

1939

A study of four plans of drawing instructions in the primary school.

Mary Monica Crowley
University of Massachusetts Amherst

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A STUDY OF FOUR PLANS OF DRAWING
INSTRUCTION IN THE PRIMARY SCHOOL

CROWLEY - 1939

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Tempera Painting by Girl Age 12 Cipek Art Class, Vienna

*A Study of four plans of
Drawing Instructions in the Primary School*

SPE
SB.
1939
by
Mary Monica Crowley

Thesis submitted for Degree of Master of Science

Massachusetts State College

Amherst. Mass

1939

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CHAPTER I
INTRODUCTION

"A better understanding of the true usefulness of art recognizes creative power as a divine gift, the natural endowment of every human soul. This appreciation leads a certain number of people to produce actual works of art, greater or lesser,--perhaps a temple, perhaps only a cup. It is the individual's right to have full control of these powers." --Arthur Wesley Dow

An adequate art course must provide for developing ability for self-expression and for understanding the expressions of others. Control over techniques is a means of freeing the powers of expression. Provision must be made in the curriculum for teaching such control, as the child needs these experiences of technique in the art process just as he needs the accumulated experiences of numbers in arithmetic. An important groundwork is necessary to develop this control of technique. Results often show the lack of it.

At first, when the young child is given paper and crayons, he handles them, crumples the paper, or tears it, plays with the crayons--the "Manipulative" stage. Next we see the "Symbolic" stage, in which his expressions are simply signs or shapes representing objects, with no concern on his part as to how they look to others. This is a step ahead of the manipulative stage in that the child is using materials as a means of expression of ideas. He is unham-



Paul Age 3

The Manipulative Stage



George Age 6

The Symbolic Stage



John Age 6

The Realistic Stage

pered by thoughts of how he does it, or how it looks to others. This work might be called a personal rather than a conventional symbol.

Dr. Dewey says that this crudity, and lack of proportion "serves to stimulate, to vivify; its main value is reactive, freeing the child's imagery--then, a return may take place to the conventional form of the object."¹

When the child asks "how to make a man" in order to finish his picture or to express his idea, we recognize the "Realistic" stage, the "return to conventional form." He now feels the need of help, he desires improvement in his form of expression, he is concerned about how it looks to others.

These changes are gradual. Having observed many children at work, and watching their progress, we are unable to see a definite step from stage to stage, but keeping these stages in mind helps to direct the child's effort toward the conventional more intelligently.

"Many consider that the art instinct is provided for when the child is allowed merely to express his ideas."² But I cannot agree with this school of thought.

When the realistic stage is reached in drawing, the child wishes to make better houses, "more real" people. He is now hampered by lack of power to express satisfac-

¹John Dewey, "Psychology of Drawing", Teachers College Bulletin, March 1, 1919.

²Margaret E. Mathias, "Beginnings of Art in the Public School", Scribners', 1924.

torily his ideas. In order to give satisfaction his drawing must adequately embody the idea in its conventional or commonly understood form. Some attention to such art principles as proportion, balance, and rhythm will help him to do this. He needs a working knowledge--the beginning of technique. It is not "what can I make in my picture", but "how can I make it more understandable."

Children want to be able to draw a man, a woman, or a child. The remark of the great French painter Gêrôme that we paint best that with which we are most familiar is as true with children as it is with adults.

I have found that in 65 drawings out of 76^(85.5%) done by six and seven year old children--children will attempt the representation of the human figure when given a free choice of subject. Houses and trees are next in popularity, and in these above subjects we see how ^{the child} depicts the surroundings of his earliest years, the little circle of the family members and playmates, his own house and the street on which he lives.

Primary children draw the human figure as a crude symbol. They rarely pause to notice details of appearance, or true proportion, so engrossed are they in the action of the story involved. However, some specific study of the human form and of dress does improve the powers of even primary children.

In learning to draw one shape, and memorizing it, it becomes an interpretive image, to be changed or added to

at will. Definite steps and thorough drill have some thing in common with learning to write a given word--each child produces some passable result. He first develops confidence in his ability, and later develops the attitude of mind that drawing, like other subjects, is mastered by systematic study.

Having been a supervisor of art instruction of grade children for fifteen years, the need of using the best method of teaching drawing in the early steps has become more and more apparent. At this point lies the question: which is the best method for our teachers and for me to use so that our pupils will show the greatest amount of achievement?

After considerable observation and study of results achieved in schools under my supervision, the one objective, that of drawing the human figure, was decided upon as the subject by which various methods of teaching were to be tried out for best results and consequent approval for use.

The purpose of this study is to find out which, if any, of the four most generally used methods of teaching primary children to draw the human figure, is the most effective in producing the best results in the shortest time.

CHAPTER II
REVIEW OF LITERATURE

Reginald Tomlinson, in "Picture Making by Children," says, "The drawings of the earlier years tell frankly what the child likes to draw, those of the later years what he dares to draw, dares in the teeth of criticism.... The seed has started germination in the infant school; it should not die for want of watering."¹

Professor Cizek of the famous Vienna Juvenile Art Class, maintains that "everybody ought to be able to represent objects with a few simple strokes", although he does not consider this should be called Art. He has found that creative talent in children begins to diminish between the ages of eight and ten--they then try either to copy from nature, or to imitate the work of mature artists. When this happens, he recommends that their attention be turned "to the representation of natural objects."²

Marie Lewis believes that the child should develop ability to draw independently after the elementary grades, the foundation is laid there, that it should be free expression with guidance. Her article³ is illustrated with the method she has used for two years with great success, the method of drawing the figure with ovals first, The

¹Tomlinson, Reginald, "Picture Making by Children," Studio Publications, 1934.

²Viola, Wilhelm, "Child art and Franz Cizek", Vienna Junior Red Cross, 1936.

³Lewis, Marie, "Figures Through the Grades", School Arts, September, 1931, 31:49-53.

child used the head oval as a unit of measurement, the back equals two heads, and so on. (See Plate II)

The earliest of instructions in the "Stick" figure method are found in the Augsburg Drawing Books published in 1901. Here we find animated little circular bodies with slightly curved legs and arms, and heads with old-fashioned caps on them. On another page he shows the regulation line figure in a pose which, he says, is not to be combined with the full-proportioned drawing, but each remains separate. To build the whole figure on the action figure would be confusing and lead to failure. The stick figure only enables the pupil to get the action, then the full-proportioned figure should be drawn separately.⁴ (See Plate III)

In his book, "The Art Teacher", Pedro Lemos illustrates several methods of figure drawing used by other art teachers. He says, "All kinds of action and attitudes may be shown with stick figures. They are used by children all over the world to show what they mean in drawing." He shows two ways of drawing simplified "stick figure", side and front view.

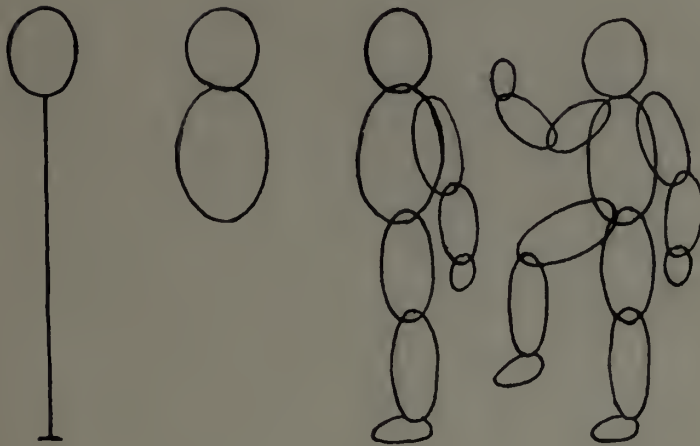
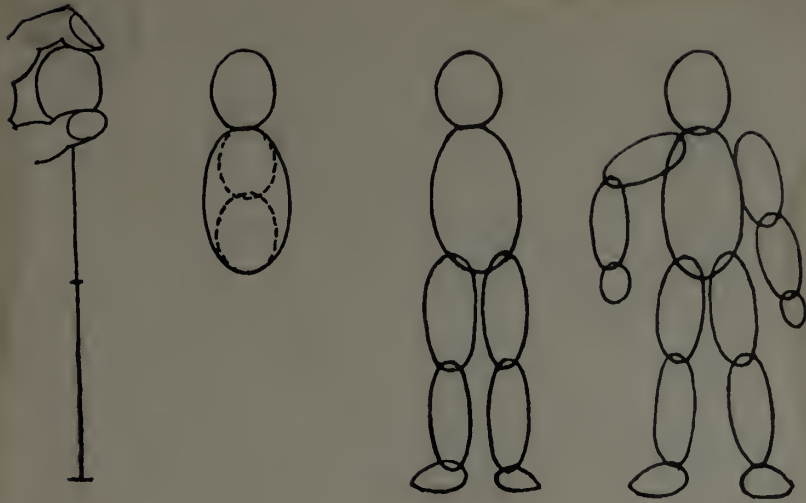
Elsie Reid Boylston presents another method,⁶ that of folding a strip of paper in four equal parts, and drawing or cutting curved lines in each of the sections. These cut-

⁴Augsburg, D. R., "A. B. C. of Drawing", Augsburg Drawing Company, 1901.

⁵Lemos, Pedro, "Art Teacher", Davis Press, 1931.

⁶Boylston, Elsie R., "The Human Figure in the Lower Grades", School Arts, June, 1929, 28:618-21.

PLATE II



Using the Head as a Unit of
Measurement. Ovals resemble
Method C of this Study.

outs may be used as forms over which any figure may be traced and clothes added. She says, "The child can cut the figure without the use of this device after the few simple curves have been worked out with them by the teacher."

Maegean R. Rice⁷ does not find either stick or circle figures satisfactory, and she shows in her article a very different technique although she does not tell us in what grades these are worked out. The drawing is started by making an orange oval for the head, and then building the figure entirely of pencil or crayon strokes placed evenly, and in the desired direction. She says her pupils are "very enthusiastic about it, are confident in working out new poses, and they use it in all illustrative and poster work."

