THIS STUDY COVERED A PERIOD OF 8 WEEKS AND 14 SESSIONS. AN EXPERIMENTAL GROUP OF 29 5-YEAR-OLDS WAS TAUGHT BY AN EXPERIENCED EARLY CHILDHOOD AND ART EDUCATION TEACHER. A CONTROL GROUP OF 26 5-YEAR-OLDS WAS USED ONLY FOR MEASUREMENT OF NORMAL GROWTH DURING A BEGINNING AND A FINAL SESSION. THE PURPOSE OF THE STUDY WAS TO INCREASE MEANINGFUL LANGUAGE DEVELOPMENT AND AWARENESS OF CULTURALLY DEPRIVED CHILDREN TO SELECTED ART IDEAS THROUGH GUIDED PARTICIPATION. A NEW CERAMIC ART PIECE WAS SHARED WITH THE EXPERIMENTAL GROUP AT EACH OF THE 14 SESSIONS. THESE WORKS REPRESENTED A VARIETY OF IDEAS, FROM THE SIMPLE PIECES BY COLLEGE STUDENTS TO WORKS BY PROFESSIONALS AND INCLUDING 2 PIECES FROM OTHER CULTURES. CLAY FOR MODELING WAS PLACED ON THE WORK AREA IN THE BACK OF THE ROOM. QUESTIONS POSED AND DISCUSSED WERE BASED ON 4 BASIC ART IDEAS: (1) WHAT IS IT, (2) WHO DID IT, (3) HOW DID HE DO IT, AND (4) COULD HE DO IT WITH AN ALTERNATE MATERIAL. TAPE RECORDINGS WERE MADE OF EACH SESSION. THE CHILDREN WERE RATED ON VERBALIZATION AND CLAY PRODUCTS. ON THE POST-TEST THERE WAS A SIGNIFICANT GAIN IN FAVOR OF THE CONTROL GROUP ON VERBALIZATION SCORES AND THE ABILITY TO USE CLAY. (CO)
INCREASING THE AWARENESS OF ART IDEAS OF CULTURALLY DEPRIVED KINDERGARTEN CHILDREN THROUGH EXPERIENCES WITH CERAMICS

Julia B. Schwartz and Nancy J. Douglas
Florida State University, Tallahassee

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Chapter I

Introduction

National interest at this time is centered on the education of very young children with particular focus on those from culturally deprived areas. Providing these children with the best possible educational experiences for their potential development as useful and productive citizens is a major concern. In keeping with this objective is the need to re-evaluate methods of teaching which tend to overlook these children who are unable to cope with the learning situations offered in today's schools. Major areas of deficiency which hinder them from taking advantage of the curriculum appear to be in their visual perceptual discriminations, processes of thinking and in language skills.

Edgar Dale (1965) notes that "the deprived child has actually been physically restricted in the number of things seen, heard, touched, and tasted. He lacks perceptual experience." Huey (1965) says the more abundant the child's sensory experiences and past associations the richer his perceptions and the greater his learning potential. Bernstein (1966) points to the low level of ability to conceptualize and non-verbal orientation which blocks these children from learning. Taba (1966) calls attention to research on cognitive styles and language patterns of these children which suggests the need to concentrate on materials and tasks that use the operational and concrete rather than the verbal stimuli. Hunt (1961) points out that "a major factor in the early development of language will be a rich concrete experience in which the child is involved and in which there is an explicit plan to name and discuss."

In seeking new methods to be used in teaching the culturally deprived child, much thought should be given to the structure of the subjects to be taught and the sequences in which these structures will be offered. Bruner (1962), in his discussion of the importance of the structure of a subject, points out that transfer, in essence, "consists of learning initially not a skill but a general idea, which can then be used as a basis for recognizing subsequent problems as special cases of the idea originally mastered."

Goodlad (1964) recommends "experimentation to develop and test materials with children and youth representing divergent cultural groups especially the disadvantaged." He sees the need to "develop curricular sequences from the bottom up instead of the top down thus opening interesting possibilities.
for relating longitudinal processes of children and youth." Deutsch's (1962) on-going study indicates that intellectual growth in a number of areas can be stimulated in young children. His study, however, does not include the area of the humanities, a rich field for developing verbal and non-verbal language concepts and perceptions as they relate to the visual arts.

If these children lack language skills, and need concrete and operational materials and tasks for developing them, a rich field for exploring possibilities is in the area of ceramics. Shaping clay is primal. It is close to the young child's experiences and being concrete and tactile permits him to exercise both sensory and muscular control and offers an opportunity to build meaningful art vocabulary and curricular sequences through interesting stimuli and involvement.

According to Bernstein (1957) the culturally deprived child's style of language limits the kind of ideas that can be expressed and communicated as well as the kind of thought that can be symbolized and ordered within it. Yet such noted linguists as Edward Sapir (1949) and Benjamin Lee Whorf (1956) have helped us to realize that language is a shaper of thought itself. These men view language as a window through which we see experience; that is, the particular language we learn causes us to pay attention to some things more than to others. Likewise Eisner (1964) notes the usefulness of language in seeing and ordering experience and the possible role it has to play in enabling the child to see art. If it is true that, in part, we see the world through our concepts, may it not also be true that terms such as smooth, rough, blue, flat, round, texture, line and shape might enable culturally deprived kindergarten children to see more completely visual works of art? Lacking language development they are unable to attach symbols to objects thus limiting the kinds of ideas they can communicate and the kinds of thoughts they can symbolize with these ideas. Would not experiencing art terms as they are helped to confront art works and to produce their own work in clay help them to internalize the non-verbal language of art?

