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Does experience in creative art influence the written self-expression of the deaf child?

Frances Gertrude Riblet

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WASHINGTON UNIVERSITY

Central Institute for the Deaf

DOES EXPERIENCE IN CREATIVE ART INFLUENCE
THE WRITTEN SELF-EXPRESSION
OF THE DEAF CHILD?

by

Frances Gertrude Riblet

A dissertation presented to the Board of
Graduate Studies of Washington University
in partial fulfilment of the require-
ments for the degree of Master of
Science in Education

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CHAPTER I

INTRODUCTION

The congenitally deaf child, by nature of his handicap, is held back from the relative freedom of "self-expression" enjoyed by the hearing child. In the lower grades all the language the deaf child has, came from formal drills and specialized teaching methods. The language which he needs is literally put into his mouth, word for word, by his teacher.

The hearing child in his development of mind and language takes for himself, from all the abundance of expressions that he hears, just what is adapted to his own needs; his language impressions are spontaneous and not artificial; he absorbs unconsciously and without any effort. For the language instruction of the deaf-mute child the teacher must have due regard to the child's need of thought, sensation, communication, and questioning, and must endeavor to produce and impart expressions that will coincide with his individual soul life. With the hearing child there is, therefore, much more independent though spontaneous mental exertion, while with the deaf the teacher's mind has to work in unison with the mind of the child (or of several children) with the definite purpose of utilizing the selected language material, and it is the teacher's mind that is the chief factor - not the pupil's.¹

In the beginning grades the teacher cannot supply the deaf child with a wide variety of language expressions from which he can select those best adapted to his wants.

¹Karl Baldrian, "Natural and Artificial Acquisition of Language," American Annals of the Deaf, 53: 7, Jan., 1908.

Rather, she must select those expressions that contain not only a minimum of unfamiliar language principles but also the vocabulary most vital to the child's needs. These comparatively few expressions are given to the deaf child in drills and more drills until he has made them his own. These expressions by no means meet all the needs of the child. But the deaf child, who had only gestures and grimaces in which to convey his feelings and desires before coming to school, welcomes this "teacher-made" language without censure and uses it uncritically from then on.

Little by little the teacher builds up the language of the child. She supplies him with an abundance of those well planned modern readers which provide for subtle and well-timed introduction of new vocabulary and language principles as well as a constant review of the old ones - all cooked up in a delightfully appetizing dish. She uses all the proved methods inherited from her predecessors, other teachers of the deaf. She is alert to new devices and techniques. When other ways fail she employs her own resourcefulness to devise new ones. Gradually the teacher increases the child's vocabulary and enlarges his store of language principles.

Building language in a deaf child is difficult. But even more difficult is the task of getting the deaf child to combine new language constructions with those already known to form sentences that are truly his own, thus de-

veloping an intellectual life that will meet the demands of his intelligence. Storey states:²

Language for the deaf is no mere academic study. If it is to be worth anything, it must be the living agent of their intellectual life. One cannot imagine any great degree of intellectual life from the daily rehearsal of set sentences.

The deaf child clings to the "ready-made" language given him by his first teachers long after it ceases to fit his emotional, intellectual, and educational development. Strauch³ writes,

Two of the greatest defects in the language of the deaf child are lack of individuality in his expression and lack of initiative.

An excellent example of a composition lacking in initiative and individuality, though correct, is cited by "The Teacher Across the Hall".⁴

'Jimmy took a walk. He found some money. He gave it to his mother. She thanked him. She was happy.'

Many deaf children regard written compositions as the proper place to record the language drill sentences of the day. "The Teacher Across the Hall" continues,

² A. J. Storey, "Why the Deaf Do Not Use Language," American Annals of the Deaf, 52: 190, Mar., 1907.

³ Genevieve Bash Strauch, "Some Phases of Composition," Volta Review, 34: 613, Dec., 1932.

⁴ "The Teacher Across the Hall," Volta Review, 41: 621-623, Nov., 1939.

Can you imagine a person with normal hearing enumerating all the people who went along on a trip? Listen to this from Ike Murphy: 'My father, my brother, my sister, my sister's boyfriend, my sister's boy friend's sister, my sister's boy friend's sister's boy friend, went to the World's Fair.'

It is essential that the deaf child be given language drills. But no language drill is an end in itself. Rather its purpose is to guide the child safely through the maze of sentence structures and verb forms, an ever present problem when he is creating original sentences. Strauch says,⁵

No individual's education is complete until he has mastered the mechanics of his own language and has attained a fair degree of skill in all forms of oral and written expression. This is especially true in the education of a deaf child.

Concerning the artificial nature of the deaf child's language, Groht writes,⁶

The determination to get correct sentences - a stupendous job in most cases - has overshadowed the realization that grammatically correct sentences can also be interesting, entertaining and beautiful.