Jessie Todd⁸ of the University of Chicago, has contributed several illustrated articles to school periodicals showing figures to draw for various purposes. Her method is the same in all her articles, that of drawing the figure "piece by piece". The child draws an oval head, puts in the features and hair or cap, then draws a neck, then a dress below the neck, adds sleeve arms, legs, socks, and shoes. (See Plate IV) Miss Todd believes that children see "in mass", that they observe and copy other childrens' clothes and hair. These drawings also give the child a vocabulary of form with which he can experiment after enough practice.

⁷Rice, Maegean R., "Figure Drawing Made Easy", School Arts, June, 1929, 28:646-7.

⁸Todd, Jessie, "Drawing Children at Play", Instructor, April, 1937. "Children Flying Kites", March, 1938.

PLATE III



*Stick Figures from an Early
Drawing Book*

E. G. Wahl⁹ in "The Instructor" of March, 1938 says that children have difficulty in measuring ovals for figures, so she has them practice drawing an oval head, then the completely clothed figure below it. (Practically the same as the method used by Miss Todd.) They practice the front view figure for standing, jumping positions, and the side view for walking, running, skating. She finds also that the young artists will vary these figures themselves after practice with the forms.

A method described by Stella E. Wider¹⁰ gives an interesting way of working out the "stick" figure, which she calls "The 1-2-3 Man." After observing the child model, she has her pupils use an oval head form as a measurement. The head is "one", the trunk is "two". (equal to two heads), the legs "three", being equal to three heads. (See Plate V)

Several other teachers, who have written about their methods, use the jointed doll as a model.

Olive Jobes¹¹ has her pupils cut out ovals which they put together to form a jointed figure. She explains that after playing with the doll, the pupils understand better the joints, the position of arms and legs in running, etc. The children experiment with other action poses also, and

⁹Wahl, E. G., "Spring Activities in Art", Instructor, March, 1938, 47:32-3.

¹⁰Wider, Stella E., "The 1-2-3 Man", School Arts, October, 1935, 35:92-4.

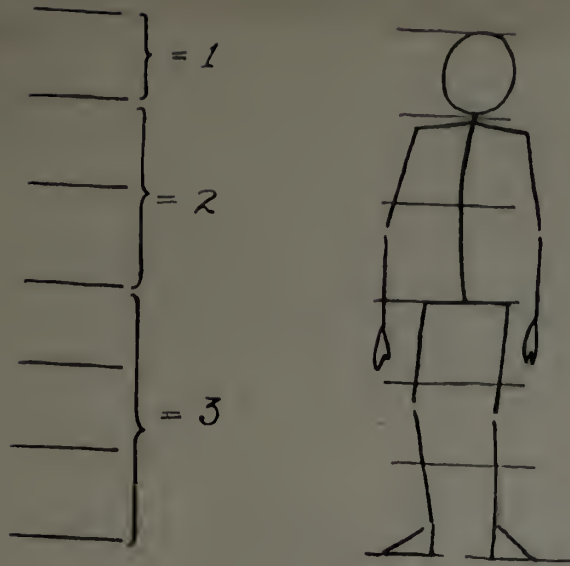
¹¹Jobes, Olive, "Lots of Action in Figure Drawing", School Arts, October, 1935, 35:81-3.

PLATE IV



*Drawing in Outline
Method D in this Study*

PLATE V



Above : The "1-2-3 Man"

Below : Another Stick-Figure Method

copy their models into their pictures. She feels that it serves as a good foundation for work in upper grades, where she observes that the older pupils still use the oval forms in drawing figures.

Louise Tessin in her book "Practical Art for the Grades", also shows use of the jointed doll.

In a recent article in "School Arts", Mr. Lemos advances an interesting theory showing the outline drawing of the figure harking back to the earliest drawings of man. He illustrates (See Plate VI) present-day drawings by school children being adaptstories of early Egyptian methods of drawing, and says,¹² "We can learn a lot by going back to the artists of earlier periods, finding out how they secured simplified and artistic results."

The wide variety of methods used, and the many theories relating to the drawing of the human figure by children, as we have found in this review, show that some study regarding them should be of value to teachers of drawing. Not every one of the methods found can be evaluated in this work, but I have chosen the four most often advanced, and used them as a basis for this study.

¹²Lemos, Pedro, "Simplified Figure Drawing", School Arts, September, 1938, 38:23-5.



A Comparison of Present Outline
Drawings With Those of
Early Mankind

PLATE VII



Rhythmic Line Drawings -
Like Method B in this Study



Rhythmic Line Drawings from Czechoslovakia
Like Method B in this Study

PLATE IX



Tempera Painting, Girl Age 8 Cipek Art Class, Vienna



Drawing by Boy 6, Boston



Drawing by Girl 5, Infant School, London

PLATE XI



Drawing by Boy, Age 7 Elementary School, Chicago

CHAPTER III
PROCEDURE
PLAN OF PROCEDURE

There are few who can be got upon higher ground without taking the first few steps. Of these first steps in learning to draw the human figure, I have chosen the four which I believe are the most commonly used methods for beginning classes.

These methods are briefly:

- A. The "Stick" method, by which a figure is drawn first as a skeleton of straight lines, then filled out with crayon or paint to look more realistic by adding clothes, etc.



- B. The "Rhythmic Line" method, drawn with curved action lines, clothes built up on line as in Method A.



- C. The "Ovals" method, where the child draws elliptical forms for the body filling them in in color for clothes, shoes, etc.



- D. The "Clothes" method, where the child draws the complete figure piece by piece, first the head, dress, sleeves, arms, etc.



A group of 60 pupils, 30 first-year, 30 second-year, were instructed in each of the four methods (a total of 240 pupils in the entire experiment). The four groups chosen were all pupils in the Agawam, Massachusetts, Elementary Schools. Their racial backgrounds were the same, the time allowance of thirty minutes was the same, and all the instruction was given by the one art teacher. No previous instruction had been given the group in any other method than the one used in the test lesson. The second-year division was instructed in the same method the previous year, so that it was not necessary that they "unlearn" any previous instruction when the^{test} was given. A child still in the first grade for the second year was considered as a second-year pupil.

SAMPLE LESSON

A descriptive lesson plan used in giving the test is stated briefly in the following:

General Aim: To test the ability of first-year (or second-year) pupils to draw human figures by using the "Stick" method.

Specific Aim: To draw a picture of a girl and a boy going to a Hallowe'en Party.

Materials: 9 x 12 Manila drawing paper
Box of eight colored wax crayons

Time: Thirty minutes.

Method: Demonstration and discussion. Instructor asks which color in the crayon box is most like the color of our faces and hands. Children say, "Orange", some, "Yellow". The instructor takes white chalk and makes a circle near the top of the blackboard saying, "Let us take our orange crayon then, and make Betty's head, 'way up near the top of the paper,--And here is her back (placing a straight line below the circle). We all know she has two legs, so here are two sticks for one leg, and here are two more for her other leg." Children continue to copy the drawing on the board, line by line on their papers until arms, hands and feet are added, and the stick figure is complete.

"Now we must dress Betty so that she will look like a real little girl, just like a little girl in this room, perhaps. You may put any kind of hair on her that you like--and any color dress--and we mustn't

forget her socks and shoes--and see what she has in her hand!"

The teacher builds out the body by adding the clothes, etc., with the flat side of the chalk, reminding the pupils that they must make Betty's arms and legs fatter now, so that "she will look like a real little girl, and not like a doll made of string."

The drawing of the boy is made by the same demonstration and discussion, on the same paper.

The children put their names, and the number denoting the grade, on their papers, which were collected at the end of the thirty-minute period.

Thirty samples were taken from the first-year pupils, and thirty from the second-year, of this lesson.

I was assisted in the preliminary grading of the papers by Miss Helena Richard, Instructor of Art in Buckingham School, Springfield, Massachusetts, who helped in placing the sets of papers in the five piles ranging from best to poorest. Some shifting about was done until we agreed on this rough estimate. The actual numerical scoring of all the papers was done by the writer.



- Point I Looks like a boy..... 20
- " II Proportions good..... 15
- " III Action excellent..... 20
- " IV Excellent Crayon work..... 20
- " V Face, cap, skates added..... 15

Fig. 1 Sample of Scoring

Method B

Fig. 2



- Point I Looks like a boy.....5
- " II Proportions poor.....5
- " III Action excellent.....20
- " IV Crayon work fair.....10
- " V Creative ability.....10

Fig. 2 Sample of Scoring

SCORING

To score the papers, thirty drawings of one group were placed in five piles, judged roughly from best to poorest. The individual papers were then scored by the writer according to the following evaluative criteria:

I

A drawing that looks like the subject
(child at play) 0 - 20 Points

II

A drawing that shows good proportions..... 0 - 20 "

III

A drawing that shows typical action..... 0 - 20 "

IV

A drawing that shows skill in using
crayon to shape and color figure..... 0 - 20 "

V

A drawing that shows some creative,
individual expression 0 - 20 "

20 points were given for fulfilling the requirements of one of the criteria to an excellent degree, 15 points for superior work, 10 for average work, 5 for poor, and 0 if no achievement at all could be noted. Figures 1 and 2 show samples of the actual scoring on the individual papers. These scores were recorded on the frequency tables which follow.

