting the ideas conveyed in the teaching unit "Jobs People Do" be found that may be more effective with boys. This could help determine whether the perceptions of the boys were not changed by this method of teaching or whether their perceptions are almost completely formed by the end of the first grade.

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APPENDIX

THE INSTRUMENT

Name \_\_\_\_\_

	PRE-TEST			POST-TEST		
	Man	Woman	N	Man	Woman	N
	-1	+1		-1	+1	
truck driver						
nurse						
sales person						
gun collecting						
needlepoint						
painting						
football						
ballet						
swimming						
mechanic						
secretary						
movie star						
models						
sewing						
reading						
motorcycling						
gymnastics						
bicycling						
police officer						
hairdresser						
musician						
antique cars						
knitting						
puzzles						
weight lifting						
figure skating						
tennis						
telephone lineperson						
teacher						
writer						
model airplane flying						
crocheting						
cards						
race car driving						
jump roping						
roller skating						
construction worker						
baby-sitter						
artist						
mountain climbing						
doll collecting						
television						
hunting						
tap dancing						
bowling						
TOTALS						

Figure 1. Instrument Scoring Sheet

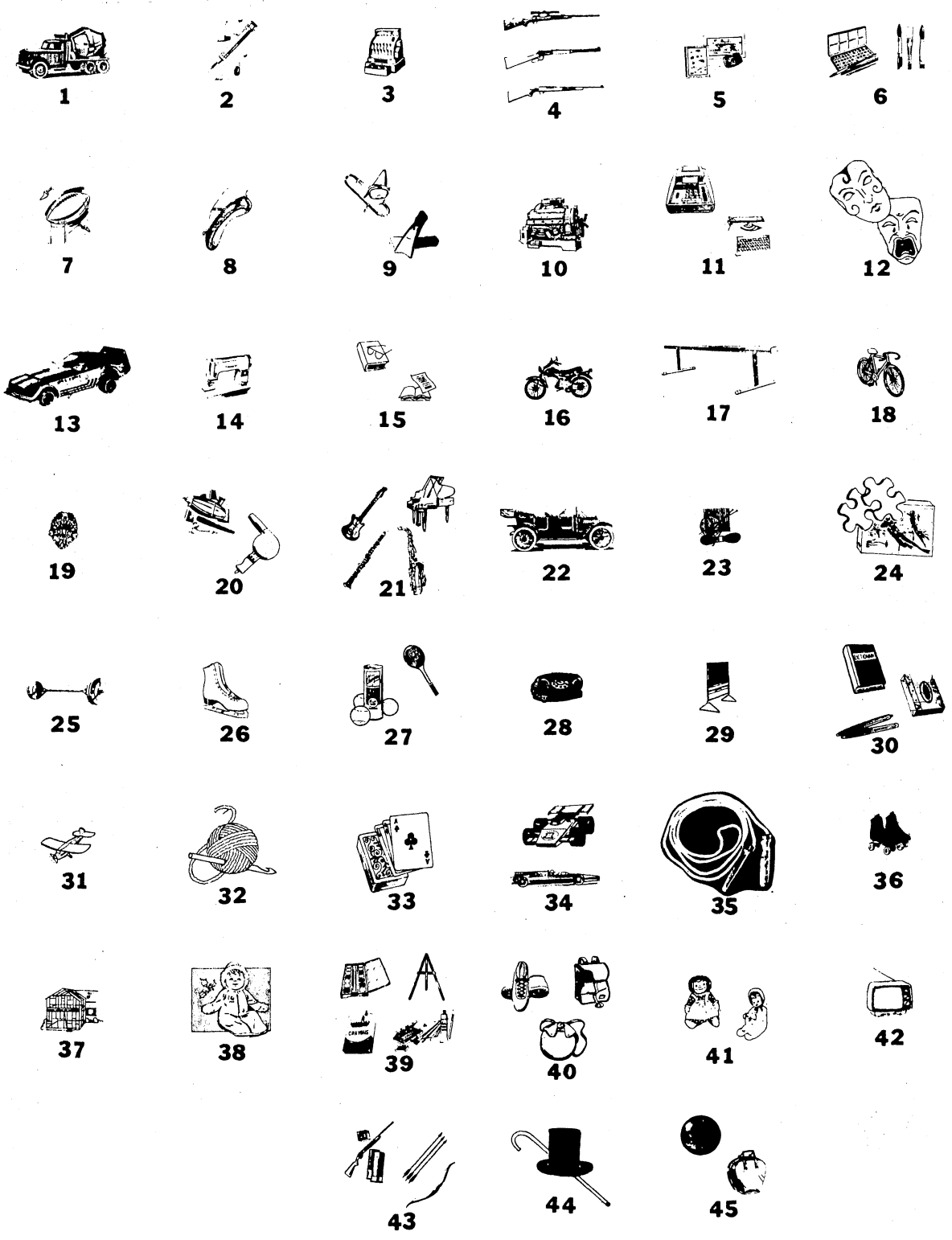


Figure 2. The Instrument

## ACTIVITY DESCRIPTION

1. Some people's jobs are to drive trucks. They are called truck drivers.

Can a man be a truck driver?  
Can a woman be a truck driver?  
Can both a man and a woman be a truck driver?