Two recent surveys of research concerning young children. Sears and Dowley (1963) and Harris (1963), indicate no previous studies concerned with art ideas. In the former art experiences, when mentioned, are primarily manipulative in nature, the sole aim being to increase eye-hand coordination and finger dexterity with emphasis on skill through provision of so-called "creative materials." No mention is made of the process of idea development in connection with the exposure of the young
child to art. In the latter emphasis is on measuring intelligence through drawing.

Kindergartens provide many opportunities for developing ideas through choice of materials, equipment, and furniture in their program. Books, pictures, stories, walks and trips contribute topics for thought and conversation according to McCarthy (1954). Van Alstyne (1932) found working with clay and crayons ranked high in conversation with their use. Yet the use of art materials as a tool for language development around basic art ideas has seemingly been overlooked.

In a study recently completed by the researchers (1967) with culturally advantaged four-year-old children it was found that the level of awareness of basic art ideas could be increased with these children when they were stimulated to observe, feel, talk, think, and create in terms of such ideas.

The literature reveals a need for methods to present materials relating to art to culturally deprived young children, which offer sensory, concrete experiences through which children can perceive and communicate their perceptions to others. Clay has great potential for providing opportunities to touch, describe, and put into action ideas about art. There is also a need for art curriculum sequences beginning with the early years of childhood and continuing into the later years. In the above mentioned study Douglas and Schwartz explored possible beginning art curriculum sequences.

The objective of this study was to increase the awareness of culturally deprived kindergarten children to selected basic art ideas (Appendix, page 29) through guided participation in observing and discussing ceramic art works and modelling in clay using an experienced teacher knowledgeable in early childhood and art education.
Chapter II

Method

I General Design

The study covered an eight-week period involving fourteen sessions with an experimental group of kindergarten children from a culturally deprived area. A control group of children of similar characteristics was used to measure normal growth at the beginning and final sessions only.

One hour during the school day, twice each week, normally used for sharing and discussing, was allotted for the experimental group. The study involved bringing in ceramic art works and other visual stimulus material by the experimental teacher to use with the children in posing pertinent questions relating to the four basic art ideas underlying the study. The regular teacher and her aide were present and were encouraged to emphasize these ideas during the week. Clay was provided for the children following sharing sessions.

Subjects

Twenty-nine kindergarten children from a culturally deprived area, thirteen boys and sixteen girls, served as subjects in the experimental group. The subjects ranged in chronological age from 4 years 10 months to 5 years 9 months with a mean of 5 years 2 months 26 days and a standard deviation of 3 months 20 days.

The control group consisted of twenty-six kindergarten children from similar backgrounds, nineteen boys and seven girls, ranging in age from 4 years 10 months to 6 years 6 months with a mean of 5 years 4 months 13 days and a standard deviation of 4 months 14 days.

Stimulus Material

Visual Stimuli

A new ceramic art piece was shared with the experimental kindergarten children at each of the fourteen sessions. The control group shared the same first and last pieces. These works were selected to represent a variety of ideas in ceramic art forms both pottery and sculpture. They ranged from simple "handies" by college students to works by professionals and included two pieces from other cultures. The examples ranged from the non-objective to the more conventional in style. Table II in the Appendix* gives descriptive detail concerning the ceramic art works in the order in

* Page 30
which they were presented to the children.

Additional or auxiliary visual art stimuli were used with the ceramic pieces when available. These included prints and originals of paintings, collages, constructions, textiles, wood sculpture, and when appropriate, the children's own art work. These were used during sessions 7, 8, 12, 13, and 14.

Verbal Stimuli

Questions posed and discussed were based on the four basic art ideas underlying the study: Criterion I, what is it; Criterion II, who did it; Criterion III, how did he do it; and Criterion IV, could he do it with an alternate material.

Rating Scales

Verbalization

A 10-point continuum scale (Table III in Appendix*) was developed based on the extent to which children gave evidence of awareness of each of the four basic art ideas underlying the study. More credit was given when answers came spontaneously from the children without teacher help on each of the four criterion.

Clay Products

A 7-point continuum scale (Table IV in appendix**) was developed in relation to use of the medium. A low rating, 1, was assigned any product where clay was relatively unchanged from the mass given to the child. A medium rating, 4, was obtained when the product was upright, showed some three-dimensionality, and a little attention was given to surface treatment (texture). A higher rating, 6, was given when the product evidenced three-dimensionality; was upright; and formed within the limitations of the medium; evidenced definite attention to technique, as, fusion apparent when the piece was built of parts; and showed attention given to texture. The highest score, 7, was given on the basis of a further refinement of aspects emphasized in those scoring 6.

Rater Agreement

Interrater agreement was established in the two areas, verbalization and clay products, by three judges through practice on similar material from another group prior to scoring.

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** Page 33
Verbalization

Following practice sessions a Spearman Rho correlation of over .90 was obtained between raters on the four criterion for verbalization before scoring the study transcriptions. A correlation of a random sample of scores on study transcripts was run periodically and when a correlation fell below .85, raters were called in for clarification. If a rater held to his score it was accepted.