TABLE I--SHOWING FREQUENCY DISTRIBUTION
OF SCORES IN CRITERIA I AND MEANS OBTAINED

SCORE		X	20	15	10	5	0	POPULATION	30	
GRADE I METHOD A-B-C-D	TALLY	T	11	1111	1111	1111	1111	N 30	MEAN	
	A	f	2	4	4	5	15		E fX165	5.5
		fx	40	60	40	25		M=165/30=		
		T	1111	1111	111	1111	11	1111	N 30	
	B	f	4	5	3	7	11	E fX220	7.3	
		fx	80	75	30	35		M=220/30=		
		T	1111	111	1111	1111	1111	11	N 30	
	C	f	5	3	11	4	7	E fX275	9.2	
		fx	100	45	110	20		M=275/30=		
		T	1111	1111	1111	1111	111		N 30	
	D	f	12	6	5	4	3	E fX400	13.3	
		fx	240	90	50	20		M=400/30=		
	GRADE II METHOD A-B-C-D		T	1111	1111	1111	1111	11	N 30	
		A	f	7	5	7	9	2	E fX330	11.0
			fx	140	75	70	45		M=330/30=	
			T	1111	11	1111	1111	1111		N 30
B		f	7	2	6	10	5	E fX280	9.3	
		fx	140	30	60	50		M=280/30=		
		T	1111	1111	1111	111	1111		N 30	
C		f	12	5	5	3	5	E fX380	12.7	
		fx	240	75	50	15		M=380/30=		
		T	1111 1	11	1111	1	11		N 30	
D		f	18	2	7	1	2	E fX465	15.5	
		fx	360	30	70	5		M=465/30=		

FOR FURTHER EXPLANATION OF THIS TABLE
SEE PAGE FOLLOWING.

Table I shows the distribution of the scores for each of the four methods in Criteria I, (Does the drawing look like the subject?)

Each paper received a mark for its achievement in each of the criteria previously stated.

The upper half of the table shows the scores obtained in this particular criteria by the 1st Year pupils, and the lower half of the table shows the scores obtained by the 2nd Year pupils.

The right hand column shows the computation of the mean for each of the four methods.

TABLE II--SHOWING FREQUENCY DISTRIBUTION
OF SCORES IN CRITERIA II AND MEANS OBTAINED

SCORE		X	20	15	10	5	0	POPULATION	30
GRADE I METHOD A-B-C-D	TALLY A	T	11					N 30	MEAN
		f	2	5	6	11	6		
		fx	40	75	60	55		E fx230	7.7
								M=230/30=	
	B	T		111			1111	N 30	
		f	5	3	7	7	8		
		fx	100	45	70	35		E fx250	8.3
								M=250/30=	
	C	T	1				1111	N 30	
		f	1	9	11	5	4		
		fx	20	135	110	25		E fx290	9.7
								M=290/30=	
D	T					1	N 30		
	f	5	12	6	6	1			
	fx	100	180	60	30		E fx370	12.3	
							M=370/30=-		
GRADE II METHOD A-B-C-D	A	T	11				1	N 30	
		f	2	7	14	6	1		
		fx	40	105	140	30		E fx315	10.5
								M=315/30=	
	B	T	111				1111	N 30	
		f	3	5	13	5	4		
		fx	60	75	130	25		E fx290	9.7
								M=290/30=	
	C	T					1	N 30	
		f	7	8	8	6	1		
		fx	140	120	80	30		E fx370	12.4
								M=370/30=	
D	T	1111			111		N 30		
	f	4	10	8	3	5			
	fx	80	150	80	15		E fx325	10.8	
							M=325/30=		

FOR FURTHER EXPLANATION OF THIS TABLE
SEE PAGE FOLLOWING.

Table II shows the distribution of the scores for each of the four methods in Criteria II, (Does the drawing show good proportion?)

The upper half of the table shows the scores obtained in this particular criteria by the 1st year pupils, and the lower half of the table shows the scores obtained by the 2nd year pupils.

The right hand column shows the computation of the mean for each of the four methods.

TABLE III--SHOWING FREQUENCY DISTRIBUTION
OF SCORES IN CRITERIA III AND MEANS OBTAINED

SCORE		X	20	15	10	5	0	POPULATION	30		
GRADE I METHOD A-B-C-D	TALLY	T					11	N 30	MEAN		
	A	f	5	11	6	6	2				
		fx	100	165	60	30		E fx355	M=355/30=	11.8	
		T						N 30	E fx345	M=345/30=	11.5
	B	f	9	5	7	4	5				
		fx	180	75	70	20					
		T				1	111	N 30	E fx415	M=415/30=	13.8
	C	f	12	6	8	1	3				
		fx	240	90	80	5					
		T				11	11	N 30	E fx395	M=395/30=	13.2
	D	f	8	9	9	2	2				
		fx	160	135	90	10					
GRADE II METHOD A-B-C-D		T			11	11		N 30	E fx510	M=510/30=	17.0
	A	f	18	8	2	2	0				
		fx	360	120	20	10					
		T		1		111	1	N 30	E fx430	M=430/30=	14.3
	B	f	15	1	10	3	1				
		fx	300	15	100	15					
		T			1	111	1	N 30	E fx475	M=475/30=	15.8
	C	f	15	10	1	3	1				
		fx	300	150	10	15					
		T				11	1	N 30	E fx460	M=460/30=	15.4
	D	f	14	8	5	2	1				
		fx	280	120	50	10					

FOR FURTHER EXPLANATION OF THIS TABLE

SEE PAGE FOLLOWING.

Table III shows the distribution of the scores for each of the four methods in Criteria III, (Does the drawing show typical action?)

The upper half of the table shows the scores obtained by the 1st Year pupils in this particular criteria, and the lower half of the table shows the scores obtained by the 2nd Year pupils.

The right hand column shows the computation of the mean for each of the four methods.

TABLE IV--SHOWING FREQUENCY DISTRIBUTION
OF SCORES IN CRITERIA IV AND MEANS OBTAINED

SCORE		X	20	15	10	5	0	POPULATION	30	
GRADE I METHOD A-B-C-D	TALLY A	T	1111		1111 1111	1111 1111 111	1111	N 30 E fx235 M=235/30=	MEAN 7.8	
		f fx	4 80	0 0	9 90	13 65	4			
	B	T	111	1111	1111 1111	1111 11	1111 1	N 30 E fx255 M=255/30=	8.5	
		f fx	3 60	4 60	10 100	7 35	6			
	C	T	111	1111 1111 1	1111 1111	111	1111	N 30 E fx330 M=330/30=	11.0	
		f fx	3 60	11 165	9 90	3 15	4			
	D	T	1111 1	1111 11	1111 1111 1	1111	1	N 30 E fx360 M=360/30=	12.0	
		f fx	6 120	7 105	11 110	5 25	1			
	GRADE II METHOD A-B-C-D	A	T	1111	1111 111	1111 1111	1111 11	1	N 30 E fx335 M=335/30=	11.2
			f fx	4 80	8 120	10 100	7 35	1		
		B	T	1111	111	1111 1111 1	1111 1111		N 30 E fx310 M=310/30=	10.3
			f fx	5 100	3 45	11 110	11 55	0		
		C	T	1111 1111 1	1111 1	1111 11	1111	1	N 30 E fx405 M=405/30=	13.5
			f fx	11 220	6 90	7 70	5 25	1		
		D	T	1111 1111	111	1111 1111	1111 1	11	N 30 E fx365 M=365/30=-	12.2
			f fx	10 200	3 45	9 90	6 30	2		

FOR FURTHER EXPLANATION OF THIS TABLE

SEE PAGE FOLLOWING.

Table IV shows the distribution of the scores for each of the four methods in Criteria IV, (Does the drawing show skill in crayon technique?)

The upper half of the table shows the scores obtained in this particular criteria by the 1st Year pupils, and the lower half of the table shows the scores obtained by the 2nd Year pupils.

The right hand column shows the computation of the mean for each of the four methods.

TABLE V--SHOWING FREQUENCY DISTRIBUTION
OF SCORES IN CRITERIA V AND MEANS OBTAINED

SCORE		X	20	15	10	5	0	POPULATION	30
GRADE I METHOD A-B-C-D	TALLY	T		11			11		MEAN
	A	f			1			N 30	
		fx	0	2	6	20	2	E fX190	
			0	30	60	100		M=190/30=	6.3
	B	T	1	11				N 30	
		f	1	2	7	20	0	E fX220	
		fx	20	30	70	100		M=220/30=	7.3
	C	T	11	111	1111	1111		N 30	
		f	2	3	11	14	0	E fX265	
		fx	40	45	110	70		M=265/30=	8.8
	D	T						N 30	
		f	12	7	6	5	0	E fX430	
	fx	240	105	60	25		M=430/30=	14.3	
GRADE II METHOD A-B-C-D	A	T						N 30	
		f	0	6	16	8	0	E fX290	
		fx	0	90	160	40		M=290/30=	9.7
	B	T	11					N 30	
		f	2	6	12	10	0	E fX300	
		fx	40	90	120	50		M=300/30=	10.0
	C	T	111	1111				N 30	
		f	3	4	7	16	0	E fX270	
		fx	60	60	70	80		M=270/30=	9.0
	D	T				1111		N 30	
		f	10	10	6	4	0	E fX430	
		fx	200	150	60	20		M=430/30=	14.3

FOR FURTHER EXPLANATION OF THIS TABLE
SEE PAGE FOLLOWING.

Table V shows the distribution of the scores for each of the four methods in Criteria V, (Does the drawing show individual, creative expression?)

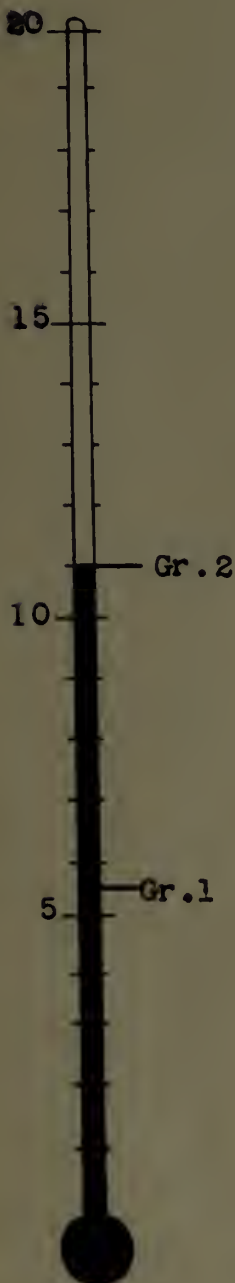
The upper half of the table shows the scores obtained in this particular criteria by the 1st Year pupils, and the lower half of the table shows the scores obtained by the 2nd Year pupils.

