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ABSTRACT

The report assesses the impact of career awareness-oriented dramatic play procedures in elementary school children. A sample of 90 second graders from North Carolina (66 from open classrooms and 24 from self-contained classrooms), who participated in a dramatic play program in which they constructed a model community in the classroom, was compared with a control group of 33 students who participated in a traditional program of career education (field trips, movies, and sound tapes). The results of the pre- and posttests, which were cross analyzed by ability level and socioeconomic level and presented in tabular form, suggest that dramatic play was more effective than traditional methods both in the self-contained and the open classroom setting. Greater gains were produced in factual knowledge, occupational awareness, and productive thinking in relation to social and community organization in both disadvantaged and more advantaged students. Evidence did not suggest however, that the dramatic play program had a differential effect on behavior patterns in the classroom or on achievement in reading, mathematics, or language. Two appendixes provide the test instruments administered to the students and selected parents' responses to a questionnaire about the program. (JR)

Evaluation of an Occupational Education Model for Primary Grades

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Abstract

The purpose of this study was to assess the effectiveness of a new program in occupational education which used dramatic play as a technique for teaching social studies and occupational awareness in the elementary grades. Three self-contained classes of 70 second grade children participated in a social studies program that featured dramatic play one day a week in a model community constructed by the students. Two classes participated in an open classroom facility provided for that purpose and one class received the program in a regular self-contained classroom. The dramatic play groups were compared to two control classes of 46 children who were taught social studies by more conventional methods.

The results supported the conclusion that dramatic play was effective in producing greater gains in factual knowledge, occupational awareness, and productive thinking in relation to social and community organization than more traditional methods. The program was as effective in this regard in the self-contained setting as in the open classroom setting. Also, the program was as beneficial to children from lower socio-economic backgrounds and ability groups as to children who were more socially and intellectually advantaged. Evidence was not obtained to suggest that the dramatic play program had a differential effect on behavior patterns in the classroom or on achievement in reading, mathematics or language. The findings generally support the conclusion that dramatic play may be used as an effective alternative to more conventional methods for teaching elementary social studies and occupational awareness.

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The opinions expressed in this report are those of the authors and do not necessarily reflect the position or policy of the North Carolina State Department of Public Instruction.

Evaluation of an Occupational Education Model for Primary Grades

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The purpose of this study was to assess the educational and behavioral impact of a new program in occupational education that features dramatic play in a model community designed and constructed by the students. In the present study dramatic play was defined as an instructional procedure as differentiated from role-playing or socio-drama techniques. Role-playing techniques were developed by Moreno (1942) and involve the spontaneous enactment of a situation in human relations in which some members of the group observe and others act out various social roles (Shaftel and Shaftel, 1967). The term dramatic play denotes a classroom activity which is focused on a specific academic content and involves the total class as active participants. Children are encouraged to explore areas such as social studies and occupational awareness by dramatizing the activities and relationships which are studied. The teacher structures the learning environment by providing information prior to the play sessions and by guiding evaluative discussions after the sessions.

Unfortunately, there has been very little systematic research and evaluation with dramatic play procedures in the classroom, aside from testimonials by exponents. For example, Shaftel and Shaftel (1967) argue that since dramatic play provides an environment which stimulates exploration, children are better motivated to learn and have an increased interest in the subject of study. Theoretical support for the use of dramatic play procedures can be found in Piaget's descriptions

of the course of cognitive development (Flavell, 1963). According to Piaget's theory, children in the early elementary years enter a stage of concrete operations during which they master abstract reasoning processes; however, they do so through the exploration of concrete objects and events. Therefore, Isaacs (1965) has suggested that although young elementary school children can use a variety of symbolic and verbal rules to organize information, there appear to be many occasions when they can learn more effectively through an appropriate activity by utilizing their direct experience.

In general, dramatic play has been used more extensively in pre-school programs than in the elementary grades. Several studies have obtained observational evidence that dramatic play results in improved social, intellectual, and verbal communications skills in kindergarten children (Bost and Martin, 1962; Smilansky, 1962; Wann, Dorn and Liddle, 1962). Litsinger (1962) found that dramatic play seemed to generate greater amounts of pupil planning behavior, pupil initiated social control, and original expressiveness than other activities in the curriculum at the UCLA demonstration school. Although these studies provide useful information regarding the dramatic play process, dramatic play procedures were not compared objectively with alternative methods.

During the 1971-1972 school year a pilot study of a new program in occupational education was begun in two primary classes in the Chapel Hill-Carrboro Public Schools. Two classes of 48 second grade students participated in a social studies program that featured dramatic play one day a week in a model community designed and constructed by the students. The dramatic play group was compared to a control group of 25 students who received social studies instruction by more conventional methods.

Each child was pre- and post-tested on instruments designed to measure knowledge about community life and organization as well as productive and imaginative thinking. Also, the classroom behavior of students was measured by using time-sampling procedures. The results supported the conclusion that dramatic play was highly effective in producing greater gains in factual knowledge and productive thinking in relation to social and community organization than more traditional methods. The data also suggested that the dramatic play program had a positive effect on task oriented and cooperative behavior in the classroom.

The outcomes of this initial study strongly suggested that dramatic play techniques may be used as an effective alternative to more traditional methods for teaching occupational awareness in the elementary grades. One of the major problems encountered in the development of occupational education programs for the primary grades seems to be the abstract nature of the subject matter. The amount of information that must be presented in order to understand the relationships among various occupations, services, and institutions that operate in the local community frequently results in an overly simplistic and surrealistic presentation in the classroom. The findings to date lend support to the notion that many abstract concepts about community life can be taught effectively in the lower grades through an appropriate activity which capitalizes on the child's direct experience as opposed to methods which rely solely on verbal and symbolic modes of presentation.

The major objective of this study was to provide a more extensive assessment of the impact of dramatic play procedures on the development of occupational awareness, academic achievement, productive thinking, and

classroom behavior of elementary school children. The following hypotheses were tested:

1. Students who participate in the dramatic play program will demonstrate greater gains in knowledge about specific occupations and community organization than will students who receive a traditional social studies program.

2. Students in the dramatic play program will show greater gains in productive and imaginative thinking in relation to social roles and community organization than will students in a regular elementary education program.

3. Students who participate in the dramatic play program will show more productive, task-oriented and cooperative behavior in the classroom than will students in a regular program.

4. The dramatic play program will be as effective when carried out in a regular self-contained class as when implemented in a specially constructed open classroom setting, provided that the program is implemented in the same manner in both settings.

5. Students in the dramatic play program will demonstrate greater gains in academic achievement than will students in a regular elementary school program.

Social Studies/ Occupational Awareness Program

The occupational awareness program was conducted during the social studies period under the supervision of the second author. The program was carried out by two second grade teachers at Frank Porter Graham Elementary School and one second grade teacher at Estes Hills School. Occupational awareness was taught by capitalizing on the child's desire to imitate and dramatize adult life. The teacher's role was to observe the play and to guide the post-play discussion so that children would

perceive the need for additional information and props in order to have better, more realistic play. The teacher planned pupil research lessons before each play session which served to structure the development and expansion of the program by the students.

The objectives of the occupational awareness/social studies curriculum were: (1) to provide the child with basic information regarding various occupations, types of services , and social institutions in the local community, (2) to develop an awareness of the interdependence of various occupations in a community, (3) to develop an understanding of the concept of community and the structure of social organization within the community, (4) to supplement other aspects of the total curriculum by providing math, reading, and language arts lessons related to the dramatic play and (5) to promote the development of productive thinking and positive attitudes toward various occupations in the community.

A child-size community was constructed out of modular blocks in an open classroom on the second floor of the Frank Porter Graham Child Development Center. A smaller community was constructed out of wooden boxes, desks, chairs, and tables in a self-contained classroom in Estes Hills School. Initially, the community consisted of only a store, a post office, and two houses. As the pupils played in the community they generated the need for additional buildings and workers. For example, the study of the post office and air mail led to the perceived need for airports with air traffic control officers and pilots. A hospital with doctors, nurses, and ambulance drivers was added in response to airplane and car crashes. Similarly, the students perceived the need for policemen to regulate traffic and a gas station attendant and mechanic to service cars. By the end of the school year the community was composed of a bank, fire station, school, restaurant, craft shop, traffic court, U.S. Mint,

U.S. Government Printing Office, newspaper office, farm, wholesale market, harbor, train station, department of motor vehicles, and a mayor's office with a city council.

Each dramatic play session consisted of three parts:

1. Pre-play discussion: The day before dramatic play each pupil chose his job. Then on the dramatic play day, pupils reviewed the job list, and had a brief discussion concerning the activities to be held in the community that day.

2. Dramatic play: The actual dramatic play lasted from 15 to 45 minutes. Play was spontaneous and was observed by the teacher.

3. Post-play discussion: Each play period was followed by a discussion in which children told what they did in the community that day and discussed their problems and their need for more information and props.

In order to have more authentic dramatic play, the teacher planned research lessons which included the following activities: (1) reading teacher-prepared charts, (2) reading books, (3) looking at movies and filmstrips, pictures and slides, (4) listening to records, and (5) taking field trips. The program included nine field trips to local agencies and centers. Also, writing and geography experiences related to the dramatic play lessons were included in the social studies program. For example, there were writing lessons in which pupils wrote stories about field trips, or wrote letters for their play in the post office. The children made a map of their own community to be used in the police station and construction company. They also studied the map of the U.S. and the world in order to decide where the airplanes should go and what information pilots should give passengers.

The occupational awareness/social studies program was held for 45 to 55 minutes five days a week. Dramatic play sessions were held one day each week during which the entire class participated. Each class had 26 or more play sessions over the school year. Three to four days a week were devoted to pupil research lessons. Sometimes the students used the fifth day for a related art lesson (e.g., making menus or other props to be used in play), or for a related skills lesson (e.g., letter or story writing, or map reading). Approximately once each week each child at Frank Porter Graham had an opportunity to participate in free play in the community with a small group of eight or nine other children. Unlike the dramatic play sessions, the child in free play could change jobs as often as he wished and generally explore various activities in the community.

Method

Subjects and Experimental Design

The subjects were 90 children who were sampled from five self-contained second grade classes (total N = 135) in Chapel Hill, North Carolina. Two classes (N=33) at Frank Porter Graham Elementary School received the dramatic play program in an open classroom provided for that purpose on the second floor of the FPG Child Development Center. A second experimental group (N=24) received the program in a regular self-contained classroom at Estes Hills School. Two classes (N=33) at Glenwood Elementary School served as a control group.

The sample was composed of 44 boys and 46 girls. The average chronological age for the sample was 91.57 months and the average PMA full scale IQ was 98.69. A summary of subject characteristics for each group is given in Table 1. The socio-economic level of each child was estimated by the Hollingshead scale for occupation of father. A X^2 analysis

Table 1

Subject Characteristics

Variable	Experimental Open-Classroom	Experimental Self-Contained	Control
N	33	24	33
CA	90.72	91.00	92.77
SES	2.49	2.87	3.00
PMA Verbal	108.19	107.77	99.60
PMA Spatial	109.32	110.36	102.84
PMA Numerical	97.06	99.31	94.62
PMA Perceptual	101.41	101.72	98.20
PMA Total IQ	101.39	102.59	94.02

of occupational level by treatment groups indicated that the socio-economic distribution was comparable among the three groups. The sample was composed of 61 white children and 29 black children who were distributed comparably among the three treatment groups. A 2(sex) by 3(group) analysis of variance on PMA full scale IQ indicated that the three treatment groups were well matched with respect to general ability.

With the exception of the Primary Mental Abilities Test, each subject was pre and post tested on the following instruments.

Test Instruments

A survey of standardized test instruments failed to uncover any measures of occupational awareness, general information or productive thinking in relation to those topics which seemed to be relevant to the academic content of the occupational education program and were appropriate for the age level of the children involved. Accordingly, during the 1971-72 evaluation two tests were developed by the Frank Porter Graham Center research staff to measure improvement in these aspects of the program; the Social Studies Information Test and the Social Studies Implications Tests. In addition, the Occupational Roles Test was developed for the present study to assess the development of occupational awareness. A more complete description of each of these measures has been provided in Appendix A.

Social Studies Information Test. This test was developed to measure factual knowledge about specific occupations and community organization. The test was individually administered and was similar in format to the Wechsler General Information Test. The Chapel Hill-Carrboro Public Schools curriculum guide for second grade social studies was used as an information base from which items were selected. Those items which related to specific

occupations or the social function performed by workers in various occupations were grouped together to form a 21-item Occupational Information subtest. Those items which pertained to transportation and communication systems, social institutions, and the physical environment were grouped under a 15-item General Information subtest. The final version of the test required approximately 20 minutes to administer. The subject's responses were scored on a six point scale to allow for partial credit according to the quality of response.

Social Studies Implications Test. This test was designed to measure productive and imaginative thinking in relation to social relationships and community organization. A series of questions were written following the format of the divergent production tests devised by Guilford (1967) and Torrance (1966). Two questions were selected from this list which seemed to elicit a wide range of responses from the subjects in the 1971-72 evaluaation. The first item (Space Man) required the subject to generate information gathering questions about a hypothetical situation in which an astronaut has landed on another planet and needs to determine whether it is a good place to live. The second item (Policeman) required the production of consequences for a situation in which no policemen were in the subject's town.

The Social Studies Implications Test was individually administered and required approximately 10 to 20 minutes. The subject's responses were recorded verbatim. Each protocol yielded two types of scores for each question. The fluency score was based on the total number of relevant responses for each question and the flexibility score was based on the number of different response categories that were used in each question, e.g. questions about the inhabitants of the planet,

life support resources, institutions and services. Specific response categories were devised separately for each question based on the analysis of the 1971-72 pre-test data.