Clay Products

After a Spearman Rho correlation of .95 was obtained in the practice sessions the raters were given the study clay products to score. Here, again, a correlation of a random sample of scores was run periodically and, when the correlation fell below .85, raters were called in for clarification. Again, if a rater held to his score, it was accepted.

II. Procedures

Fourteen sessions were held during an eight week period with an average of two sessions per week.

Session 1 (Pre-test): Experimental and Control Groups

Prior to the children entering their room a piece of ceramic art work was displayed on one of their tables but visible to all. Clay for modelling was available on the work area in the back of the room. A tape recorder was set up to tape the children's verbal responses. No effort was made to call the children's attention either to the ceramic art work or the clay. Clay pieces produced were photographed in the room with the use of a Polaroid camera when the children had completed them.

Sessions 2 through 13: Experimental Group

Sessions 2 through 13 involved only the experimental group. A teacher knowledgeable in early childhood and art education presented a different ceramic art work during a regular sharing session which took place on Tuesdays and Thursdays of each week. By use of questions relating to the four art ideas underlying the study the teacher guided observational and verbal responses for as long as interest was indicated. After this she asked, "Can you 'talk' with clay?" Clay and other art materials were available to the children during the free choice period. In her work with the children modelling clay she emphasized the basic art ideas of the study.
When auxiliary visual art materials were used they were introduced in connection with Criterion IV, could he do it with another material.

The regular kindergarten teacher and her aide were present during the full time and were invited to participate. Recordings were made of the discussions and photographs were made of the children's clay modellings with a Polaroid camera. Any comments from the children concerning their product, when the investigators commented, "Tell me about it," were recorded and attached. Clay was made available to the control group at this time for the teacher to use as she desired.

Session 14 (Post-test): Experimental and Control Groups

The experimental teacher shared the same ceramic art work in the same manner with the control group of children as she did with the experimental group. A recording was made of the discussion and photographs made of the children's clay modellings according to the usual procedure.
Chapter III

Results

The data revealed that awareness to art ideas by these culturally deprived kindergarten children could be increased when a teacher knowledgeable in early childhood and art education helped them to 1) observe and discuss ceramic art works in terms of these ideas and 2) put the ideas into action in their own clay modelling.

I. Verbalization

The verbalization scores presented here are on individuals in groups and, therefore, a T-test of significance of difference between means would be inappropriate. For this reason the data are presented in graph form.

Control Group

No check for growth in awareness of art ideas of the control group in verbalization is possible because these children on the pre-test ignored the ceramic art work even though it was moved deliberately by the teacher from table to table. As these children worked almost silently with their clay no transcription by tape recorder was possible and, therefore, a score of zero had to be assigned. On the post-test when the experimental teacher shared the ceramic piece with them, asking pertinent question, they were able to obtain a score of 14.6.

Experimental Group

The experimental group of children on the pre-test observed the ceramic art work immediately as they came in from outside. They gathered around the piece, feeling it, and exclaiming over it excitedly. The transcription of their verbalization scored 5.3. By the third session their verbal score of 18 had exceeded the post-test score of the control group. The experimental group post-test score was 30.6.

The combined scores for the four criteria of verbalization fluctuated erratically over the fourteen sessions of the experimental group but revealed increasing awareness. In order to show this more clearly the scores were grouped in quartiles, i.e., sessions 1, 2, 3 and ½ of 4, and are shown in Figure 1. The scores for the first and last sessions of the control group are...
FIGURE 1. TOTAL VERBALIZATION SCORES FOR THE EXPERIMENTAL GROUP BY QUARTILES OF SESSIONS AND THE FIRST AND LAST SESSIONS OF THE CONTROL GROUP
FIGURE 2. VERBALIZATION SCORES OF EXPERIMENTAL GROUP BY CRITERIA BY QUARTILES OF SESSIONS AND THE LAST AND FIRST SESSIONS OF THE CONTROL GROUP
also shown here. When the over-all verbalization score was looked at in terms of the four criteria there was a general upward trend on all of them as revealed in Figure 2. The greatest increase was on Criterion IV where the score rose from less than 1 in the first quartile to slightly above 6 in the last quartile. Criterion II had its greatest increase in quartile 2, a loss between quartiles 2 and 3, and a small upswing during the last quartile. Criterion I had an abrupt increase in quartile 2, a plateau at quartile 3, and another abrupt increase in the last quartile. Criterion III tended to get its total increase in the second quartile with little change thereafter.

II. Clay Products

First Session: Experimental and Control Groups

A two-tailed T-test was run between scores on the control and experimental groups on the first session. No significant difference at the .05 level was found between the two groups.

Last Session: Experimental and Control Groups

A T-test difference between the scores of the last session was significant at the .01 level in favor of the experimental group of children.

First and Last Sessions: Control Group

The mean product score for the first session of the control group was 3.7 and the post-test mean score was 3.8 showing no significant difference.

First and Last Sessions: Experimental Group

An analysis of variance between means of the first and last group was performed. A significant difference at the .01 level between the two was found in favor of the last session.