The right hand column shows the computation of the mean for each of the four methods.

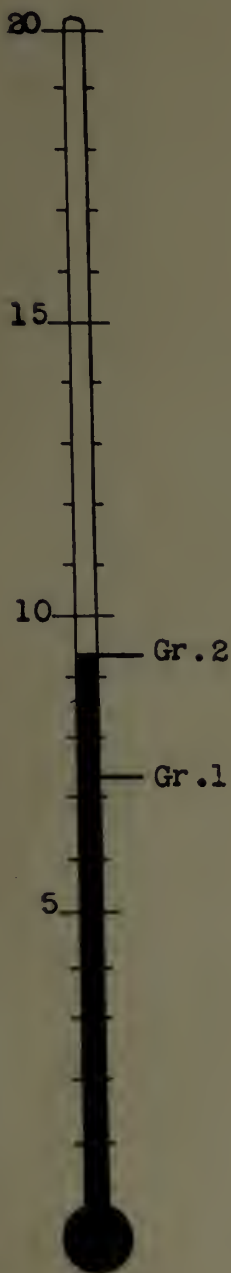
CHART I

EVALUATIVE CRITERIA 1---DOES IT LOOK LIKE SUBJECT?

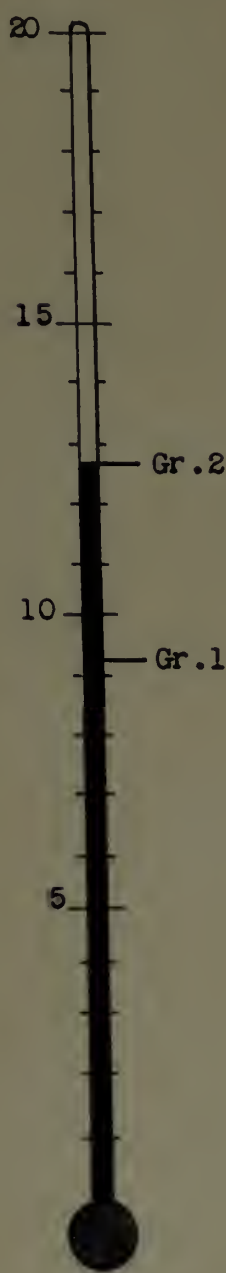
METHOD A
(60)



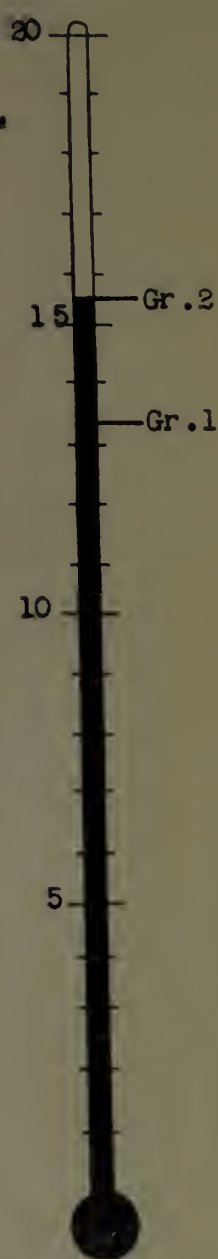
METHOD B
(60)



METHOD C
(60)



METHOD D
(60)



SEE OTHER EXPLANATORY MATERIAL ON

PAGE FOLLOWING.

Chart I shows the height of achievement in Criteria I (Resemblance of the Drawing to the Subject) by each of the four methods:

Method A, which used the Stick-figure device, shows a mean of 5.5 in the first year, and 11.0 in the second year.

Method B, which used the Curved-line device, achieved a mean of 7.3 in the first year, and 9.3 in the second year.

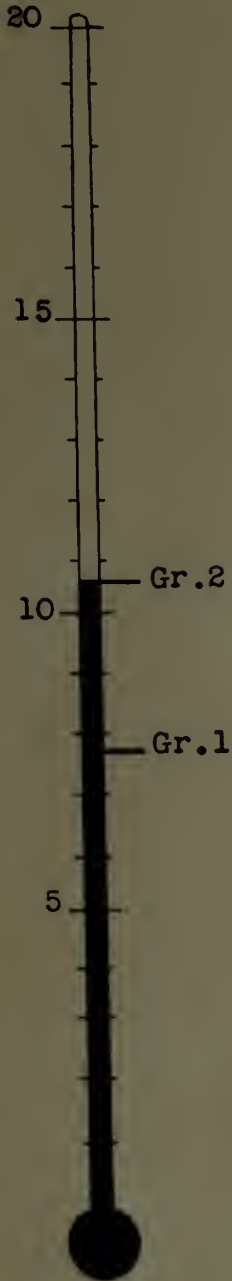
Method C, using the Circle-figure as a device, rated a mean of 9.02 in the first year, and 12.7 in the second year.

Method D, using the Clothes-figure device, achieved the highest means, 13.3 in the first year, 15.5 in the second year.

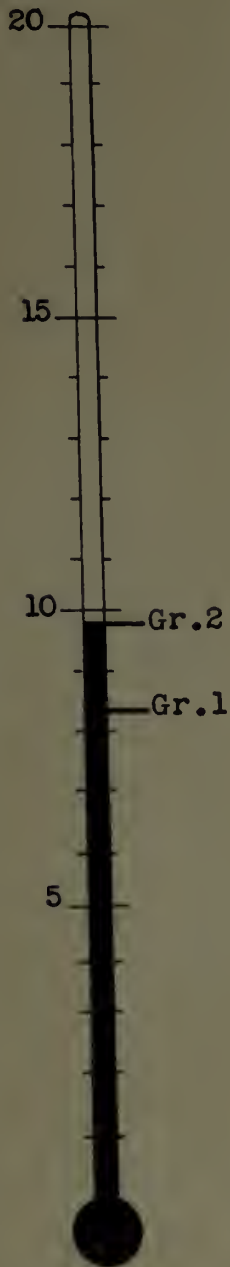
CHART II

EVALUATIVE CRITERIA 2---GOOD PROPORTION

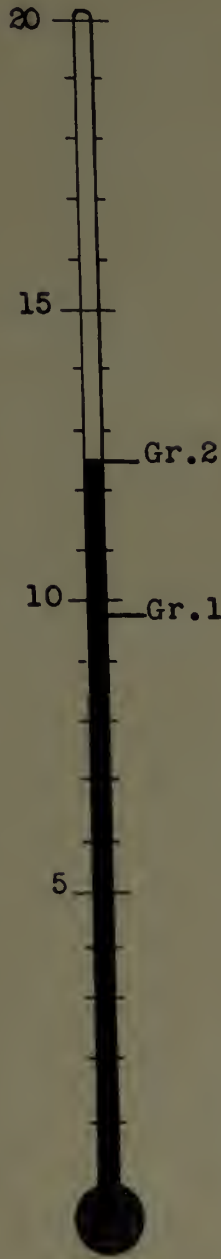
METHOD A
(60)



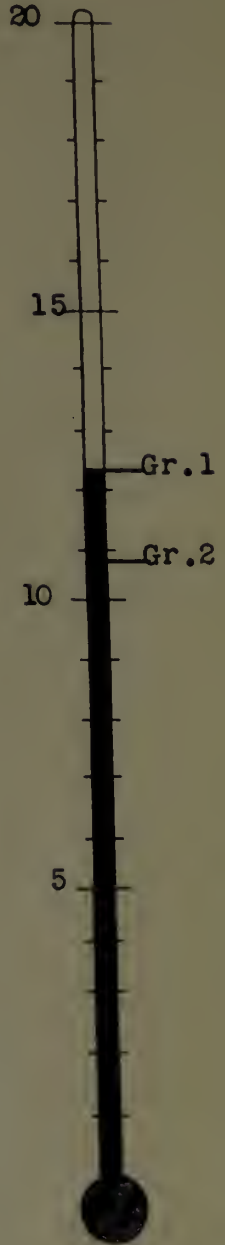
METHOD B
(60)



METHOD C
(60)



METHOD D
(60)



SEE OTHER EXPLANATORY MATERIAL ON

PAGE FOLLOWING.

Chart II shows the height of achievement in Criteria II (Good Proportions) by each of the four methods:

Method A, the Stick-figure device, shows a mean of 7.7 in the first year, and 10.5 in the second year.

Method B, the Curved-line device, shows a mean of 8.3 for the first year, and 9.7 for the second year.

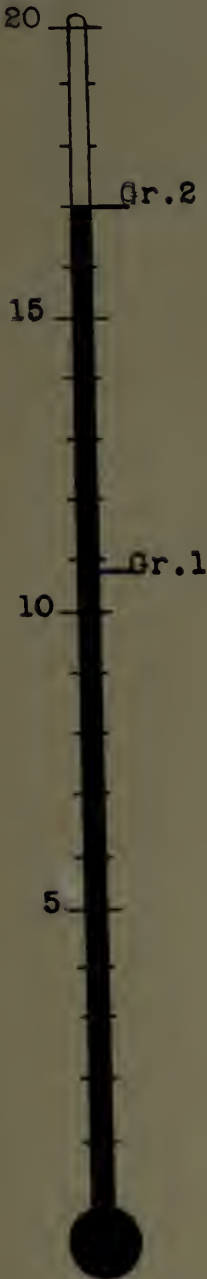
Method C, the circles method rated a mean of 9.7 in the first year, and 12.4 in the second year.

Method D, using the Clothes device, shows a mean of 12.3 in the first year, and 10.8 in the second year.