Occupational Roles Test. The Occupational Roles Test was developed to measure occupational awareness as defined by the child's perception of the availability of jobs for a hypothetical couple who had just moved to Chapel Hill. The subject was first asked what jobs Mr. Thomas could find and then what jobs Ms. Thomas might find. Each relevant response was scored according to three categories:, job titles, e.g., bank teller, electrician; job descriptions, e.g., teaching in college, give shots and take temperatures; and job locations, e.g., work in a gas station, library or school. Responses which were considered too vague and ambiguous to be scored as occupational roles were classified as irrelevant, e.g., toy keeper, peanut butter man, daddy.

Classroom Behavior. The Schedule for Classroom Activity Norms (SCAN) is a time sampling procedure which permits the classification of classroom behavior into one of 27 categories (see Appendix A). Each child was observed for five-minute periods on each of five days by two observers during the language arts period in his assigned classroom. Behavior was categorized every 10 seconds which resulted in 150 observations for each child on each occasion (fall and spring). The frequency of behavior in each of these categories was then grouped according to six general dimensions; Task Orientation - task relevant and task irrelevant, Social Orientation - independent (self-directed) and dependent(passive), and Affective Orientation - cooperative and aggressive.

In addition to SCAN, teacher perceptions of the classroom behavior of each subject were obtained by the Schaefer Classroom Behavior Inventory (CBI). The CBI is a 18-item scale on which teachers rate the classroom

behavior of their students in the areas of; task orientation versus distractability, introversion versus extroversion, and considerateness versus hostility. The specific items for each scale are given in Appendix A.

Academic Achievement. The academic progress of each child was measured by five subtests of the California Achievement Test (CAT). The subtests included in this battery were; Reading Vocabulary, Reading Comprehension, Mathematics Computation, Mathematics Concepts and Problems, Language Usage and Structure.

General Ability. The Primary Mental Abilities Test (PMA) was used as a subject classification instrument and was administered as part of the pre-test battery.

Procedure

The experimental and control groups were pre-tested with each of the instruments described above in September and October of 1973 and were post-tested in April and May of 1974. Three experienced examiners who were not involved in the instructional programs administered all of the tests and observational procedures. The Occupational Awareness Program was begun in October, 1971, and was terminated in May, 1972.

The program was carried out in basically the same fashion in the self-contained setting (Estes Hills) as in the open-classroom setting (Frank Porter Graham) with several exceptions. First, since the size of the regular classroom at Estes Hills was approximately one-third that of the open-classroom used for the community at Frank Porter Graham, the pupils at Estes Hills were taught to set up the community at the beginning of each dramatic play session and to dismantle it at the end of the period. The props for the various centers were put into boxes, labeled and stored until the next play session. In setting up the community, the pupils

used the tables, desks and floor in the room, as well as space outside the classroom for the farm, wholesale market, and harbor. Secondly, in order to facilitate the construction of the community, the children chose their jobs the day before dramatic play was held and practiced setting up the community. These activities were not necessary at Frank Porter Graham since the community was maintained in the open space. Also, for this reason, the children at Estes Hills were not able to use the community for free play during the week. The time spent planning and setting up the community in the self-contained classroom resulted in less time being spent in reading social studies books and lessons than at Frank Porter Graham. All other aspects of the program were basically the same in both sessions.

The control group participated in their usual classroom activities and received social studies instruction as outlined in the Chapel Hill-Carrboro Public Schools curriculum guide for the second grade. The topic of study, as given in this guide, was "Neighborhood and Community" and focused on community helpers. Social studies and related lessons were usually held three to four times a week for approximately 2 1/2 hours a week. Once each week the control group teachers had a 1 1/4 hour social studies period in which the children participated in one or more of the following activities: (1) looking at pictures and filmstrips, (2) listening to tapes and records, (3) reading social studies books, (4) participating in discussions or committee work, (5) giving oral reports on community helpers they had interviewed, or (6) listening to resource people. Occasionally small groups would role-play an occupation such as librarian while the rest of the class observed.

The day following this 1 1/4 hour period, a social studies activity was integrated into the language arts/reading block. Students were assigned an activity related to the social studies/occupational awareness topics of

the previous day such as writing or reading a story or completing a language paper. On following days students sometimes participated in art or health lessons related to occupational awareness. For example, some pupils prepared a social studies bulletin board which featured different occupations.

The control classes took a total of four field trips and had six resource people, e.g., policeman, fireman, nurse, speak to their classes about occupations and community services. In addition, they were loaned 21 movies that were used in the experimental groups and obtained four other films related to occupational awareness. Also, the control groups listened to five Wallensak Teaching Tapes on various occupations and completed the accompanying work papers. In general, the control classes received what might be classified as a traditional program for introducing occupational awareness in the elementary grades.

Results

In order to test for sex differences and to determine whether the experimental and control groups were matched with respect to initial performance, a 2(sex) x 3(treatment group) analysis of variance was carried out on each pre-test variable. The significance of change between the pre and post tests on each variable was determined for each group by *t* tests for related samples. In order to test for significant changes among the three treatment groups a two-way (group x sex) analysis of variance was performed on the change scores for each variable. As a check on the generality of the results from the analysis, a 2 x 3 analysis of covariance was carried out on each post-test variable with the pre-test and IQ controlled.

Social Studies Information. The average pre and post test scores for each group on the Social Studies Information Test are given in Table 2. The analysis of the pre-test data for each scale indicated that boys

displayed greater knowledge about specific occupations than girls at the beginning of the project; however, sex differences were not observed on the General Information subtest or on Total Social Studies Information. Also, this analysis showed that the groups were well matched on initial performance for all three information measures.

As Table 2 shows, both experimental groups and the control group made significant gains on each scale of the Social Studies Information Test. Nevertheless, the analysis of variance on the change scores indicated that the dramatic play groups demonstrated markedly superior gains in both general information ($F=68.60$, $p < .001$) and occupational information ($F=46.35$, $p < .001$) compared to that made by the control group. Similarly, the change in total information for the two experimental groups was greater than that for the control group ($F=105.31$, $p < .001$). In each case, the gains in information made by the self-contained experimental group were comparable to those made by the open classroom group (see Figure 1). Although boys in the open classroom group tended to show greater relative progress in general information than girls, no other significant sex effects were observed.

The analysis of covariance on each post-test variable for the Social Studies Information Test yielded the same results as reported above when IQ and initial performance were held constant. Therefore, the data support the conclusion that the students who received dramatic play acquired greater factual knowledge about specific occupations and community organization than those who participated in a more traditional social studies program. The dramatic play program was as effective in this regard when carried out in a regular self-contained classroom as in an experimental open classroom setting.

Table 2

Mean Pre and Post-test Scores for the Information and Implications Tests

Variable		Experimental Open	Experimental Self-Contained	Control
General Information	Pre	29.09	28.92	25.06
	Post	69.27	72.83	37.61
	t	19.43**	18.73**	8.19**
Occupational Information	Pre	28.00	28.96	24.09
	Post	66.58	66.38	38.00
	t	19.75**	15.23**	9.42**
Total Information	Pre	57.09	57.88	49.15
	Post	135.85	139.21	75.61
	t	27.92**	21.63**	12.28**
Implications-Space Man Fluency	Pre	5.36	3.92	4.27
	Post	7.64	7.71	5.33
	t	2.11*	5.77**	2.17*
Flexibility	Pre	3.03	2.33	2.63
	Post	3.76	3.75	3.09
	t	2.27*	4.10**	1.74*
Implications-Policeman Fluency	Pre	4.06	3.04	3.61
	Post	5.81	5.75	4.52
	t	4.28**	7.16**	2.53*
Flexibility	Pre	2.60	2.33	2.52
	Post	3.24	3.08	2.70
	t	3.37**	3.19**	0.81

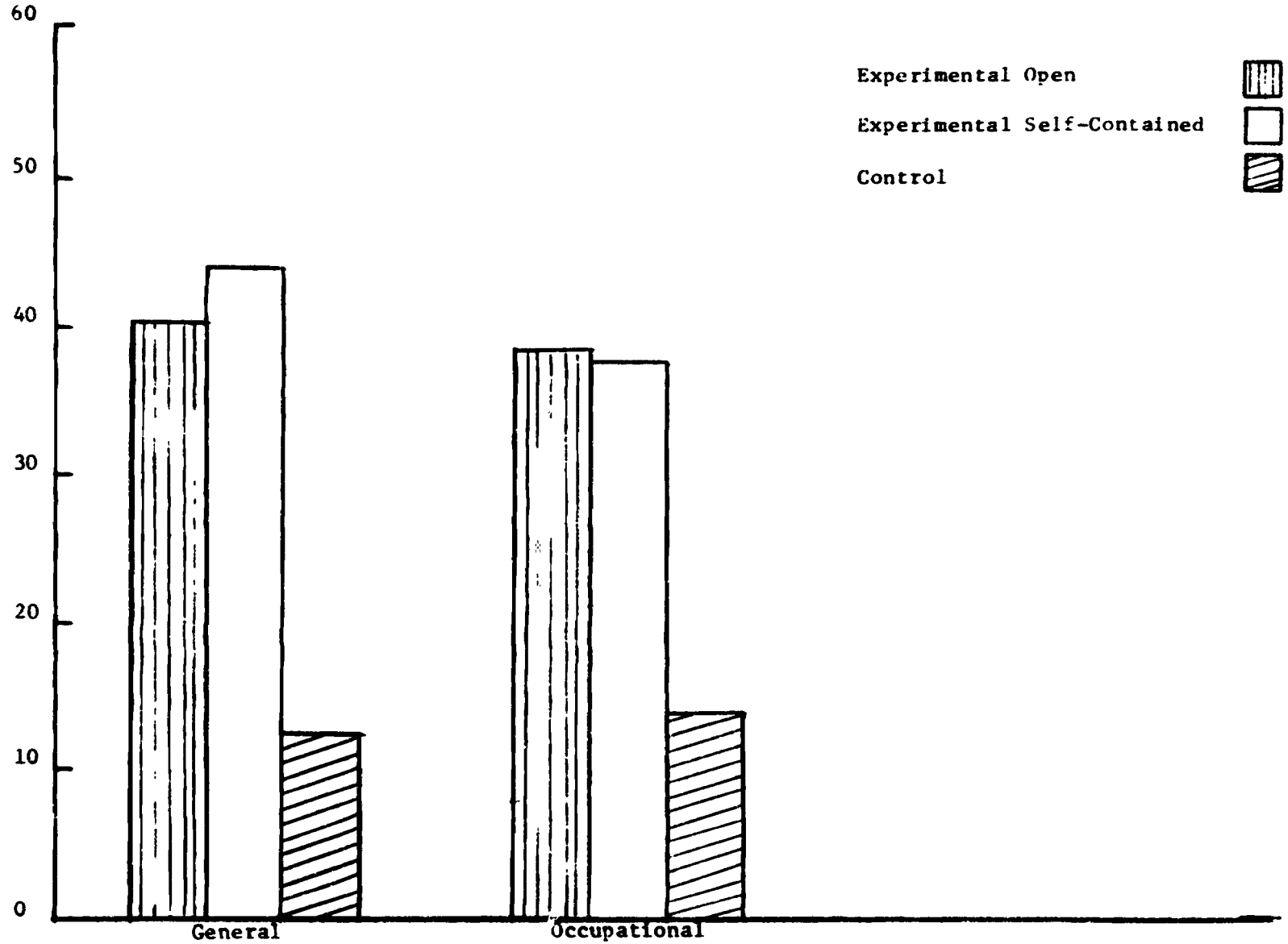

Figure 1 The Average Change on the Social Studies Information Test

Social Studies Implications. Since the Space Man question on this test provides a more general measure of productive thinking compared to the Policeman question which relates more specifically to the occupational content of the program, the fluency and flexibility scores for each item were analyzed separately. The analysis of the pre-test scores for each item revealed an initial superiority for boys on the Space Man question. However, no significant differences in initial performance were found among the three treatment groups for either question.

The data in Table 2 shows that each of the treatment groups made reliable gains on the fluency scale for both questions. Similarly, all three groups showed significant increases in flexibility as measured by both questions with one exception, the pre and post test comparison for the control group on the Policeman question failed to reach significance.

The analysis of variance on the change in fluency scores for the Space Man question failed to yield significant differences among the three treatment groups. On the other hand, when initial performance and IQ were controlled by covariance procedures, the average gains in fluency on this item were shown to be greater in the experimental groups than in the control group ($F=3.34$, $p<.04$). Similarly, both experimental groups showed greater gains in fluency on the Policeman item than did the controls ($F=5.48$, $p<.05$), and this finding was supported by the covariance analysis. Also, for this item, the self-contained experimental group showed greater progress in fluency than that observed in the open classroom setting ($t=1.69$, $p<.05$). The average gains in fluency for each group are shown in Figure 2.

With respect to the flexibility measures, the analysis of change scores for both questions failed to indicate significant group effects.

