

IS IT POSSIBLE TO TEACH EVERY HIGH SCHOOL STUDENT
TO DRAW EVEN IF HE HAS NO APPARENT ARTISTIC ABILITY?

by 4089

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CHAPTER I

INTRODUCTION

Let this be plain to all; design, or as it is called by another name, drawing, constitutes the fountain-head and substance of painting and sculpture and architecture and every other kind of painting, and is the root of all the sciences. Let him who has attained possession of this be assured that he possesses a great treasure . . .

Michelangelo

THE PROBLEM

Statement of the problem

Many have expressed admiration for those who are able to draw, and envy for those who possess the ability to do so. As an art teacher, this writer has over the years become aware of the vast number of people who claim to be unable to draw a straight line with a ruler. Various artists, authors of drawing books, and drawing instructors (2, 3, 6, 11, 14) regard this as a fallacy; for if a person can hold a pencil and a ruler still--he certainly can draw a straight line. Zaidenberg (14) notes that our own essentials are the only necessary implements. They consist of two eyes that can see, and a hand strong enough to hold a pencil. With them, some instruction, anyone should be able to draw (14). Assuming this is true, this study was designed to prove that anyone can draw.

Purpose of the study

The purpose of the investigation was to determine if high school students, having had no previous art training in the high school and very little, if any, in the grade school and professing an inability to draw, could learn to draw with the aid of a few lessons on drawing. The purpose

was two-fold; first, determine if these students could learn to produce semi-finished drawings and second, discourage the attitude that all drawing requires artistic talent.

Justification for the study

It is the conviction of this writer that art enhances life. Drawing, because it is the first step in the plan of any art project, is very important. Painting, sculpture, advertisement, set decoration, even fabric, fashion, furniture, automobile design all begin at the drawing board. Art can touch every phase of human life and make it much more comfortable. This is true according to Hayman (16, pp. 6, 7):

Man's life differs from that of most other organisms in that individualization has become more important to him than strict conformity to type. Individual capacity, viewpoint, choice, and action are qualities that make us human. Art expressions enable man to see himself and communicate with himself for it gives voice to the self. The artist's product makes the man unique as much as his thumb print and signature single him out. This individuation of experience, of emotion, is made possible through art.

Art deals with the emotional realm of man; it supplies stimulus for his capacity to feel and react, it expands his area of sentiment. The art experiences sharpens and rewards the senses, and thus it develops all human faculties. Art is among the human disciplines that allow for and depend upon the intense commitment of man to constructive action. The art experiences which involves the feelings of children and men encourages incentive and allows for commitment.

If this is true, then more people should embrace the field of art--perhaps as a hobby. "The good life is made of man striving to express his best self (2, p. 2)." Others (16, 6, 7, 8, 13) write of the importance of art experiences and are in agreement that these experiences are essential to the fullest development of all people at all levels of growth. They promote self-realization of the whole individual by integrating his imaginative, creative, intellectual, emotional, manual capacities, social maturity, and responsibility (8). Man cultivates a deepened understanding of the problems,

ideals, and goals of other individuals and social groups (16). Warner (13) in her book, Art: An Everyday Experience, wrote that art has within it the power to make something out of the ordinary from the ordinary. She relates that people need to gain a purpose in living, they need to become involved by "getting off the bank and into the stream." In addition, she expresses the idea that art is one of the few remaining areas where man can be director and doer and dreamer, all at one time (13).

The justification of this study then was to involve students in drawing. By "getting them off the bank and into the stream," their lives will possibly become more meaningful. If this writer could start in students the process which would enable them to express themselves freely and openly through their drawings, then she would feel her efforts were indeed justified.

Definitions of terms used

For the purpose of clarity and understanding in this study, the following terms were defined.

Drawing. A series of lines put on a flat surface to indicate form.

Figure drawing. The drawing of the human form.

1. Practical drawing. A simple, symbolic line drawing. It does not have to be artistic; it may even be crude. It can be a mental tool, as useful in solving problems as a saw and a hammer are useful in carpentry.

2. Realistic drawing. A drawing from nature, showing form. It is a close resemblance to nature. The senses and the feelings of the artist are involved in the drawing.

3. Foreshortening. The apparent shortening of forms in relation to the angle from which they are observed. The appearance of shortening becomes more acute as the angle between the eye-line and the nearest point of the

form, e.g. an outstretched arm, is reduced.

Still life drawing. A drawing of inanimate objects, e.g. fruit, flowers, vases, pitchers, etc. From the French word Nature Morte, meaning dead nature.

1. Composition. The arrangement of shapes, forms, and masses in the drawing to make it both balanced and interesting.

2. Light and shade. The sides or sections of a form that are individually struck by light or are in the shade. These planes can be vertical, horizontal, diagonal, or curved.

Perspective drawing. The alignment of various lines to show depth. The fundamental law of perspective lies in the fact that the farther away the forms are from the viewer the smaller they appear.

1. Depth. The illusion of distance or three-dimension.

2. Horizon line. The line ahead of the spectator which is level with his eye-level. The imaginary line where the sky seems to meet the earth. It is on this line that parallel lines converge to meet at vanishing points.

3. Vanishing point. The point on the horizon line at which parallel lines appear to vanish.

Semi-finished drawings. Drawings which are not finalized. These could be quick sketches and still convey meaning. The drawings from the students concerned here are in the semi-finished stage, due to the time element.

BACKGROUND FOR THE STUDY

Drawing as an international language

Increasing international associations and complexities call for international understanding through a common knowledge of some sort of

language. The picture language is unique in that it is universal. Marquart and Mitchell (9) wrote that drawing is the oldest written language in the world--a language understood by everyone in the world, from the most primitive tribes to the President of the French Academy of Art. English, French, German, Russian, and Spanish are among the important languages of the world but drawing is the only language universally understood. Others (2, 3, 6, 9, 10, 11, 16, 21) agree. Newman (21, p. 76) wrote, "When art speaks, it is heard clearly in every tongue."

As a means of communication, drawing has served the world well. A whole system of communication sprang from the earliest drawings and paintings found on the stone tablets and on the walls in caves of prehistoric man. The alphabet and all written language are outgrowths of these earliest recorded images (16). Hayman further notes that from the moment in our history when man became distinguishable as man, art was the mark that distinguished him, and ever since, man has continued to be an artful creature (16). Prehistoric man recorded himself and much of his environment by drawing and painting on the walls of his cave, and according to Hayman (16), this enabled historians to write of this era. Hayman (16, p. 5) states, "Every child, every culture gives form to its feelings and ideas through art." Nelms (11) in his book, Drawing for Practical Use, discusses Galileo's sketch of the sun. It was one of a series of sketches made originally for notes. These sketches became learning tools in his investigation of sunspots. Nelms (11) feels that Galileo later used these sketches to communicate his theories to his friends. Another example calls attention to Edison's drawings for the phonograph. He apparently made them to guide his own planning, and when he was satisfied he used his sheet of sketches as a means of communication (11). McIntyre (10) feels drawing fits into the scheme of education as a means of visual

communication--to show what things look like, how they work, or how they fit together. In considering the role of drawing as a means of communication, perhaps the following quotation by Nelms (11, p. 4, 5) taken from his book Thinking with a Pencil expresses it best:

Practical drawing is primarily a thinking tool. It can be used for taking notes, for learning, for planning, and for computation. Perhaps no one of these functions by itself is as important as communication. But when we consider them all, there is little doubt that the ability to think with a pencil is even more valuable than the ability to talk with one.

One's ability to draw

Zaidenberg (9, p. 19) states, "Anyone can draw!" Nelms (11) believes if a person has enough skill with a pencil to write his own name, he can make simple drawings to make himself understood. He claims everyone can be instructed on how to make practical drawings; drawings used in chalk talks, for posters and simple illustrations for purposes of being understood (11). Tourists have made use of drawings when foreign languages failed them, and according to Zaidenberg (9) the use of the tablecloth as a canvas to illustrate a motor or a new golf club seems to be universal even in the most prosaic of individuals. No one can deny the ability to draw in this sense; nor can anyone deny the desire to draw for this purpose (6). The simple outline for purposes of illustrations represents one kind of drawing and consensus is that this type of drawing is quite common among man (2, 3, 4, 6, 8, 9, 10, 11, 14).

When Zaidenberg wrote, "Anyone can draw!" he meant that anyone can give form to trees, buildings, and human form (9, p. 19). This three-dimensional illustration then is the other kind of drawing. This is the kind that many stay away from because they claim to have no talent. In answer to this statement Zaidenberg (9, p. 19) relates, "The ability to draw is not.

necessarily predetermined by an inherited artistic sense, or even, as so many people believe, by the rare phenomenon known as talent." He readily admits anyone possessing artistic talent will be able to carry his drawings further, instilling his own ability for creativity (9). On the same subject, Fawcett (3) has never placed too high a value on natural aptitude. He writes that if one starts early enough, maintains a keen desire, and implements this by frequently drawing, he will end up by becoming a fairly good draftsman (3). Yet most works this writer has read (2, 3, 4, 8, 9, 11, 16, 21), conclude that people generally think that drawing depends on inspiration and that it requires some special gift of the gods. These same authorities feel this belief is responsible for the confusion and the resulting failure of many who wish to draw (2, 3, 4, 8, 9, 11, 16, 21). It is a misconception that comes at an early age (6).

Children's ability. Almost all children like to draw, and according to Kaminski (6) they all seem to have similar ability. Some draw boldly, others timidly; some have a free approach, others are meticulous; some are interested in details, others omit them. In general, they share the same enthusiasm for artistic expression, and when children draw and paint, they do so because they enjoy it and it interests them (6). Kaminski (6) claims children have no preconceived notions and know nothing of the great masters; design, perspective, color wheels, and composition do not exist for them. This same author says that children rarely ask such questions as, "Am I a born artist?" "Am I doing it right?" "Will people laugh at it?" "Do I have talent?" (6). Fawcett (3) feels children seem to show understanding in their drawing and although they often accompany them with torrents of oral explanations, children's drawings can usually stand on their own. The problem.

exists with parents and teachers; they stymie children's desire to draw. As an art teacher, this writer has many times witnessed parents and other teachers commenting on children's drawings. Such phrases as, "What is it?" "Is this really a tree?" "You're kidding; mommy doesn't look like that!" are detrimental to children's creative development. Others (2, 6, 8, 17) agree with this writer, and feel in classroom criticisms of their work, children often find that their drawings are measured by an already existing standard. This standard is not familiar to them, and as a result, they lose the sense of pleasing themselves in their work and try instead to please the adults in their lives (8). Kellogg (17) adds that an established attitude of most adult observers of children's art is one of assuming that even preschool children are constantly trying to draw reality objects; whereas preschool age drawings themselves indicate clearly that this is not the case. She believes most adults are hoping and wishing to see children draw reality objects, for this enhances communication between them (17). Kellogg says if adults could learn how to look at, or to read the spontaneous works of children from earliest scribbling days on up, then the children's natural methods of drawing would not be violated by influences of uncomprehending adults (17). Lowenfeld (8) advises if children developed without any interference from the outside world, no special stimulation for their creative work would be necessary. He writes that children would use their deeply rooted creative impulse without inhibition, confident in their own kind of expression (8). Since children's thinking and experiences are different from those of the adult's, it stands to reason their expressions must also be different (2, 8). Children must be allowed to express themselves freely, and according to Ellsworth and Andrews (2) self-expression releases tensions which interfere with growth and stimulates further activity. The working together of mind, muscles, emotions,

and spirit to complete patterns set up by oneself has an integrating effect on personality (2). Newman (21) adds that the desire to create comes naturally to young people and must always be encouraged. Yet, unknowingly, parents and other adults in their ridiculous questions and statements concerning children's art confuse the children, and somewhere along the way children begin to lose confidence (15). Kaminski (6) concludes, "Thus arises the false belief that special talent is necessary."

The attitude of a child's family toward drawing is another source of this false belief, as many families actually feel ill at ease with drawing--an attitude they do not have toward other kinds of school work (6). Parents often help the child with his homework and it is taken for granted that he will learn to write and spell, add and subtract, in spite of the fact that these things are actually more difficult than drawing (6). When a child hears, "My mother's cousin Sue painted china; you must get your talent from our side of the family," and "We certainly don't have any talent in our immediate family," he questions the meaning (6, p. 1). Here is that word "talent" again. Kaminski (6, p. 1) further adds:

As the child grows older, the notion that talent is a prerequisite for drawing becomes a settled conviction. As a result, from the many youngsters who draw and paint, only a few retain their interest and continue their drawing. This is because everyone seems to think that art is a special gift. Art may be; but not drawing. Just as you can learn to write your name, so can you learn to draw.

Those very people who could never draw a straight line if they chose to, could trace their way back through the years to a time when they did draw and paint--regardless of how straight the line (21).

Drawing is seeing

Essentially, learning to draw is learning to see (15). This fact is universally accepted and is substantiated in the writings of several artists

(3, 4, 9, 10, 14, 15, 19, 21). Fawcett (3) feels a good drawing is dependent on the coordination of hand and eye. The student is concerned with the idea of putting down something that looks acceptable and, his eye being yet untrained, he searches for some aid (3). Fawcett (3) feels it is far better that the student concern himself with learning to see, so that with understanding and conviction he will be able to draw anything which comes within his range of vision. When a student gets to the point where his powers of observation are completely at his command, he can commence to draw (15). Freimark (15, p. 146) continues, "At this point (providing he has something to say and says it in a means conductive to his subject) the drawing will flow effortlessly out of his mind and onto the page." Kick (19) writes that drawing is a conscious thought process, and the student gives shape to it by seeing and feeling. He uses his eyes carefully to discover new things about the object (19). Therefore his mind and emotions work together with his eyes and hands as he consciously draws marks on a surface (19). Fawcett (3) describes all drawing from a subject as an act of memory, and at that moment when the student traces his line on the paper he is no longer observing. The image observed has become a mental one, and the success or failure of the drawing will depend on the nature of this succession of mental images (3). Marquart and Mitchell (9) note that an understanding of the basic form is essential in order to draw them, and that the student must think them through before beginning. The student must look and study the object, for true freedom in drawing can result only from a background of knowledge of forms (9). Libby (20) writing on Marco's technique of teaching drawing, tells students that lines, as we know, do not exist in the observable world, but rather in the minds and works of artists as a direct and autographic means of representation. The line pattern of the Greek artists conveyed rhythm, form and

movement to an extraordinary degree, and became a final and complete pictorial art form (3). The attempt to enclose space by a simple line is one of the earliest and most primitive ways of developing the powers of observation, or registering in permanent form facts needed to reason from, and to convey to others the shapes of things observed (3). One only has to study the drawings of such masters as Dürer, Daumier, Rubens and Michelangelo, all great draftsmen, to show what drawing can do. Kent (18, p. 64) quotes Helen Logge:

I believe that a drawing should not be just material for other media (though it may be used for that purpose) but a serious end in itself, upon which one may lavish as much thought, care, and time as if it were a major painting, a complete work of art.

While drawing can be a finished complete work of art, it can also be a sketch or semi-finished, and either practical or realistic in nature (11). In both cases the ability to see and to understand the object is very important (11). Fawcett (3, p. 74) states:

I think it can be said that seeing and understanding are one and the same thing; or at least interchangeable. In conversation we say, "I see what you mean," meaning, "I understand what you mean." In drawing the same thing applies.

CHAPTER II

METHOD AND MATERIALS

Description of the sample

The sample was selected from a population of students enrolled at two area high schools; Hanover High School in Hanover, Kansas, and Linn High School in Linn, Kansas.

Background of the sample. Both high schools are located in Unified District #223 in Washington County, Kansas. Both communities are basically rural and diversified farming is the main industry. Hanover is located in the northeast part and Linn in the southeast part of the county. They are twenty-six miles apart. The communities have a good deal in common, including the prominence of church affiliated grade schools. The Hanover area is served by three parochial schools; St. John's Catholic, Immanuel Lutheran, and Trinity Lutheran. The Linn area is served by Linn Lutheran and St. John's Lutheran. In addition both towns have a public grade school. The two high schools absorb incoming students from the even smaller towns in the district. Hollenberg students attend Hanover High; Palmer students attend Linn High; Barnes students may attend either center. The enrollment at Hanover High is 167; the enrollment at Linn High is 180.

Selecting the sample. The population was narrowed to only those students never having had art instruction in the high school. A cover letter by the superintendent of schools (Appendix A), a letter by this writer explaining the purpose (Appendix B), and a questionnaire (Appendix C) were sent home with each student in this population. The questionnaire was filled out by the

parents and returned by the student to his respective school office. Permission for the drawing lessons, in the form of the parent's signature, was included in the questionnaires. Table I indicates the number of forms sent home and the number returned.

The sample was selected from the questionnaires through which permission by the parents had been granted. A total of 40 students was selected, 20 being selected from each school. This writer wanted an equal number of males and females so the questionnaires at each school were separated into two groups representing sex. The procedure was then to draw at random ten questionnaires from each of the four groups. Due to the number of boys enrolled in the art course at Hanover High School, only eight questionnaires were available. Therefore, the sample at the Hanover center consisted of 8 boys and 12 girls, while the sample at the Linn center was composed of 10 boys and 10 girls. There were no restrictions as to the grade level of the sample, but the random selection provided 9 freshman, 18 sophomores, 6 juniors, and 7 seniors.