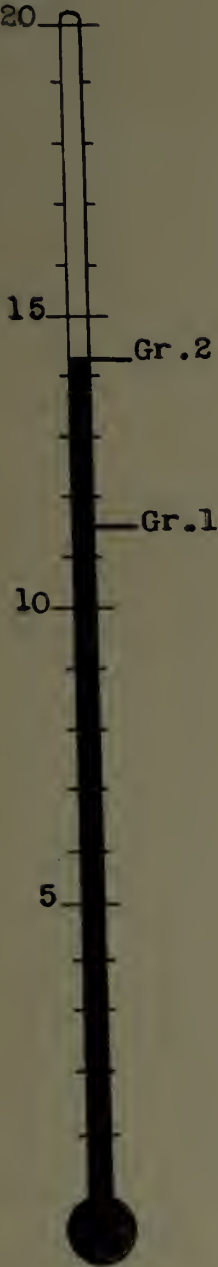
CHART III

EVALUATIVE CRITERIA 3---TYPICAL ACTION

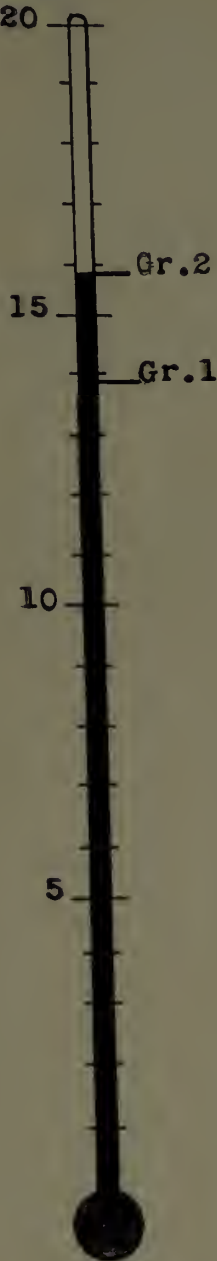
METHOD A
(60)



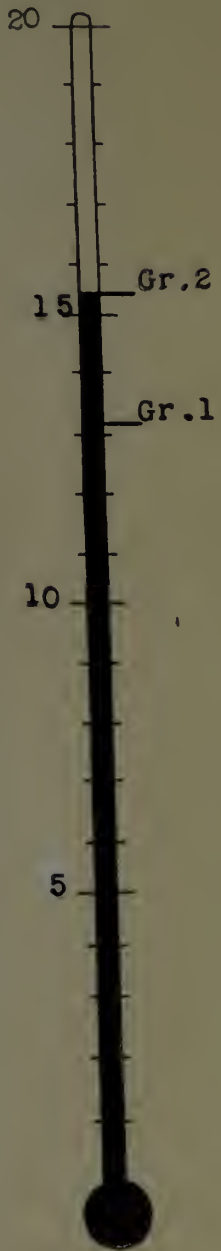
METHOD B
(60)



METHOD C
(60)



METHOD D
(60)



SEE OTHER EXPLANATORY MATERIAL ON
PAGE FOLLOWING.

Chart III shows the height of achievement in Criteria III (Typical Action in the Drawing) by each of the four methods:

Method A, using the Stick-figure device, shows a mean of 10.8 in the first year, and a mean of 17.0 in the second year.

Method B, using the Curved-line device, shows a mean of 11.5 in the first year, and 14.3 in the second year.

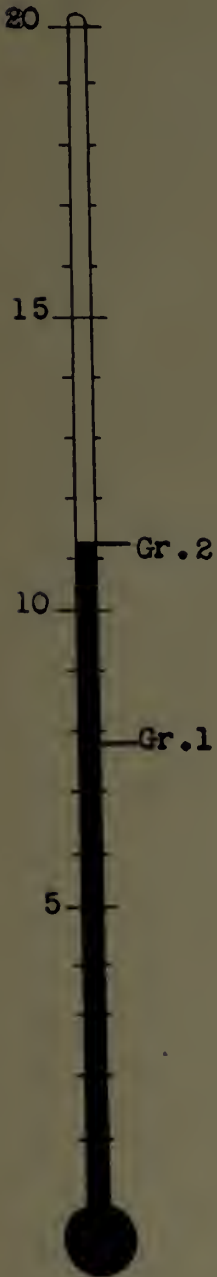
Method C, using the Circles method, shows a mean of 13.9 in the first year, and 15.8 in the second year.

Method D, the Clothes method, shows a mean of 13.2 in the first year, and 15.4 in the second year.

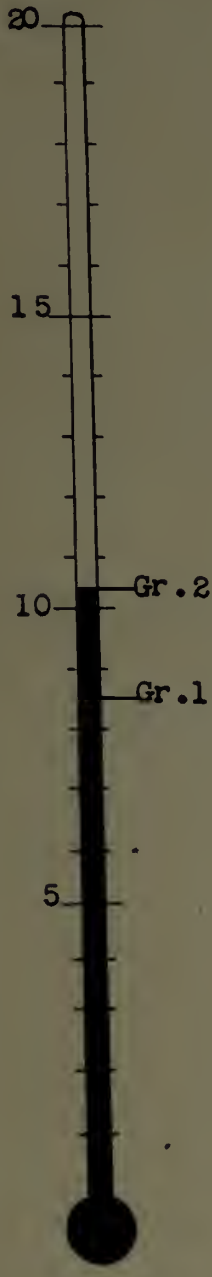
CHART IV

EVALUATIVE CRITERIA 4---CRAYON TECHNIQUE

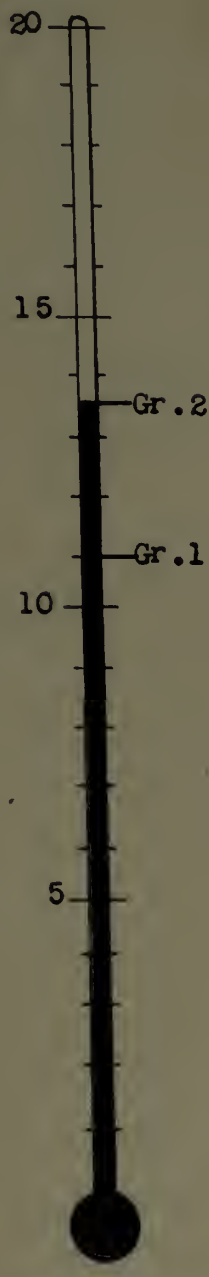
METHOD A
(60)



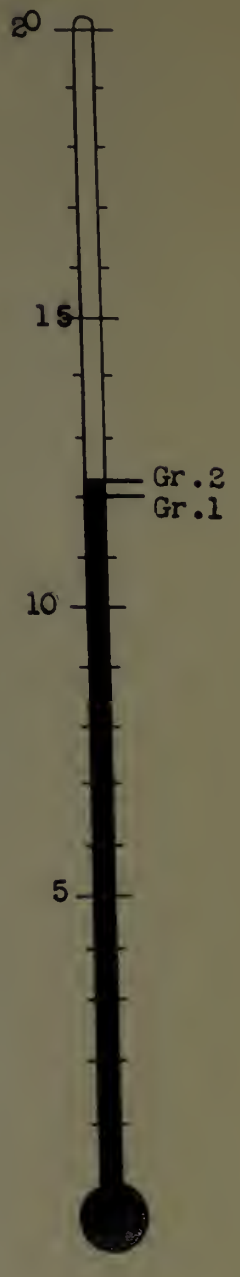
METHOD B
(60)



METHOD C
(60)



METHOD D
(60)



SEE OTHER EXPLANATORY MATERIAL

ON PAGE FOLLOWING.

Chart IV shows the height of achievement in Criteria IV (Excellence in Crayon Technique) by each of the four methods:

Method A, which used the Stick-figure device, shows a mean of 7.8 in the first year, and 11.2 in the second year.

Method B, using the Curved-line device, shows a mean of 8.5 in the first year, and 10.3 in the second year.

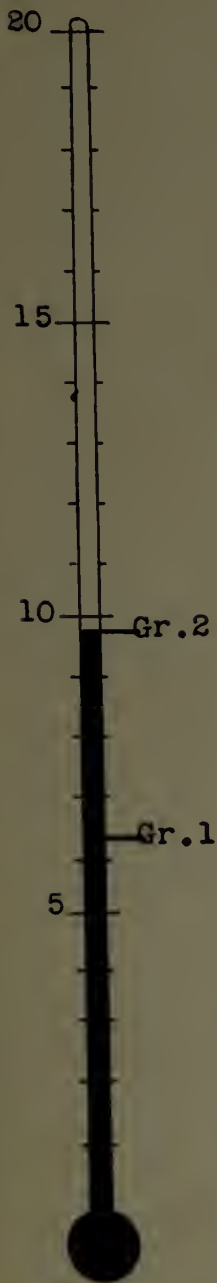
Method C, that of the Circle device, shows a mean of 11.0 in the first year, and 13.5 in the second year.

Method D, the Clothes method, shows a mean of 12.0 in the first year, and 12.2 in the second year.

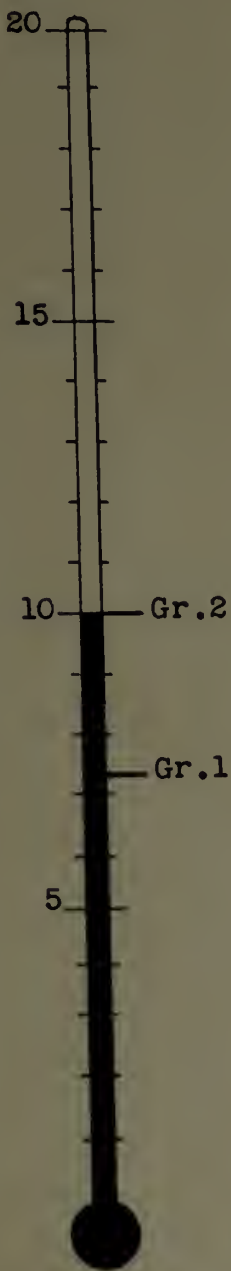
CHART V

EVALUATIVE CRITERIA 5---CREATIVE EXPRESSION

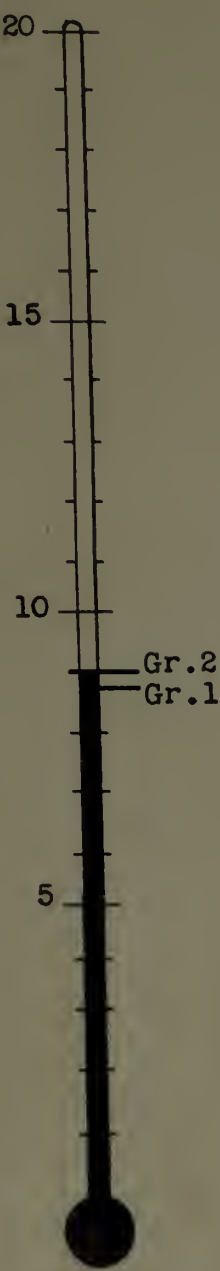
METHOD A
(60)