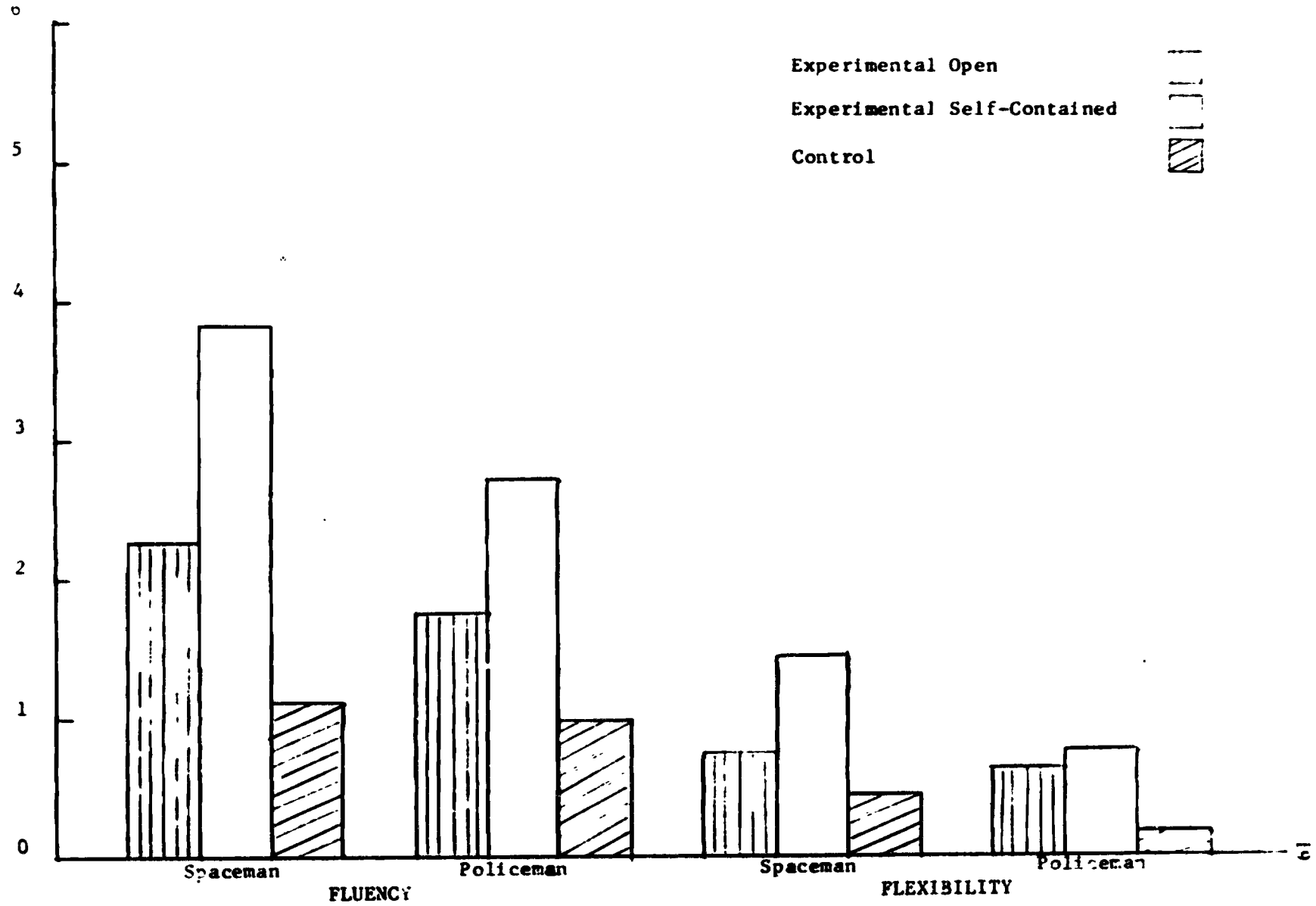

Figure 2 The Average Change on the Social Studies Implications Test

However, when initial level and IQ were held constant by the analysis of covariance, significant group effects were obtained for the Policeman question. In general, the increases in flexibility as measured by this item were comparable for the two experimental groups and greater than that for the control group ($F=2.94$, $p < .05$). No significant differences were noted between boys and girls in improvement on either measure for either question.

Accordingly, these results support the conclusion that dramatic play procedures facilitate the development of productive and imaginative thinking on the part of second grade students. In the present study, the impact of the program appeared to be greater on the production of meaningful ideas (fluency) than on the diversity of the ideas that were produced (flexibility). Also, very little evidence was gained to suggest that the program was more effective in one of the settings than in the other, although the self-contained group was superior to the open classroom group on one of the four measures.

Occupational Roles Test. The average number of occupational titles, descriptions and places of work for each item on the Occupational Roles Test is shown in Table 3 for each occasion of measurement. Although boys described various occupations that might be available in the community more often than girls, no sex differences were noted for the frequency of occupational titles or places of work in response to either item, i.e., work for Mr.Thomas or for Ms. Thomas. Also, on the pre-test, children in the control group listed more places of work than did those in either experimental group.

As Table 3 shows, the children in both experimental groups gave significantly more occupational titles and places of work in response to both questions in spring than in the fall. Also, both experimental groups

Table 3

Mean Pre and Post-test Scores for the Occupational Roles Test

		Experimental Open	Experimental Self-Contained	Control
Mr. Thomas	Pre	3.48	3.33	3.09
Title	Post	9.09	8.46	5.39
	t	7.15**	6.79**	3.71**
	Pre	2.39	1.75	1.64
Description	Post	0.73	0.54	1.61
	t	-3.02**	-3.17**	-0.08
	Pre	0.70	0.87	1.79
Place	Post	2.82	2.54	2.09
	t	4.36**	3.20**	0.72
Ms. Thomas	Pre	2.36	7.46	2.12
Title	Post	7.51	2.50	3.51
	t	6.62**	5.77**	3.80**
	Pre	1.27	1.12	1.60
Description	Post	0.54	0.21	0.79
	t	-2.23**	-2.35*	-2.55**
	Pre	0.61	0.58	0.79
Place	Post	1.94	1.62	0.94
	t	3.57**	2.59*	0.56
Total Occupations	Pre	5.85	5.83	5.21
Title	Post	16.61	15.92	9.24
	t	7.59**	7.48**	4.63**
	Pre	3.67	2.88	3.24
Description	Post	1.27	0.75	2.39
	t	-2.97**	-3.35**	-1.38
	Pre	1.30	1.46	2.58
Place	Post	4.76	4.17	3.03
	t	4.54**	3.49**	0.79

showed significant decreases in the frequency of descriptive responses to both questions. The control group showed increases in the number of occupational titles given to both questions and a decrease in the number of descriptive responses to question two (see Figure 3).

The analysis of change among the three treatment groups indicated that the increase in the frequency of occupational titles for the dramatic play groups was greater than that for the control group ($F=12.06$, $p<.001$) and this effect was observed for both items. The self-contained and open classroom groups did not differ in the magnitude of change on this variable. In general, boys showed greater increases in responses involving occupational titles than did girls ($F=6.58$, $p<.01$).

The analysis of variance on change scores for the places of work response category yielded significant group effects for each question and for the total score. However, when differences among the three groups on the fall scores and IQ were controlled by covariance procedures, these effects failed to approach acceptable levels of significance. No significant sex differences were found for change scores in this response category. The analysis of covariance for descriptive responses showed that the decrease in the number of descriptive responses for the dramatic play groups was greater than that for the control group ($F=4.32$, $p<.01$) for item one (Mr. Thomas). The same analysis for item two (Ms. Thomas) indicated that changes in this response category were comparable among the three groups. No significant sex differences were found for the number of descriptive responses when IQ and initial performance were held constant.

These results support the general conclusion that the dramatic play program had a significant impact on the development of occupational awareness in second grade children. The finding that children in the

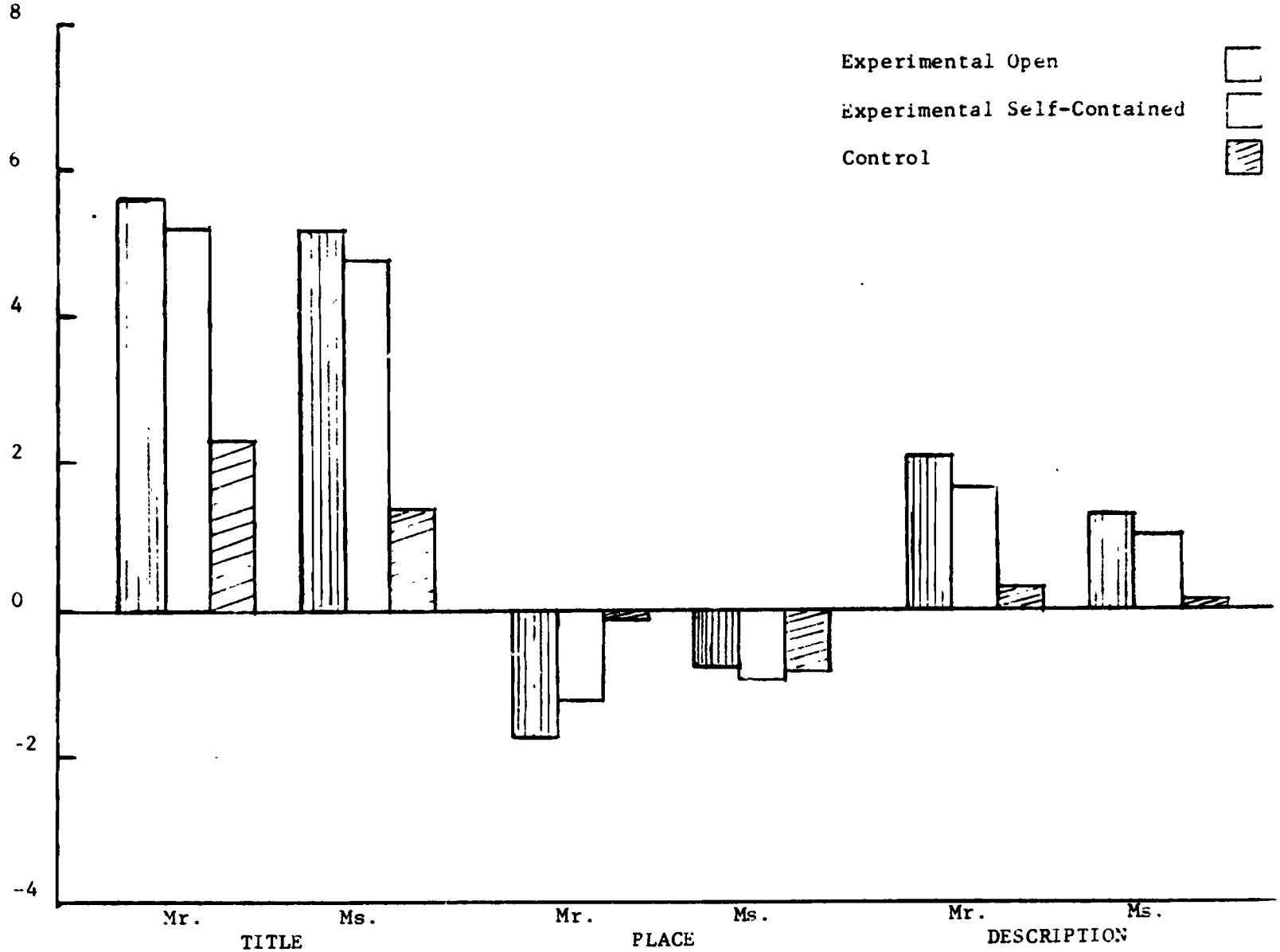

Figure 3 The Average Change on the Occupational Roles Test

experimental groups listed specific occupational titles more frequently and described various job activities less frequently following the program suggests a shift from a more concrete or functional way of thinking about occupations to a more abstract view of the world of work.

Academic Achievement. The mean pre and post test grade equivalent scores on the California Achievement Test are given in Table 4 for each group. When the pre-test data were analyzed for group and sex differences, girls scored higher than boys initially on the Reading Comprehension and Language Usuage and Structure subtests. Accordingly, the average Total Achievement score for girls was higher than that for boys. The control group was superior to both experimental groups on the Language Usage and Structure subtest; however, the average attainment of the three groups was comparable in all other areas and for total achievement.

Significant progress was noted for each of the three treatment groups between the fall and spring measures on all subtests and on total achievement (see Table 4 for t values and significance levels). The average gain in total achievement for the three groups was 1.51 years. In general, the total sample made greater progress in language (1.83 years) and reading (1.61 years) than in mathematics (1.32 years). Comparisons of the average gains among the three groups on each subtest failed to show significant differences in academic progress with one exception. The open classroom group made greater gains on the Mathematics Concepts and Problems subtest than the other two groups ($F=7.00$, $p < .01$).

The sex x groups analysis of covariance on the post-test scores for each variable yielded significant group effects for the Mathematics Concepts and Problems ($F=7.11$, $p < .001$) and Language ($F=3.81$, $p < .02$) subtests, as well as for the Battery Total ($F=4.23$, $p < .01$). Also, this analysis

Table 4

Mean Pre and Post-test Scores on the California Achievement Test

		Experimental Open	Experimental Self-Contained	Control
Reading Vocabulary	Pre	2.31	2.20	1.91
	Post	3.90	3.69	3.64
	t	10.35**	6.45**	10.12**
Reading Comprehension	Pre	1.97	2.27	1.74
	Post	3.43	3.63	3.35
	t	8.15**	5.57**	9.62**
Reading Total	Pre	2.04	2.12	1.71
	Post	3.55	3.71	3.45
	t	11.22**	7.17**	11.27**
Mathematics Computation	Pre	1.75	1.90	1.72
	Post	2.80	2.59	2.64
	t	11.46**	4.89**	6.51**
Mathematics Concepts and Problems	Pre	2.05	2.24	1.81
	Post	3.71	2.96	3.10
	t	10.48**	4.42**	8.48**
Mathematics Total	Pre	1.80	1.95	1.65
	Post	3.03	2.70	2.73
	t	12.58**	6.85**	7.93**
Language Usuage and Structure	Pre	1.64	2.06	1.33
	Post	3.39	3.56	3.42
	t	7.43**	5.35**	9.81**
Battery Total	Pre	1.82	2.03	1.56
	Post	3.33	3.33	3.19
	t	12.99**	8.96**	12.09**

indicated that when initial performance and ability level were controlled, differences among the groups in post-test performance on the Vocabulary subtest approached significance ($F=2.80$, $p > .06$). Individual comparisons between the groups for each of these subtests showed that the open classroom group and control group made comparable progress on the Vocabulary and Language subtests which was greater than that observed in the self-contained group. The open classroom group made greater relative gains on the Concepts and Problems subtest than the control group which showed greater gains than the self-contained group.