The tabulation of answers from the 40 questionnaires is presented in Table II. It was interesting to find that only 12 students out of the total sample had ever been exposed to elementary art through an art teacher. It was felt by this writer that this would have little bearing on the outcome of their drawings as these students had not been exposed to the fundamentals of figure, still life, or perspective drawings. A breakdown of the type grade schools attended is also presented in Table II. None of the parochial schools employed an art teacher.

Working conditions

Numbers were given each student as a means of identification. This

TABLE I
DATA ON DISTRIBUTION OF
QUESTIONNAIRES

		Hanover High	Linn High
School enrollment		167	180
Enrollment in art		70	23
Questionnaires handed out (only to those students not having had high school art)		97	120
Questionnaires returned		40	73
Permission for the lessons	Yes	31	60
	No	9	13

TABLE II
TABULATION OF QUESTIONNAIRE ANSWERS

Questions	Hanover				Linn					
	Boys		Girls		Boys		Girls		Totals	
	yes	no	yes	no	yes	no	yes	no	yes	no
2. Art teacher in grade school.	0	8	3	9	5	5	4	6	12	28
3. No art teacher - any classroom art?	4	4	3	9	4	6	1	0	12	28
4. Does student draw much at home?	3	5	4	8	2	8	3	7	12	28
5. Does student appreciate art?	5	3	8	4	5	5	7	3	25	15
6. Has he taken high school art?	0	8	0	12	0	10	0	10	0	40
7. Are there books on art in the home?	2	6	5	7	4	6	0	10	11	29
8. Are art prints on display in home?	5	3	5	7	6	4	4	6	20	20
9. Has student ever visited a museum?	5	3	4	8	2	8	2	8	13	27
10. Does he want to learn to draw?	7	1	12	0	6	4	10	0	35	5
11. Either parent draw or paint?	0	8	1	11	0	10	2	8	3	37
12. Parents permission	8	0	12	0	10	0	10	0	40	0

Elementary School Attended

Public School	22
Parochial School	18

was mainly for their benefit. Each student's work would later be rated by six different judges who would determine if and how well the student had learned to draw. The identification system can be found in Table III. The student's sex, his grade level, and his IQ are also recorded. The IQ scores of the sample were not pertinent to the research conducted and therefore, were not secured from the guidance counselors until the lessons were finished.

The home room period was selected by both principals as the best and most convenient time of the school day for the lessons. The art rooms at both centers were available during this period. This author worked with the Linn group in the first part of the morning and later in the morning with the Hanover group. The nine scheduled lessons on drawing were presented on nine consecutive days, and each working session was approximately forty-five minutes long. One problem arose: the entire Hanover group rarely assembled together for a session. Being near the end of the school term, various make-up tests, speech rehearsals for district contests, organizational meetings, picture taking sessions for the yearbook, and track meets all made a dent in the proceedings of the lessons. However, with permission of the principal, extra days were allowed this writer in which to instruct those students who had missed the scheduled sessions. All students received nine lessons.

Drawing equipment

The art materials used during the nine drawing lessons were purchased and supplied by this writer. The list of materials used is as follows: unprinted newsprint, cream manila drawing and white drawing papers, numbers 2H, B, and 5B drawing pencils, graphite sticks, lithographic crayons, art erasers, India ink, meat skewers, and felt pens. While the drawing pencils and erasers topped the list of tools used to draw on the papers, the students

TABLE III

IDENTIFYING CHARACTERISTICS
OF THE SAMPLE

The sample consisted of 18 boys and 22 girls. The IQ scores were secured following the lessons. The average IQ is 110.

Linn							
Number	Sex	Year	IQ	Number	Sex	Year	IQ
1	M	Jr	106	11	M	Soph	112
2	M	Jr	94	12	M	Fr	115
3	F	Sr	113	13	M	Fr	102
4	F	Soph	115	14	M	Fr	120
5	F	Sr	99	15	M	Soph	108
6	F	Sr	101	16	F	Soph	119
7	F	Soph	120	17	F	Soph	113
8	F	Soph	114	18	F	Sr	101
9	F	Soph	106	19	M	Fr	110
10	M	Soph	102	20	M	Fr	108

Hanover							
Number	Sex	Year	IQ	Number	Sex	Year	IQ
21	M	Soph	118	31	F	Fr	112
22	F	Sr	132	32	F	Soph	123
23	F	Soph	95	33	F	Soph	127
24	F	Jr	100	34	M	Soph	90
25	F	Jr	94	35	M	Soph	119
26	F	Soph	123	36	M	Jr	103
27	F	Jr	114	37	M	Jr	130
28	F	Jr	95	38	M	Fr	95
29	F	Sr	110	39	M	Sr	112
30	F	Soph	118	40	M	Soph	116

were at least made aware of the other implements. They tried them all. This writer wanted them to learn the proper usage of each, to get the feel of each drawing implement, and to see the results of each one.

Drawing lessons

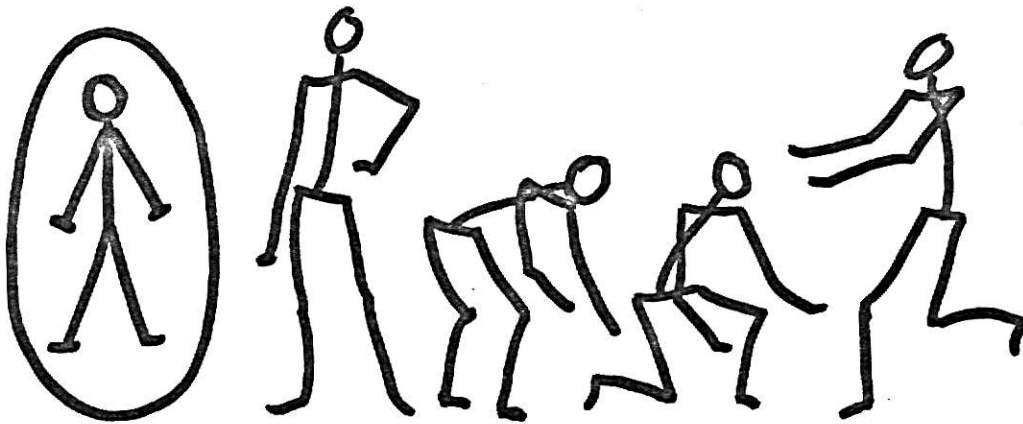
The lessons were prepared with the idea that three important aspects of drawing would be taught in the nine 45-minute periods. Clarity as well as brevity were most important. Students were given tips to practice. They were drawing the entire time, except for short demonstrations. Much had to be said, much instructing had to be done. The only possible solution was to talk while they drew. The lessons were as follows: four on figure drawing because it is more complicated, two on still life, and three on perspective.

Lesson one - art materials and the stick figure. Instructions were given the students on the usage of the various materials given them. This was done to familiarize them with each. Three drawing pencils were used, the 2H produces a hard mark while the B and the 5B produce soft marks and can be smeared quite easily. They were told about the various degrees of hardness and softness available in drawing pencils. If a student wanted a very clear, clean line, the pencils in the hard range would suffice. If softness and tonal effects were desired, one of the soft pencils would do. The students also worked with the graphite stick and the lithographic crayon. Both are rectangular in shape, have no paper covering, and have flat blunt ends. No cover is provided in order to use the flat side for shading purposes. Both are held differently from a pencil when in use. Two types of felt pens were in use, a broad tip pen and a fine tip pen. These have become popular with artists as they are much easier to handle than the drawing inks and can be obtained in various colors. India ink is a permanent ink so students were

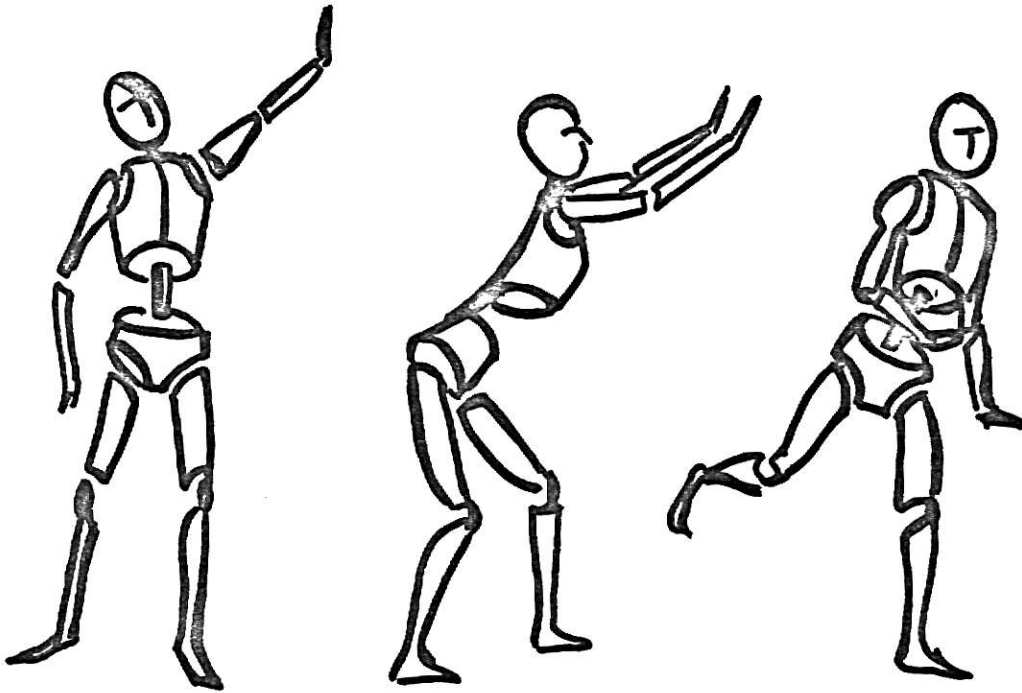
urged to use it with care. The meat skewers took the place of a brush or pen. The skewer was simply dipped into the ink jar and then drawn on the paper.

While the students were working with the materials, a discussion of freedom of drawing was held. Some felt they could never be able to draw anything. This instructor found the students were tense and held their implements too hard which restricted their efforts. To instill a certain amount of freedom, they were asked to draw four X's on their 12 x 18 size newsprint. With the pencil point on one X, they were instructed to select another X and keep their eye on it. Without looking away from that second X, they drew a curved line to it from the first X. A demonstration on the blackboard showed the way. They repeated this several times, using the four X's as guides.

A short lecture on being able to draw as long as you could see met with disbelief. All the important ideas of looking, studying, and understanding the object to be drawn were relayed to them. The idea that the mind observes while the hand draws was freely discussed. At the easel, a demonstration of the growth of the basic stick figure took place. To understand the human figure better, it is necessary to resort to the stick figure. Such figures are not just a kindergarten concept, but can be a big help in learning how to draw the human figure. Illustrations, such as shown in Fig. 1, were drawn and explained. Shoulder and hip lines have been added to the torso line. The arms now extend from the ends of the shoulder line instead of from the neck. The legs are drawn from the ends of the hip line. These new lines when enclosed create a figure which resembles man more than that of the basic stick figure. The advanced stick figure goes even further showing a chest area, a pelvic area, and fullness in the extremities is evident. The spinal column takes on the important role as indicator of the body's actions. Students practiced drawing the elementary stick figure.



ELEMENTARY STICK FIGURES



ADVANCED STICK FIGURES

Figure 1

Stick Figures Used in Understanding
The Human Figure

Lesson two - realistic drawing. The first part of the second lesson involved drawing the advanced stick figure. It is a much more difficult procedure than drawing the elementary figure, but it is necessary. A boy and a girl from a study hall consented to act as models. The poses at first were for three minutes each. The problem was to get the young artists to put the pose down on the paper quickly with a basic outline drawing. It was suggested to draw the head, and remembering that the figure stands seven heads tall, visually measure down six more heads to find the bottom of the feet. The student had to study the pose, decide if the weight of the body rested on one leg or on both legs equally. A quick line down from the neck to that foot or to both feet established a good guide line for the rest of the drawing. Because this was the next step from the stick figure, it was fine to incorporate shoulder and hip lines to aid the student in drawing the proportions. Learning a lesson from the simplicity of the stick figure does not mean it should be applied literally. From the stick figure concept, the students were asked to look at the model, study the pose for a minute, and then quickly draw the outline or contour, as it is sometimes referred to. After doing this, they made necessary proportional changes and added some detail. Figure 2 illustrates the rapid outline drawing and the finished sketch. The hardest thing to accomplish was to get the outline drawn. Once they used lines to enclose the figure, the drawing became easier. Much talk on proportion took place. Dividing the human figure into various parts on a scale helped several students who were having a great deal of difficulty with the problem. The scale simply helped them to understand relationships of the various parts of the body to each other. A division of the various parts can be studied in Fig. 3. With the models posing and the students drawing, the instructor related important things to consider in drawing. The neck is quite important

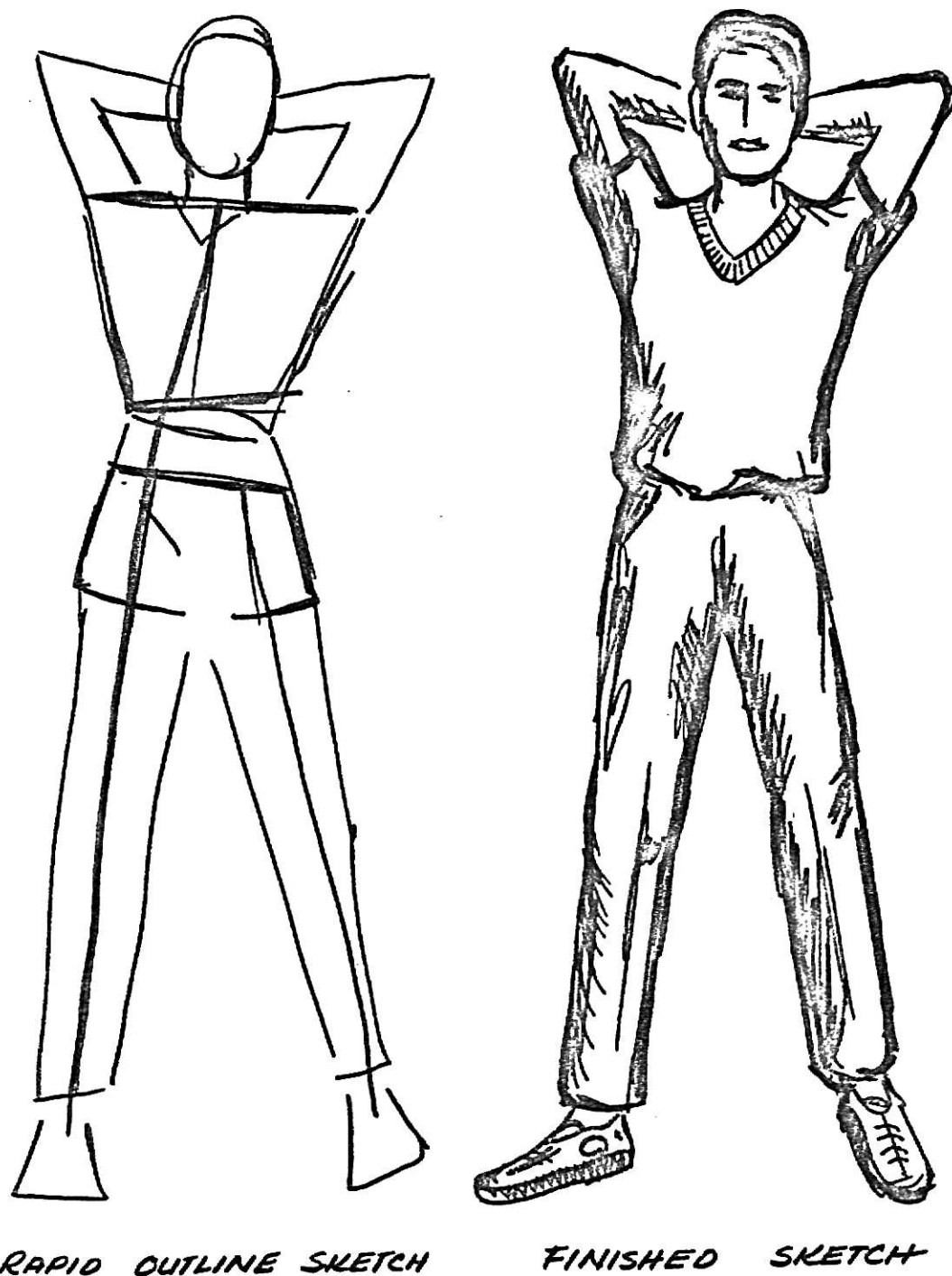
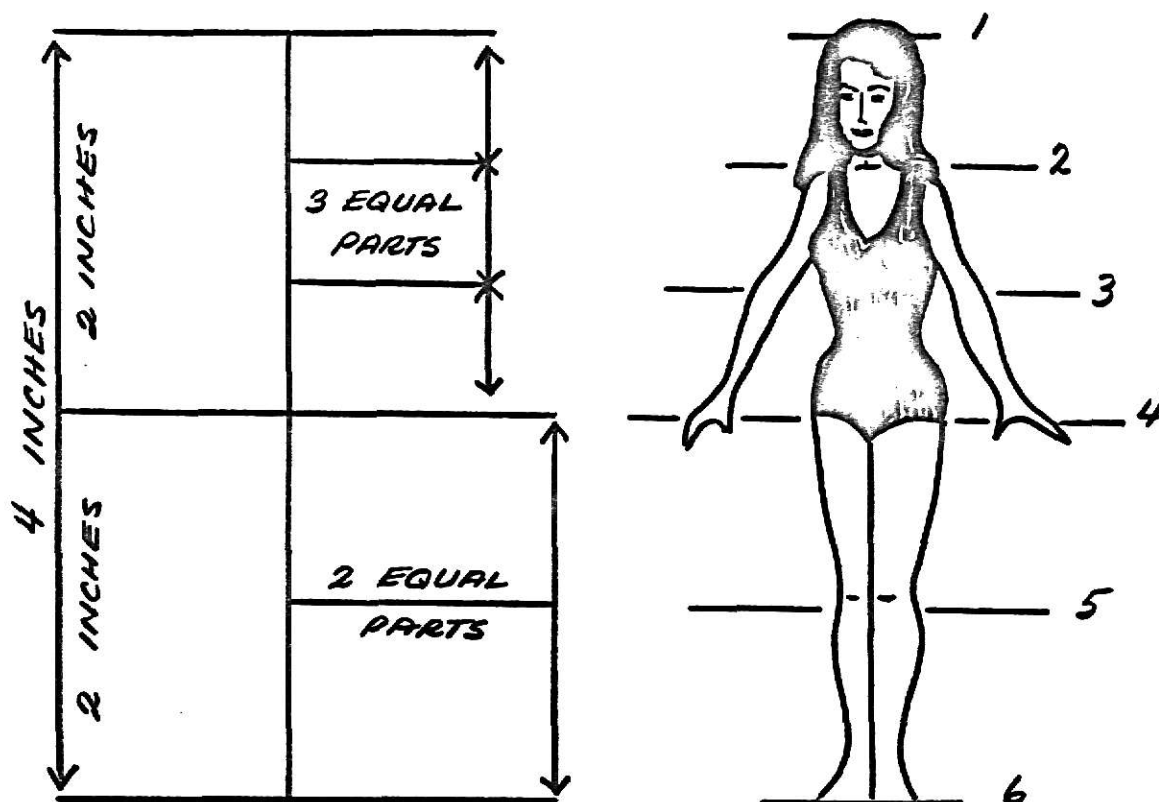