Sessions 1 through 14: Experimental Group

In the product scores as in the verbalization scores, there was a general upswing throughout the fourteen sessions from a mean group score of 2.5 at the beginning to a mean group score of 5.06 (Chicken) on the last session. This may be seen in Figure 3. The highest peaks were reached during the 7th (Big Owl) and the 13th (Lady) sessions, which tied for a score of 5.16. The over-all mean product score for the fourteen sessions was 4.3
FIGURE 3. MEAN PRODUCT SCORES OF THE EXPERIMENTAL GROUP ON EACH SESSION AND ON THE FIRST AND LAST SESSIONS OF THE CONTROL GROUP.
Chapter IV
Discussion

I. Verbalization

Control Group

These children were provided with clay and opportunities to use it but no ceramic art works were furnished by the researchers between the first and last sessions. Their final score on verbalization with the experimental teacher indicated that they were unable to achieve the third session score of the experimental group. One reason for this might have been the lack of background knowledge in art on the part of the control group teacher and, therefore, children used clay as an activity and not as a means of discussion. In a spot check during the middle part of the study she revealed that she was providing clay experiences for the children but was concerned because "their clay pieces were falling apart" and "they had run out of ideas." The final score on the clay products upheld her observations.

Experimental Group

As noted in the results, according to Figure 2, all four criteria showed plateaus in which little gain was evident. Plateaus for Criteria II and III continued at the end of the study whereas Criteria I and IV reveal an upswing, a plateau and an increase. How long these trends would continue is unknown. The increase in Criterion IV could be attributed to the use of auxiliary visual art stimuli of the 7th session. The researchers cannot account for the rapid gain in Criterion III which levels off for the rest of the study. In Criterion I the small Owls and Big Owl were largely responsible for the rise in quartile 2. The plateau occurs during sharing of Slab Pot, Coil and Pinch Pots and Big Handy, pieces which appear to be too abstract for these children. The rapid increase in the last quartile could be due to the Mexican Bull, Lady, and Chicken, which were within the experience of these children.

II. Clay Products

Control Group

There was no significant gain in the children's mean product score during the eight weeks of the study. Their pieces remained the same stereotype baskets and eggs, simple pots, and crude attempts to portray human figures. Not as many attempts at upright forms were made as had been observed in the first session.
Experimental Group

In reviewing the scores on the clay products of the experimental group the most feasible method for comparing increase in awareness appeared to be by percentage of children whose score at any one session was above their previous average. Figure 4 shows percentage of experimental children, as a group and by sex, whose product score was above own previous average.

As a group on the 3rd session (Sutton Bird) 80% of them exceeded their own previous average product score. On the 5th session (Indian Pot) the percentage dropped to just below 60%. A peak of 100% was achieved on the 7th session (Big Owl). The downward trend was started during the 8th session (Head) and reached its lowest during the 9th session (Slab Pot); yet 44% of the children still achieved a gain over their own previous average product score. This downward trend could reflect a possible weakness in choice of ceramic art work and lack of auxiliary visual art stimuli. The upswing of the last two sessions supports this view. From the 9th session the increase rose to another peak of 85% on the final two.

The difference between boys and girls is noted on the 10th session (Coil and Pinch Pots) at which time only 26% of the boys but 65% of the girls achieved a product score above own previous average. The largest difference between the two was on the 11th session (Big Handy) when 85% of the boys and 38% of the girls achieved a product score above own previous average. The girls' lowest percentage was reached at this session. This ceramic piece must have had more significance for the boys. The girls seemingly were unable to relate as evidenced by one of them who titled her product, "It's a meat bone." In the final session (Chicken) 91% of the boys and 87% of the girls exceeded their own previous average product score.

When looking at the over-all mean gain in product scores of the experimental group, as pictured in Figure 3, it is interesting to note that the score zoomed when pieces such as Big Owl (7th session) which seem to hold significance for the children were shared. This gain was abrupt but was lost on pieces of seeming less significance as Head (8th session) and Slab Pot (9th session). The head lacked qualities which could appeal to the children. The researchers question whether results might have been different had a piece with negro features been presented. The reason for the drop with the Slab Pot is questionable as the piece was highly successful with culturally advantaged four-year-olds in a previous study. It is interesting to note that this piece had least significance for the boys.
FIGURE 4. PERCENTAGE OF EXPERIMENTAL GROUP CHILDREN WHOSE PRODUCT SCORE ON SESSION WAS ABOVE PREVIOUS AVERAGE: BY TOTAL GROUP AND BY SEX.
III. Relationship Between Verbal and Product Scores and Length
of Time of Sharing Sessions

There appears to be a relationship between verbalization scores, product scores, and discussion time. For this reason the discussion section will consider these together. Figure 5 shows a composite graph indicating the pattern of development for each over the fourteen sessions of the experimental group: verbalization and product scores, and time of each discussion session. The consistent high peak for all three areas was on the 7th session (Big Owl). This was also true of the 3rd session (3 Small Owls), the 12th session (Mexican Bull), and the 14th or last session (Chicken). For the 13th session (Lady) less time was used to achieve the high verbalization product scores. On the 10th session (Coil and Pinch Pots) more time was used, due, perhaps, to the demonstrations performed, with a lower product score and a little higher verbalization score. On the 9th session (Slab Pot) there was an abrupt dip in time, verbalization and product scores. The lack of additional visual art stimuli at this sharing session and the inability of the children to handle the art ideas in relation to this ceramic form might have influenced the results obtained. Certainly these children were more concerned with concrete ideas within their realm of experiences.

IV. Other Observations

Although the results show that the awareness of these culturally deprived kindergarten children to basic art ideas was increased through guided participation, observation and discussions of ceramic art works and modellings in clay other interesting phenomenon were also observed.