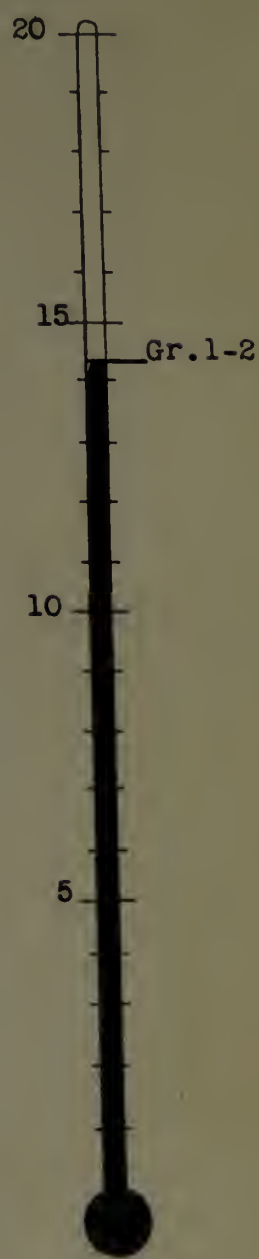
METHOD B
(60)



METHOD C
(60)



METHOD D
(60)



SEE OTHER EXPLANATORY MATERIAL ON
PAGE FOLLOWING.

Chart V shows the height of achievement in Criteria V (Amount of Individual, Creative Expression in the Drawing) by each of the four methods:

Method A, the Stick-figure method, shows a mean of 6.3 the first year, and 9.7 for the second year.

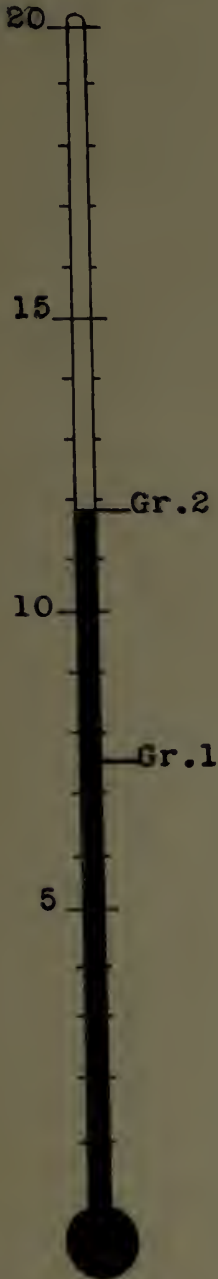
Method B, the Curved-line method, shows a mean of 7.3 for the first year, and 10.0 for the second year.

Method C, using the Circles device, shows a mean of 8.8 in the first year, and 9.0 in the second year.

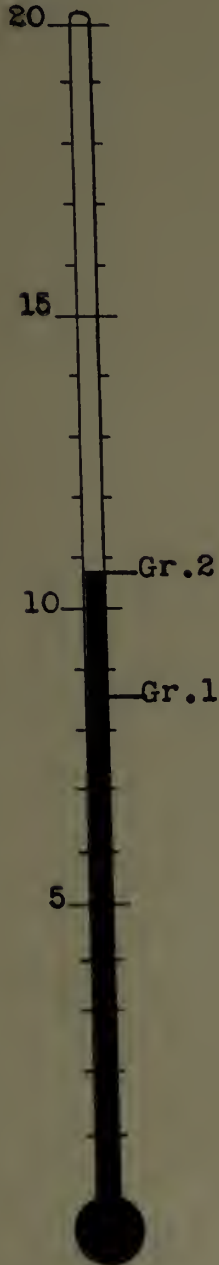
Method D, using the Clothed-figure device, shows the mean to be 14.3 in the first year, and 14.3 in the second year.

CHART VI
SUMMARY OF EVALUATIVE CRITERIA

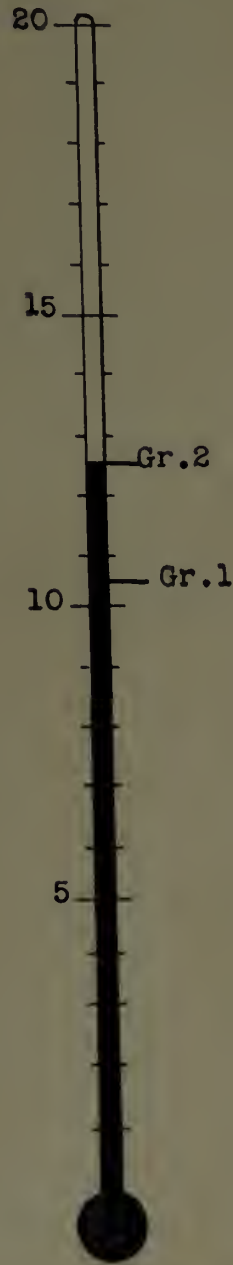
METHOD A



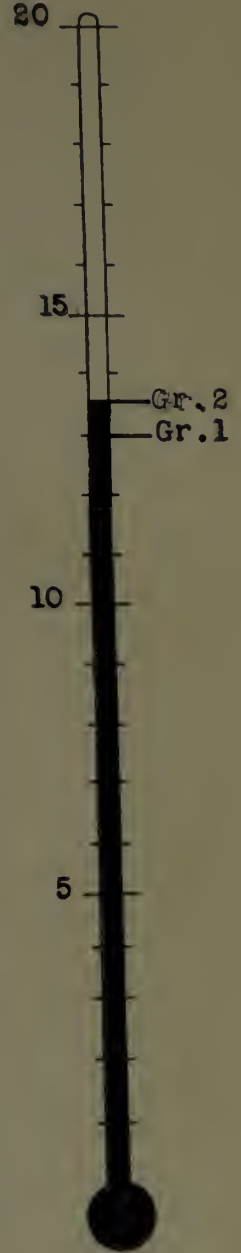
METHOD B



METHOD C



METHOD D



SEE EXPLANATORY MATERIAL ON PAGE
FOLLOWING.

Chart VI shows the means for each of the four methods, A, B, C, and D, for easy comparison.

The mean indicated on the Method A thermometer scale is the result obtained when the means for each of the evaluative criteria are averaged for Method A. (The other three thermometer scales, B, C, and D, report the means obtained in the same manner as noted for Method A.)

Method A shows a mean on this chart of 7.6 in the first year, and 11.8 in the second year.

Method B shows a mean of 8.5 in the first year, and 10.7 in the second year.

Method C shows a mean of 10.5 for the first year, and 12.6 for the second year.

Method D shows 13.0 for the mean of the first year, and 13.6 for the second year.

This chart is the summary of the means of Charts I through V.

Explanation of Charts

A uniform method of presentation has been adopted. These charts facilitate easy comparison of the four methods in terms of the criteria set up. A separate chart is shown for each of the five points as follows:

Chart I--	Evaluative Criteria	1--	Resemblance to subject
" II--	"	2--	Good proportion
" III--	"	3--	Typical action
" IV--	"	4--	Crayon technique
" V--	"	5--	Creative expression

Each chart contains four thermometer scales, one for each of the following four methods:

Method A---
" B---
" C---
" D---

Each thermometer shows how that method rated in that specific point. The left side of each thermometer is graduated from 0 to 20, in terms of qualitative evaluations as follows:

20-----Very superior
15-----Superior
10-----Fair
5-----Poor
0-----Very inferior

On the right side of each scale is noted the position of the grade being studied, either Grade 1 or Grade 2. In determining the position of each grade on Charts I-V inclusive, means were computed from the tabulated scores. (See Tables I - V) The means so obtained determined the extent to which the thermometer should be filled.

Chart VI shows a summary of Charts I - V. In con-

structuring this chart the total means for the five criteria earned by each of the four methods of instruction were averaged.

FURTHER DATA

As a further step in the judging of these drawings, the papers were then exhibited in one large room, where they were placed in rows, the top row showing Method A, the second row, Method B, and so forth. Here they were viewed, discussed, and judged by three supervisors of art in elementary schools (Miss Ruth Buxton of the West Springfield Schools, Miss Alice Geary and Miss Harriet Higgins of the Springfield School Department), and two others who said they "knew nothing about art", one a high school teacher of modern languages, the other a secretary.

I chose the two last-mentioned judges because I felt their opinions would not be influenced by any past experiences or theories regarding the teaching of drawing, and because I believed they would represent the average consumer who "knows what he likes" in art as well as in other products.

A brief diary was kept while the writer was carrying on the test lessons, in order to note observations of how the young pupils worked and their response to the lesson.

DISCUSSION OF DATA

Two of the art supervisors decided immediately which set they thought the best, the third took more time to examine them. The observation and discussion on the part of these judges brought forth the following comments:

"Method D drawings look much more like children."

"There is more individuality shown in the D drawings."

"The proportions are much more natural in the D drawings."

"To me, it (D method) seems the natural way to draw as

it builds upon his first symbolic drawing."

"Those heavy pencil and orange lines (in A and B) spoil the appearance of the picture."

"Some of those circle figures (C method) are very good. I would make those my second choice."

"I see too much uniformity in these (A and B methods). They look too copied."

"I think the stick figures show better action."

"D drawings look very stiff and set."

The following are a few of the excerpts from the diary recording the writer's observations during the test lessons:

1. Proportion is the most difficult to teach. First and second graders not developed enough to sense it. Cannot tell them how long to make the lines used in A or B methods. They look at the teacher drawing it on the board, then make long sweeping lines on their papers. Many children hurry ahead of the instruction and put arms and legs on where they wish!