2. Some people's jobs are to help others get well. They are called nurses.

Can a woman be a nurse?  
Can a man be a nurse?  
Can both a woman and a man be a nurse?

3. Some people's jobs are to sell different things. They are called sales persons.

Can a man be a sales person?  
Can a woman be a sales person?  
Can both a man and a woman be a sales person?

4. Some people enjoy collecting guns as a hobby.

Can a woman collect guns?  
Can a man collect guns?  
Can both a woman and a man collect guns?

5. Some people enjoy needlepoint as a hobby?

Can a man do needlepoint?  
Can a woman do needlepoint?  
Can both a man and a woman do needlepoint?

6. Some people enjoy painting as a hobby.

Can a woman paint?  
Can a man paint?  
Can both a woman and a man paint?

7. Some people enjoy playing football for recreation.

Can a man play football?  
Can a woman play football?  
Can both a man and a woman play football?

8. Some people enjoy ballet dancing for recreation.
  - Can a woman be a ballet dancer?
  - Can a man be a ballet dancer?
  - Can both a man and a woman be a ballet dancer?
9. Some people enjoy swimming for recreation.
  - Can a man go swimming?
  - Can a woman go swimming?
  - Can both a man and a woman go swimming?
10. Some people's jobs are to work on engines. They are called mechanics.
  - Can a woman be a mechanic?
  - Can a man be a mechanic?
  - Can both a woman and a man be a mechanic?
11. Some people's jobs are to type letters in offices. They are called secretaries.
  - Can a man be a secretary?
  - Can a woman be a secretary?
  - Can both a man and a woman be a secretary?
12. Some people's jobs are to entertain others. They are called movie stars.
  - Can a woman be a movie star?
  - Can a man be a movie star?
  - Can both a woman and a man be a movie star?
13. Some people enjoy building models as a hobby.
  - Can a man build models?
  - Can a woman build models?
  - Can both a man and a woman build models?
14. Some people enjoy sewing as a hobby.
  - Can a woman sew?
  - Can a man sew?
  - Can both a woman and a man sew?
15. Some people enjoy reading books as a hobby.
  - Can a man read books?
  - Can a woman read books?
  - Can both a man and a woman read books?
16. Some people enjoy riding motorcycles for recreation.
  - Can a woman ride motorcycles?

- Can a man ride motorcycles?  
Can both a woman and a man ride motorcycles?
17. Some people enjoy gymnastics for recreation.  
Can a man do gymnastics?  
Can a woman do gymnastics?  
Can both a man and a woman do gymnastics?
18. Some people enjoy bicycling for recreation.  
Can a woman go bicycling?  
Can a man go bicycling?  
Can both a woman and a man go bicycling?
19. Some people's jobs are to keep the community safe.  
They are called police officers.  
Can a man be a police officer?  
Can a woman be a police officer?  
Can both a man and a woman be a police officer?
20. Some people's jobs are to fix others hair. They are called hairdressers.  
Can a woman be a hairdresser?  
Can a man be a hairdresser?  
Can both a woman and a man be a hairdresser?
21. Some people's jobs are to play musical instruments.  
They are called musicians.  
Can a man be a musician?  
Can a woman be a musician?  
Can both a man and a woman be a musician?
22. Some people enjoy collecting antique cars as a hobby.  
Can a woman collect antique cars?  
Can a man collect antique cars?  
Can both a woman and a man collect antique cars?
23. Some people enjoy knitting as a hobby.  
Can a man knit?  
Can a woman knit?  
Can both a man and a woman knit?
24. Some people enjoy working puzzles as a hobby.  
Can a woman work a puzzle?  
Can a man work a puzzle?  
Can both a woman and a man work a puzzle?