Since the reading, language and mathematics programs differed from class to class, comparisons were made among the five classes that participated in the study. The average gains in total scores for each class are given in Figure 5. These data showed that the two control group classes differed in relative progress on the Vocabulary, Mathematics Computation and Mathematics Concepts and Problems subtests. Similarly, the average gains of the three experimental classes differed significantly on each of these subtests. In each case differences were found which favored one experimental class in relation to one of the control classes, and vice versa. Therefore, the group effects reported above were not consistent across classes which suggests that they were due to variations in the regular classroom programs rather than to the dramatic play experience.

Also, the differences between the groups were not great and did not exceed .3 of a year as measured by the grade equivalent scores (see Figure 4). For example, average gains of 1.63, 1.50 and 1.29 were made by the control group, the open classroom group, and the self-contained group, respectively. Therefore, although the group differences reported above are reliable in a statistical sense, it is doubtful whether they are educationally important. Similarly, although the average gain in total achievement for girls was greater than

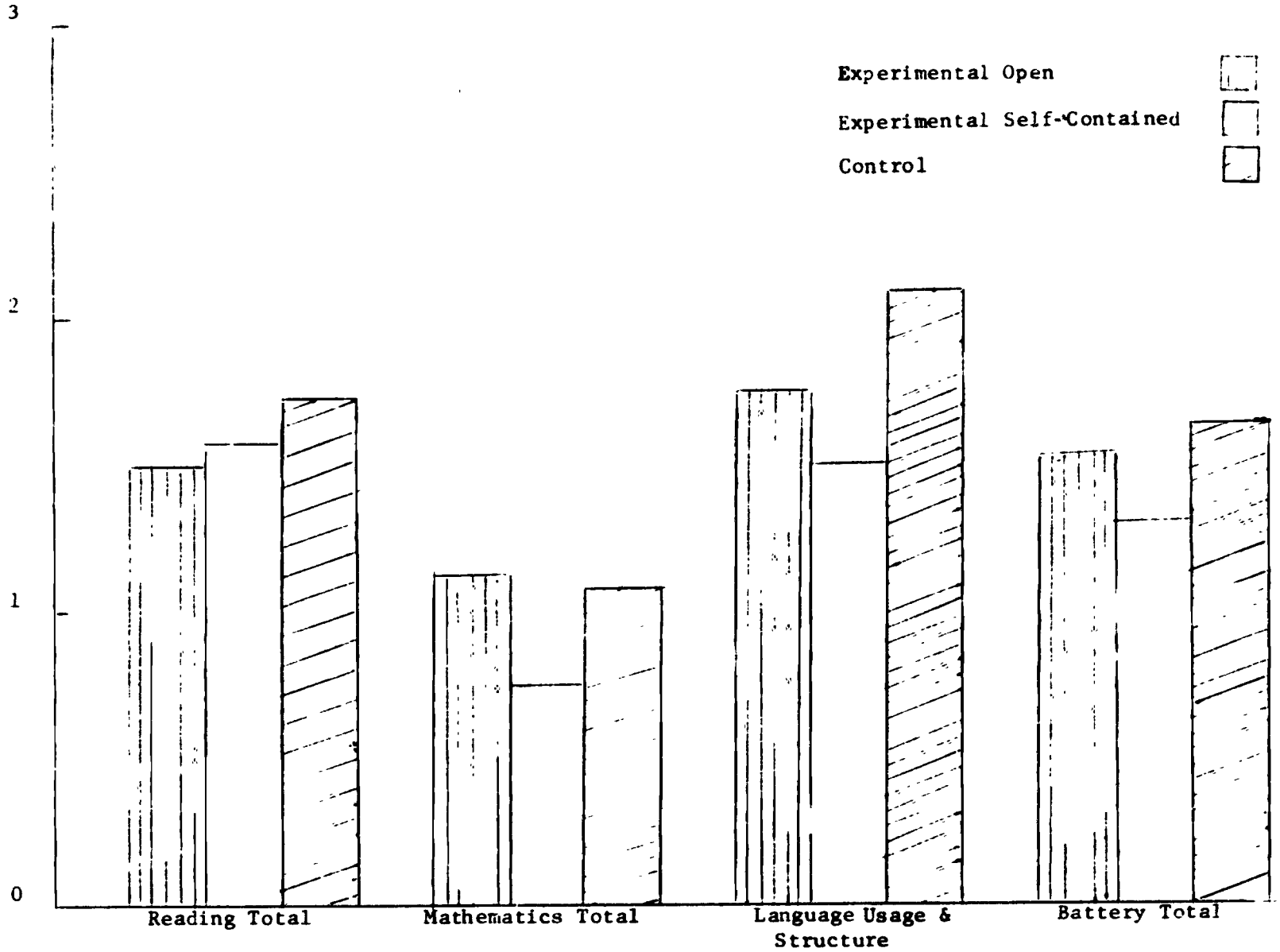

Figure 4 The Average Change on the California Achievement Test (Grade Equivalents)

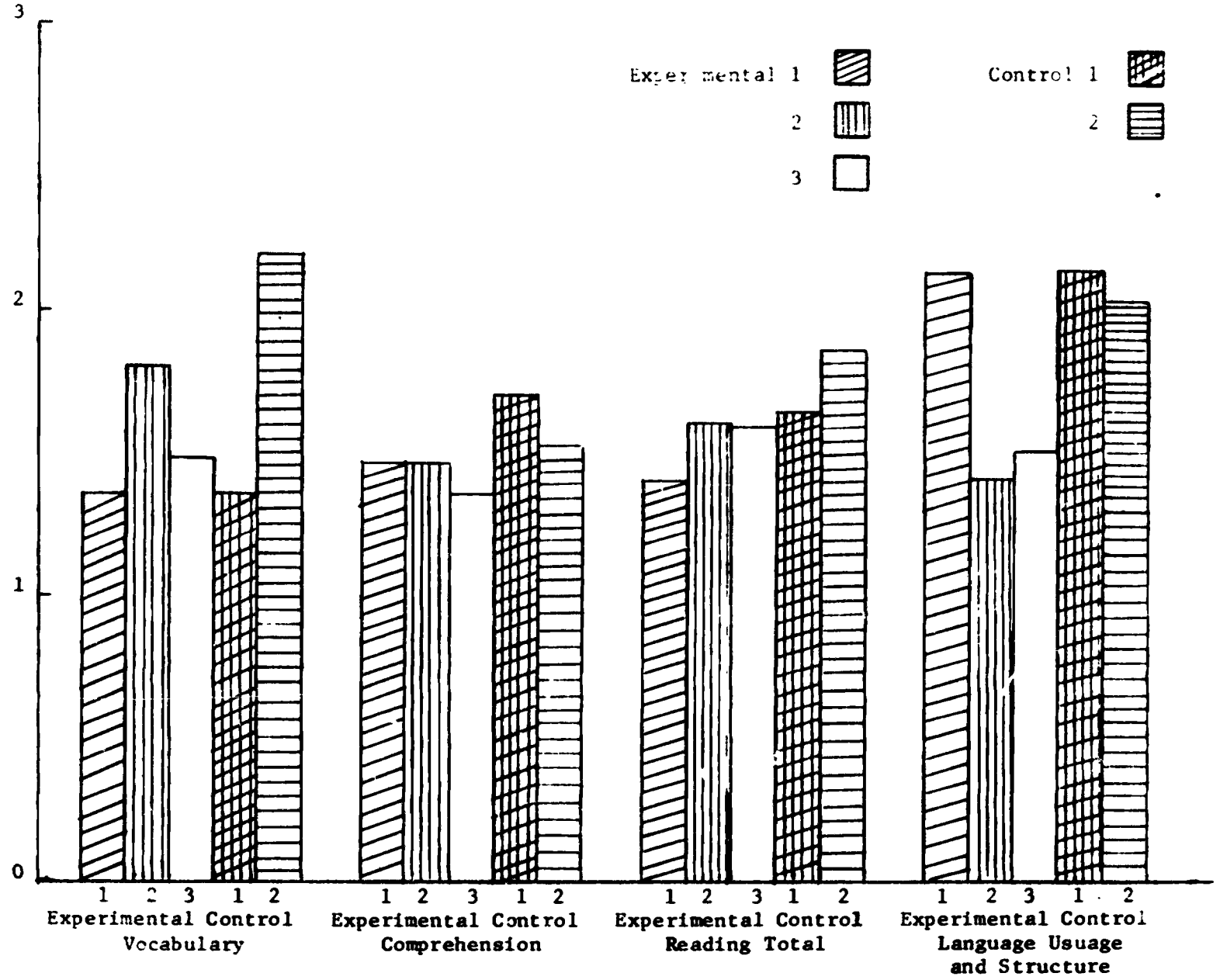

Figure 5 Mean Change Scores on CAT for each Class (Grade Equivalents)

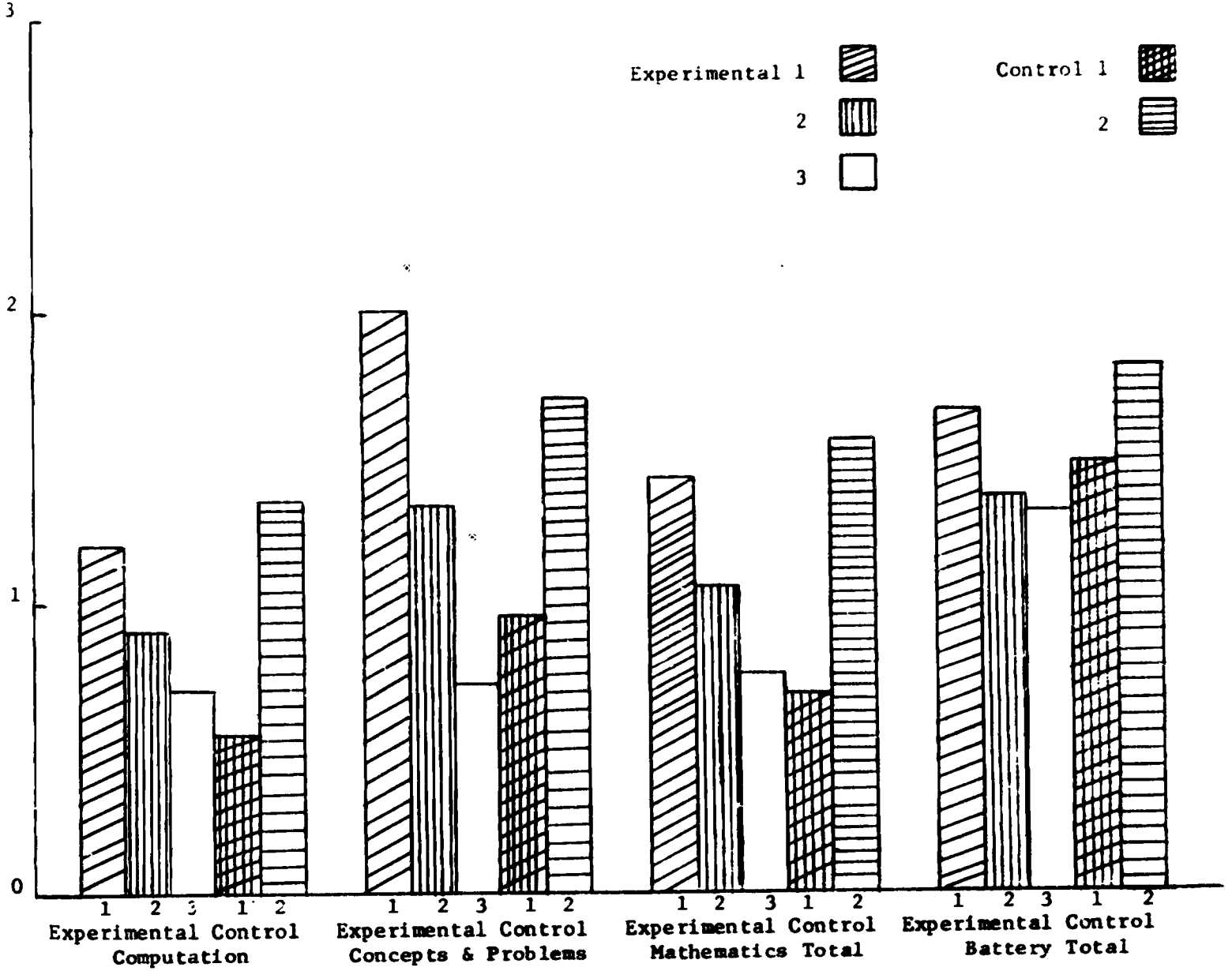

Figure 5 Continued

that for boys ($F=5.56$, $p < .02$), it is doubtful that the difference between the average progress of boys (1.46 years) and girls (1.57 years) is meaningful educationally.