2. They will not wait for the teacher to discuss proportions, although they are interested in showing action, and will try to get the lines to show that the girl is walking or skating.
3. Pupils do not seem interested in putting clothes

on the stick figures. Their pleasure in the lesson seems to end with the lone figure, and they have to be urged to put masses of color on the lines to represent the clothes. Most of the pictures look unfinished. Why? Is their urge to draw something satisfied quickly with the stick man? Are they discouraged soon and do not want to go on with it? Does the time limit (30 minutes) prevent them from drawing both the stick foundation, and carefully drawn clothes, faces, and other details?

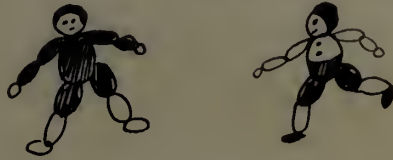
4. In finishing the figures made by Methods A, B, the pupils simply rub crayon on the foundation lines. They do not, as a rule, fill out the body sufficiently. The most successful ones draw an outline of the dress and fill it in.
5. In Method C, using ovals, the pupils sometimes put three ovals in the arm or leg which shows that they have not grasped the idea of an upper and a lower arm, which this method is supposed to give them.



They make circles in a row and do not attempt to bend the arm at the elbow or the leg at the knee.

6. In finishing those done by Method C, many of the second graders, and nearly all of the first

graders, simply color in the circles. This is confusing to them in trying to show certain types of clothes and gives them an unreal look.



- The children seemed pleased with these drawings, laughed and talked about them, and kept working on them until the period ended. They did not have time to add anything else to the picture.
7. The children appeared interested and happy when doing the drawings by Method D. After the legs appeared, they started to talk and all additions after that (curly hair, collar and pocket on dress, roller skates, etc.) called forth much laughter and comment. Some did the complete figure in pencil, and then colored what they wished; others used color directly for hair, features, and dress trimmings. About one-third added a background of sky, ground, trees, house to the picture. Nearly everyone completed the coloring of the figures.



AllerC.



AllerC.

I. 119. 3 Comparative Drawings by Same Pupil
(I. Drawn by Method C, II Drawn by Method D.)



I

Marie

Fig. 4 I. Drawn by Method C }
II. Drawn by Method D } by Some Pupil



II.

Marie



*Fig. 5 Showing How Lines Show Through
on Finished Drawing (Method A)*



*Fig 6. Showing How Pupil Fills in
the Ovals Only in Method C*

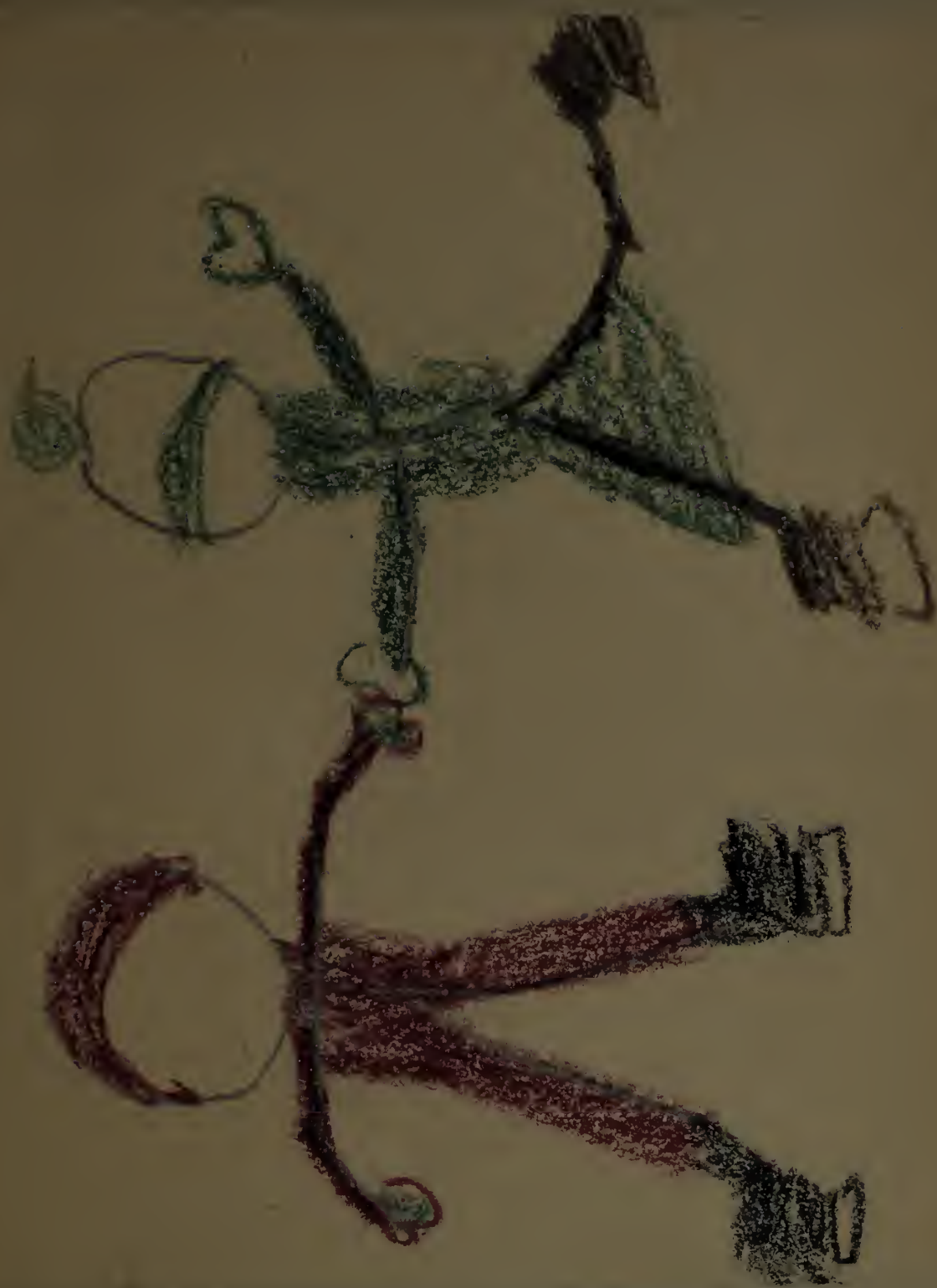


Fig. 7 Showing Failure to Build up Body With Color. (Method 3)



*Fig. 8. Showing Failure to Build
Up Body With Color (Method A)*

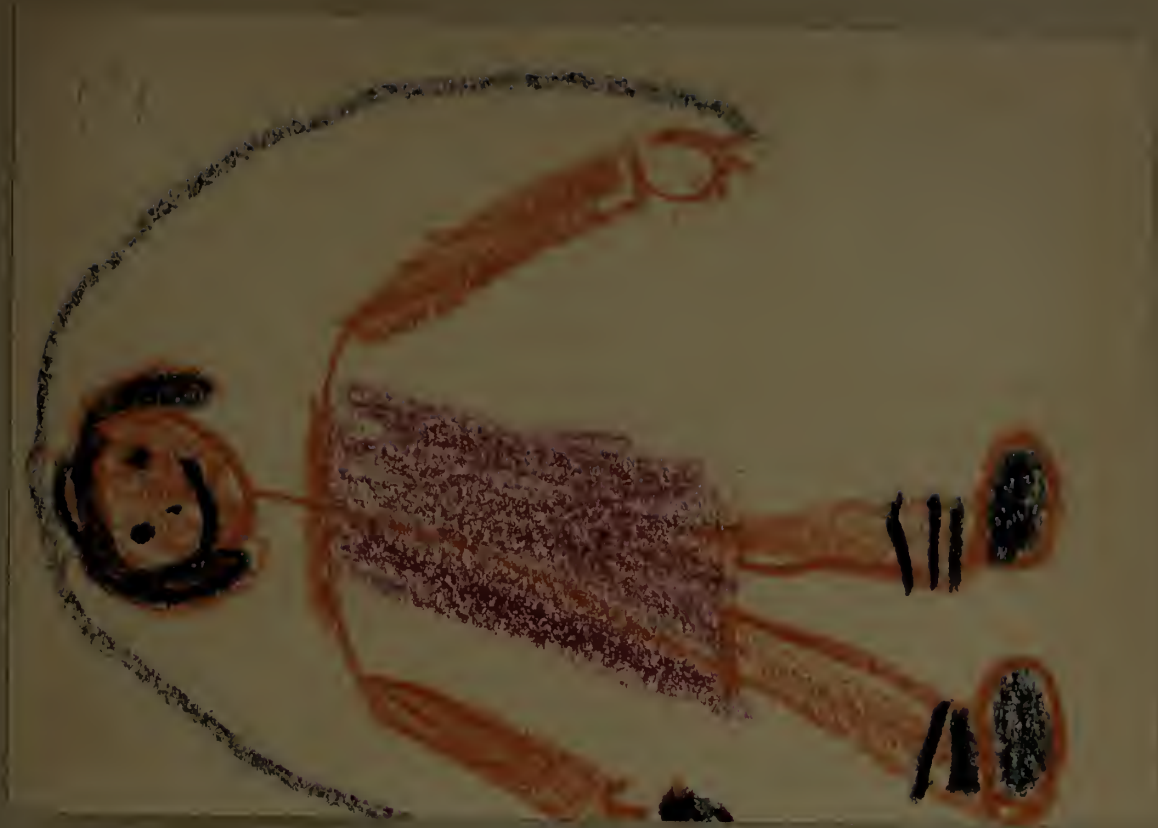


Fig. 9 Two Attempts to Place Clothes on Stick Figure



*Fig. 10 Showing Difficulty in Shaping
Body and Clothes With Crayon. (Method A)*

CHAPTER IV
SUMMARY OF RESULTS

From our study of the collected data in this report, it seems evident that Method D, or the "Clothes", or outline method, was the most satisfactory. Method C, the "Circles" method, was second, Method A, the straight line, third, and Method B, the curved line, fourth. No one method stood out sufficiently to be selected immediately, but in reviewing the results of the investigation the following reasons for the choice of Method D present themselves:

1. These drawings look more like children.
2. They show better proportions (of arms and legs to body). Method C, however, was equal to Method D in this requirement.
3. More details of dress, hair, playthings are added, as less time was required to complete it (others were drawn twice).
4. They present a more attractive appearance, due to more clearly defined shapes and smoother crayon work.
5. Children seemed more pleased and satisfied when using this method. Were willing to do it step by step at first, laughed and talked while working on them. In other methods, they rushed ahead after drawing the foundation lines, not waiting to find out how to make the clothes, but simply covered the

lines with rough crayon strokes.