Figure 2

The Rapid Outline Sketch And
The Finished Sketch



THE TOP LINE IS THE TOP OF THE HEAD. HAIR MAY EXTEND ABOVE LINE.

THE SECOND LINE IS FOR THE SHOULDERS.

THE THIRD LINE IS FOR CHEST AREA, RIB AREA.

THE FOURTH LINE IS FOR THE BULGE OF THE HIPS.

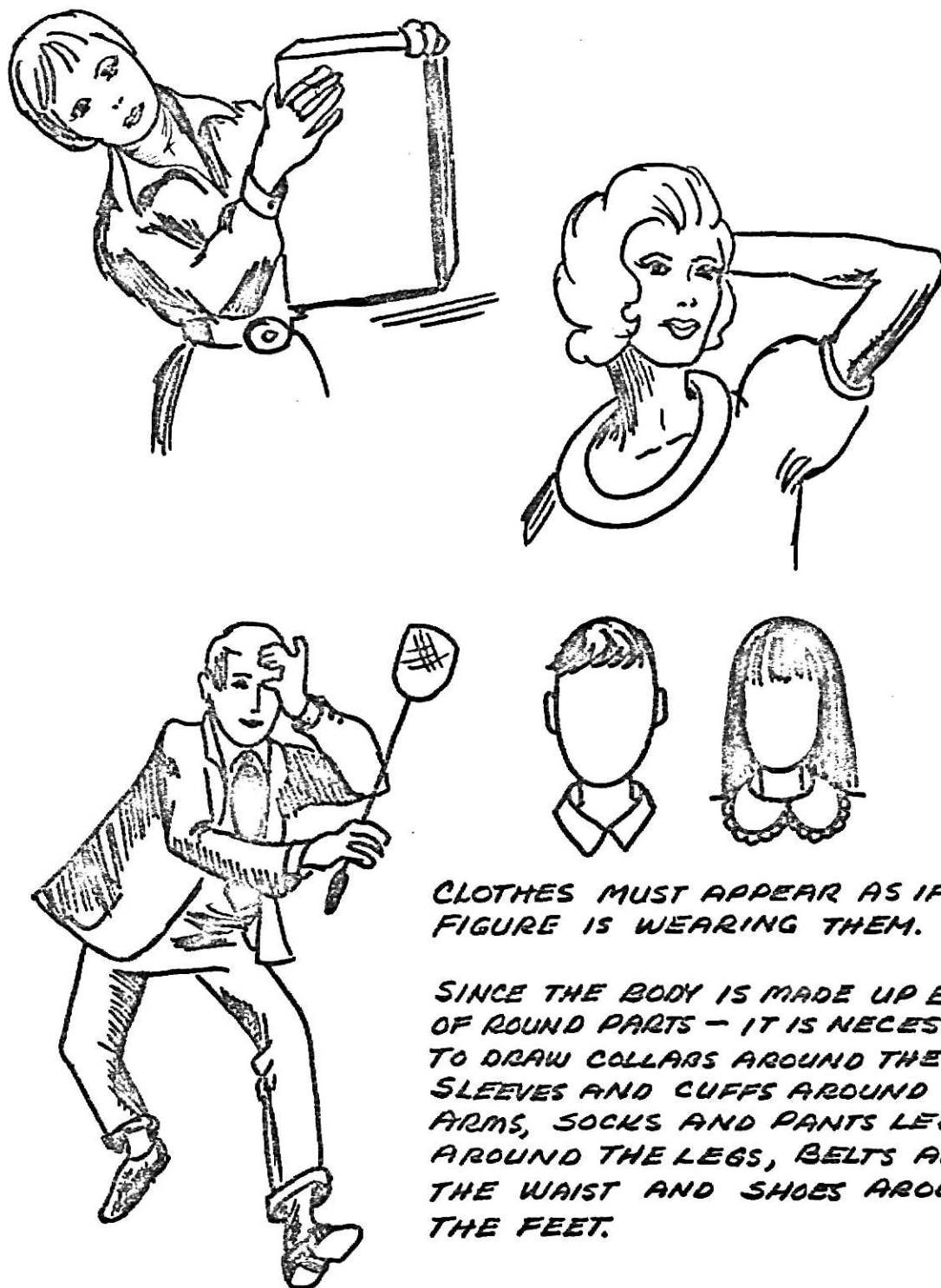
THE FIFTH LINE IS FOR THE KNEES.

THE SIXTH LINE IS FOR THE SOLES OF THE FEET.

Figure 3

Guide Used to Locate Parts of the Human Figure Proportionally

as it holds and supports the head, and therefore should be drawn with that in mind. It should be drawn boldly and not small and narrow in size. The elbow bends on a line even with the waist. A man's shoulders are wide and his hips narrow while a woman's shoulders are narrow and her hips wide. The students were told that proportions were important in drawings to establish proper relationships, but a good discussion was held on the many differences in body structure that exist. One has but to look around to see the skinny lady in contrast to the fat lady, or the short man in contrast to the tall man. Set rules cannot apply here, so the student must again rely on his powers of observation. Poses were then extended to ten minutes which gave time to concentrate on details. When a seated pose was used, it was urged that the drawing actually show the figure seated. The body is made up entirely of round parts, and this was pointed out many times. Clothing presented a problem. Illustrations from art books were introduced in an effort to illustrate how wearing apparel is drawn around the figure. Clothing must look like it fits and not like it was just stuck on as a child would stick a dress on a paper doll. Collars fit around the neck, sleeves fit around the arms, and shoes fit around the feet. This is illustrated in Fig. 4. The students looked at the roundness of their own arms and how the sleeves fit around them. In the ten minute drawings the roundness and proper fit of clothing were stressed. Again the idea of really seeing what one draws was mentioned. The poses were varied; legs and arms were crossed, arms were outstretched, and front, back and side views were made available. Erasures were not permitted during this lesson, and in fact, erasers were not available. Details on hands, feet, and face were very general, but most did well except for drawing the hands.



CLOTHES MUST APPEAR AS IF THE FIGURE IS WEARING THEM.

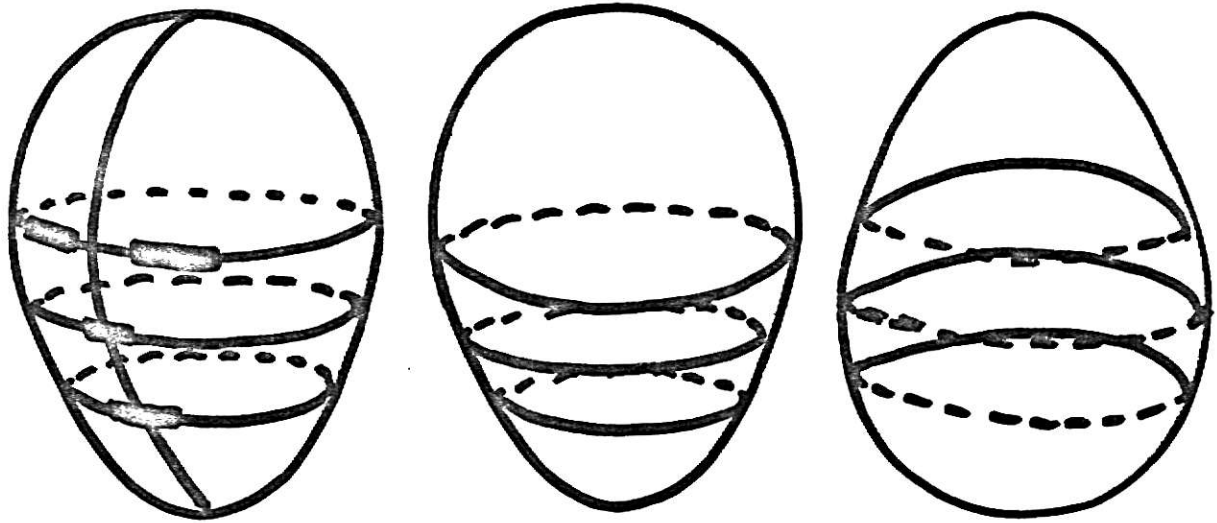
SINCE THE BODY IS MADE UP ENTIRELY OF ROUND PARTS - IT IS NECESSARY TO DRAW COLLARS AROUND THE NECK, SLEEVES AND CUFFS AROUND THE ARMS, SOCKS AND PANTS LEGS AROUND THE LEGS, BELTS AROUND THE WAIST AND SHOES AROUND THE FEET.

Figure 4

Illustrations Where Clothing Fits
The Human Figure

Lesson three - realistic drawing. The head and its shape was discussed. The head is egg-shaped or oval, not circular as is sometimes shown in practical drawings. An illustration, such as seen in Fig. 5, was drawn on the blackboard. It was necessary to explain the various positions the head assumes, and show how to draw the eyes, nose and mouth in the different positions. Figure 6 gives the division of the parts of the face. The oval can be divided into three equal parts. The lines which represent the division of the face indicate the position of the eyebrows and the nose. The bottom part is divided into two equal parts, and this line becomes the guide line for the lower lip. The ears are placed between line 2 and line 3. The student artists practiced drawing the head and face for ten minutes. The remainder of the time was spent drawing three ten minute poses, again using the student models. The idea of form and some detail were expected from the students in their drawings. Erasers were permitted for the first time since these were to be semi-finished drawings. During this time some demonstrations were shown on the blackboard to a few students having various problems in their drawings. It was just a matter of aiding the student to better understand and see the pose as it was. Reminders such as, "Make sure the collar fits around the neck," "The legs cross at the knees so notice the relationship of one leg to the other," "Keep your pencil lines light, corrections can be made easier," were issued frequently. Some previous discussion on shading added to the semi-finished drawings.

Lesson four - practical drawing. Practical drawing was described to the group as an inherent line process. It is a simple, symbolic line drawing which conveys a message. Such things as roundness and three-dimensional form are not included in practical drawing. In contrast to realistic drawing



THE HEAD IS SELDOM STATIONARY: IT LOWERS, RAISES, AND TURNS FROM SIDE TO SIDE. THE ELLIPSE LINES WILL GIVE A GUIDE FOR EASILY ACHIEVING ANY ASPECT DESIRED.

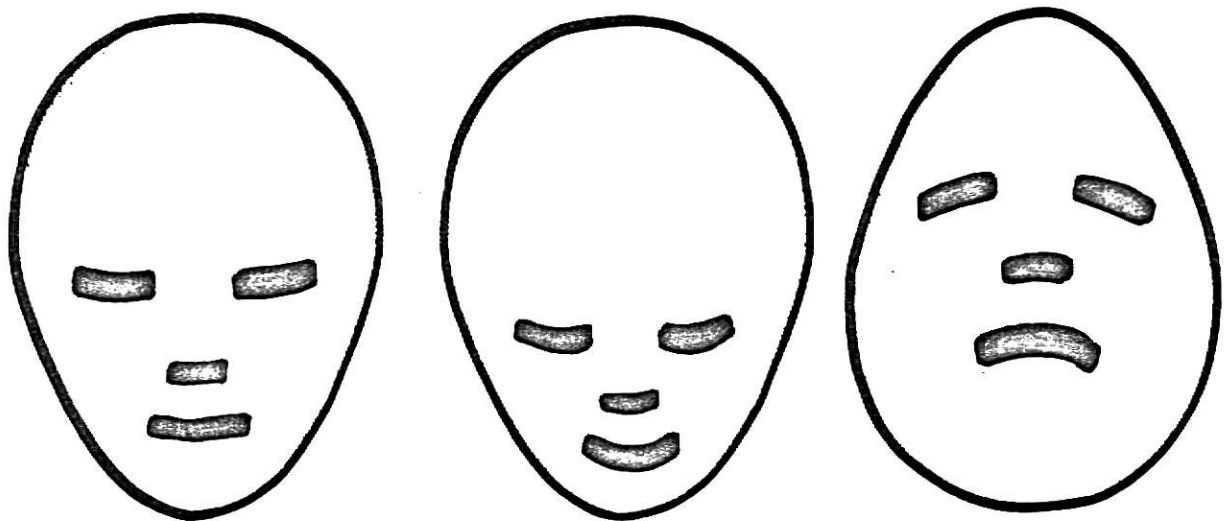
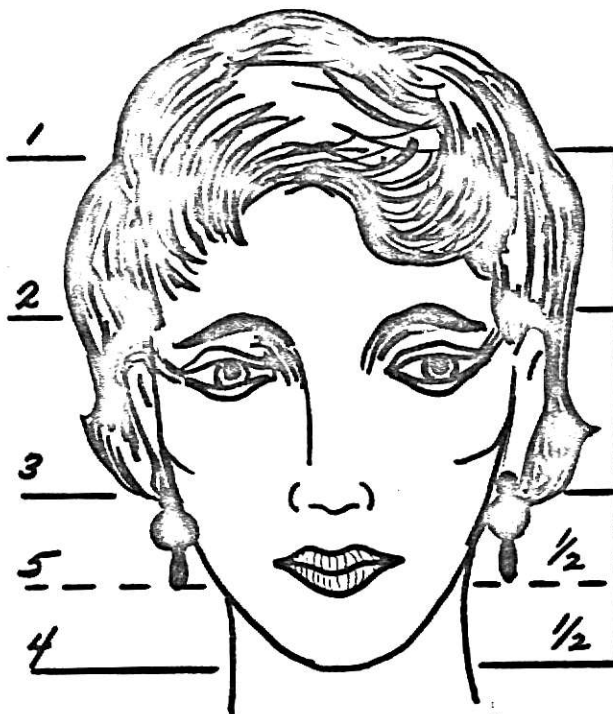


Figure 5

Ellipse Lines Guide the Placement
of Facial Parts



DIVIDE THE OVAL INTO THREE EQUAL PARTS.

THE TOP OF THE HEAD IS ON LINE 1.

THE EYEBROWS ARE PLACED ON LINE 2.

THE EARS START EVEN WITH THE CORNER OF THE EYE. DRAW UP AND THEN DOWN TO LINE 3.

THE NOSTRILS OF THE NOSE, NOT THE TIP, GO ON LINE 3.

THE BOTTOM OF THE MOUTH GOES ON LINE 5.

THE CHIN RESTS ON LINE 4.

THE HAIR SHOULD EXTEND UP AND OUT FROM THE OVAL.

THE SAME DIVISION OF FACIAL PARTS HOLDS TRUE WHEN FACE IS VIEWED FROM PROFILE.