25. Some people enjoy weight lifting for recreation.
- Can a man lift weights?
  - Can a woman lift weights?
  - Can both a man and a woman lift weights?
26. Some people enjoy figure skating for recreation.
- Can a woman figure skate?
  - Can a man figure skate?
  - Can both a woman and a man figure skate?
27. Some people enjoy tennis for recreation.
- Can a man play tennis?
  - Can a woman play tennis?
  - Can both a man and a woman play tennis?
28. Some people's jobs are to fix our telephones. They are called telephone linepersons.
- Can a woman be a telephone lineperson?
  - Can a man be a telephone lineperson?
  - Can both a woman and a man be a telephone lineperson?
29. Some people's jobs are to help others learn. They are called teachers.
- Can a man be a teacher?
  - Can a woman be a teacher?
  - Can both a man and a woman be a teacher?
30. Some people's jobs are to write stories and poems. They are called writers.
- Can a woman be a writer?
  - Can a man be a writer?
  - Can both a woman and a man be a writer?
31. Some people enjoy flying model airplanes as a hobby.
- Can a man fly model airplanes?
  - Can a woman fly model airplanes?
  - Can both a man and a woman fly model airplanes?
32. Some people enjoy crocheting as a hobby.
- Can a woman crochet?
  - Can a man crochet?
  - Can both a woman and a man crochet?
33. Some people enjoy playing cards as a hobby.
- Can a man play cards?

Can a woman play cards?  
Can both a man and a woman play cards?

34. Some people enjoy race car driving for recreation.

Can a woman be a race car driver?  
Can a man be a race car driver?  
Can both a woman and a man be a race car driver?

35. Some people enjoy jumping rope for recreation.

Can a man jump rope?  
Can a woman jump rope?  
Can both a man and a woman jump rope?

36. Some people enjoy roller skating for recreation.

Can a woman go roller skating?  
Can a man go roller skating?  
Can both a woman and a man go roller skating?

37. Some people's jobs are to construct buildings. They are called building construction workers.

Can a man be a building construction worker?  
Can a woman be a building construction worker?  
Can both a man and a woman be a building construction worker?

38. Some people's jobs are to take care of children. They are called baby-sitters.

Can a woman be a baby-sitter?  
Can a man be a baby-sitter?  
Can both a woman and a man be a baby-sitter?

39. Some people's jobs are to make pictures. They are called artists.

Can a man be an artist?  
Can a woman be an artist?  
Can both a man and a woman be an artist?

40. Some people enjoy mountain climbing as a hobby.

Can a woman go mountain climbing?  
Can a man go mountain climbing?  
Can both a woman and a man go mountain climbing?

41. Some people enjoy collecting dolls as a hobby.

Can a man collect dolls?  
Can a woman collect dolls?



Can both a man and a woman collect dolls?

42. Some people enjoy watching television as a hobby.

Can a woman watch television?

Can a man watch television?

Can both a woman and a man watch television?

43. Some people enjoy hunting for recreation.

Can a man go hunting?

Can a woman go hunting?

Can both a man and a woman go hunting?

44. Some people enjoy tap dancing for recreation.

Can a woman tap dance?

Can a man tap dance?

Can both a woman and a man tap dance?

45. Some people enjoy bowling for recreation.

Can a man bowl?

Can a woman bowl?

Can both a man and a woman bowl?

## JOBS PEOPLE DO

I. Purposes

- A. To show women and men performing a wide variety of jobs so that children understand that people are free to choose their work from an enormous variety of options unhampered by sex typing.
- B. To show that most jobs can be performed equally well by men and women.
- C. To help children understand that all work is important.
- D. To promote self-confidence in her/his own sex-role.

II. Concepts

- A. There are many important jobs to choose from in our community.
  - 1. Some people choose to work away from home.
  - 2. Some people choose to work at home.
  - 3. Some people work inside the home as well as outside the home.

The following three things will be used to help initiate the unit the first week.

BULLETIN BOARD - "Happy Workers". Display the "People at Work" photos by Instructo on a bulletin board entitled "Happy Workers". These include 24 photos of women and men on the job.

LIBRARY CORNER - Display non-sexist books about working women and men in the reading corner. (I will use the books listed in the Annotated Bibliography of Non-Sexist Picture Books by the Child Development Programs, University of Oklahoma.)

WORK CENTER - I will have equipment for a job there for dramatic play. This will be changed every 2 or 3 days depending upon the interaction of the children. I am planning on continuing this throughout the unit.

## ACTIVITIES PLANNED FOR THE FIRST WEEK

## MONDAY

Group Time - A.M.

Discussion about work. This will include a discussion of the bulletin board "Happy Workers". Read a stereotyped book about work. I will follow this up on Tuesday with a non-stereotyped book about work.

Group Time - P.M.

Show the children some photographs of women and men who are engaged in non-stereotyped work and have them react to them. Include photos from the "Happy Workers" bulletin board. Example: What is this picture about? Who's driving the bus? Do you think women can drive buses?

## TUESDAY

Group Time - A.M.

Read the book Mommies at Work by Eve Merriam. Continue the discussion from Monday. Compare the two books and see what differences the children can find.

Group Time - P.M.