Unfortunately, the deaf child cannot learn language principles and word concepts as quickly as does his hearing brother. But as he learns each, one by one, should he not be reaching out with them toward better and more

⁵

Strauch, op. cit., p. 613.

⁶

Mildred Groht, "On Making Language Natural," Volta Review, 34: 3, Aug., 1932.

abundant self-expression?

With the turn of the century, creative art has come to the fore as a means of helping the child to express himself. The meaning of the term "creative" as applied to expression is perhaps best explained by Rugg:⁷

There are two kinds of expressions: one "representative," the other "creative." This differentiation applies to the fields of music, drama, and literature, as well as to the field of fine arts. "Representative" art has for its initial impetus elements set outside the self. There are controls, such as an audience, or facts in history, science, and literature which must be heeded and so respected that the resulting expression possesses integrity of meanings. Communicability to others and agreement on common meanings are guides to evaluation. "Creative" expression however, has for its origin a mood, a desire, an inner drive to produce, an internal reaching not checked by external controls, a purely individual response to life or living.

Several prominent contemporary educators consider creative art as a vital part of the child's school life. Tannahill,⁸ Associate Professor of Fine Arts, Teachers College, Columbia University says,

Every child in our schools has a right to experience the joy of manipulating art materials, of creating and expressing his own ideas.

Whitford,⁹ Chairman of the Department of Art Education and

⁷

Harold Ordway Rugg, Culture and Education in America. New York: Harcourt, Brace and Co., 1931. Pp. 378-379.

⁸

Sallie B. Tannahill, Fine Arts for Public School Administrators. New York: Teachers College, Columbia University, 1932. p. 6.

⁹

William G. Whitford, An Introduction to Art Education. New York City: D. Appleton and Co., 1929. p. 37.

Associate Professor of Art Education at the University of Chicago writes,

Individual expression is an inherent desire of all people and particularly is this true of children. Pupils require an opportunity in our schools to give expression to their originality and ingeniousness. The activities and projects of the art courses offer an unlimited field for creative effort.

One frequently reads that language and drawing are comparable means of expression. Charters¹⁰ says,

The essential difference between language and drawing is merely one of the mediums through which the communication is carried on.

Drawing parallels both language and literature, not only because drawing is a vehicle of expression...but also because the observer of a picture deciphers its symbols to get at the meaning in it just as the reader deciphers the symbols of language in order to relive the experiences of the author.

Irwin¹¹ writes,

Many children find in language the natural expression for their ideas and emotions. For many others, however, words never supply this outlet. To all children both painting and plastic art seem to offer a much simpler and more spontaneous form of expression.

It is expressing himself in language that is so difficult for the deaf child. It is probable that creative art will lead the deaf child to more self-expression in his

10

W. W. Charters, Teaching the Common Branches: Revised Edition. Boston: Houghton Mifflin Co., 1917. p. 155.

11

Art Education Today, Edited by The Fine Arts Staff of Teachers College, Columbia University. New York: Teachers College, Columbia University, 1935. p. 76.

drawings. But will creative art lead the deaf child to more self-expression in his language? Might not creative art provide the deaf child with such an easy means of self-expression that his self-expression in language (a more difficult medium for him) might be consequently seriously retarded?

If the deaf child's experience in creative art impairs his self-expression in language, or even merely has no effect on it, then perhaps the deaf child's activities should be directed into more profitable fields. As Meyer¹² has so aptly said:

Deaf children, while in school, have a great deal more to learn than hearing children. Economy with the educational time of the school child, while a serious question in any school, is therefore an especially serious problem for the executive officer responsible for managing a school for deaf children.

On the other hand, if experience in creative art will lead the deaf child to greater use of self-expression in his language, then such experience could be justifiably included in the activities of schools for the deaf.

It is the aim of the following study to determine in what way, if at all, participation in creative art affects the deaf child's self-expression in written language.

12

Max Meyer, "Does a Percussion Band Educate the Deaf?," American Annals of the Deaf, 7:106, Mar., 1932.

CHAPTER II

HISTORY

A. Public School Art

In recent years the United States has seen the rise of a new theory of elementary education. This movement, fostered by Dewey, aims to direct the school activities so as to provide the children with opportunities for the maximum amount of freedom and originality of self-expression.

Dewey¹³ writes,

When I think of this fresh reaction of little children to the world, I am led to ask why it so soon gets dimmed, why it gets so soon gets covered up and a kind of mental rubber stamp or phonograph record takes its place. It may be thought absurd to demand originality of every one. But I think this idea of absurdity is due to having a wrong measure by which to judge originality. It is not measured by its outer products; it is rather an individual way of approaching a world common to us all.