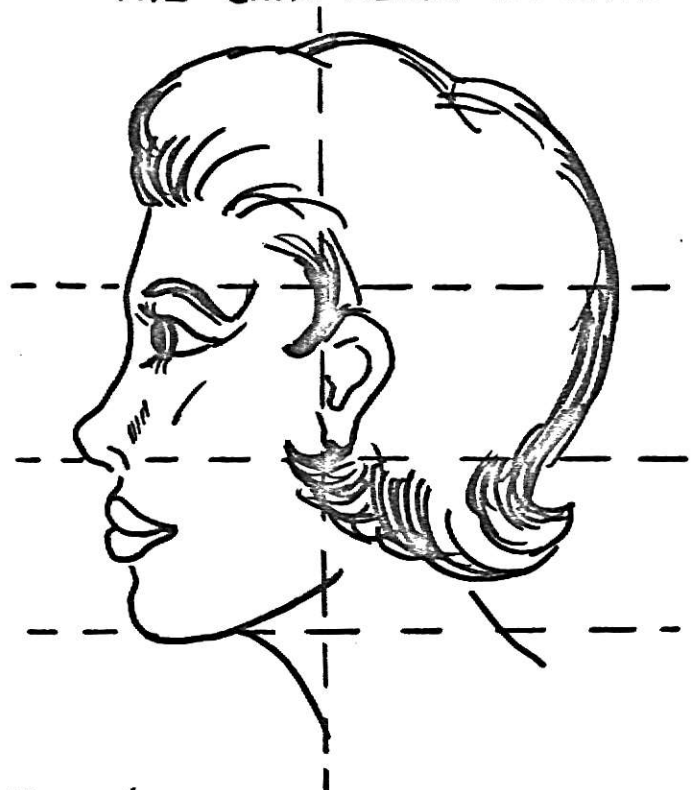
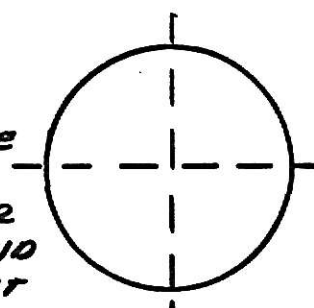


Figure 6

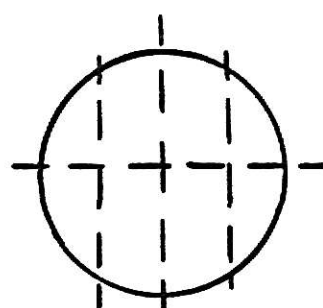
Divisions for Facial Features

where shading is important, shading in the practical drawing tends to obscure the meaning. If shading is employed at all, it should be done sparingly and kept very simple. The students were told this type of drawing lends itself quite well to simple illustrations, blackboard demonstrations involving mathematics and in making posters to advertise a school play or a student campaign for office. This writer felt it important the students know the pointers involved in this kind of drawing. The face has a most important role here as its expression sets the mood for the illustration or cartoon. In Fig. 7 the divisions of the circle clearly pinpoint the positions for the eyes, nose and mouth. Ears are omitted. Lines and circles make up the facial features. A few basic eyebrow and mouth lines can create a number of different expressions as evident in Fig. 8. The body is greatly simplified, as shown in Fig. 9. The human figure can be constructed with the aid of guide lines. Figure 10 shows just how simple the form is, indicating the four heights that are obtained by using the seven heads high and the very straight lines used to form the body. It was brought to the students attention that the figures have no necks, another means of simplifying the form. Some variations can be made as seen in Fig. 10. When a few details in the clothing are added as in Fig. 11, the character takes on more meaning. Though done in a simple manner, the message is clear. Everyone should be able to tell just what each figure represents. The figure can assume some action. In Fig. 12, he stands, squats, jumps, walks, lopes, and finally, breaks into a run. The practical drawing can be done with the aid of a ruler, but students were encouraged to draw the figures freehand. Figure 13 finds some freehand drawings which show the figures doing various things. During this fourth lesson, the students drew the face, the expressions, and several procedures of drawing the body. They preferred this type of drawing to the realistic type.

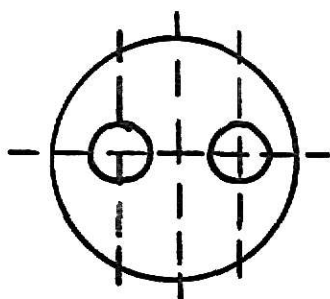
**DRAW THE
BASIC CIRCLE
EITHER
FREEHAND OR
TRACE AROUND
A FIFTY CENT
PIECE**



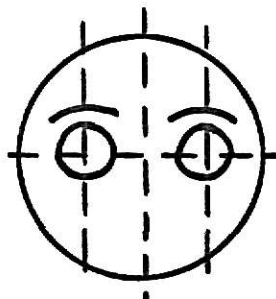
**DIVIDE THE
CIRCLE VERTICALLY
AND HORIZONTALLY**



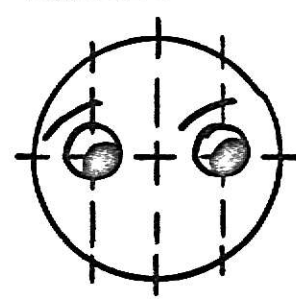
**SUB-DIVIDE THE
VERTICAL HALVES
WITH VERTICAL
LINES.**



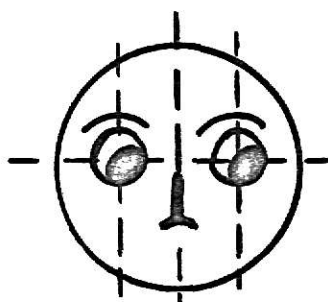
**LOCATE THE EYES
AT INTERSECTIONS.**



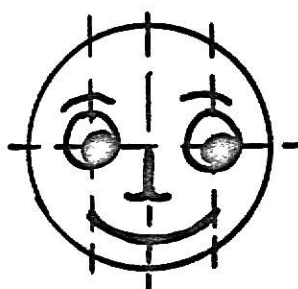
**THE EYEBROWS
TAKE MANY FORMS.
THIS IS THE
SIMPLEST.**



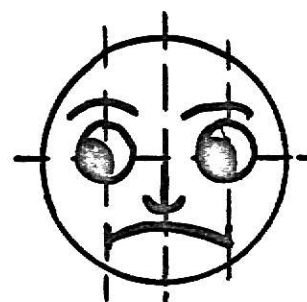
**THE PUPILS OF
THE EYES INDICATE
THE DIRECTION THE
"HEAD" IS LOOKING**



**THE NOSE MAY
TAKE MANY FORMS.
THE INVERTED "T"
IS THE EASIEST.**



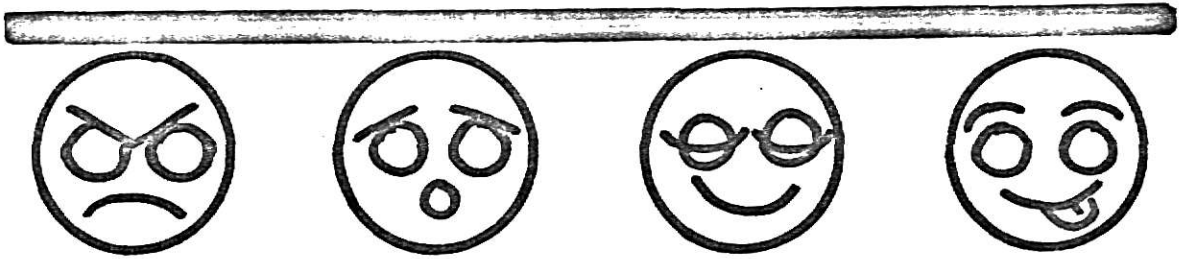
**LIKE THE
EYEBROWS, THE
MOUTH MAY HAVE
MANY FORMS.**



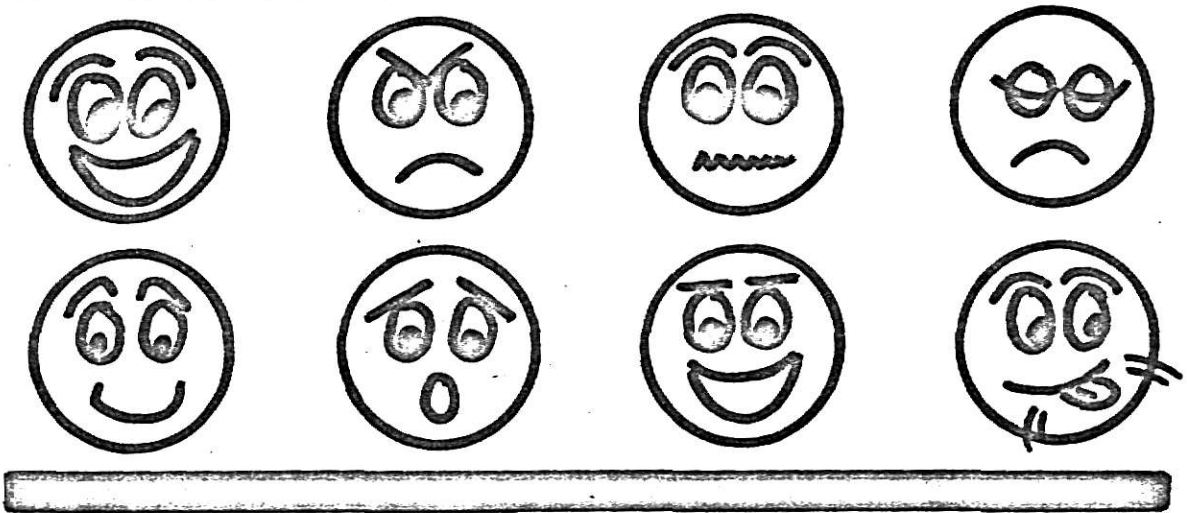
**EXPRESSION
SHOWS GLOOM
OR SADNESS.**

Figure 7

Placement Aids for Faces
in Practical Drawing



THESE FIGURES REPRESENT A MATRIX OF EXPRESSIONS. NOTE THE FOUR DIFFERENT EYEBROW AND MOUTH POSITIONS. ALL THESE EXPRESSIONS ARE MEANINGFUL AS MANY FACES CAN BE MADE FROM THEM.



THE ABOVE FACES ARE ROUND BECAUSE A QUARTER WAS USED TO ESTABLISH THE OUTLINE.

BELOW, QUICK FACES ARE DRAWN FREEHAND. THE FACE CAN BECOME ELONGATED OR EVEN FLATTENED.

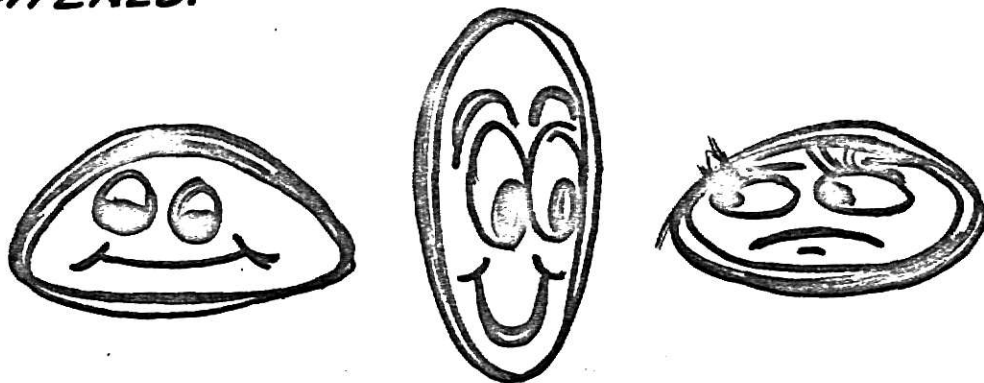
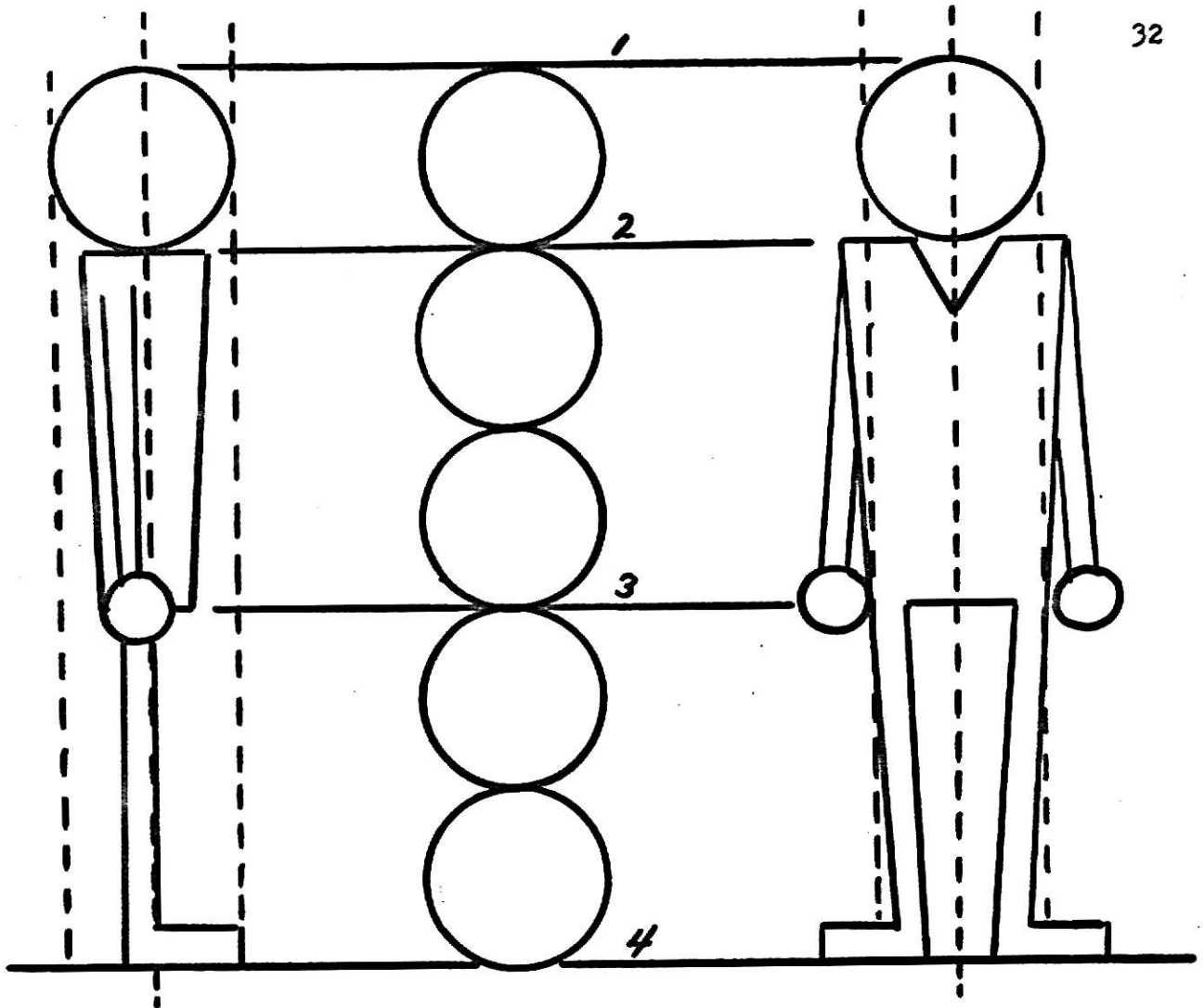


Figure 8

Expressions Used in
Practical Drawing



THE HUMAN FIGURE CAN BE CONSTRUCTED WITH THE AID OF GUIDE LINES. THE HEIGHT SUGGESTED IS 5 HEADS TALL. THE VERTICAL LINE OR "BACKBONE" IS THE BEGINNING AND MOST IMPORTANT ASPECT OF ANY FIGURE.

SEE ILLUSTRATION: LINE 1 - TOP OF HEAD, LINE 2 - SHOULDER LINE, LINE 3 - BOTTOM OF TORSO, LINE 4 - SOLES OF FEET. TO BE ABLE TO DRAW A FIGURE IN THIS "STATIC" POSITION IS NECESSARY BEFORE DRAWING THE FIGURE IN "ACTION" POSES.