In summary, little support was gained from these data for the assumption that the dramatic play program would have a differential effect on academic achievement. Rather, the differences reported above may be attributed more conveniently to differences in the reading, language and mathematics programs in the various classes and schools. Similarly, very little evidence was obtained to suggest that the time devoted to a systematic program of this type in social studies and occupational education detracts in any measurable way from the on-going educational programs in the various schools.

Classroom Behavior Patterns. The average frequency of behavior for each SCAN dimension is shown in Table 5 for each group. The analysis of fall data yielded group and sex effects for the frequency of independent behavior. Boys in the sample displayed less independent behavior than girls, and students in the control group showed higher frequencies of independent behavior than those in the self-contained experimental group. The three groups were comparable on each of the remaining five categories of behavior, as were boys and girls.

As Table 5 shows, the experimental open classroom group displayed a higher frequency of task-relevant behavior in the spring than in the fall; however, this change in behavior did not prove to be significantly greater than that observed in the other two groups. On the other hand, the significant decrease in task-irrelevant behavior by the open classroom group was greater than the change observed in the self-contained and control groups for this variable ($F=3.05$, $p < .05$). In general, the same results were obtained when IQ and fall behavior patterns were held constant by covariance procedures.

Table 5

Mean Frequency of Behavior in SCAN Categories

		Experimental Open	Experimental Self-Contained	Control
Task-Relevant	Pre	81.24	84.62	82.03
	Post	89.00	86.83	79.70
	t	2.13*	0.43	-0.74
Task-Irrelevant	Pre	68.94	62.00	65.09
	Post	56.97	58.88	67.15
	t	-3.55*	-0.63	0.66
Independent	Pre	83.03	72.96	86.55
	Post	74.70	82.00	82.36
	t	-1.55	1.68	-1.14
Dependent	Pre	18.15	21.08	16.45
	Post	19.94	25.75	21.45
	t	0.88	1.70	2.32**
Cooperative	Pre	12.12	14.67	8.94
	Post	13.88	11.50	9.27
	t	0.80	-1.12	0.21
Aggressive	Pre	0.30	0.00	0.09
	Post	0.27	0.04	0.12
	t	-0.14	1.00	0.23

The analysis of variance on the change in independent behavior indicated significant increases in this pattern of behavior in the self-contained group compared to decreases in the open classroom and control groups ($F=6.63$, $p < .01$); however, this effect was not obtained when initial sex and group differences were controlled. Similarly, although the control group showed a significant increase in dependent behavior, comparisons among the three treatment groups failed to yield reliable differences in this pattern of behavior. No significant changes were observed in the frequency of cooperative or aggressive behavior over the period of the study and no significant differences were found among the three treatment groups with respect to these dimensions.

In order to test for group differences in discrete categories of behavior, a one-way analysis of variance was performed on the change in frequency of behavior for each of the 27 SCAN categories (see Appendix A for a listing of each category). It was found that the open classroom group displayed significantly greater increases in the frequency of attending behavior than the other two groups ($F=5.87$, $p < .01$), and that the self-contained experimental group showed greater increases in constructive class work in relation to the other groups ($F=5.13$, $p < .01$). The frequency of constructive play increased in the open classroom group and declined in the self-contained and control groups ($F=5.04$, $p < .01$). Significant decreases in distractability were observed in the open classroom and control groups, while that for the self-contained group remained relatively constant ($F=3.22$, $p < .05$). Finally, the level of social interaction about things other than academic tasks decreased in the two experimental groups compared to an increase in this category for the control group ($F=6.61$, $p < .005$). The frequency of behavior of each of these categories is shown in Figure 6.

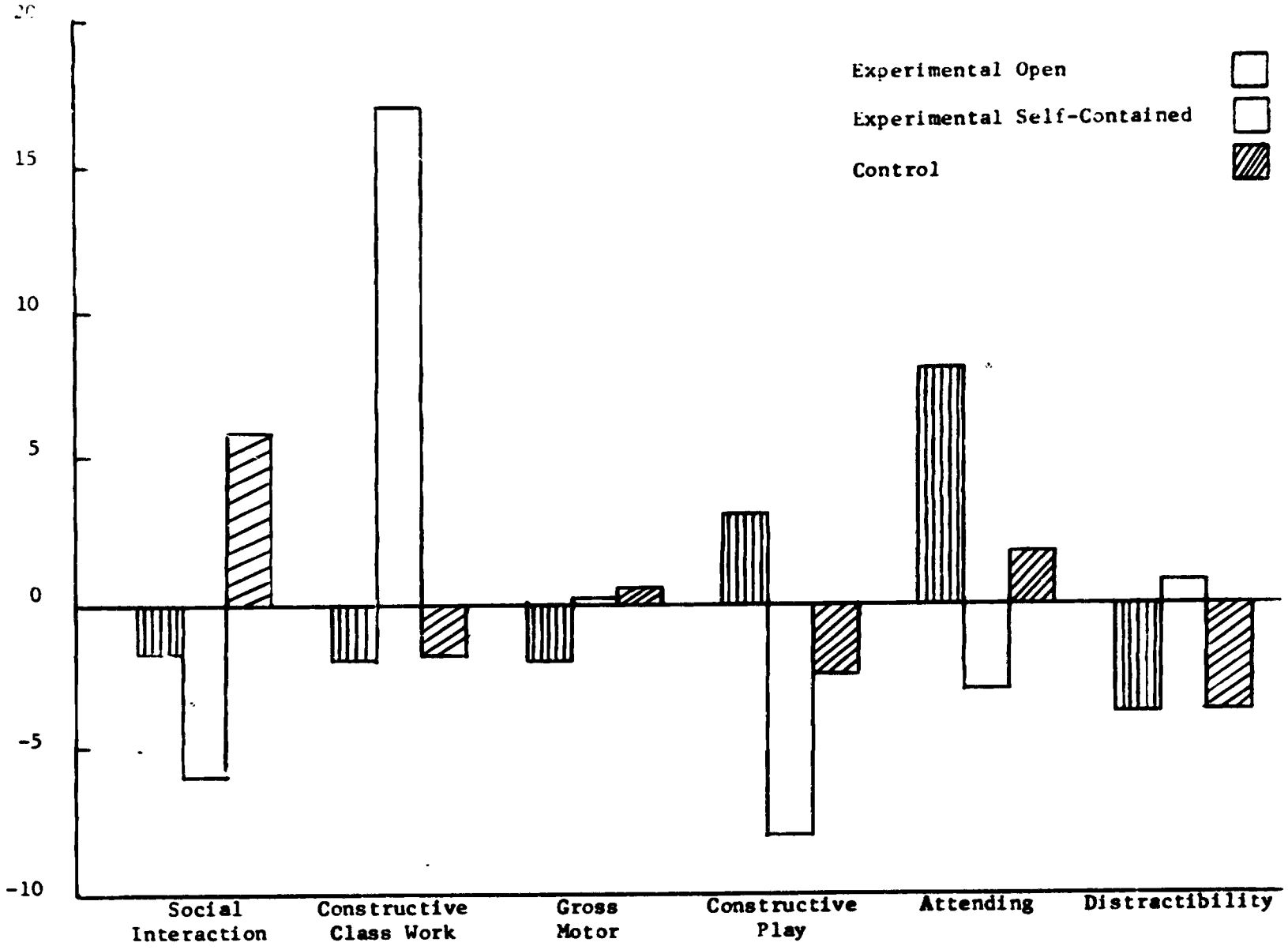

Figure 6 The Average Change in the Frequency of Behavior in SCAN Categories

In conclusion, these findings suggest that dramatic play may have a positive effect on the task-oriented behavior of children in their regular classroom environment during language arts activities. At the same time, differences in the behavior of the children following the program were not consistent across the various categories of task-oriented behavior. For example, children who received the program in the open classroom setting were more attentive and less distractable following treatment, while those who participated in the regular classroom showed increases in productive class work and decreases in task-irrelevant conservation. These results suggest that dramatic play may influence different types of behavior when it is carried out in different classroom settings. On the other hand, when evaluated in relation to changes in the control group, the data suggest that the observed patterns of behavior among the three groups might be attributed to the unique characteristics of the various classes rather than to the effects of the dramatic play program. Thus, additional research is required to determine whether different settings for dramatic play produce different effects on classroom behavior.

Teacher Ratings of Classroom Behavior. The mean fall and spring teacher ratings on the Classroom Behavior Inventory are given in Table 6 for each group. The sex x group analysis of variance on the fall ratings revealed marked sex differences for five of the six scales and significant differences among the treatment groups on three of the six scales. Girls were described as more task-oriented and considerate than boys, whereas boys were described as more introverted, distractable and hostile than girls. These findings were consistent with previous work with this instrument which suggests that teachers tend to ascribe more negative traits to males and more positive traits to females. The teacher of the self-contained group rated her children as more task-oriented in the fall than did the teachers of the open classroom group

and as less distractable and more introverted than did the teachers of the control group.

The analysis of variance on changes in teacher ratings of task-oriented behavior indicated that although the children in the self-contained group were rated as less task-oriented in the spring than in the fall, the average change in ratings on this scale was comparable for the three treatment groups. Children in the open classroom group and control group were rated as less distractable in spring than in the fall, while those in the self-contained group were rated as more distractable (see Table 6). The average decrease in distractability ratings for the control group was greater than that for the open classroom group ($t=2.03$, $p < .02$) which was significantly different from the change in ratings for the self-contained group ($t=2.59$, $p < .01$).

As Table 6 shows, no significant change in ratings was observed on the extroversion scale. However, the control group teachers rated their children as less introverted in the spring than in the fall and this change was significantly different from that for the experimental groups ($F=6.16$, $p < .01$). Similarly, the control group teachers rated their children as less hostile in the spring compared to increases in hostility ratings for the two experimental groups ($F=11.19$, $p < .01$).

Since rather marked differences were observed between the initial ratings assigned to boys and girls, as well as among the three groups, a 2 x 3 analysis of covariance was carried out on the ratings for each scale with IQ and the fall ratings as covariates. In general, this analysis yielded results which were comparable to those reported above. At the same time, this analysis removed a large and highly significant amount of variance due to regression on each scale. This finding suggests that changes in the ratings assigned to each scale were in part a function of the initial ratings in the fall.

Table 6

Mean Pre and Post-test Ratings on the Classroom Behavior Inventory

		Exp Open	Exp Self	Control
Task Orientation	Pre	8.74	10.38	9.11
	Post	8.91	9.92	9.04
	t	0.70	-1.75*	-0.22
Distractibility	Pre	7.57	6.25	8.39
	Post	7.19	6.96	7.30
	t	-1.86*	2.48*	-3.69**
Extroversion	Pre	9.98	9.79	9.02
	Post	10.04	9.88	9.39
	t	0.32	0.28	1.58
Introversion	Pre	5.72	5.12	6.50
	Post	6.19	5.33	5.52
	t	1.54	0.68	-3.27**
Considerateness	Pre	9.19	10.50	9.52
	Post	9.57	10.42	9.46
	t	1.60	-0.30	-0.25
Hostility	Pre	6.06	4.71	6.30
	Post	6.49	4.88	5.04
	t	1.78*	0.59	-4.24**

Inspection of mean ratings in Table 6 suggests that students in the self-contained experimental group were initially rated higher on desirable traits and lower on undesirable traits compared to those in the other two groups (the range of possible scores is from 3-12). This was particularly true for those scales on which significant changes were observed, i.e., task-orientation, distractability, and hostility. It should also be noted that with one exception high average ratings in the fall decreased in the spring and low average ratings increased in the spring. Thus, the more favorable outcomes for the control group and the less favorable outcomes for the experimental groups may be explained in part by uncontrolled variance in the pre-test ratings which biased both the direction and magnitude of change that could be measured by the scale.

Data Analysis by Ability Level. Since it was desirable to determine whether children of different ability levels responded differently to the dramatic play programs, a 2(high versus low IQ) x 3(treatment group) analysis of variance was performed on the change scores for each measure. Children who scored 105 or higher in PMA full scale IQ were included in the high IQ group and those who scored 89 and below were included in the low IQ group. The average IQ for the high ability group was 114.52 and that for the low ability group was 70.64. Table 7 shows the average change scores on each major variable for each group. Subtest scores and those variables which failed to show significant IQ effects were omitted for brevity.

The data analysis indicated that there were no significant differences between the two ability groups in average gains on the Social Studies Information Test. Thus, the gains in factual knowledge shown by low ability children in the two experimental groups were as great as those

Table 7

Average Change Scores for High and Low IQ Groups for Each Summary Variable

Variables	Experimental Open Classroom		Experimental Self-Contained		Control	
	High	Low	High	Low	High	Low
N	14	6	13	5	12	13
Social Studies						
Information	77.14	78.00	85.76	78.40	27.83	24.00
Implications						
Fluency 1	0.64	4.33	4.00	2.40	3.08	-0.46
Fluency 2	1.85	2.83	2.92	2.60	2.00	-0.38
Flexibility 1	0.50	1.33	1.61	0.60	1.50	-0.15
Flexibility 2	0.50	0.83	1.00	0.40	0.75	-0.38
Occupational Roles						
Titles	14.28	12.50	10.84	7.80	4.25	3.69
Descriptions	-3.07	-2.33	-2.00	-3.60	1.41	-2.38
Places	3.28	2.50	3.76	2.40	1.25	-0.07
CAT - Total	2.01	0.67	1.35	0.78	2.21	0.92

Note: Variables for which significant IQ effects were obtained. Subtest variables have been omitted for brevity.

for high ability children, and were significantly greater than those for either IQ group in the control condition.