Openness to Experience

The control group, at the beginning, paid little attention to new experiences available to them as revealed in their ignoring the ceramic work during the first session. Even the children sitting at the table where it was placed were seemingly oblivious to its existence. The teacher moving it from table to table where the children worked in clay could not attract their attention. When the researchers showed the children Polaroid photographs taken of their work and pointed out the ceramic piece in them, only then did the children ask, "Where is it?" on the other hand, these children scored higher than the experimental group on their initial clay products indicating surprising manipulation of the medium, beginning uprightness of form, some three-dimensionality, and even joining of parts by squeezing.

The experimental group was far more observant and open to new experiences. The ceramic piece was located on the back table;
Figure 5. Pattern of Development of Experimental Group Over Fourteen Sessions on:

Verbalization, Products, and Discussion Length of Time.
immediately and began to talk about it and to feel of it. Thus much spontaneous comment was taped.

Teacher Differences

The differences in philosophy and methods of teaching may have affected the reactions of these groups of children. Although the teachers had similar backgrounds of education and experience and were rated good teachers by their supervisor, the control group appeared less free in movement going immediately to assigned seats and waiting for teacher suggestion. The experimental group of children, on the other hand, felt free to move immediately to where the new experience had been arranged and discussed freely what they observed.

Auxiliary Visual Art Material

The use of auxiliary visual art materials in sharing sessions appears to be related to Criterion IV, "Could he do it with an alternate material?" For example, in the 7th session (Big Owl) the children were shown several artists' expressions of the same object: transparent tissure paper overlay, opaque colored paper collage, and paper construction sculpture. Criterion IV verbalization scores rose from a previous score of 1 to a score of 7.6 for this session. This score was maintained in the next session during which auxiliary visual art materials were again used, but dropped to zero on the next three when such materials were unavailable. This points to the need for a variety of concrete visual art material for building concepts.

Attention Span

It was noted that the attention span increased sharply from beginning to end. In the experimental group it went from five minutes at the first session to fourteen minutes at the last, the longest being fifteen minutes at the 7th session (Big Owl). The length of the session appeared to increase when auxiliary visual art material was introduced.

Technique

The researchers became aware that technical help at the right time is essential. Those children who were overlooked had a tendency to revert back to pancake forms or to become disinterested.

In the beginning the children used their allotted clay to make numerous identical small stereotyped forms whereas during the final sessions they were using all the clay originally provided, asking for more, and producing large work with detail, technical know-how and upright form. Many would still be working in an absorbed fashion when the session was over, a period of an hour.
When the concept of slip was introduced at the 6th session (Turtle Man) children were interested in using water for soaking clay rather than for technical purposes. This changed rapidly and soon all added pieces were firmly attached and smoothed. It should be pointed out that the piece, Turtle Man, was introduced so that an explanation and demonstration of the use of slip could be developed.

For the control group at the mid-point of the study, as already mentioned, the teacher noted the lack of technique on the part of the children. The researchers noted that some of their clay modelling showed ideas but no concept of technique and less evidence of uprightness of form than had been observed at their first session. The use of the same stereotyped forms as the first session, pancakes, baskets, eggs, and snake-like shapes, was still prevalent.

**Additional Learnings**

Other learnings were evident in the study. 1) The children of the experimental group by the 12th session (Mexican Bull) could handle the ceramic piece with care and pass it unassisted from one to another. In the beginning all wanted it at the same time. 2) Gesturing in place of talking diminished as children acquired words to describe what they observed. This increase in words was also noticed when each told the researchers about his work at the end of the session just prior to the time it was photographed. 3) Girls, in the beginning, participated rarely in the discussion sessions. This was true of only a few of the boys. Towards the end of the study children were all contributing, taking turns, listening to each other and sharing ideas. A new respect for each other's work became evident. Children no longer laughed at another child's efforts.

By way of summary, the results of this study indicate that an awareness of art ideas was increased in these kindergarten children through planned experience, both visual and verbal. When pertinent questions were asked the children in relation to ceramic art works, they were stimulated to observe and to express their ideas, both verbally and through clay. Their appreciation deepened and their understanding were developed. Teachers need help in defining questions and identifying and using visual art materials which help children to do this. They need help in learning how to work with children in terms of basic art ideas. The control group was able to handle art ideas in the last session when the experimental teacher posed appropriate questions but the children's verbalization score was less than all sessions of the experimental group except the first two.
Chapter V

Conclusions, Implications, and Recommendations

I. Conclusions

The study reported herein investigated a method of increasing the awareness of art ideas of culturally deprived kindergarten children through experience with ceramics. The method included two areas: 1) ability to observe and discuss ceramic art works using four basic art ideas and 2) ability to use the clay medium. A teacher knowledgeable in early childhood and art education was used. A control group of children was used as a check for natural growth.

Verbalization

1. The experimental children moved from responding through gestures or non-participation to active and interested involvement both verbally and visually.

2. Scores on verbalization increased and, when measured in the final session, revealed a decided overall gain for the experimental group of children.

3. There was unequal growth in the four areas of verbalization, the most decided gain being on Criterion IV: could he do it with an alternate material.

4. There was a plateau in which the children held their own or lost slightly during the middle of the study. This plateau continued to the end of Criterion III: how did he do it.