Figure 9

Basic Figure Used in
Practical Drawing

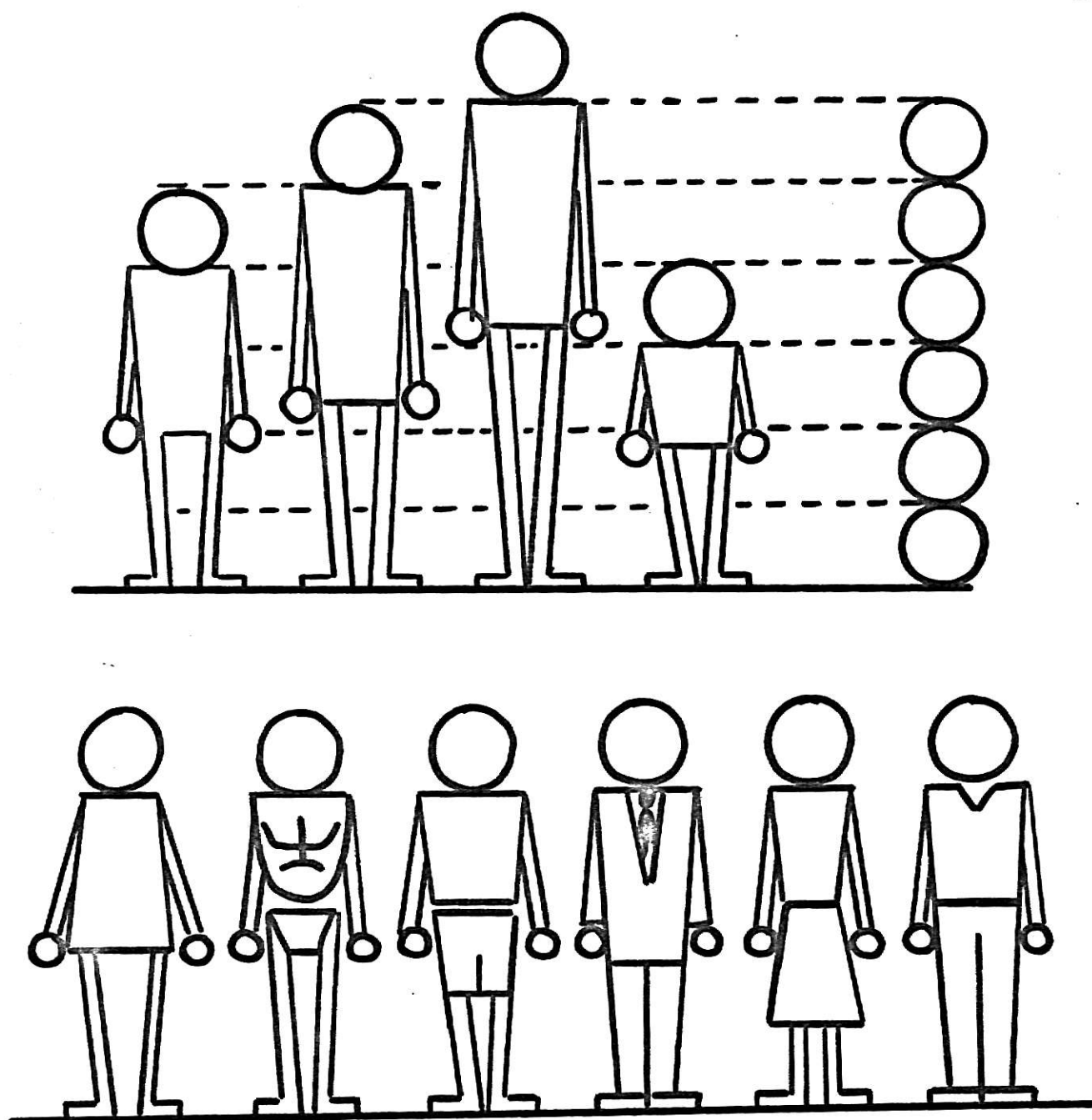


Figure 10

Usage of Head Sizes in Determining
Height of Body and Variations
of Figure Illustrations

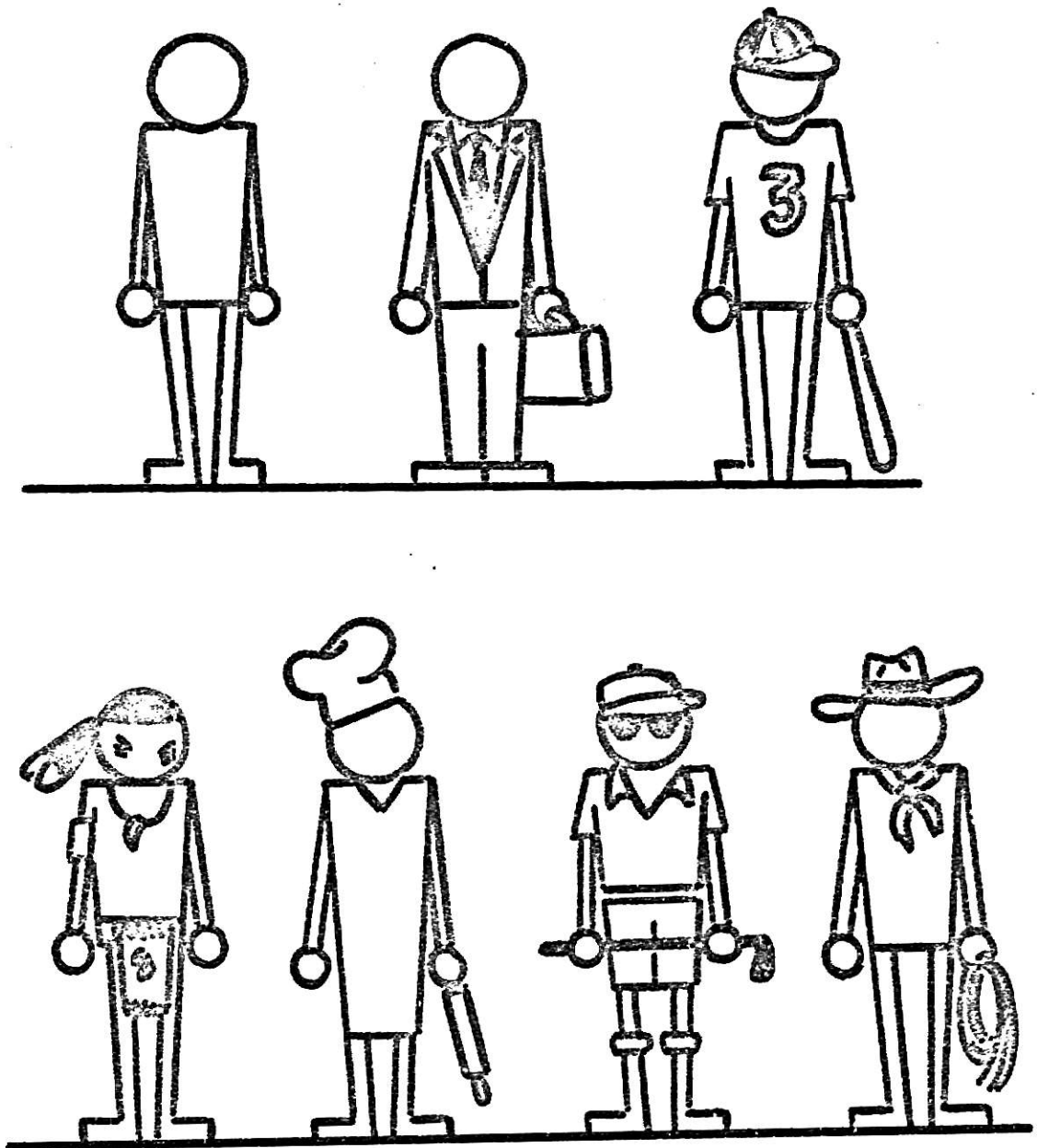


Figure 11

Clothing Does Make a
Difference

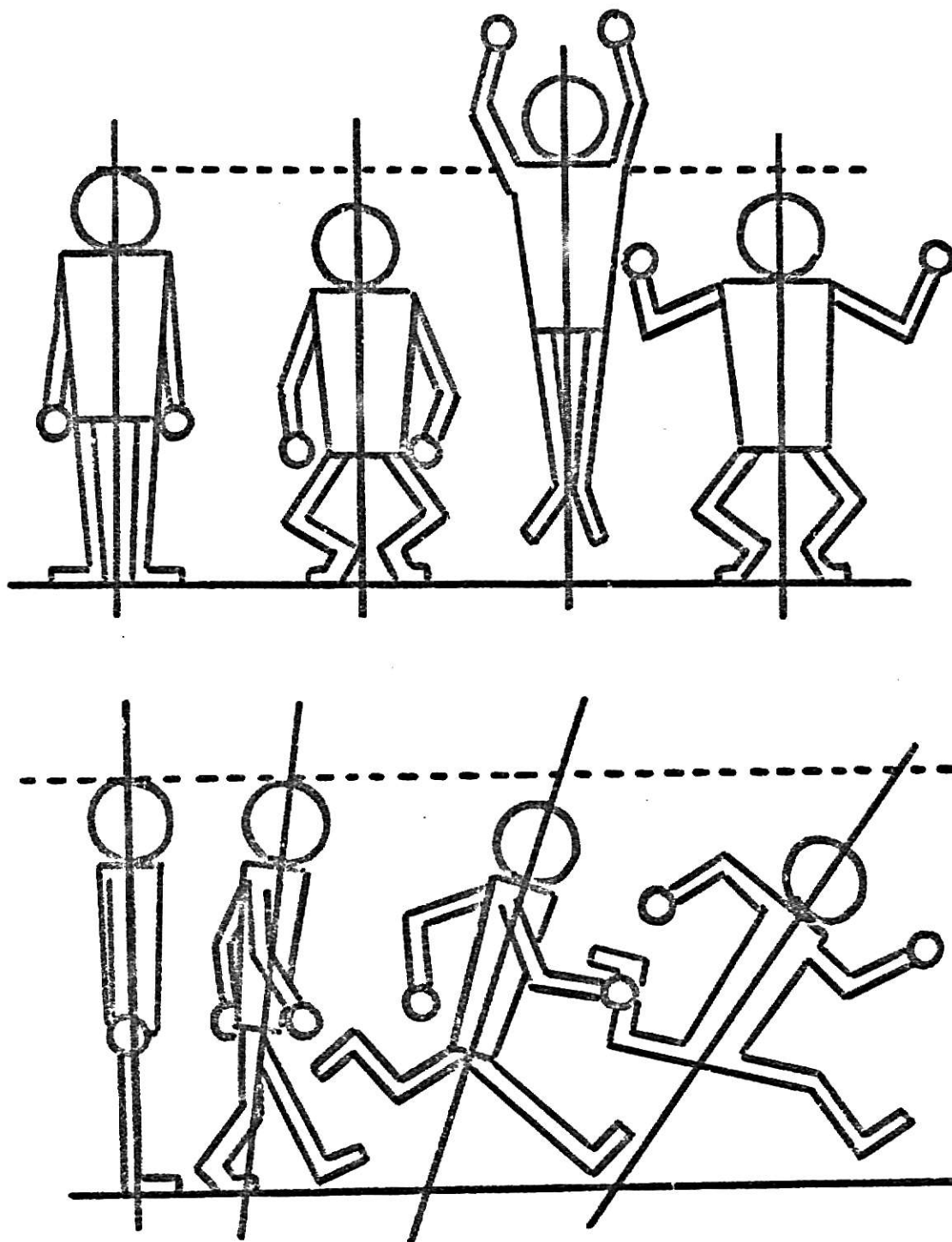


Figure 12

Action Drawings are
Possible

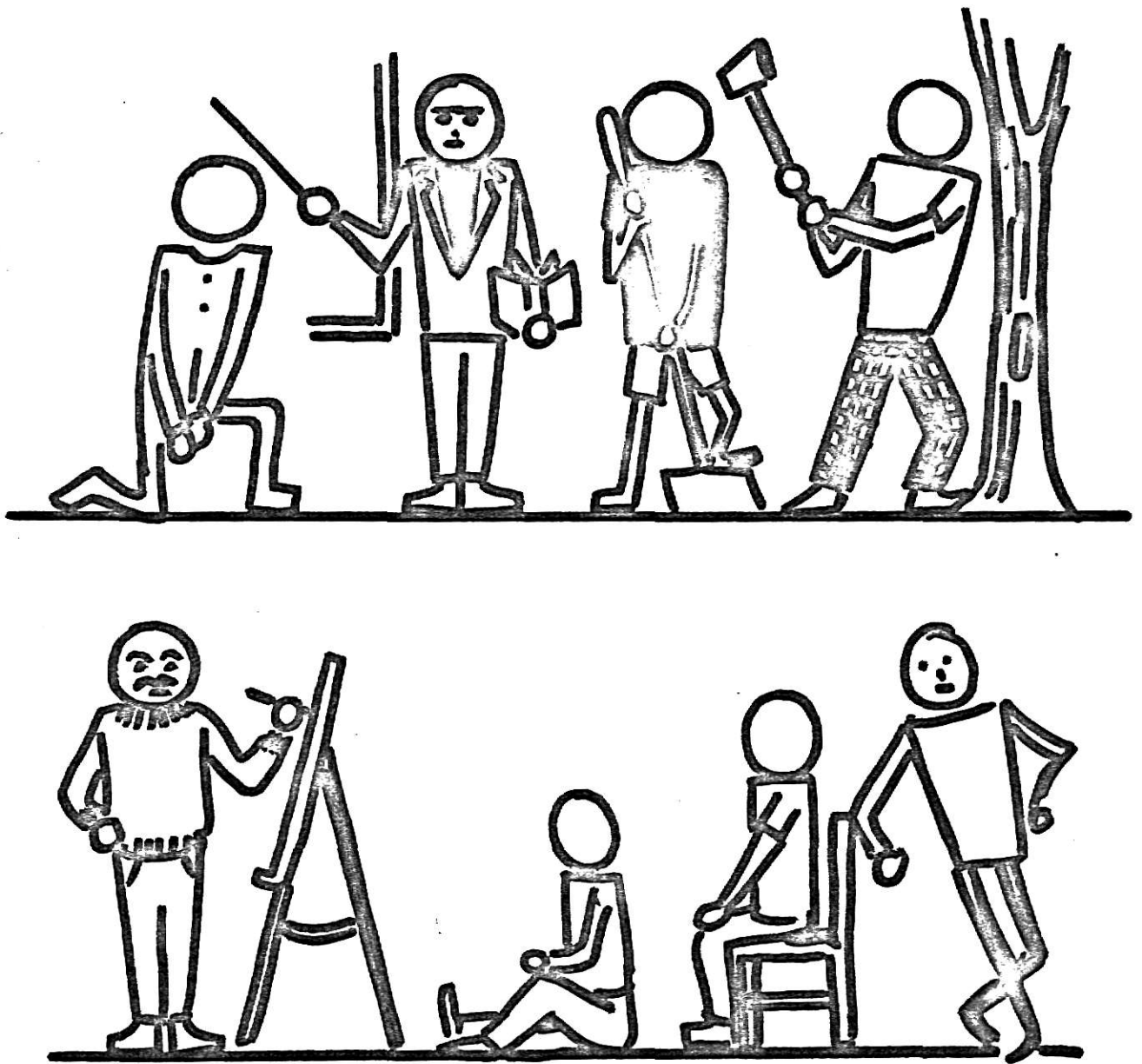


Figure 13

Freehand Drawing, Without the Use of a Ruler,
Clearly Define Figure

Lesson five - still life. Two still life compositions were set up where the students could see both equally well. The beauty of a still life composition is that once it has been set up, it stays there. It does not tire or shift positions the slightest bit as a model would. The inanimate objects used in the compositions were a vase, a basket of fruit, a compote with grapes, a pitcher, and candle. The group was urged to study the composition very carefully before beginning their drawing. The important factor was to view each object in the composition in relationship to the other objects. Form was discussed in length. They were shown through demonstration the four basic shapes concerned in all drawing: the cube, the sphere, the cylinder and the cone. Discussion involved here consisted of taking objects and breaking them down visually to a basic form. Knowledge of the forms is a tremendous asset in constructing all drawing, some of which are depicted in Fig. 14. From the sphere, a globe and half an apple are drawn. From the cylinder, a carrying case and a drum evolve. The cube becomes a box of rice and a television set. An ice cream cone and a party hat are illustrations of the cone. The shading becomes necessary to indicate the sides on a cube and the roundness of the sphere, cylinder and the cone. This is aptly shown in Fig. 14 and Fig. 15. Shading indicates a light source striking the objects. The part closest to and facing the light source becomes the lightest portion of the object, while the side not directly in contact becomes darker. This must be shown by shading. Students practiced drawing a few grapes, an apple or a single larger object found in the still life compositions before them. The objects in both set compositions were round in form. The light source was somewhat difficult to see as the light coming through the windows tended to fuse with the indirect lighting in the room. However, a lighter side to the objects was discernible. On the practice