Have the children make a book with some non-stereotyped photographs of workers. After a child has chosen a picture let him/her mount it. Cover with clear contact paper and assemble them in ring binders for the library.

## WEDNESDAY

Group Time - A.M.

Play the song from Free to be . . . You and Me, "When We Grow Up". Discuss what each child wants to be when he/she grows up.

Creative Writing - P.M.

The children draw a picture of what she/he wants to be when she/he grows up. Then they write about that job. Share these with the class and display them around the room. Example: My name is \_\_\_\_\_. I would like to be a \_\_\_\_\_ when I grow up. I would like to be a \_\_\_\_\_ because I could \_\_\_\_\_.

Art Time - P.M.

Place the magazine pictures of various non-stereotyped workers on a table for the children to choose from to make a collage.

## THURSDAY

Group Time - A.M.

Introduce the set of pictures from the Feminists for Equal Education. Discuss the variety of jobs shown in the pictures.

Group Time - P.M.

Continue the discussion of pictures from the morning.

#### Incidental

Have the woman mail carrier who comes to our school stop by our room and share briefly with the children what her job entails. Write an experience story of her visit after she leaves. This will begin a book of experience stories entitled "Book About Work".

#### Creative Writing - P.M.

Have the children choose a job from the "People at Work" photos and write about the person's job. Example: This man/woman is a \_\_\_\_\_. He/she does \_\_\_\_\_. I would like to be a \_\_\_\_\_ because I could \_\_\_\_\_.

### ACTIVITIES PLANNED FOR THE SECOND WEEK

#### MONDAY

Group Time - A.M.

Listen to the song from the record Free to be . . . You and Me, "Parents are People". Discuss the different jobs that the children's parents have.

Chart of Jobs - P.M.

Have each child make a chart of the jobs performed by the children's families. They may also illustrate these. After they have completed theirs we can make a combined chart for the class so that the children can recognize that in different homes different people do different jobs.

Activity Time - A.M.

Introduce and discuss the pieces in the flannelboard set Non-Sexist Community Careers for the Flannelboards by Instructo. Set them out for the children to play with during their activity time.

#### TUESDAY

Resource Person - P.M.

Have the female telephone lineperson from Bell Telephone come and share her job with the children. Write an experience story about this and add it to the "Book About Work".

#### WEDNESDAY

Group Time - P.M.

Show the children several props associated with a certain occupation and let them take turns guessing who would use them.

Art Time - P.M.

Make community helper hats. Provide time for them to role play.

#### THURSDAY

Field Trip - P.M.

Walk to the fire station. The fire fighters can tell the children what jobs they do. After we return we will write another experience story for our "Book About Work".

FRIDAY

Creative Writing - A.M.

Have the children make up riddles about different jobs. The others can guess what job their riddle is about. As a class then we can write a poem about jobs.

Group Time - P.M.

Play charades. Have the children act out various jobs which they would like to perform in our community. The other children will guess who they are.

ACTIVITIES PLANNED FOR THE THIRD WEEK

BULLETIN BOARD - "Homemakers have to know how to . . ." This bulletin board will be done by the children. They will work on it throughout the week as the children have various experiences.

MONDAY

Group Time - P.M.

Make a grocery list for pizza. Use the newspapers to determine the cost of the ingredients. Compare this with what a homemaker would do in planning for the meal for a family.

TUESDAY

Group Time - A.M.

Discuss what the children know about laundry and cleaning. "Do you think laundry and cleaning are hard or easy? Who do you think does both of these jobs? What would happen if someone didn't do these jobs?"

Group Time - P.M.

Have Iwilda McCune, the custodian, tell the things she does to keep the school building clean. Write an experience story about Iwilda McCune's visit to add to the "Book About Work".

Have the children decide how they will help in preparing the pizza.

WEDNESDAY

Group Time - P.M.

Make the pizza.

Experience Story - P.M.

Have the children write an experience story about what they did and how it compares to preparing meals for a family.

## THURSDAY

Group Time - P.M.

Have a nurse and a mother visit together. They can demonstrate first-aid and how you care for an infant. Write an experience story for the "Book About Work". A discussion needs to go along with this to help the children see the similarities of the job of a nurse and the care given children by their parents.

## FRIDAY

Group Time - A.M.

Discuss with the children that some people work both in and outside the home. Discuss with the children that although their mothers and/or fathers have jobs outside the home someone has to help with the jobs at home. Let the children discuss their own home situations.

Art Time - P.M.

Make a class mural entitled "People Do All Kinds of Work".

VITA<sup>2</sup>

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Master of Science

Thesis: CHILDREN'S PERCEPTIONS OF SEX-ROLES RELATED TO  
ADULT ACTIVITIES

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First grade teacher at Trout Elementary School,  
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