6. More individuality and freedom expressed.
7. Results of a second proving test, given to the children previously taught Method C, showed that the drawings made by these same children using Method D, were, as a whole set (60 papers), much better looking as to shape and proportions, and showed greater individuality. (See Figs. 3 and 4)

Regarding the other three methods, the following results were recorded:

1. Lines were made too heavy in pencil or crayon so that they showed through the clothes. (See Fig. 5)
2. In Method C the children simply colored in the circles for clothes, giving a bead effect. (See Fig. 6)
3. In Methods A and B, the pupils covered only the lines with crayon instead of showing a sleeve, a sweater, etc., thus making them much too thin. (See Figs. 7 and 8)
4. Children seem to have difficulty in placing clothes in right places over the lines. (See Fig. 9)
5. Drawings have ragged, broken outlines, caused by trying to build up a mass effect with the crayon. (In Method D they have the outline

first which is easier to fill in with color.)

(See Fig. 10)

6. The differences in size of the drawings in the four groups were the same. Each of the four groups contained drawings that were large and covered the paper, and other drawings made very small.

CHAPTER V

CONCLUSION

From the evidence studied, it seems that Method D, or the drawing of the human figure in outline form, is the most satisfactory for use in primary grades.

COMMENTS GROWING OUT OF THE STUDY

The appearance of the drawings made by this method^D were the most pleasing to look at because they looked like the children they were meant to represent. The proportions were more nearly correct, their attitudes and facial expressions were more alive and childlike, and the details of dress, the "accessories" in the picture which were added during the lesson, made these pictures more individual, joyous expressions of creative art.

It is the most natural way to draw people, as the crudely made symbol attempted by the pre-school child shows. The average adult, if asked to draw a man, will use the outline shape, usually in profile. We naturally see what the eyes take in, a face with light or dark hair, a blue dress, tan arms and legs, black shoes. We do not sense the skeleton or construction lines underneath.

It is extremely difficult for anyone, let alone a most immature child, to reduce complex shapes to a few single fundamental lines. Such a process is an adult one, learned after much practice, and is best left for the later years of high school and art school.

Children of this age have learned recognition of forms by looking at simplified representations of various objects in the many picture-books which they have at home and at school, and have had considerable practice in "coloring in" the shapes with their crayons or paints. This fact, I be-

lieve, leads them naturally to outline the form first and then color it in.

The child finds the line or circle construction confusing when he has to go back and draw clothes on it, and even then he will outline the shape of the dress or sweater before making it a solid mass.

He is dissatisfied too in seeing the lines showing through the clothes that he wanted a light color or white. The dark color that he has to use to cover up the lines makes the much-loved details of buttons, pockets, ribbons, etc. impossible to show.

The outline method eliminates the confusion and struggle resulting from so many lines, and the young artist is free to draw the shape of his object as he wants it in a fresh, spontaneous manner. His very first manipulations of the crayon or brush give him what is to him a man, and he is able then to use any colors and finish it up to suit his own pleasure.

The factor of time is another point in favor of the chosen method. The complete figure is drawn in a little over half the time, as it is planned and formed only once, whereas, in the other three methods, the action lines must first be planned and placed on the paper, and then they must be "gone over" again to build out the finished body before it makes a satisfying expression. As very young children have difficulty in concentrating for any length of time, they leave these "stick" drawings half finished. Having com-

pleted their symbol of the man, they are not critical enough to spend much more time in making an accurate, finished picture.

Little children have no interest in aesthetic qualities of graceful lines, good proportions or fine balance. The narrative interest is strong at this grade level and when they draw a human figure, they wish to tell a story. When they draw Santa Claus, the postman, or Bobby with his dog, they want quick returns, and are satisfied with crude results. The quickest way and the easiest to depict these characters is by drawing their faces and their clothes. Using Method D, however, they rarely fail to complete the whole drawing during the art period, even adding other objects such as houses, trees, animals, etc.

Perhaps the strongest argument against the Methods A, B, and C, is that children do not use these methods unless compelled by constant reminders. Left to themselves, they revert to drawing in outline. (Test in seventh grade--68 papers, 49 drew a man in outline, 15 used light action lines first, 4 were of doubtful process.)

It is for the art teacher to help the child to make the outline correctly in order that he may progress in his work.

Modern education is thought of as a "drawing out" rather than a "pouring in" process. To pour in, whether the child is interested or not is a difficult if not impossible process. I believe that allowing the child to draw freely and naturally, to build upon the first crude forms that he uses to express

his ideas, is "drawing out" his creative ability.

If we wish, therefore, to ally ourselves with the theories and practices of the most progressive art teachers in this country and abroad, if we believe in the modern objectives of art for the primary level, and if we have in mind the characteristic interests and capacities found among these young children, we must allow them to do their drawings of people in the outline form.

BIBLIOGRAPHY

A. BOOKS

Allen, A. B., Teaching of Art to Infants and Junior Children, F. Warne and Company, England, 1937.

Augsburg, D. R., The A B C of Drawing, Augsburg Drawing Company, 1901.

Boas, Bell, Art in the School, D. Page and Company, 1924, Ch. IV, pp38-48.

Dewey, John, Art and Education, Barnes Foundation, 1929.

Gibbs, Evelyn, Teaching of Art in Schools, 1936.

Goodenough F. L., Measurement of Intelligence by Drawings, World Book Company, 1926.

Holme, Geoffrey, Children's Art Book, Studio Publications, 1937.

Kliner, W. and Carey, Gertrude, A Measuring Scale for Freehand Drawing, Johns Hopkins Press.

Lemos, Pedro, Applied Art, Pacific Press, 1920.

Lemos, Pedro, Art Teacher, Davis Press, 1931, Ch. II, p.39.

Machab, Ian, Drawing the Human Figure, Studio Publications, 1936.

Mathias, Margaret E., Beginnings of Art in Public School, Scribners', 1924.

* Rimmer, C. H., Figure Drawing for Children, Lothrop Press, 1893.

Sargent, W. and Miller, Elizabeth, How Children Learn to Draw, Ginn and Company, 1916, Ch. II, pp. 154-170.

Sawer, Daisy D., Everyday Art in School and Home, Bridgman, 1929, Ch. V. pp. 113-120.

Springfield, Mass., A Tentative Art Course for Elementary Grades, Springfield School Committee, 1929.

Tessin, Louise D., Practical Art for Grades, Milton, Bradley Company, 1932.

* Nicholas, Mawhood and Trilling, Art Activities in the Modern School, MacMillan, 1937.

Tessin, Louise D., Childhood Art, Milton, Bradley Company, 1930.

Thorndike, E. L., Measurement of Achievement in Drawings, Teachers College, 1913.

Tomlinson, Reginald R., Picture Making by Children, Studio Publications, 1934.

Viola, Wilhelm, Child Art and Franz Cizek, Vienna Junior Red Cross, 1936.

B. PERIODICALS

Action Figures from Czechoslovakia, Esther deLemos, School Arts, April, 1937, 46:485-6.

Action Figures in Nursery Rhymes, Dorothy Mitchell, School Arts, December, 1931, 31:236-9.

Circle Figures, Esther deLemos, School Arts, March, 1937, 46:423-4.

Drawing Children at Play, J. W. Todd, Instructor, April, 1937, 46:31+.

Drawing Children in Other Lands, R. E. Hofstetter, Instructor, January, 1936, 45:13.

Drawing Faces and Action Figures, S. E. Hammond, Instructor, January, 1937, 46:33.

Drawing Pictures of Windy Days, J. W. Todd, Instructor, March, 1937, 46:32.

Figure and Object Drawing, E. D. Charles, School Arts, June, 1929, 28:628-30.

Figure Drawing in Intermediate Grades, S. E. Hammond, Instructor, November, 1936, 46:54.

Figure Drawing Made Easy, M. R. Rice, School Arts, June, 1929, 28:646-7.

Figure Drawing Simplified, E. C. H. Madsen, School Arts, May, 1936, 35:524-6.

Figures That Primary Children Can Draw, Jessie Todd, Normal Instructor, October, 1929, 38:30.

Figures Through the Grades, Marie Lewis, School Arts, September, 1931, 31:49-53.

Figures Through the Grades, Marie Lewis, School Arts, January, 1932, 31:304-7.

Filling the Space, J. Todd, Instructor, May, 1936, 45:23+.

Football Action Drawing, K. Tyler, School Arts, October, 1935, 35:73-9.

How Shall Primary Children Draw People? Eugenia Eckford, Instructor, January, 1934, 43:23+.

How to Draw Children, J. M. Todd, Instructor, March, 1938, 47:36+.

Human Figures in Lower Elementary Grades, Elsie R. Boylston, School Arts, June, 1929, 28:618-21.

Lots of Action in Figure Drawing, Olive Jobs, School Arts, October, 1935, 35:81-3.

1-2-3 Man, S. E. Wider, School Arts, October, 1935, 35:92-4.

Pictorial History, Eugenia Eckford, Instructor, February, 1934, 43:14+.

Simplified Figure Drawing, Pedro Lemos, School Arts, September, 1938, 38:23-25.

Spring Activities in Art, E. G. Wahl, Instructor, March, 1938, 47:32-3.

Stick Figures for Primary Grades, Della Fricke, Instructor, April, 1932, 41:21.

Approved by:

W. Welles

Arthur A. Harrison

Mildred Briggs

Thesis Committee

Date May 9, 1939