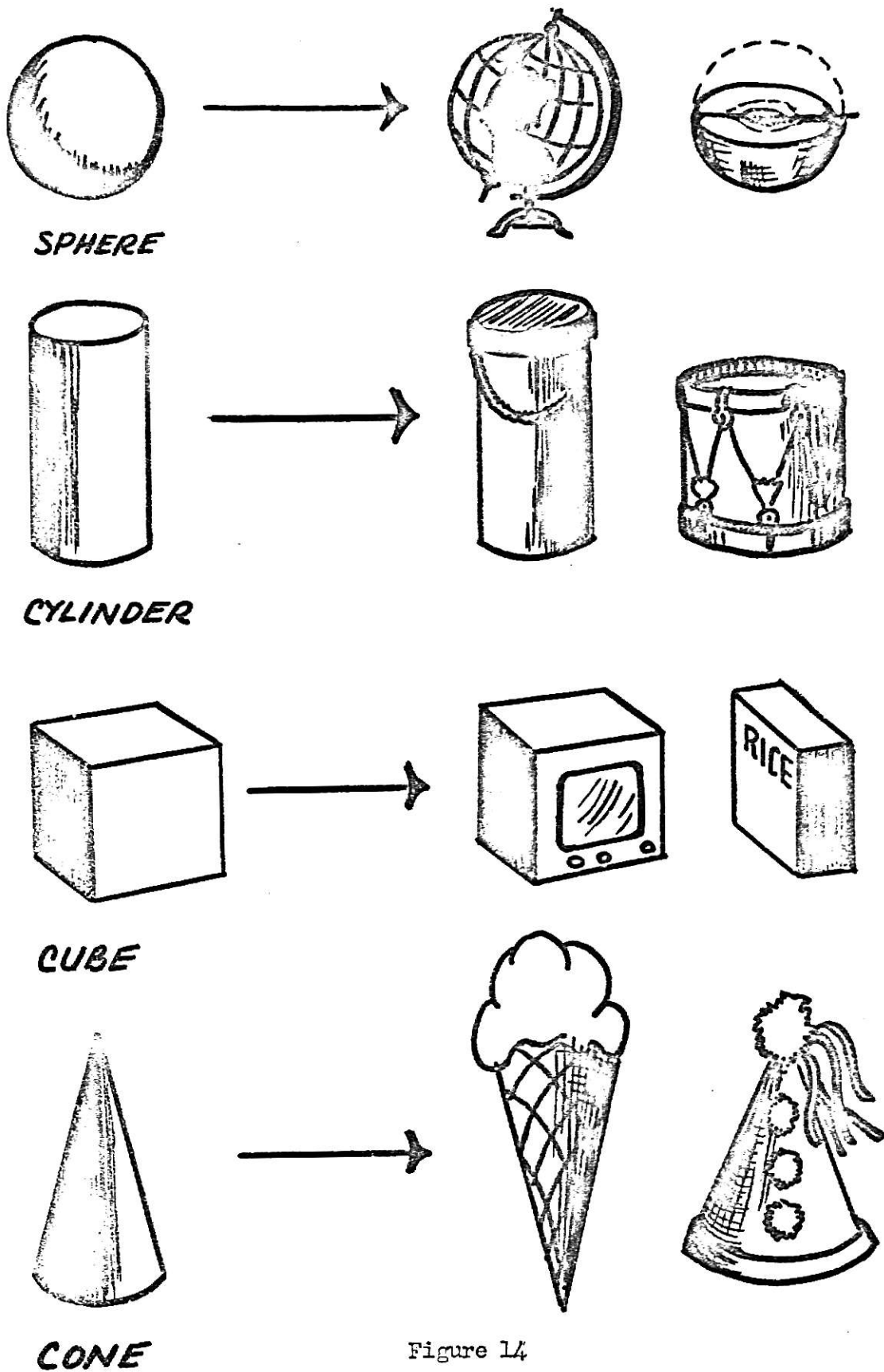
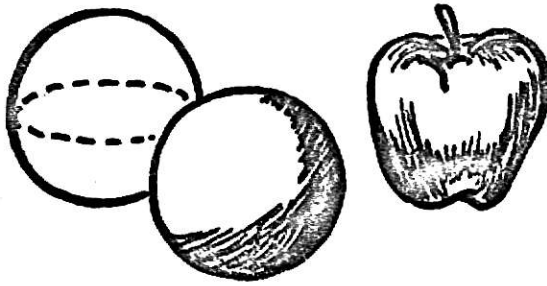
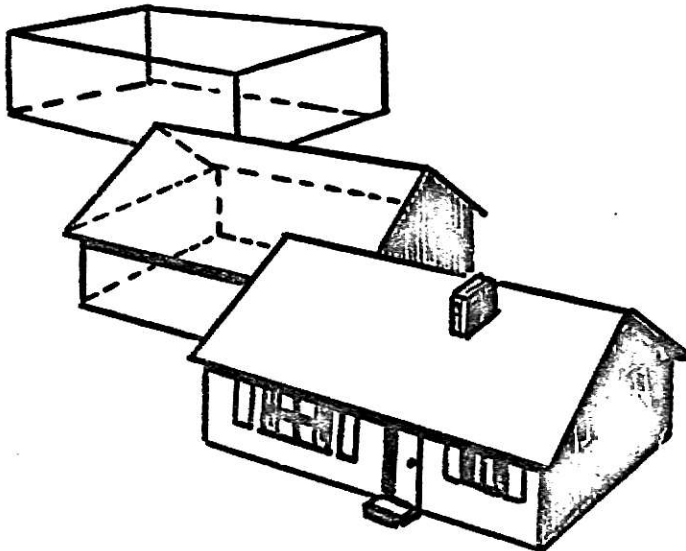


Figure 14

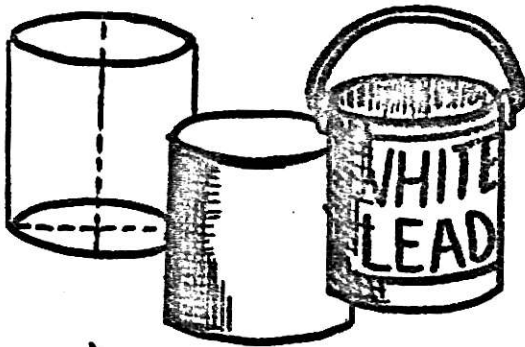
The Four Basic Shapes and What
Can Evolve from Them



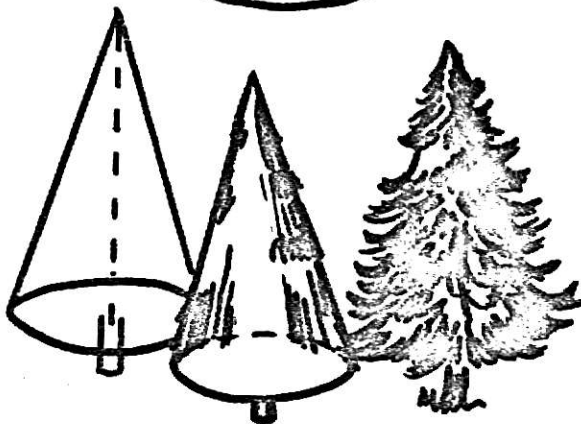
DRAW A SIMPLE SPHERE. THE LINE AROUND THE CENTER SHOWS DEPTH. ADD SHADING TO SUGGEST LIGHT FROM THE LEFT. FINALLY, MODIFY THE BASIC SPHERE FORM SLIGHTLY TO MAKE IT LOOK LIKE AN APPLE.



FIRST, DRAW THE MAIN LINES, WHICH REPRESENT THE FLOOR AND WALL PLANES OF THE HOUSE. ADD THE ROOF PART, A SECTION OF A CUBE TURNED AT AN ANGLE. AREAS OF SHADE HELP EMPHASIZE THE FORM. THE DETAILS COME LAST. DRAW THEM IN ONLY AFTER YOU HAVE CONSTRUCTED THE BASIC FORM AND PUT IN THE SHADING.



THE CAN OF PAINT IS BASICALLY A CYLINDER. START BY DRAWING ONE. NEXT, CREATE THE EFFECT OF LIGHT COMING FROM THE RIGHT BY ADDING SHADOW AS SHOWN. THE HANDLE AND THE LABEL WITH LETTERING IS ADDED LAST.



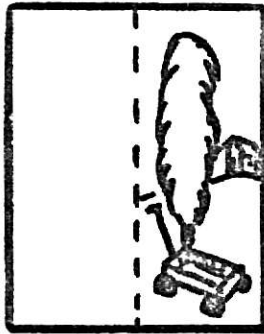
THE BASIC FORM OF THE PINE TREE IS A CONE. DRAW A CENTER LINE TO LOCATE THE TRUNK. USE SHADING TO MAKE THE FORM LOOK MORE SOLID. FINALLY, DRAW IN THE IRREGULAR BRANCHES, WHICH ADD REALISM. DON'T DESTROY THE BASIC CONE FORM OF THE TREE.

Figure 15

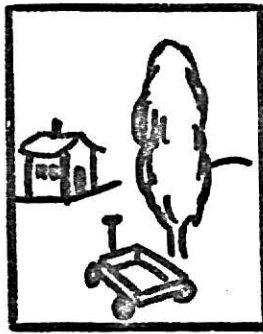
papers, students drew several objects and added shading with either curved lines indicating direction and roundness or pencil smudges to give a tonal effect. After experimenting with shading, they began drawing one of the compositions. Relationships were again stressed. How near was one object to the other, and how high on the vase does the compote go, were lessons in observation. They had to indicate with light guide lines where each object was located. Much erasing took place, but once they were satisfied, they tore into the completion of their drawings. Such things as bowls and vases are symmetrical. Students had trouble drawing one side of a vase to look like the other side, but came near enough for their first efforts.

Lesson six - still life. This lesson was a continuation of lesson five. The students, after having practiced drawing a still life composition, were ready to draw their still life as a semi-finished drawing. White drawing paper was used, and may have caused a tighter drawing procedure in some. The idea that this drawing was the one to be rated could have scared a few, because some did a better job on their practice manila cream paper. During this time, composition was discussed. Composing a still life, or composing a picture of any kind can be a disaster if someone with an untrained eye accepts the composition because it looks good to him. It may not look right to others. A few rules need to be followed as illustrated in Fig. 16. These rights and wrongs were reviewed and demonstrated. Those students finishing their drawings early were taken to another part of the room and given objects to arrange in a pleasing composition. This was to let them explore the do's and don'ts of composition.

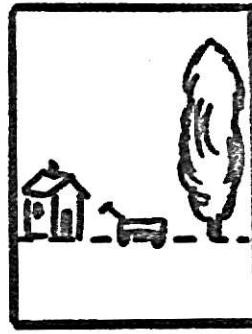
Lesson seven - one point perspective. The fundamental law of perspective rests on the simple fact that the farther away the forms are from the



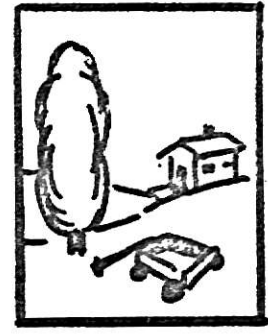
**DON'T SPLIT
THE PICTURE
IN HALF**



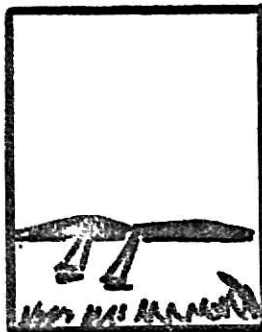
**USE THE
WHOLE
PICTURE AREA**



**DON'T LINE
THINGS IN
A ROW**



**VARY THE
PLACEMENT**



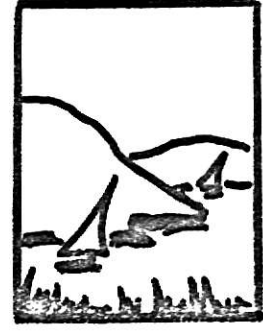
**DON'T CROWD
THE BOTTOM**



**USE UPPER
HALF TOO**



**DON'T CENTER
EVERYTHING**



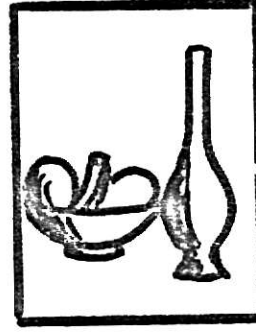
**MOVE THINGS
TO THE SIDE**



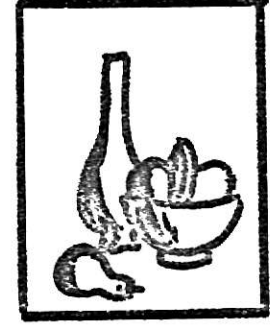
**DON'T LEAVE A
HOLE IN THE
CENTER**



**MAKE GOOD
USE OF
YOUR SPACE**



**DON'T LET
OBJECTS
JUST TOUCH**



**OVERLAP THE
OBJECTS FOR
BETTER BALANCE**

Figure 16

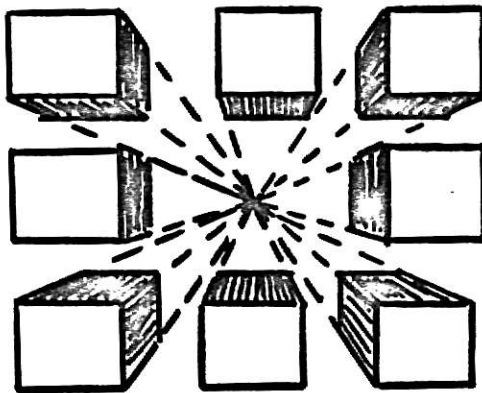
Illustrated Tips on Composition

spectator, the smaller they appear. The students know the size of a car, so it was mentioned that when a car passes them on the highway, the farther away the car gets, the smaller it looks. The sides of this same highway seem to get closer together as they go into the distance. They know that the sides of the road remain parallel to each other, so the illusion discussed is merely an illusion of depth. Carrying this to a logical conclusion, it is easy to see that if an object is moved away from the eye until it is nothing but a speck on the horizon, the lines that define the object converge at a distant point. This is called the vanishing point. These one or two vanishing points are located on the horizon line, or eye-level line. The horizon line is that imaginary line where the sky seems to meet the ground. This line remains constant with the level of the eye. The students, by looking out the windows, could see the horizon line. To illustrate the fact that this line is the same as the eye-level, the students were asked to look at the horizon line, then get up and sit back down again. The horizon line moved with them, thus proving to them that the horizon line and the eye-level are the same. If the student is below the object, the horizon line will also be below the object. If the student is above the object, the horizon line will also be above it. The students were told if they could draw a cube from all angles, they had partially learned to draw buildings and furniture the perspective way. One point perspective, the simplest kind, can be applied when the student is squarely facing the frontal plane of an object. The side that is visible has parallel lines also, but because of the illusion of depth, these lines seem to be pulled to the vanishing point on the horizon. The vanishing point system is usually called linear perspective, but perhaps a better name would be alignment. The students were asked to draw a straight line across the paper, a horizontal line. On this line, a dot, the vanishing point, was placed.

Demonstrations at the blackboard illustrated the techniques for creating buildings, tables, cubes, telephone poles, trees and other items using one point perspective. Figure 17 just shows a few of the objects drawn. The group then went to work. They practiced drawing tables and buildings using the one vanishing point. The most difficult obstacle facing them was drawing windows on the side of the building that seemed to get smaller. This is shown in Fig. 18.

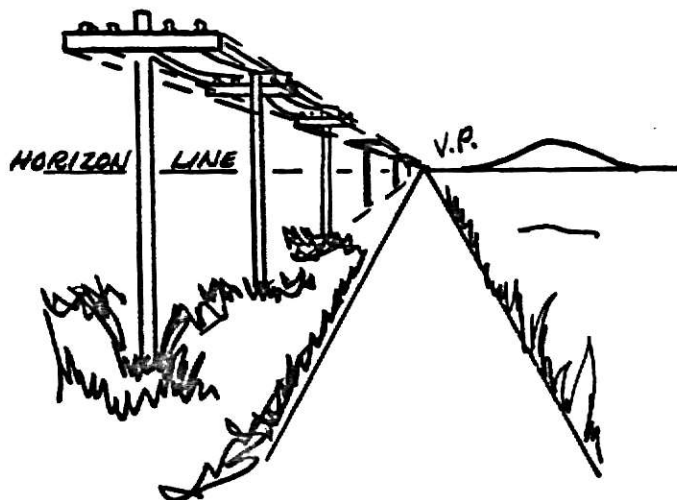
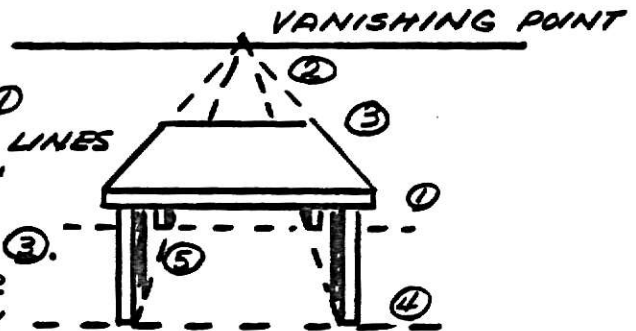
Lesson eight - two point perspective. The depth and illusion are the same, but as pointed out to the students, the corner of the object is closer to you. There is no frontal plane, so both sides seem to get smaller and vanish at two vanishing points instead of one. This procedure is depicted in Fig. 18. Students practiced drawing buildings, boxes, television sets and other objects using the two point perspective. Some discussion was held during the session, but mostly the students would ask questions pertaining to the particular object they were drawing. This instructor merely made the rounds to all the students to give them assistance where needed. They found this useful. However, they seemed to see and understand the logic behind the plan of perspective drawing and it was evident in most of their drawings.

Lesson nine - perspective drawing. A choice was permitted as to whether each student wanted to draw his semi-finished drawing using one point or two point perspective. Most chose the two point system. As in the two previous lessons, a ruler and an eraser could be used. White paper was not used this time, as they preferred to draw on the cream manila. They were told to be thinking of the type of building or buildings they wanted to draw so they would not have to spend valuable class time trying to decide what to draw. At the beginning of the period, the illustrations featured in Fig. 19



THE CUBES DRAWN HERE ALL HAVE A FRONTAL VIEW. ONE FACE OF EACH CUBE IS PERPENDICULAR TO THE VIEWERS LINE OF SIGHT.

DRAW TABLE LINE ①
FIRST. DRAW DOTTED LINES ② FROM END OF EACH LINE TO V.P. DRAW BACK LINE OF TABLE ③. DRAW BASE LINE FOR TABLE LEGS ④. DRAW DOTTED LINES FROM TABLE LEGS TO V.P. MAKING GUIDE LINES FOR INSIDE PART OF FRONT LEGS AND FOR BACK LEGS OF TABLE.