5. When comparing the last session scores for both groups, the increase in favor of the experimental group is evident. The results are reported in Table V. The control group did not reach the experimental group in any of the criteria. The largest difference was found in Criteria II and IV.
### Table V

Scores on Each Verbalization Criteria for the Last Session of the Experimental and Control Groups

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Group</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Experimental</td>
<td>7.7</td>
<td>9.0</td>
<td>7.0</td>
<td>7.0</td>
<td>30.6</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>5.6</td>
<td>3.0</td>
<td>5.1</td>
<td>1.0</td>
<td>14.6</td>
</tr>
</tbody>
</table>

6. Using additional or auxiliary visual art stimuli at the sharing session produced increasing verbalization scores.

7. The length of discussion time tended to increase during the study, but varied according to the kinds of visual stimuli used.

**Clay Product**

1. The mean product scores for the experimental group showed a continuous gain though fluctuating in relation to the visual art stimulus used.

2. There was no significant difference between the experimental and control group product scores at the first session but the difference was significant at the .01 level in favor of the experimental group on the last session.

3. The need for extra help at the crucial moment when working with clay was evident. Children not helped with simple techniques when needed tended to revert to flat pancake forms, eggs, simple snake-like coils or lose interest entirely.

4. When looking at the percentage of children achieving an increase over their own previous product score average, the lowest percentage of 38% occurred during the 9th session and the highest of 100% on the 7th session. On the final session the percentage was 89%. The boys' and girls' pattern of development tended to follow the total group. The percentage of boys, however, exceeded the percentage of girls and the total percentage on sessions 3, 4, 8, 11, 12, 13, and 14.
There tended to be a strong relationship between scores on verbalization, clay products and length of time used for discussion.

Children's drawings between sessions tended to increase in number and richness of symbol as they were included as auxiliary visual art materials in sharing sessions. The children moved from an attitude of ridicule and contempt for each other's drawings to that of interested acceptance of them.

The regular kindergarten teacher and aide of the experimental group though encouraged to participate tended in the beginning sessions to stand aloof. As the sessions developed, however, both became deeply involved and actively assisted in all aspects of the period. The teacher took detailed notes for own future use.

Art ideas gained from the ceramic art work sharing sessions were carried through during other parts of the day. This was evidenced in bulletin boards and in experience stories.

Although this study dealt with culturally deprived kindergarten children, the implications could be applicable to all five year olds in varying degrees. Implications of the results of the study are presented in two parts: first, in relation to an approach to art education for children, and, second, in relation to this approach in in-service teacher education and re-orientation.

An Approach to Art Education for Kindergarten Children

Basic art ideas were used successfully through ceramic art work and clay modelling in this group. This approach could be used as a foundation for developing curriculum in art education for young children. It could serve as a beginning for more advanced later development of knowledgeable art production and art criticism-history.

This method of observation and discussion of ceramic art works based on central art ideas acts as a catalyst in the development of: language (art vocabulary), visual perceptual discrimination (color, shape, texture, form), motor skills (control and manipulation of art media and tools), intellectual development (relating ideas) and emotional well-being (total self-involvement and satisfaction).
3. Observing, handling, and discussing ceramic art works and working in the clay medium offer concrete experiences for helping the child to build richer concepts.

4. Ceramic art works to be shared with kindergarten children should be selected in terms of the child's own background of experience and presented in appropriate sequence. In other words, the ideas and details of the pieces must be both significant and learnable.

5. Attitudes such as greater self-awareness, self-control, self-confidence, and self-respect as well as respect for others can be built through the procedures used in this study.

6. Clay appears to be a medium suited to boys of this age. This is of particular importance in planning art experiences since there tends to be a growing feeling that the school curriculum today may be penalizing boys.

In-service Kindergarten Teacher Education and Re-orientation

1. Teachers lack basic understanding of art ideas themselves, a necessary requirement for presenting visual art materials to and guiding children in art experiences involving dialogue. Teachers become involved to the extent that their own understanding of art ideas is clarified and deepened.

2. Value of art experiences is overlooked by teachers who use art as an activity for occupying children while they work with other children in "more intellectually demanding" activities.

3. There is a need for resource people knowledgeable in early childhood and art education to work with kindergarten teachers and their children and their supervisors and school administrators.

4. Teachers lack suitable visual and verbal art materials needed for this approach to art education. They further lack the know-how to use with their children the materials that are available.

III. Recommendations

The following recommendations are made in relation to the findings of the study:

1. This study should be replicated with other five-year olds in both the same and varying cultural backgrounds and for a longer period of time.
2. Further study should be done on the kinds of ceramic pieces which hold significance for these children.

3. This study should be extended to include art works and art materials other than ceramics with kindergarten children.

4. A follow-up study should be made of these children in first grade and later periods for purposes of ascertaining retention.

5. A comparison between a concentrated study in one area, such as ceramics, versus a multi-media approach so common in practice today in most kindergartens should be made.

6. Basic art ideas such as those of this study should be refined and amplified for studies to be made with consecutive age groups of children and tested with them regarding maturation and interest.

7. A study using this method should be conducted for the purpose of identifying and measuring learnings such as language, visual perception, motor skill, and intellectual and emotional development.

8. There is a need to develop art teaching materials, both visual and verbal, for and with teachers in the field. This might be accomplished through institutes throughout the year for kindergarten teachers in the field. These institutes would also serve to build more adequate backgrounds in understanding art in relation to production and criticism-history.

9. Resource people knowledgeable in early childhood and art education are needed to work with teachers to help them to follow-up institutes and develop understandings and need for providing materials and time to develop such programs.