A significant IQ group x treatment interaction was found for both the fluency and flexibility measures from question one (Spaceman) of the Social Studies Implications Test. On this question low-ability children in the open classroom group showed greater increases in fluency and flexibility than high ability children compared to greater relative gains for high ability children in the other two treatment groups. A similar trend was observed on question two (Policeman) for this test, but the interaction effect failed to reach an acceptable level of statistical significance. These results suggest that the dramatic play program may be of greater benefit to low ability children with respect to the development of productive thinking than to high ability children.

On the Occupational Roles Test the high IQ group showed greater increases in the frequency of occupational titles given in response to the Ms. Thomas question than did the low IQ group. No other significant differences were noted between the two IQ groups on this test. In general, the results indicated significant gains in occupational awareness as measured by this test for both IQ groups in both experimental conditions which were greater than those observed for either IQ group in the control condition.

With respect to academic progress in reading, math, and language, the high ability group made significantly greater gains on each CAT subtest and on the battery total than the low ability group. These differences were consistent for all three treatment groups. No significant differences were observed between IQ levels for the SCAN dimensions;

however, teachers in the open classroom group rated low ability children as more hostile than high ability children compared to teachers in the other two groups. No other comparisons were significant on the Classroom Behavior Inventory.

The finding that children with high IQs showed greater relative progress in reading and mathematics than children with low IQs was not surprising given the previous literature relating ability level to academic achievement. However, the finding that low ability children in the dramatic play groups showed gains which were comparable to those of high ability children in social studies achievement, occupational awareness, and productive thinking is worthy of note. Since low ability children typically show deficits in general information and abstract thinking, dramatic play procedures may be an effective alternative to more conventional methods for increasing factual knowledge about specific occupations and community organization, as well as for stimulating the development of more advanced thinking skills in low ability children.

Data Analysis by Socio-Economic Level. In order to determine the effects of socio-economic status on changes in academic performance and behavior following the dramatic play program, the sample was divided into three SES groups by using the Hollingshead scale for occupation of father. The upper SES group was composed of 39 children whose fathers were executives, proprietors of large concerns, and professionals. The middle SES group included 28 children whose fathers held such occupations as business manager, technician, clerical and sales workers. Although skilled manual employees are usually classified as lower-middle SES on this scale, they were combined with semi-skilled and unskilled occupations to form the lower SES group due to the small number of cases in the latter categories. The lower SES group contained 23 children.

Table 8

Average Change Scores for Each Socio-Economic Group

for Each Summary Variable

Variables	Experimental Open Classroom			Experimental Self-Contained			Control		
	U	M	L	U	M	L	U	M	L
N	12	14	7	12	4	8	15	10	8
Social Studies									
Information	80.33	77.28	79.00	85.33	84.33	73.75	28.06	24.10	26.37
Implications									
Fluency 1	0.08	4.35	1.85	4.16	2.75	3.75	2.40	-0.60	0.62
Fluency 2	1.50	2.35	1.00	3.08	1.25	2.87	2.06	-0.40	0.37
Flexibility 1	0.41	0.92	0.85	1.06	0.20	-0.37	1.16	2.00	1.50
Flexibility 2	0.58	0.64	0.71	0.40	0.10	-0.12	0.91	0.50	0.62
Occupational Roles									
Titles	13.83	10.07	6.58	10.50	9.50	9.75	4.13	5.00	2.62
Descriptions	-3.50	-0.21	-4.85	-2.16	-1.50	-2.37	0.73	-3.00	-1.12
Places	2.66	5.35	1.00	3.00	2.75	2.25	0.93	-1.40	1.87
CAT - Total	1.88	1.26	1.06	1.45	1.30	1.03	2.01	1.47	1.03

Note: Subtest variables have been omitted for brevity.

The average gains for each summary variable for each SES group are given in Table 8. The data for individual subtests were omitted to conserve space. A 3(SES group) x 3(treatment group) analysis of variance was carried out on the change scores for each of the measures that was used in the study. The results of these tests indicated that there were no significant differences among the three SES groups in relative progress on the Social Studies Information Test or the Social Studies Implications Test. On the Occupational Roles Test, upper SES children showed greater increases in the number of occupational titles that were given in response to the Mr. Thomas question compared to lower SES children; however, all other comparisons for this instrument were not significant.

Significant SES effects were noted on each of the CAT reading subtests which favored the upper SES group, but these differences were not found for either the mathematics or language subtests. Similarly, no significant main effects due to SES were observed for the SCAN dimensions of classroom behavior or on the Classroom Behavior Inventory. In general, these findings with respect to socio-economic level were consistent among the three treatment groups.

Therefore, the data suggest that the dramatic play program was as beneficial to children from lower socio-economic backgrounds as to children from more advantaged homes. At the same time, these findings must be interpreted with care since children from severely disadvantaged backgrounds were under-sampled in the present study.

Interviews with Classroom Teachers and Principals. In order to elicit the opinions of teachers and principals regarding the dramatic play program, interviews were conducted with each of the three teachers and two principals who were involved in the study. Each interview lasted for

approximately 30 minutes. In general, each of the respondents indicated that they preferred dramatic play to the methods they had used previously for teaching elementary social studies.

According to the teachers, the major advantage of dramatic play over more traditional methods was that it provided an opportunity to learn by doing which the teachers felt stimulated interest on the part of the students and promoted retention of the information that was presented. The teachers indicated that the major benefits to the children were in the development of problem-solving skills, increased peer-group cooperation, and growth in oral language and communication skills. Each of the teachers reported that the children reacted very positively to the program and looked forward to the activities in the dramatic play community. Several teachers and each of the principals felt that the program was more effective with slower students in that it used a concrete means for teaching abstract ideas which provided successful, rewarding experiences for these students.

The major disadvantages that were listed concerned practical matters such as teacher preparation time and the effort required to set up and take down the community in the self-contained class. Each of the teachers felt that a formal curriculum guide would greatly reduce many of the practical constraints involved in carrying out the program. A second disadvantage concerned the availability of space (both activity and storage space) and materials. Two of the teachers and one of the principals felt that the program would be most effective if several teachers in the same school could share a common space which could be used on a flexable schedule, thereby eliminating the duplication of space and materials in a given school. Other respondents felt that the use of teacher aides and parent volunteers would enable one teacher to carry out the program in a single classroom.

There was general agreement that the program was practical in a self-contained classroom and that it could be extended to other grade levels. Each of the teachers indicated that they hoped to continue the program and felt that a four day time commitment was practical on a flexible schedule. Each of the teachers felt that the time devoted to social studies/occupational awareness did not reduce the amount of time they normally would spend on basic skill areas, and that a variety of other topics could be integrated into this type of social studies program. The general attitude toward the program was well summarized by the comments that, "---its just a dog-gone, good complete program" and "---I'm really very glad we did it."

Parent Questionnaire. In order to sample parent opinions regarding the dramatic play program, each of the parents of children who were still in the participating schools in the fall of 1973 were asked to fill out the questionnaire shown in Table 9. The parent was requested to describe his child's reaction to the program by checking one of four alternatives to each question, i.e., very much, somewhat, very little, or not at all. The alternatives were numbered from one (not at all) to four (very much). The average ratings and proportion of most favorable responses are given in Table 9.

Of the 78 questionnaires that were sent out, 68 or 87% were returned. It is clear from the data in Table 9 that the vast majority of the parents who were sampled felt that the dramatic play program was a positive, facilitating experience for their child and were sufficiently enthusiastic to recommend it to others.

In addition to these ratings, the parents were given the opportunity to comment about the program in their own words. A list of these comments has been provided in Appendix B.

Table 9

Parent Questionnaire for Dramatic Play

	Very Much	Some What	Very Little	Not at All	% "Very Much" respon.
1. Was your child excited abut the program?	4	3	2	1	86.15
2. Did you see any benefits to your child fr.m being in the program?	4	3	2	1	61.90
3. Did your child show increased interest in school due to the program?	4	3	2	1	50.79
4. Did your child do voluntary homework on topics related to the community?	4	3	2	1	16.66
5. Did your child show increased interest in library books on community topics dramatized in dramatic play?	4	3	2	1	27.41
6. In his conversation, did your child give evidence of increased knowledge and information on the community?	4	3	2	1	77.77
7. As you drove or walked through the community, did your child show increased interest in objects (mailboxes, road signs, buildings, traffic laws, etc.) related to dramatic play at school?	4	3	2	1	71.42
8. Did your child show increased interest in TV programs or newspaper articles on community/dramatic play topics?	4	3	2	1	33.89
9. At home, did your child set up a "dramatic play community" or in any way dramatize what he had learned at school through dramatic play?	4	3	2	1	18.03
10. Would you recommend this program to other parents at the school as being valuable for their child?	4	3	2	1	82.53

We would appreciate any comments you may wish to make about the program.

(See Appendix B)

In general, of the 29 comments that were made spontaneously 25 reflected strong parental support for the program. Two parents felt that the program detracted from the time devoted to "academic subjects" and two felt that they could not evaluate the program independently from other school and/or community experiences. It should be noted that the former remarks were made by parents of children in a school where the program was in its first year. Thus, they may have been unfamiliar with the purposes and rationale behind the program.

Summary and Conclusions

The major objective of this study was to assess the educational and behavioral impact of dramatic play in a model community as a technique for teaching social studies and occupational awareness in the primary grades. The data supported the conclusion that the dramatic play program was effective in producing greater gains in factual knowledge relevant to the objectives of the second grade social studies curriculum than were regular classroom procedures. Also, the results indicated that the dramatic play program facilitated the development of greater occupational awareness in second grade children at a more abstract level than that observed in classes which were taught by more traditional methods. In addition, the findings reported above support the assertion that dramatic play had a positive effect on the development of more productive and imaginative thinking about community organization and social relationships than more traditional teaching methods.

These findings substantially replicate those of the previous evaluation of the dramatic play program (McKinney and Golden, 1973). More importantly, the results of the present study indicate that this approach can be as effective in teaching social studies and occupational awareness when carried out in a regular self-contained classroom as

when implemented in a specially constructed open classroom environment. Thus, the data suggest that the program can produce consistent results over a period of time with different groups of children and can be effective when modified for typical classroom settings.

Unfortunately, the data offer very little support for the assumption that students who participated in the dramatic play program would show more productive, task-oriented and cooperative behavior in the classroom than students in a regular elementary education program. Although the analysis of student behavior patterns suggested that the program may have had a positive influence on task-oriented behavior, these effects were not consistent across various categories of behavior among the experimental classes. Children in the open classroom group displayed higher frequencies of attending behavior and less distractability following the program compared to those in the other classes, while those in the self-contained experimental class showed increases in constructive class work and decreases in social conservation in relation to those in the other classes. Accordingly, these differences might be attributed to the unique characteristics of the various classes and the kinds of activities that occurred during the language arts period rather than to the effects of the program as carried out in different settings.

Similarly, the analysis of changes in teacher ratings on the Classroom Behavior Inventory offer very little support for the contention that the dramatic play program would have a profound impact on the teacher's perceptions of the academic and social behavior of their children. Although children in the open classroom groups were rated as less distractable following the program, those in the self-contained experimental class were described as more distractable and less task-oriented. The interpretation of these findings was complicated by the presence of highly

significant differences among the three groups in the pre-test ratings which seemed to bias both the direction and magnitude of change that could be measured by the scale. Also, these results were inconsistent with those obtained from classroom observations using time-sampling techniques. Apart from the ambiguities of these results, the ratings and comments of parents regarding the enthusiasm and interest displayed by their children were decidedly unambiguous.

In general, the hypothesis that students in the dramatic play program would demonstrate greater gains in reading, language and mathematics achievement than those who did not receive dramatic play was not supported. A review of the methods and amounts of instruction that were offered in each of the five classes in the study revealed rather marked differences among the groups in the types of skill programs that were used and the emphasis that was placed on certain academic areas. For example, the scheduling of various skill periods and the availability of workbooks and individualized math and reading series varied from class to class and from school to school. These variations in instructional materials and procedures seemed to be due to differences in the resources that were available to individual teachers and to an attempt on the part of the teachers to individualize instruction for their students.

Since the average gains in achievement for the separate classes which were selected to form the treatment groups differed in a number of academic areas, the variation among the treatment groups may be attributed more conveniently to differences in the instructional procedures that were used by the classroom teachers rather than to the dramatic play program. This interpretation is consistent with a large body of literature concerning the impact of teacher variables and curriculum variations on academic achievement in specific subject areas (e.g., see Gage, 1963;

Travers, 1973). Also, previous research in curriculum evaluation indicates that the impact of a given program in one academic subject is greatly limited by the specific content that was taught. Therefore, since the basic skills program in the various experimental classes was not related in terms of content, or integrated into the dramatic play program in a systematic fashion, one would not expect a large carry-over or transfer effect from the dramatic play program to more remote measures of over-all reading, language and mathematics attainment.

Perhaps of greater importance is the implication that since all of the groups made significant progress in reading, mathematics and language achievement, more attention and effort can be devoted to social studies and the development of occupational awareness in the primary grades without detracting from educational programs in basic academic skills. This conclusion was generally supported by the opinions of the classroom teachers and principals who were involved in the program.

It was apparent from both the interviews with these professionals and from the responses of parents to questionnaires that the dramatic play approach to social studies/occupational awareness provided a positive, successful educational experience for their children. Perhaps one of the more notable measures of success was the degree of professional interest and parental support that was displayed for this effort. Also, of particular interest in the present study was the finding that the dramatic play program was as beneficial to children from lower socio-economic backgrounds and ability groups as to children who were more socially and intellectually advantaged.