GUIDE LINES DRAWN FROM THE NEAREST TELEPHONE POLE DETERMINE WHERE THE NEXT POLES WILL BE DRAWN. POLES GET CLOSER TOGETHER THE FARTHER AWAY THEY ARE.

IN ONE-POINT PERSPECTIVE, SIDES A, B, AND C ARE PARALLEL TO EACH OTHER. ALSO SIDES D, E, AND F ARE PARALLEL TO EACH OTHER.

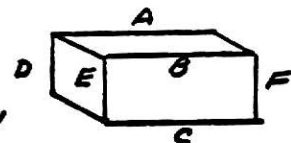
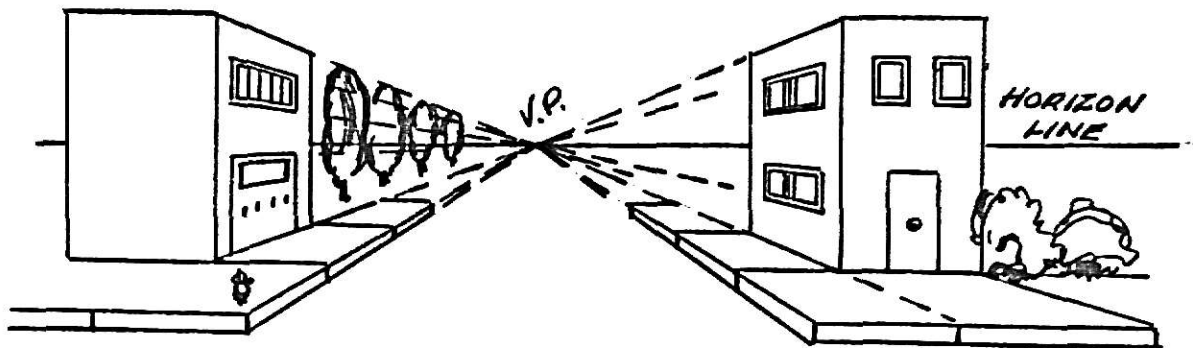


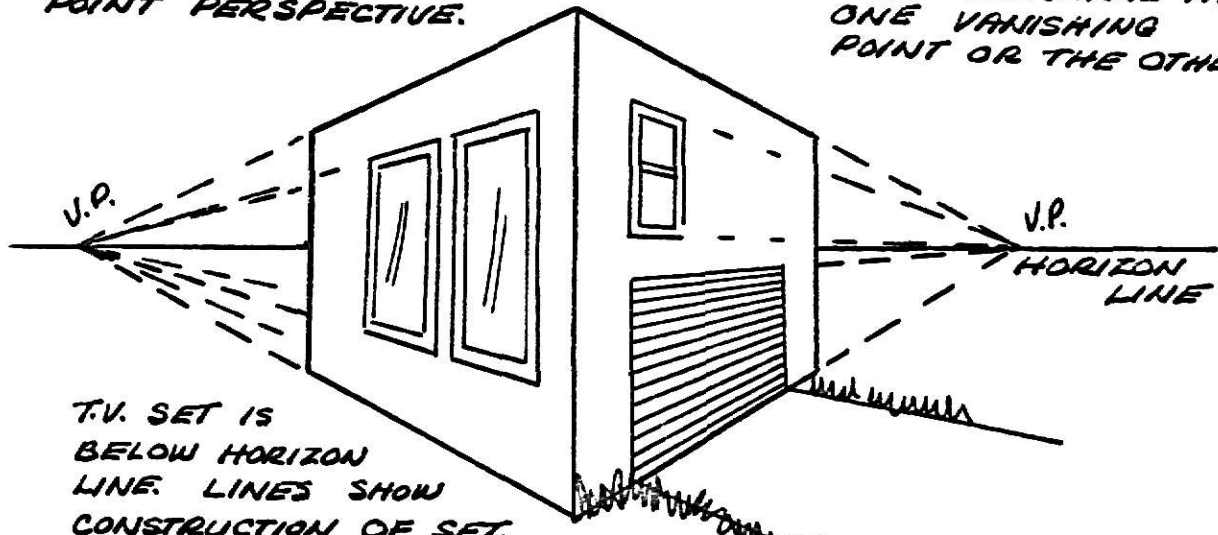
Figure 17

One Point Perspective; One Vanishing Point

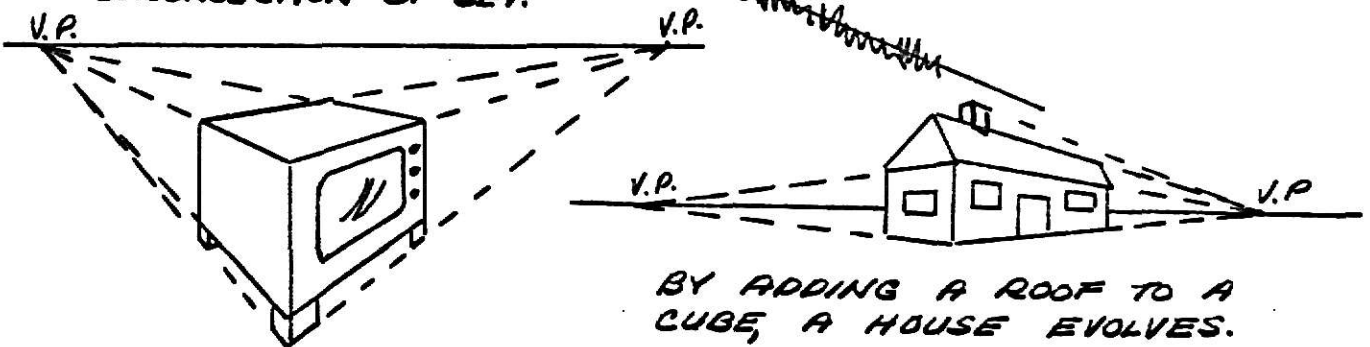


ALL PERPENDICULAR LINES
ARE PARALLEL TO EACH OTHER
IN BOTH ONE POINT AND TWO
POINT PERSPECTIVE.

ALL OTHER LINES
MUST CONVERGE AT
ONE VANISHING
POINT OR THE OTHER.



T.V. SET IS
BELOW HORIZON
LINE. LINES SHOW
CONSTRUCTION OF SET.



BY ADDING A ROOF TO A
CUBE, A HOUSE EVOLVES.

Figure 18

Both One Point and Two Point Perspective
With Guide Lines for
Windows and Doors

LEARN TO DRAW OBJECTS AT AN ANGLE,
INSTEAD OF STRAIGHT ACROSS.



THIS TAKES PRACTICE.

EXAMPLES SHOW THE DIFFERENCE
A LITTLE TRAINING TOGETHER WITH
PRACTICE CAN MAKE IN A DRAWING.

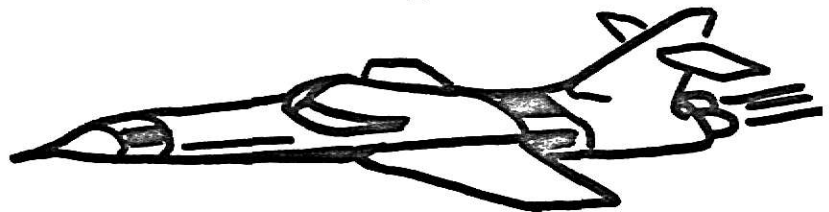
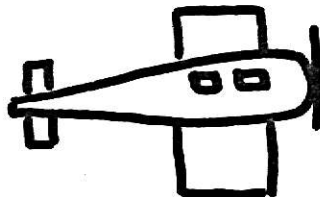
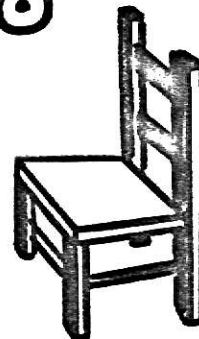
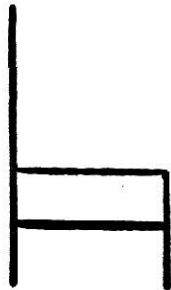
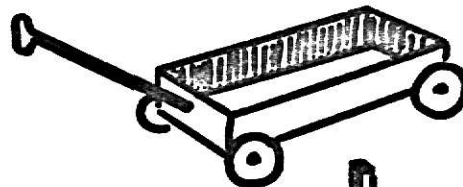
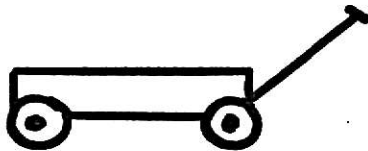
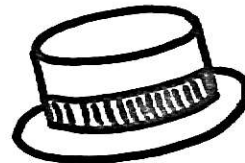
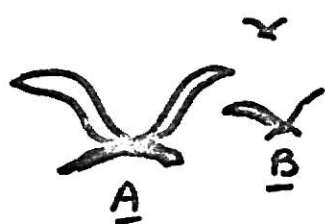


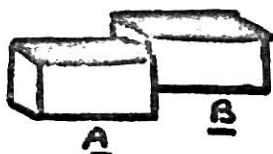
Figure 19

Reality Drawing in Contrast to
Practical Drawing

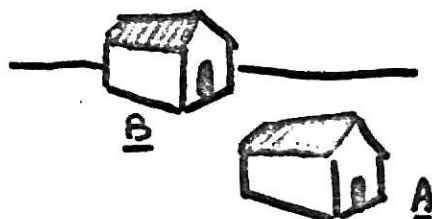
and Fig. 20 were relayed to the student. They had learned a little about drawing objects at an angle and would certainly learn more with every drawing they chose to make. Also since they were constructing a picture, basically a building drawn by perspective, some of the principles of drawing could be applied. They were used in the drawings of most of the student-artists. The students were informed that what they had learned was a good start. They were encouraged in any further drawings they might try later to attempt perspective without a ruler. It would give them more freedom, and making use of the hand-eye coordination theory, they could certainly do this.

SIZE:

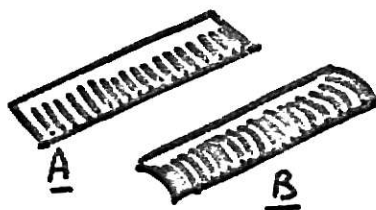
BIRD A SEEMS CLOSER TO YOU THAN BIRD B, BECAUSE BIRD A IS DRAWN LARGER THAN CORRESPONDING THINGS FARTHER AWAY.

OVERLAPPING:

BOX A SEEMS CLOSER TO YOU THAN BOX B. NEAR OBJECTS OFTEN OVERLAP OBJECTS FARTHER AWAY.

SURFACE:

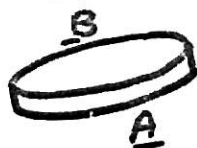
SHED A SEEMS CLOSER TO YOU THAN SHED B BECAUSE SHED A IS DRAWN ON THE SURFACE OF THE GROUND BUT NEAR THE BOTTOM OF THE PAGE.

SURFACE LINES:

SURFACE LINES ON A ARE STRAIGHT WHICH MAKE THE SURFACE SEEM FLAT. SURFACE LINES ON B ARE CURVED WHICH MAKE THE SURFACE SEEM ROUND.

SHADING:

POINT A ON THE BALL SEEMS CLOSER THAN POINT B. SHADING IS USED TO GIVE AND CONTROL VOLUME. FLAT FIGURES, SUCH AS A CIRCLE, CAN BE GIVEN THE APPEARANCE OF A BALL, OR SPHERE, BY USE OF SHADING.

FORESHORTENING:

A SEEMS CLOSER TO YOU THAN B BECAUSE THE CIRCLE HAS BEEN DISTORTED OR FORESHORTENED.

Figure 20

CHAPTER III

ANALYSIS AND SUMMARY

Student work

Student work was mounted on 6-ply 22 x 28 poster boards, using both practice and semi-finished drawings to indicate the progression each student made. Since three phases of drawing were taught, three poster boards were used to represent each student's work, one for each phase. Mounted on the respective display boards were both practical and ten minute realistic drawings, as well as a few roughly drawn stick figures; sketches of single pieces of fruit showing the practice of shading light and dark areas, along with the semi-finished still life drawings; and practice drawings of telephone poles, tables, books, television sets, and cubes indicating various aspects of perspective together with drawings in their semi-finished state. The student number appeared on at least one of the drawings on each board for the purpose of identifying the student with the rating. A total of 120 poster boards representing 40 students were then judged.

The judges

It was essential that these drawings be rated in some manner to determine whether each student had learned to draw. Six individuals were selected to serve as judges; three are art instructors having considerable art background, and three are persons having no background in art and claim to know nothing about drawing. The judges were an elementary art teacher, a secondary art teacher, a university art instructor who also serves as the head of the art department, two housewives, and an assistant professor of education. Three were men, and three were women. The judges are identified by letters of

the alphabet, and will be referred to as Judges A, B, C, D, E, and F. The letter names are not in order with the listing of the occupations. However, the letters A, B, and C represent the judges with the art background; and the letters D, E, and F represent the judges with no art background.

The rating procedure. Affixed to each poster board was a rating slip with brief instructions for the rating procedure. It simply asked the judge to rate each student's ability, choosing one of the numbers one through nine to represent his assessment of the student's work. The number one indicated the student demonstrated very little skill at all. The number five was used to rate the student who demonstrated about the amount of skill one would expect in the average adult with no training in drawing. The number nine was used to rate the student who displayed an unusual skill in drawing. Other numbers were used to represent intermediate points on the scale. At the bottom of the slip were the nine numbers, and each judge was asked to circle the number he felt best represented the student's ability. He was also instructed to either sign or initial the slip. The student number and the number of forty-five minute lessons involved in that phase of the problem also appeared on the slip. Each poster board was given just one rating for all the drawings on that board. When a judge finished his ratings, the slips were removed and new slips attached for the next judge. When all six judges had completed their ratings, a tabulation was made. This tabulation can be seen in Table IV.

Analysis of the ratings

In order to say a student had learned to draw, he would have to have an average rating of 5 or above on his drawings. Table IV indicates how each judge rated each student's three types of drawings. It also shows the total score for each problem taught and a grand total score for all three. To

TABLE IV

TABULATION OF RATINGS BY THE JUDGES

STUDENT	FIGURE							TOTAL	STILL LIFE							TOTAL	PERSPECTIVE							TOTAL	GRAND TOTAL	90 = Pass
	JUDGES						JUDGES						JUDGES													
	A	B	C	D	E	F	A		B	C	D	E	F	A	B		C	D	E	F						
1	7	5	4	5	5	8	34	5	6	4	5	8	9	37	9	9	7	6	8	7	46	117				
2	6	5	3	6	6	9	35	7	7	5	5	8	8	40	9	7	4	7	8	7	42	117				
3	6	6	4	5	8	9	38	7	8	6	8	9	9	47	7	9	7	9	9	8	49	134				
4	6	5	3	5	8	9	36	5	9	4	5	9	8	40	6	6	2	4	7	8	33	109				
5	6	5	3	4	7	9	34	6	8	4	8	8	8	42	6	8	5	5	9	7	40	116				
6	6	4	4	4	6	7	31	2	5	1	3	6	7	24	3	7	4	7	7	8	36	91				
7	7	6	3	5	7	7	35	8	9	6	9	8	8	48	6	9	8	7	8	9	47	130				
8	7	4	3	4	6	7	31	7	8	5	6	8	9	43	9	6	4	6	8	9	42	116				
9	8	6	5	7	7	7	40	5	7	5	7	9	9	42	6	8	4	8	6	8	40	122				
10	6	5	1	4	7	7	30	4	8	4	6	8	9	39	5	9	5	8	8	9	44	113				
11	7	5	3	4	6	7	32	5	6	3	5	7	8	34	5	7	4	4	6	9	35	101				
12	6	3	3	6	5	8	31	5	9	5	6	9	8	42	5	7	4	5	7	8	36	109				
13	4	1	3	2	6	8	24	2	5	5	5	7	7	31	3	8	5	4	8	8	36	91				
14	7	7	4	5	7	9	39	5	6	4	4	7	8	34	9	7	6	8	9	8	47	120				
15	4	5	3	5	6	7	30	3	6	1	4	8	8	30	7	6	7	6	8	8	42	102				
16	5	4	5	5	5	8	32	5	8	4	5	8	8	38	5	7	4	8	7	6	37	107				
17	5	6	5	6	8	9	39	4	7	4	5	8	9	37	7	8	5	5	7	7	39	115				
18	7	6	4	4	6	7	34	7	8	5	7	8	9	44	5	9	5	6	6	8	39	117				
19	5	4	2	3	6	8	28	3	4	4	3	7	8	29	5	6	4	6	7	7	35	92				
20	6	6	4	4	5	6	31	8	7	6	7	9	9	46	4	7	7	5	8	6	37	114				
21	7	6	5	6	5	7	36	5	6	3	4	7	7	32	8	8	5	4	7	7	39	107				
22	9	9	6	6	8	9	47	6	8	6	7	8	8	43	8	6	5	7	8	7	41	131				
23	4	5	4	2	6	8	29	4	6	4	4	7	9	34	4	8	5	5	8	8	38	101				
24	4	8	4	2	7	7	32	6	8	5	7	8	8	42	5	6	5	6	7	7	36	110				
25	5	7	5	3	6	9	35	5	9	5	9	9	8	45	4	6	4	7	8	7	36	116				
26	5	9	7	7	9	9	46	7	8	5	6	9	8	43	4	9	5	7	8	8	41	130				
27	8	9	6	6	7	9	45	6	8	5	6	8	8	41	8	8	4	6	8	9	43	129				
28	3	3	4	4	6	7	27	5	7	4	5	7	7	35	8	7	5	5	6	8	39	101				
29	9	6	5	4	7	8	39	4	8	4	6	8	9	39	6	8	5	5	8	9	41	119				
30	4	6	5	2	6	7	30	3	4	1	3	4	6	21	5	7	4	6	8	9	39	90				
31	3	4	3	4	6	8	28	5	6	5	6	7	7	36	6	6	3	3	7	8	33	97				
32	9	9	7	6	9	9	49	9	9	6	5	6	9	44	8	7	5	4	8	8	40	133				
33	7	8	5	6	6	9	41	5	9	5	8	6	9	42	8	9	4	9	9	9	48	131				
34	3	1	1	2	4	6	17	3	4	2	4	5	7	25	5	6	2	3	7	9	32	74				
35	8	9	6	8	9	8	48	7	8	7	5	9	7	43	8	6	6	8	7	9	44	135				
36	6	7	4	5	7	7	36	4	6	4	5	6	7	32	9	7	4	5	8	7	40	108				
37	6	6	3	5	6	7	33	7	8	5	4	7	8	39	5	6	5	3	6	8	33	105				
38	4	1	1	2	4	6	18	5	4	3	4	6	7	29	4	6	4	2	8	9	33	80				
39	8	8	7	5	8	9	45	7	9	6	4	9	9	44	8	9	7	8	9	9	50	139				
40	6	8	3	5	6	9	37	8	7	6	6	6	5	38	3	7	6	7	9	9	41	116				