10. There is a need for pre-service teacher education institutions to evaluate existing programs in light of the results of this study.
Chapter VI

Summary

I. Objectives

The purpose of this study was to increase the awareness of culturally deprived five year old children to selected art ideas through guided participation in observing and discussing ceramic art works and modelling in clay. This was a descriptive study.

II. Procedures

The study covered an eight week period involving fourteen sessions with an experimental group of five year olds and an experienced teacher knowledgeable in early childhood and art education. A control group of children with similar characteristics was used for a beginning and final session only to measure normal growth. Fourteen pieces of ceramic art work were used as visual stimuli during a regular sharing period. Appropriate questions were asked concerning four basic art ideas: 1) what is it, 2) who did it, 3) how did he do it, and 4) could he do it with an alternate material. The children were then asked, "Can you 'talk' with clay?" During the week the regular teacher emphasized these ideas. Clay was available after each session.

III. Sources of Data

Tape recordings were made and transcribed of each sharing period. These transcriptions were scored by three judges on a 10-point continuum based on the extent to which children gave awareness of the ideas underlying the study. Photographs were made of clay products and any comments made by the child were attached. These were scored by the same judges on a 7-point continuum reflecting the child's control of the medium. The two sessions of the control group were scored the same way.

IV. Findings

There was a real difference between the verbal discussions of the groups on the post-test. The control group's score had been exceeded by the experimental group on their third session. No significant difference was found between the clay products of the two groups at the pre-test sessions. On the post-test, however, a significant difference at the .01 level was found in favor of the experimental group. Awareness to art ideas was increased in this group of kindergarten children.
REFERENCES


<table>
<thead>
<tr>
<th>Questions for Art Structured Discussion</th>
<th>Aspects of Structure of the Subject of Art*</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is it?</td>
<td>I. Art is a means of non-verbal communication.</td>
</tr>
<tr>
<td>Who did it?</td>
<td>Does the child understand that by moving (manipulating) the clay he can communicate to other people?</td>
</tr>
<tr>
<td>How did he do it?</td>
<td>II. The art product is the embodiment of the idea of the artist who created it.</td>
</tr>
<tr>
<td>Could he make it with his crayon (an alternate material)?</td>
<td>III. The visual embodiment of the artist's idea reflects the perceptions, sensibilities and judgments of the artist, the process and product are reciprocal.</td>
</tr>
<tr>
<td></td>
<td>Does the child understand that his modeling is his idea?</td>
</tr>
<tr>
<td></td>
<td>IV. The artist in the past has chosen, and the artist today can choose, from a variety of material in order to realize his purpose.</td>
</tr>
<tr>
<td></td>
<td>Does the child understand that clay is only one of many materials he can use for his expressive purpose?</td>
</tr>
</tbody>
</table>

TABLE II

CERAMIC ART WORKS USED WITH THE CHILDREN:
CHARACTERISTICS AND ORDER IN WHICH THEY WERE PRESENTED

<table>
<thead>
<tr>
<th>Title</th>
<th>Height in Inches</th>
<th>Other Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dancers</td>
<td>13</td>
<td>dull, dark glaze; two figures on base</td>
</tr>
<tr>
<td>Three Handies</td>
<td>3 to 5</td>
<td>one dark brown glaze, others unglazed</td>
</tr>
<tr>
<td>Sutton Bird</td>
<td>22</td>
<td>hollow, slender, textured, subtle changes in light color glaze, gentle curves, up and down lines</td>
</tr>
<tr>
<td>Two Small Owls</td>
<td>5 to 6</td>
<td>unglazed, textured, red brick</td>
</tr>
<tr>
<td>Indian Pot</td>
<td>5 by 6</td>
<td>historic Weedon Island Indian bird pot</td>
</tr>
<tr>
<td>Turtle Man</td>
<td>9</td>
<td>unglazed, fantasy-personification parts broken off, unstable base</td>
</tr>
<tr>
<td>Big Owl</td>
<td>18</td>
<td>textured, hollow, waxed red brick</td>
</tr>
<tr>
<td>Head</td>
<td>12</td>
<td>white clay, unglazed</td>
</tr>
<tr>
<td>Slab Pot</td>
<td>6</td>
<td>shiny glaze, decorative texture</td>
</tr>
<tr>
<td>Coil and Pinch Pots</td>
<td>3 to 10</td>
<td>with coils left as decorative effect, fired and unfired</td>
</tr>
<tr>
<td>Big Handy</td>
<td>7</td>
<td>red brick, waxed, no ONE right side as up</td>
</tr>
<tr>
<td>Mexican Bull</td>
<td>13 by 14</td>
<td>slip glaze in decorative design, arch neck</td>
</tr>
<tr>
<td>Lady</td>
<td>12</td>
<td>unglazed, exaggeration, humor</td>
</tr>
<tr>
<td>Chicken</td>
<td>19</td>
<td>unglazed, red brick, textured, exaggeration</td>
</tr>
</tbody>
</table>
### Table III