In summary, the findings of this study suggest that dramatic play techniques may be used as an effective alternative to more traditional methods in teaching elementary social studies and occupational awareness.

The results generally support the notion that many abstract concepts about the organization and operation of a community can be taught more effectively by procedures which take advantage of the child's direct experience as opposed to methods which rely solely on verbal and symbolic modes of presentation.

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Appendix A

Test Instruments

Social Studies Implications, Information and Occupational Roles Tests[1]

It was hypothesized that participation in the dramatic play program would increase factual knowledge and facilitate productive and imaginative thinking and problem solving skills in regard to social roles, relationships, and community functioning. A survey of standardized testing instruments failed to uncover any measures which were appropriate for the age level of our subjects and relevant to the topics described for the Chapel Hill-Carrboro second grade curriculum. Two tests were developed by Frank Porter Graham research assistants to measure these aspects of the program: the Social Studies Implications Test and the Social Studies Information Test.

Social Studies Implications Test

Variable. Relying upon the ideas of Guilford (1967) and Torrance (1962) the Implications Test was developed to measure changes in divergent-productive thinking in regard to social relationships and community functioning.

Description. (The Implications Test was developed and utilized during the 1971-72 school year.) A series of hypothetical situations were written which called for divergent production of semantic units, and semantic implications. From this initial list, two questions were chosen which seemed likely to elicit a wide range of response. The questions involve two types of response requests: the first (Space Man) requires the subject to generate information-gathering questions about the hypothesized situation; the second (Policeman) calls for the production of consequents of the given event. The questions are as follows:

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[1]Social Studies Implications, Information and Occupational Roles Tests were developed by Kathi Perkerson and Jeanne Mason.

1. Pretend you are an astronaut and you have just crash landed on another planet. You are not hurt, but your spaceship is wrecked. You will have to live on this planet. When you climb out of your spaceship a strange looking little man is standing on the ground. What questions would you ask him about the place you have just landed to see if it is a good place to live?

2. What would happen if there were no policemen in your town?

Procedure. The Implications Test and the Occupational Roles Test were administered during an individual testing session which lasted from ten to twenty minutes. E began the session by explaining that she had some questions to ask S, and she would write down his answers. E explained that this was not part of the regular school work and that the purpose was simply to see what S thought about some special things. It was also emphasized that there were no right or wrong answers so S should just think hard and say what he thought about the questions.

E read the questions verbatim and used probes and positive verbal reinforcement as often as was necessary to elicit maximum response from S, e.g., "You're thinking of some very good answers! What else would you ask to see if that's a good place to live?" "I like the way you're thinking so hard about this."

Scoring. S's responses were written down verbatim and later typed. The categories into which responses were coded were developed during the 1971-1972 school year when 77 experimental and control subjects were tested with this instrument. The categories and examples for each question are listed below.

The coded protocol yields two scores per question per child. The fluency score is based upon the number of relevant responses. The

The flexibility score is based upon the number of categories into which these responses are coded. For data analysis the fluency and flexibility scores for both the questions were combined to yield one fluency score and one flexibility score per subject per session.

Categories and Sample Responses

Question 1: Spaceman

I. Relevant Questions

A. Location or Name of Planet

What place is this?
Where did I land?

B. General Conditions (questions about physical environment)

If it is a big place or a small place?
What's it like on this planet?

C. Inhabitants (includes questions about "the little man" and about others who might inhabit planet?)

Is there any other creatures?
Do you have any friends?

D. Life Support (questions relating to planet's vital resources which would be necessary to sustain life)

If you could breathe?
Where do I live? (only questions relating to the need for shelter are scored in this category; any reference to a house or home to stay in is scored in Comfort - E)
Do I have to wear special clothes?

E. Comfort (questions relating to personal comfort and nonessential facilities)

How do I get to the bathroom?
Do they have good beds?
Does he have games?

F. Return to Earth (questions relating to how one might be able to return and questions about repairing damaged spacecraft)

Is there anything that can take me back to earth?
How do I get my spaceship fixed?

G. Safety

Are there any things that will kill me?
Is there any danger?

H. Institutions and services

Do you have to go to school?
Where do I get money?

I. Specific job titles

Are there any:
astronauts
lawyers

II. Irrelevant Questions

A. Elaboration of a relevant question

What could you eat (D - Life Support)? I like to eat hamburgers and french fries and I would hope they have some. (Irrelevant Elaboration of D)

B. Egocentric - fantasy elaboration

He could land in the water and save himself.
A boat might come save him.

Question 2: Policemen

I. Relevant

A. Egocentric

My father could protect me.
I would be safe in my basement.

B. Apprehension of Criminals (protection of property and nonspecific crimes)

Robbers would be robbing jewelry stores, banks, etc.
People would get in trouble a lot.

C. Enforcement of Traffic Rules (vehicular & pedestrian)

You wouldn't know when to walk across the street and you'd always die.

D. Protection from Physical Harm

People could kill you.
There would be lots of riots.

E. Provision of Services other than Law Enforcement

Wouldn't be anybody to save somebody if the ambulance wasn't there on time.
If we got lost, there wouldn't be anybody to help us find the way home.

F. Individual Responsibility for Maintenance of Order

I'd catch them myself.
I'd see the governor and see what he could do 'cause we need some.

G. Remote Consequences

There wouldn't be a judge.
Maybe there would be no more courts.
People wouldn't be in jail anymore.

II. Irrelevant or Narrative

Houses might catch on fire.
We can make a jailhouse and we can make a police car.

Evaluation. Ninety experimental and control children were tested in October and again in May. A test-retest reliability coefficient was calculated for the 24 control subjects' fluency and flexibility scores. The coefficient for the fluency score was in the expected direction but did not reach significance (r=.32). Test-retest reliability for the flexibility scores was significant at the .05 level (r=.42).

Occupational Roles Test

Variable. In order to measure awareness of the occupational roles which could be assumed by adults the Occupational Roles Test was developed.

Description. The problem posed to the subject is a simple one: "Mr. and Ms. Thomas just moved to Chapel Hill and they need jobs. What jobs do you think Mr. Thomas could find aroud here? What jobs do you think Ms. Thomas could find?"

Procedure. This test was given in conjunction with the Social Studies Implications Test in an individual testing session with each child. The Implications Test was administered first with the directions described above and no further directions were given.

Probes and positive reinforcement were used to elicit maximum response. Once the S exhausted his list of possibilities for Mr. Thomas, he was

asked about jobs for Ms. Thomas. If S responded by saying, "Well, Ms. Thomas could have all of those jobs I just told you for Mr. Thomas," E agreed and terminated the session. In most cases Ss continued to list jobs for Ms. Thomas.

Scoring. Responses for "Mr. Thomas" and "Ms. Thomas" were tallied separately. Each relevant response was tallied under one of three categories: job title, job description, job location. Thus, scores on this test are frequencies of response in three categories. A few responses were considered unscorable because they were too vague, too fantastic, or described a social role rather than an occupational one.

Sample Answers

1. Job Title: ambulance driver
   bank teller
   carpenter
   dairy farmer
   electrician

2. Job Description: teaching kids in college
   shoot off to the moon
   give shots and take temperatures
   be a road fixer
   cook food at someone's house

3. Job Location: work in a gas station
   work in a book store
   work in a library

4. Not Scored: toy keeper
   peanut butter job
   pie man
   daddy
   housewife

Social Studies Information Test

Variable. This test was designed to measure factual knowledge acquired in second grade social studies. The Chapel Hill-Carrboro Curriculum Guide for second grade social studies was used as a base from which to draw questions appropriate for the topic of study, "Neighborhood and

Community," e.g., helpers in the community, transportation and communication, culture, physical environment.

Description. The Information Test developed and utilized during the 1971-72 school year was revised in the early fall of 1972. The questions were divided into two major areas, General Information and Occupational Information. Thirteen questions were selected from the original test which related to General Information. Two new questions were added to form a 15-item General Information Subtest.

The Occupational Information Subtest was designed to focus on three aspects of occupational roles: job titles, behavior, and equipment needed for a job. Five questions from the original test were included in this subtest. Sixteen new questions were added to form a 21-item Occupational Information subtest.

The selection of questions for both subtests was based upon two objectives: (1) to sample equally from the various content areas described in the Chapel Hill-Carrboro Curriculum Guide, and (2) to sample at several levels of difficulty. The eighteen new questions were pilot tested with a small sample of second grade children to check for ambiguities. The resulting Social Studies Information test was a thirty-item questionnaire, with fifteen items on each subtest. Ninety second grade children were pre- and post-tested on this instrument. See Scoring section for questions and sample answers.

Procedure. The Social Studies Information Test took approximately twenty minutes. E instructed S before the questions began that she wanted to find out how much second graders knew about the place they live., that his answers would be written down, but that this was in no way part of his school work.

The questions were read verbatim and were repeated upon request by S or if no response was elicited. One probe per question was given, e.g.,

"Can you think of another community worker who works all night?" If S did not know the answer to the question, E proceeded with the next question. If S had difficulty in answering several consecutive questions E made a comment such as, "Some of these questions are hard, let's try the next one." Reinforcement was given generously to stimulate the subject to do his best, e.g., "You are thinking of some very good answers!" If the subject gave more responses than were requested, all responses were recorded.

Scoring. Each question was scored on the basis of six points. The subject's response was given a score of 6 or 0 for a one-answer question and a score of 2, 1, or 0 for each part of a three-answer question. Thus, on multiple-answer questions, answers which are not fully adequate may receive partial credit depending upon the quality and degree of generalization. The subject's responses should be matched against the sample answers given below. Any unusual responses which are not typified should be scored according to the examiner's judgment.

In scoring, the following general rules should be employed.

(1) If on any question requesting job titles, the place, vehicle, or instrument, e.g., fire truck, police station, ambulance, is named instead of the job title, 1/2 credit is given.

(2) If S gives more responses than required, score only the first three responses given.

(3) If two answers involve the same job, etc., give credit for only one answer.

(4) If any extraneous answers are given for one-questions, score 0.

Questions and Sample Answers

General Information Test

1. If you want to send a letter from Chapel Hill to New York City, what would be the fastest way to send it?

6 Points
- Airmail
- Airplane
- Air

0 Points
- Mailbox
- Mailman

2. In Florida they grow a lot of oranges; in Idaho they grow potatoes; in Japan they make good cameras and radios; in Switzerland they make watches. How are all these things brought to Chapel Hill from far away so that your family can buy them if they want? (Obtain three methods of transporting goods.)

2 Points
- Airplane
- Truck
- Ship
- Train
- Bus

0 Points
- Mailman
- Trailers

3. In what state do you live?

6 Points
- North Carolina

0 Points
- Carolina

4. A stamp is cancelled at the post office. What is cancelled at the bank?

6 Points
- Checks

0 Points
- Money
- Bills

5. Who is the President of the United States now?

6 Points
- Nixon

0 Points
- Any other response

6. What are some ways we find out about what is happening in the community? (Obtain three)

2 Points
- Newspaper
- Radio
- Television
- Field trips

0 Points
- Walking
- Letters
- Policeman

7. What does this sign mean? (Show Yield sign.)

6 Points
- Slow down and watch for the other cars coming.
- Give way to other cars that are coming.

0 Points
- Stop
- You've got right-of-way

8. There are some things in your neighborhood that nobody owns but everybody shares, like the streets, for example. Name some other things that are shared by everyone. (Obtain three)

2 Points	0 Points
Sidewalks	Pools
Telephone wires	Trees
Playgrounds	Restaurants
Signs	
Libraries	

9. How much does it cost to send a letter by first class from Chapel Hill to Raleigh?

6 Points	0 Points
$.08	Any other response

10. In what country do we live?

6 Points	0 Points
United States of America	Any other response
America	
United States	

11. How do people choose someone to be president of the United States?

6 Points	0 Points
Vote	Any other response

12. How old do you have to be to vote in a national or federal election?

6 Points	0 Points
18 years old	Any other response

13. How does the government get money from the people?

6 Points	0 Points
Taxes	Any other response

14. Who is mayor of Chapel Hill?

6 Points	0 Points
Howard Lee	Any other response

15. The food that your mother buys in a grocery store like potatoes, carrots, and lettuce is grown by farmers. To what special place is this food carried before it goes to the grocery store?

6 Points	0 Points
Market	Any other response

Occupational Information Test

1. Most people go to work in the morning and come home about dinner time. Name three kinds of community workers who work all night.

2 Points	1 Point	0 Points
Policeman	Fire truck	Restaurant
Fireman	Ambulance	Construction workers
Doctor		
Truck drivers		

2. There are a lot of people who keep us safe in our community. Name three safety helpers.

2 Points	1 Point	0 Points
Fireman	People that help keep things sanitary	Guards
Policeman		Parents
Nurse		Government
Health inspector	Man in Health Department that checks food we eat	

3. There are other people who work in hospitals besides doctors and nurses. Name three other types of jobs in the hospital.