determine if a particular student learned how to draw the human figure, the total in that section is checked to see if his score is 30 or more. This writer was interested in the grand total score, as all three phases of drawing were inclusive in determining whether a student learned to draw. The score would have to be 90 or above. In checking the grand total column, it was found that students thirty-four and thirty-eight have scores less than 90, and therefore, statistically did not learn to draw. There may be several reasons for their failure in drawing. Table III, p. 17, gives the IQ score for student thirty-four as being 90, and the IQ score for student thirty-eight as being 95. This author felt other circumstances were more the contributing factors. Student thirty-four was hesitant to draw, and getting him to put that first mark on the paper was a challenge. During the last few minutes of the second session, he began to draw, but not before expressing his fear of not doing it right. He did not want his peer group to see what he had drawn. Student thirty-eight took the lessons against his better judgment. He was there only because his parents had given permission, and because the high school principal had asked him to participate as the group was short of boys. However, his questionnaire revealed he did not want to take the lessons, and he made it known.

The ratings tabulated in Table IV show how differently the judges viewed the drawings. A case in point is student thirty-three. His perspective drawings received four 9 ratings, one 8 rating, and one 4 rating. These indicate that five judges believed he displayed an unusual amount of skill, while the sixth judge failed to give him even a passing score. Only two judges used the 1 rating; Judge B used it three times, Judge C made use of it six times. Seven students fell short of having a total of 30 points on the figure drawings, but five of them scored enough points in the other phases of

drawing to have a total score of 90 or above. Four students lacked 30 points on their still life drawings, but two had more than enough total points to make up the difference. All students did well on the perspective drawings. An interesting fact shows that Judge C rated all perspective drawings, with the exception of three, lower than the other judges. It must be remembered that Judge C is an art teacher and may well have been more critical of the drawings due to his profession.

A correlation matrix was instrumental in providing further information in analysis. It was selected as it is the most convenient form of reporting a large number of correlations for the same group. Information was programed into a computer. The print out sheet showed no significant correlation on such variables as sex, school, and answers to selected questions 2, 3, 4, and 10 on the questionnaire. Therefore sex was not a factor in the ability to learn to draw, nor did it make any difference which school the student attended. It seemed to make little difference whether students had any elementary art, drew at home, or even wanted to learn to draw. Of the five who did not want to draw, only one failed to pass the judges. Some relationships between IQ and performance was indicated, but not in all cases. The IQ scores ranged from 90 to 132. The judges were the other variables. The correlation matrix on these variables offered some interesting information. Tables V and VI were prepared to disclose these facts. In Table V, the judges have been placed into three categories: (1) all six judges, (2) judges with art background, and (3) judges without art background. This was done to reveal means of the sum of the judges' ratings, standard deviations, and the mean score. In the category of "all judges", the mean sum of scores for figure drawing is 34.525. The standard deviation is 7.201 which indicates a high variance of ratings among the judges. The mean score of 5.754 represents the average rating given

TABLE V

JUDGES PLACED IN THREE CATEGORIES SHOW MEANS OF SUM
OF SCORES, STANDARD DEVIATIONS AND MEAN SCORES

Judges	Type Drawing	Means Sum of Scores	Standard Deviations	Mean Score
All Judges	Figure	34.525	7.201	5.754
	Still Life	37.775	6.563	6.275
	Perspective	39.725	4.610	6.620
Mean rating score by all judges in category = 6.223				
Judges	Type Drawing	Means Sum of Scores	Standard Deviations	Mean Score
Judges With Art (A, B, and C)	Figure	15.625	4.603	5.208
	Still Life	16.750	4.194	5.583
	Perspective	18.275	2.932	6.091
Mean rating score by all judges in category = 5.627				
Judges	Type Drawing	Means Sum of Scores	Standard Deviations	Mean Score
Judges Without Art (D, E, and F)	Figure	18.900	3.048	6.300
	Still Life	21.025	2.945	7.008
	Perspective	21.450	2.428	7.150
Mean rating score by all judges in category = 6.817				

on all figure drawings. The number 6.223, found below perspective drawing, represents the mean score given all drawings by this group.

Table VI lists the mean of the sum of the three scores, standard deviations, and the mean score given by each judge. In checking the individual mean scores, Judge C of the art group and Judge D of the non-art group gave the lower ratings. Judge C offered no criterion of his ratings, but Judge D felt he misunderstood the rating slip. Instructions read, "The number five should be used to rate a student who demonstrates about the amount of skill you would expect in an average adult." He wondered if the average adult would be given the same instructions as the student, and therefore, creating a comparison between student and adult drawings. Judge D offered to rate the drawings again, and though the ratings may have been higher, this writer felt this was unnecessary. Standard deviations in Table V demonstrate the degree of variances in the ratings. The highest degree of difference can be found in the group "judges with art." Table VI shows the standard deviations for each judge. The degree of variance is more constant with Judge E and Judge F. This would tend to indicate that these two judges are better raters than the others. The mean score for each judge fairly well tells the story. Judge C obviously felt the students had not learned to draw, while Judge A and Judge D felt the students learned to draw, but not well. Judge B, Judge E, and Judge F determined the students learned to draw quite well. The mean score for all judges on all drawings is 6.2 which would indicate that all students learned to draw.

SUMMARY

The purpose of this study was to determine if every high school student, having had no previous art training in the high school and very little,

TABLE VI

MEANS OF THE SUM OF THE THREE SCORES, STANDARD
DEVIATIONS, AND MEAN SCORE OF EACH JUDGE

Judges	Mean of Three Scores	Standard Deviations	Mean Score Given
Judge A	17.425	3.999	5.808
Judge B	20.050	3.667	6.683
Judge C	13.175	3.185	4.391
Judge D	15.950	3.521	5.316
Judge E	21.625	2.277	7.208
Judge F	23.800	1.584	7.933

if any, in the grade school, could learn to draw with the aid of a few drawing lessons. The objective was (1) to find if students could learn to produce semi-finished drawings, and (2) to discourage the attitude that drawing requires artistic talent.

An examination of writings by various professional art people indicates the important contribution art has made to our cultures from the earliest times. Pictorial communication continues to enhance man's world and bring about better understanding. Art can touch every phase of human life and make it more comfortable. The authors concluded that art experiences are essential to the fullest development of all people at all levels of growth, and that such experiences should be encouraged. They also feel that anyone possessing eyes that can see and hands strong enough to hold a pencil could be taught to draw. For these reasons, the study was made.

A sample of forty subjects was selected from the student enrollment of the two area high schools, Hanover and Linn. The lessons were given in nine sessions of approximately forty-five minutes each. Three phases of drawing were taught: (1) figure, (2) still life, and (3) perspective. Drawing was approached not as a mysterious skill, but rather as a science. Without a plan, without some knowledge and understanding of underlying principles, progress is impossible. Almost every field of endeavor except art has a plan. Music, medicine, mathematics, engineering all have their foundation in some simple fundamentals that must be mastered according to plan before there can be any real progress in learning. Therefore, the drawing lessons were carried on with some logical procedure.

Six judges, three with art background and three without art background, rated the semi-finished drawings on a one-to-nine scale. The nine represented the highest possible rating. As predetermined, an average of 5 for all his

drawings would indicate the student had learned to draw. The results of the ratings determined that two students did not learn to draw.

A correlation matrix was programed and fed through a computer to establish correlations among variables. The results indicated there was no significant correlation on such variables as sex, IQ, school attended, or on answers to selected questions 2, 3, 4, and 10. It seemed to make little difference whether students had had any elementary school art, drew at home, or even wanted to learn to draw. Of the five who did not want to draw, only one failed to pass the judges. The information on the other variables, the judges, was in the form of means and standard deviations. The judges were grouped in three categories for purposes of analysis. These categories are: (1) all judges, (2) judges with art background, and (3) judges without art background. The computer determined the means of sums of scores, mean scores, and standard deviations for the three groups. It also provided the same information on each judge. The degree of variance in the rating procedure among the judges was significant. The judges without art background, as a whole, tended to rate the drawings higher. This would indicate the judges with art background were more critical in viewing the student work. However, one art teacher had a mean rating score for all drawings of 6.683.

Conclusions

"Is it possible to teach every high school student to draw even if he has no apparent artistic ability?" The experimental research was designed to answer this question. The tabulation of ratings by the judges on all drawings indicates two out of the forty students did not learn to draw. If this were the only criterion used, the answer to the question would be negative. The computer gave a mean score of 6.2 for all judges on all drawings, which is

well above the 5.0 needed. This, then concludes that every student did learn to draw, and the answer to the question would be positive. Though this was a small sample, it might well represent the whole population.

The computer print out showed in rating art work it is difficult to find any correlation. It seemed to be a rather personal thing, an individual taste as to whether the student learned to draw. The variance of ratings, even among the judges who are art teachers, revealed they looked for different things in the drawings. The reliability of the ratings is questionable. The use of a scale rating was objectionable to the art teachers as being grossly unfair to the student. This is true, but the ratings were the only decisive means of measurement available. Unlike mathematics, drawing is not exact and cannot be judged either right or wrong. If the judges had been familiar with the circumstances of the two students whose work they rated low, the judges might have agreed with this writer that the two students did, indeed, learn to draw. Perhaps the one student would have produced better work had he had more time, for some students learn at a slower pace than others. The second student's attitude may have kept him from drawing better regardless of how much time he was given.

The second objective, to discourage the attitude that drawing requires artistic talent, was not measured. However, students who had expressed the opinion they could not draw found that they could. Several indicated they would enroll in the high school art program the following year. Many expressed gratitude for the privilege of receiving the lessons. Parents have told of the interest their students now have in drawing, and some parents have expressed hope for a few drawing lessons for themselves. During the course of the lessons many adults, having learned of the research, indicated they felt the objective could not be accomplished. These same adults, in seeing the

results, are now wondering if maybe they, too, could learn to draw. The rewarding part is that students who felt they could not learn to draw are doing just that, and by involving themselves in drawing, their lives may become more meaningful.

Suggestions

Should further research be attempted, the writer offers a few suggestions. It might be to the advantage of the investigator to give a pretest to the sample. The students could try to draw a person, a bowl of fruit, and a building. These drawings could be compared later with the post test, drawings done following the lessons. This comparison would enable the judges to determine how much the student learned. It is also suggested that more time be allowed for the lessons. The nine 45-minute lessons were inadequate to teach the three phases well. Short cuts in teaching could possibly be eliminated with more lessons. The research paper, or at least the section on the drawing lessons, should be read by all judges before they rate any drawings. This would familiarize them with the lessons, what the investigator wanted to do, and afford them some understanding of the problems involved.

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APPENDICES

APPENDIX A

Unified School District No. 223
Barnes, Kansas 66933

Dear Parent,

From time to time students at the various colleges ask our schools to participate in activity designed to gather information, try new practices, or verify research. The attached questionnaire is no exception.

Marilyn Nease, graduate student in art education at Kansas State University, has asked that our schools cooperate with her in gaining information for her research paper. As the main topic of her paper she asks, "Can every high school student be taught to draw even if he has no apparent artistic ability?" This is a question our schools would like answered.

Therefore, we ask that you the parent of the student cooperate in completing the enclosed questionnaire, and to permit your student to participate in the art experiment. Very little effort will be required of each.

Sincerely,

M. Dale Carlson
Superintendent USD No. 223

APPENDIX B

Dear Parents,

This questionnaire is being sent home for you to read, fill out, sign, and send back with your student to the school office. This of course is voluntary, but it is my hope you will complete the questionnaire.

As an art teacher, I have long felt that every student even if he has no apparent artistic ability can be taught to draw. After the mechanics of drawing are taught — then the creative ability takes over. I do not pretend to make artists of every student, but to show that they can learn to draw.

Since a masters report is one of the requirements for a Masters Degree, I want to test my theory, and discover whether every student can be taught to draw. My report will be written based on the findings of this experiment. I will select at random from the returned questionnaires — 10 boys and 10 girls from the Hanover High School and 10 boys and 10 girls from the Linn High School. These 40 students will be instructed in three phases of drawing; perspective, figure, and still life. They will be given no less than three and no more than nine lessons. No outside work will be required, and all materials will be furnished.

This questionnaire should be returned to the school office no later than March 26, 1970. I want to thank you for your time in reading the questionnaire, and a special thank you to those of you who return it completed.

Marilyn M. Nease

APPENDIX C

Questionnaire

Answer the first question by filling in the blank.

1. My high school student attended elementary school at
-

Answer all other questions by placing a circle around either YES or NO.

2. The elementary school employed an art teacher. YES NO
3. If the school had no art teacher, was there much art instruction by the elementary teachers? YES NO
4. Does your student ever draw pictures at home, other than for a classroom assignment? YES NO
5. Has your student ever expressed an appreciation for art or for pictures drawn by others? YES NO
6. Has your student ever taken art in high school? YES NO
7. Do you have any books in your home concerning art and known artists? YES NO
8. Are there art prints hanging in your home or on display there? YES NO
9. Has your student ever visited an art museum? YES NO
10. Would your student like to learn to draw? YES NO
11. Does either parent draw or paint as a hobby? YES NO
12. If your student is selected, will you allow him to participate in these series of drawing lessons?..... YES NO

Students Name

Parents Signature

IS IT POSSIBLE TO TEACH EVERY HIGH SCHOOL STUDENT
TO DRAW EVEN IF HE HAS NO APPARENT ARTISTIC ABILITY?

by

MARILYN MARIE NEASE

B. A. E., University of Kansas, 1956

AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1970

The purpose of this study was to determine if every high school student could be taught to draw even if he had no apparent artistic ability. The objective was to learn if students could learn to produce semi-finished drawings, and also to discourage the attitude that drawing requires artistic talent. The justification for the research lies in the importance of drawing, and should not be overlooked.

From the earliest times, art has made a vast contribution to our cultures of the world. Pictorial communication continues to enhance man's world and bring about better understanding between the various cultures. Professional art people agree that art experiences are necessary to the fullest development of all people, regardless of age. They feel that anyone possessing eyes that can see and hands strong enough to hold a pencil can be taught to draw, for drawing is essentially seeing.

A sample of forty subjects was selected from the two area high schools, Linn and Hanover. In nine 45-minute lessons, three phases of drawing were taught: (1) figure, (2) still life, and (3) perspective. Drawing was approached not as a mysterious skill, but rather as a science. Almost every field of endeavor except art has a plan. Without some knowledge and understanding of underlying principles, progress is impossible. The drawing lessons followed a plan with some logical procedure.

Six judges, three with art background and three without art background, rated the student drawings on a one-to-nine scale. Nine represented the highest rating. An average of 5.000 for all his drawings would indicate the student had learned to draw. A tabulation of all ratings on all students was made. The ratings indicated two students did not learn to draw. A correlation matrix was programed and fed to a computer. No significant correlation on such variables as sex, intelligence quotient, school attended

was noticeable. It also made little difference if students had had any elementary school art, drew at home, or even wanted to draw. The information on the other variables, the judges, suggested that rating art work was difficult to measure. No relative correlations were found. The computer determined the means of sums of scores, mean scores, and standard deviations. The degree of variance in the ratings by the judges was noticeable. The results indicated the judges without art background, as a whole, tended to rate the drawings higher. These judges also showed less variance in the standard deviations.

In determining whether every high school student could be taught to draw, the tabulations of the scores and the computer print out were used. The tabulation of all ratings indicated two out of the forty students did not learn to draw. However, the computer gave a mean score of 6.200 for all judges on all drawings. This score is above the required 5.000, and therefore, indicates every student did learn to draw. Though this was a small sample, it might well represent the whole population.