**Rating Scale for Transcriptions**

<table>
<thead>
<tr>
<th>Elements of Criterion:</th>
<th>Rating -- Low to High</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Identification: subject &quot;looks like&quot; or &quot;is&quot;</td>
<td>None: 0</td>
</tr>
<tr>
<td>b. Created or made: person or machine; real or not real</td>
<td>One element wth* 1 woth* 2</td>
</tr>
<tr>
<td>c. Material: may be implied through process (also reciprocal)</td>
<td>Two elements wth 3 woth 4</td>
</tr>
<tr>
<td>d. Interpretation statement: something beyond subject identification</td>
<td>Three elements wth 5 woth 6</td>
</tr>
<tr>
<td>e. Design: structure and surface quality</td>
<td>Four elements wth 7 woth 8</td>
</tr>
<tr>
<td>All five elements wth 9 woth 10</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elements of Criterion:</th>
<th>Rating -- Low to High</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Not real, made (can be implied)</td>
<td>None: 0</td>
</tr>
<tr>
<td>b. Maker: made by someone not specifically stated, for example, &quot;he made or she made&quot; or made, &quot;doed&quot;</td>
<td>Element a wth 1 woth 2</td>
</tr>
<tr>
<td>c. Word &quot;artist&quot; used by student as maker</td>
<td>Element a wth 3 woth 4</td>
</tr>
<tr>
<td>d. Differentiates artists, as more than one kind, personal identity</td>
<td>Elements a,b wth 5 woth 6</td>
</tr>
<tr>
<td>e. Gives explicit name of artist as sculptor, as Sutton made this sculpture and/or &quot;the artist is a potter, painter, architect, etc.&quot;</td>
<td>Elements a,b,c wth 7 woth 8</td>
</tr>
<tr>
<td>b,c,d, with c wth 9 woth 10</td>
<td></td>
</tr>
</tbody>
</table>

* wth -- with teacher help
* woth -- without teacher help
<table>
<thead>
<tr>
<th>Criterion C: How did he do it?</th>
<th>None</th>
<th>One or two</th>
<th>Three</th>
<th>Four</th>
<th>Five</th>
<th>All elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Materials: clay</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Tools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Process as manipulation or formation: pinched, pulled out, poke, add, twist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Process: fired in kiln</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Form: kinds of form, character of form, round, long, pointed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Surface treatment or texture: hard, smooth, rough</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Design: relationships or parts and whole, structure only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rating -- Low to High</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Criterion D: Could he do it with an alternate material?</th>
<th>None</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes or No answer</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>b. Processes: drawing, painting, construction--can be implied by, for example, cut, paste, form</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Tools other than clay: tools as crayon, pencil, brush, finger, sticks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Materials: paper, paint, wood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Design: structure (the accumulation of previous elements)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Difference: knowing it is different and how it could be different (ex. 2-D, 3-D)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rating -- Low to High</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>All but e and f</th>
<th>wth 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>wth 9</td>
</tr>
</tbody>
</table>
TABLE IV

SCALE FOR SCORING CHILDREN’S CLAY PRODUCTS ON CRITERION: USE OF THE CLAY MEDIUM (to be used with visual scale)

<table>
<thead>
<tr>
<th>Criterion: use of clay medium</th>
<th>Scale of Values</th>
<th>LOW</th>
<th>L.PLUS</th>
<th>F.MINUS</th>
<th>FAIR</th>
<th>F.PLUS</th>
<th>H.MINUS</th>
<th>HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1-</td>
<td>2-</td>
<td>3-</td>
<td>4-</td>
<td>5-</td>
<td>6-</td>
<td>7-</td>
</tr>
<tr>
<td></td>
<td>Scale of Values</td>
<td></td>
<td>points</td>
<td>points</td>
<td>points</td>
<td>points</td>
<td>points</td>
<td>points</td>
</tr>
<tr>
<td>Clay is pliable and may be manipulated</td>
<td>Relatively</td>
<td></td>
<td>points</td>
<td>points</td>
<td>points</td>
<td>points</td>
<td>points</td>
<td>points</td>
</tr>
<tr>
<td></td>
<td>Unchanged</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Obviously changed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Purpose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pieces of clay may be joined in building a form</td>
<td>Parts barely touching</td>
<td></td>
<td>Points ed together</td>
<td></td>
<td>Points</td>
<td></td>
<td>Points</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Points</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Parts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fused together</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Together</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surfaces of clay forms may be varied in texture</td>
<td>No attention</td>
<td></td>
<td>Some attention</td>
<td></td>
<td>Obvious attention</td>
<td></td>
<td>Attention</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parts to whole</td>
<td></td>
<td>Parts to whole</td>
<td></td>
<td>Parts to whole</td>
<td></td>
<td>Parts to whole</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fragile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A descriptive study to increase the awareness of culturally deprived kindergarten children to selected art ideas through guided participation in observing and discussing ceramic art works and modeling in clay. The study covered an 8-week period of 14 sessions with a teacher knowledgeable in early childhood and art education. A control group of children of similar characteristics was used for a beginning and final session only to measure normal growth. Fourteen ceramic works were shared during which appropriate questions concerning the 4 basic art ideas of the study were asked: what is it, who did it, how did he do it, and could he do it with an alternate material. Clay was available after each session.

Tape recordings were made of each session, transcribed, coded, and rated by judges on a continuum relative to evidence of awareness of the children to the art ideas. Photographs were made of the children's clay modelings, mounted, coded and rated by judges on a continuum relative to the child's control of the medium.

There was a real difference between the verbal discussions of the two groups on the post-test. The control group's score had been exceeded by the experimental group on their third session. No significant difference was found between clay products of the two groups at the pre-test session. On the post-test a significant difference at the .01 level was found in favor of the experimental group. Awareness to art ideas was increased in this group of kindergarten children.