2 Points	1 Point	0 Points
Ambulance people	Ambulance	Bandage maker
Chaplains	Check people in	Give medicine
Candy stripers	People who give x-rays	Maids
Dieticians		Clinics
Data processors		

4. Name some jobs in a grocery store.

2 Points	1 Point	0 Points
Manager	Cash register	Cash check
Cashier	Meat man	Help people find things
Butcher	Bagger	Loading groceries
Stock boy		

5. What is the group of people called that help the mayor run the city government in Chapel Hill?

6 Points	3 Points	0 Points
Board of Aldermen	City Council	Any other response

6. Name three things a postal clerk does to a letter in the post office.

2 Points	1 Point
Cancels the stamp	Lines stamp
Sorts them out	Puts date on
Stamps it with postmark	Puts into machine to separate

0 Points
- Puts stamp on
- Stamps it
- Puts lines on

7. If a man has been found guilty of a crime, who tells him what his punishment will be?

6 Points	0 Points
Judge	Police
	Jury

8. On an airplane, a stewardess does a lot of things to help passengers. Name some things she does. (Obtain three)

2 Points	1 Point
Serves food and drinks	Serves
Helps people who are sick	Gives aspirin
Welcome passengers on plane	

0 Points
- Helps pilot
- Puts your seatbelt on

9. To get a driver's license you must go to the Department of Motor Vehicles. What three tests does the examiner give you before you can get your license?

2 Points	0 Points
Written law test	Any other response
Sign test	
Road test	

10. What does a bank teller do? (Obtain three)

2 Points	1 Point
Cashes checks	Puts money in
Takes deposits for checking account	Checks and stamps your check
Counts money	Puts money in safe place

0 Points
- Lets you borrow money
- Saves your money
- Gives you the money

11. A fireman needs a fire truck to do his job. What other things does he need? (Obtain three)

2 Points	1 Point	0 Points
Hoses	Bells	Steps to go to bed
Ladder	Things you squirt water with	Clothes
Ax	Fire Pump	Tank

12. What special things does a policeman need to do his job? (Obtain three)

2 Points	1 Point
Gun	Spray thing so can't see
Uniform	Things to fasten up hands
Whistle	Things to call in places

0 Points
Helper
Knife
Speaker

13. What special things does a postman need to do his job? (Obtain three)

2 Points	1 Point	0 Points
Mail truck	Car	Clothes
Mail bag	Bag	Stamps
Mail		Machines

14. What special things does a control tower operator need to know to do his job. (Obtain three)

2 Points
When airplanes are coming in
If runway is clear
Weather conditions

1 Point
Where to locate airplane in case of emergency

0 Points
How to work machine
How fast plane is going

15. A gas station attendant needs a lot of things to do his job. He needs gas to put in your car when it's empty. Name three other things he needs.

2 Points
Gas pump
Air pump
Hydraulic lift

1 Point
Things you keep gas in
Things to pump up tires with
Things to make cars go up to fix under

0 Points
Cash register
Electricity
Cord to ring bell

TABLE 1

Schedule for Classroom Activity Norms

Category	Definition	Examples	Scales
Positive Self-Assertion	Leadership toward constructive objectives.	Enforcing rules, saying, "Be quiet, do your work!"	Task relevant, Coope
Cooperation / Participation	Cooperating or participating in a teacher approved activity.	Raising hand to answer a question, sharing a book, helping a peer.	Task relevant, Coope
Task Oriented Interaction	Working with another child on a teacher approved activity.	Working on a joint project, joint participation in a conversation about a lesson.	Task-relevant, Coope
Constructive Class Work	Self-directed activity leading to a teacher-accepted product or goal.	Doing assignment, reading, writing a paper, working.	Task-relevant, Indep
Constructive Play	Self-directed activity, not part of curriculum but teacher accepted.	Doing educational puzzles, games, drawing.	Task-relevant, Indep
Initiating Task Oriented Conversation	Task oriented interaction with peer.	Starting a conversation about school work, asking to borrow a book.	Task-relevant, Indep
Requesting More Work	Going beyond current task bounds.	"I'm finished--is there another sheet to do?"	Task-relevant, Depe
Attending	Paying attention.	Listening carefully, watching closely.	Task-relevant
Work Preparation	Activity not part of task, preparing for task or cleaning up after it. Generally time wasting.	Pencil sharpening, getting ready, erasing, finding material,	Task-irrelevant, Ind
Gross Motor Activity	Activity involving large muscle groups, self-directed.	Running, dancing, wandering around.	Task-irrelevant, Ind
Non-Constructive Activity	Self-directed activity not leading to a teacher accepted goal or product.	Banging pencil on desk, scribbling, playing when work is assigned.	Task-irrelevant, Ind
Initiating Social Conversation	Initiating social interaction with peer that does not facilitate task relevant behavior.	Starting a conversation about after-school activity, a friend, or a party.	Task-irrelevant, Ind
Social Interaction	Conversing about things other than school work.	Talking about a party, planning after-school activity, talking about a friend.	Task-irrelevant
Inappropriate Cooperation / Participation	Interacting inappropriately.	Talking out when hands are to be raised, permitting another child to copy.	Task-irrelevant
Distractibility	Visual wandering, visual checking.	Looking out window, looking around, looking up when child comes near.	Task-irrelevant
Responding to Internal Stimuli	Not attending to teacher or peers.	Daydreaming, staring into space, scratching, stretching, yawning.	Task-irrelevant
Responding passively	Waiting for directions, waiting for teacher to give directions.	Standing next to teacher without paying close attention, approaching child passively.	Task-irrelevant
Seeking Information	Asking for information or assistance from teacher or peers.	Asking questions, asking for help.	Dependent
Seeking Support or Praise	Asking for support or praise from teacher or peers.	Asking teacher to look at work or to tell if work is correct.	Dependent
Proximity to Teacher	Approaching or being near teacher.	Standing close to teacher, waiting for her to pay attention.	Dependent
Accepting Help	Accepting help in a passive way.	Passively accepting help from teacher or peer with an involvement,	Dependent
Resisting Authority	Active or passive resistance to authority.	Refusing to follow directions, failing to hear teacher.	Aggression
Negative Self-Assertion	Manipulation of others for personal gain.	Threatening, demanding, ordering.	Aggression
Negative Attention Getting	Using inappropriate means to get attention.	Pestering, whining, crying, clowning.	Aggression
Aggressive Behavior	Verbally or physically attacking a person or object.	Destroying property, shouting, name-calling, hitting, pushing.	Aggression

TABLE 1

CLASSROOM BEHAVIOR INVENTORY
Short Form, K-12
Earl S. Schaefer and May Aaronson
(Items by Categories)

TASK ORIENTED

Works earnestly at his classwork; doesn't take it lightly.
Watches carefully when teacher or a classmate is showing how to do something.
Sticks with a job until it's finished, even if it is difficult for him.

DISTRACTIBILITY

Is quickly distracted by events in or outside the classroom.
Sometimes pays attention; other times must be spoken to constantly.
Often cannot answer a question, because his mind has wandered.

HOSTILITY

Tries to get even with a child with whom he is angry.
Gets angry quickly when others do not agree with his opinion.
Ridicules and mocks others without regard for their feelings.

CONSIDERATENESS

Awaits his turn willingly.
Tries not to do or say anything which would hurt others.
Gives the other an opportunity to express his point of view.

EXTRAVERSION

Laughs and smiles easily and spontaneously in class.
Likes to express his ideas and views.
Does not wait for others to approach him, but seeks out others.

INTROVERSION

Has a low, unsteady or uncertain voice when speaking to teacher or a group of classmates.
Is usually sad, solemn or serious looking.
Tends to withdraw and isolate himself, even when he is supposed to be working with a group.

Appendix B

Comments Made By Parents on Questionnaire

Comments Made By Parents on Parent Questionnaire

"There was a definite increase in vocabulary. Reading improved-general excitement and enthusiasm about what they were doing. Personally, since we are concentrating now on career education in the upper grades, I felt here it was being implemented in the early grades and the children were definitely aware of the importance of every person's job. Think it was a fantastic program and sure wish it would be continued."

"I found _____entering in family conversation more and telling of her visits around town to the teenage members in our family."

"I was amazed at the number of sophisticated concepts that my daughter not only was exposed to, but could discuss at the end of this remarkable project".

"He said it was a dramatic play and very exciting. I asked why, and he said, the men with cameras and mikes would listen to what they had to say."

"I feel that the dramatic play program was very helpful in providing my child with an understanding of real life situations. It also stimulated independent thinking on her part. I also think that the program may serve as an aid in helping children to adapt to and become a part of the changing and sometimes rather confusing social structure that they have to deal with in that the program gives them a basis for thinking problems through and dealing with other people on a one-to-one basis."

"Maybe that I can help sometimes on Wednesdays."

"_____ was very enthusiastic with the community program. Her interest in school was much better and her attitude improved."

"Our regret is that this program cannot reach every child in the school system. It is an excellent program in every way and is a both interesting and enjoyable approach to learning about communities and how they work."

"My child was quite excited about the program and gained a great deal of knowledge and pleasure from the program. I consider the program more successful than my answers to your questions show."

"My child _____ enjoyed this program very much. He talk abut it a lot. He seem to get a lot out of it--about road signs, traffic laws. It has help _____ a lot. I am very happy, that _____ show interesting in it."

"I think too much time was spent last year or this program and not enough time was given to academic subjects."

"I am an avid supporter of the program. The "not at all" circles reflect _____'s interests, which might have been part of the community--sports, in particular--but were omitted. Certainly in Chapel Hill,

Rainbow Soccer and UNC are dominating forces in many youngsters' lives. The "community" was not localized or individualized in any way. I am saying three things at once: (1) I like the program and would like to see it continued and expanded; (2) I think it might be localized more to reflect this particular community, or any other it is used in, for example, Harlem and Chapel Hill are not the same communities clearly!; (3) I would like input from the children about what aspects of the community affect them and why."

"I feel that this program was very valuable for ____. He showed an increased interest in his community. He certainly learned a lot about political processes and the organization of a town and its related services. I feel that the role playing done is very valuable to his development and appreciation of all types of job and people. I can only hope that he will have an opportunity to again participate in a program such as this. It has helped in his reading and math also."

"____looked forward to "Community" day every week. She always enjoyed, since she was 3, dressing up and acting out her feelings - so Community really interested her. I think the idea is excellent and hope funds can be found to continue the program. I also wish I could have observed the group to see how _____ handled herself. One negative comment, the hospital visit, the girls were given nurses caps automatically. Even _____ commented on that, she asked me if girls could be doctors? That made me wonder if the Community girls and boys leaned toward stereotype roles. I can't believe that or I won't believe it. However, I was pleased _____ could participate and wish all the 2nd grade Chapel Hill school children and had that opportunity."

"I think this program has greatly accelerated _____ learning about community resources. When she did not quite grasp all the details she knew how to ask more questions. In addition to this general information, I see this as pre-vocational exploration and very valuable for future reference. Thank you."

"This questionaire is stacked, in so far as it does not assess (1) any negative effect (2) the relative merit of dramatic play in relation to more conventional methods of teaching. Also it is difficult to assess whether child's interest in Community affairs is a result of dramatic play or a product of other stimulations in his environment. Our son, who is one year older,and who was not exposed to dramatic play, discusses both local and national politics with me with a fair degree of competence."

"As you know ____ only participated in the program for the months of April, May, and June. The "Community" aspect of FPG was ____'s most positive feeling towards his new school. My husband and I continue to be amazed by what he learned from the program in such a short period of time."

"I feel ____ reacted in a positive way to this program; it seems to me, however, that his response was as much to the people running the program as to any of the structural specifics of the program."

" I would recommend it for children until they are at least out of third grade."

"_____ did not have an especially satisfying school experience, many times not wanting to go to school--. This program made the difference in whether school offered something worthwhile for him. Probably one of the few aspects that filled his needs--wish he had a similar experience this year--excellent!"

"I think (from comments we received) that _____enjoyed the program, but resented the amount of time spent on it. I do think her opinion of the program became more favorable as the year progressed, when the time was more scheduled. We felt she gained insight of the community through the study and were quite impressed, when viewing the video-tape of their dramatic session, at their role playing."

"(#9) This was very true. It was so interesting to me to see what she had learned. She enjoyed acting out the various roles and still does. _____ even now remembers so much of the information learned during the school years program. She re-enacts the village set up, and various roles with her doll house village, by setting up roads, signs, offices for community businesses and persons. I am so very impressed by what she has learned. She has certainly benefited a great deal--and we were glad to have her in the program. I highly recommend it!"

"_____ very much looked forward to this part of the day--She enjoyed playing different "roles" in the community and looked forward to anticipating which role she would assume. It added a great deal to her entire school year--It instigated a good interpersonal relationship between the students (i.e., the changing of roles which conveyed responsibility)."

"I personally think the program was pushed too much last year (too much time) to the point where I felt other subjects were neglected. The program should be geared down if reinstated."

"I would like for my child to have the same opportunity again this year. He would desire it, also. The personal letters were a good idea. I felt they were a little low-keyed. I believe 2nd graders can handle more complex sentences (lack of variety) to the letters as the year progressed. Therefore, their effectiveness was greatly diminished. However, it was still a great program!!!"

"_____seemed to like the program but it has had little effect. Perhaps it would be well to advise the parents in advance and in detail of the type of social drama and define the results anticipated."

"_____enjoyed aspects of the program in which she was free to grow--particularly dramatic play. She was bored by explanations in class--I infer that she enjoys "learning by doing"."

"Reading was fun for _____when it was associated with the Community, his knowledge of how people must work together to make a Community operate well is still being evidenced in his conversations and activities of this year, a marked increase in spoken vocabulary, the periods of free play in the Community were especially enjoyable and meaningful for ____. There was a good balance it seems between structured and non-structured situations for children. All elementary school children should have an opportunity to experience this program."

"Having seen two children improve their knowledge about community topics, I am very enthusiastic about this program. My only question is will an ordinary school, with its limited space, be able to adapt it?"