One of the chief factors of this new approach, attempting to get more and better self-expression from the school child is "creative art." To quote Tannahill,¹⁴

Participation and enjoyment in its many forms of expression are among the finest contributions that our schools can offer to the children today. To rob children of these experiences is to make their lives colorless, drab, and merely utilitarian. To give

¹³

John Dewey, Construction and Criticism, New York: Columbia University Press, 1930. Pp. 4.

¹⁴

Tannahill, op.cit., p. 1.

them what art has to offer helps to refine, enrich, and uplift their lives.

Bently¹⁵ made the first use of art as a curriculum activity in the public schools of the United States in Boston in 1821. His art course favored the copy method and emphasized geometric outline drawing. It is possible that he may have received his idea from the public schools of France where art training for the children of the primary schools had been initiated by Napoleon as a rehabilitation measure.¹⁶

Prior to 1821, not much art instruction was provided except for the specially gifted. In the Colonial Latin grammar schools,¹⁷ the attention given to art and to music was negligible. Occasionally a school offered drawing, or drafting, to boys in connection with applied mathematics. However, in the boarding schools which sprang up toward the end of the eighteenth century, art courses¹⁸ were considered peculiarly appropriate for the

15

Whitford, op. cit., p. 8.

16

I. L. Kendel, Educational Year Book of the International Institute of Teachers College, Columbia University, 1934. New York: Teachers College, Columbia University, 1934. p. 222.

Hugh B. Froehlick and Bonnie E. Snow, Text Books of Art Education, Book I, First Year. New York: Prang Educational Company, 1904. Preliminary leaf.

17

Stuart G. Noble, A History of Education. New York: Farrar and Rinehart, Inc., 1938. p. 91.

18

Ibid., p. 91.

education of a lady. The bulk of these art courses was needlework, but occasionally the courses included oil painting.

In the forty years which followed Bently's innovation of 1821, drawing was introduced in the city schools of Philadelphia, New York, Baltimore, Cincinnati, Cleveland, and in several other eastern cities.¹⁹ Peale,²⁰ of Philadelphia, in 1840 recommended that art work be in the form of graphics - a system of exercises for the education of the eye and the training of the hand, an auxiliary to writing, geography, and drawing. Minife,²¹ of Baltimore, in 1848 advocated art as a training in tastes for all pupils and as a means of discovering art talent for use in the industries.

A broader motive for teaching art²² appeared in the early eighties, as is apparent from a report on school art in Boston, 1882.

Art education, even for little children, means something more than instruction in drawing. It comprehends the cultivation of the eye, that it may perceive form; of the hand, that it may represent graphically (drawing); of the mind, that it may receive and express ideas in regard to form. It would seem appropriate,

¹⁹ Whitford, op. cit., p. 8.

²⁰ Ibid., p. 8.

²¹ Ibid., p. 8.

²² Ibid., p. 10.

then that these lessons should be called "form lessons." Teachers should consider them as such, and should direct their teaching to creating in the minds of their pupils a correct conception of simple forms, rather than to giving instruction merely in drawing.

While such a motive was commendable, it could not be followed by the educators of that day. The separate skills of teaching children and of teaching art were rarely found combined in one person at that time. Moreover, in that period, American art, attempting exact though flowering reproductions, was stilted and listless. The public mind would not have been satisfied with anything short of accuracy.

Judging from the reports²³ of the early exhibitions of school art, it would appear that these first art courses were characterized by little organization and much use of hit-or-miss method. The art work exhibited by the Massachusetts public schools at the Philadelphia Centennial Exposition in 1876²⁴ was dominated by straight- and curved-line drawing, geometric forms and designs, perspective, objects in outline, and light and shade.

The World's Columbian Exposition at Chicago²⁵ in 1893 gave this country probably the greatest stimulus for art that it had yet received. This country was just awakening to the possibilities of color (the French

²³

Ibid., pp. 10-11.

²⁴

Ibid., p. 11.

²⁵

Ibid., p. 11.

Impressionists' discovery of "color" was beginning to filter into the art circles of this country). At the same time there was improvement in paper, crayons, pencils, brushes, and all materials. As a result, art instruction was widely accepted by many public schools. However, the teaching of technique and skills was the dominating factor. The value to the child of this approach seems not to have been considered. Art teaching tended towards "Art for Art's sake" and passed into an extreme from which it is only now recovering.

The first edition of Dow's "Composition"²⁶ was published in 1899. This book aimed to revolutionize art teaching by presenting the art, structure, or design point of view, as a contrast to the then current idea of copying and representing. Dow's method²⁷ began with what he considered to be logically simplest, such as lines, dark and light spots, color, and with the general definitions of the principles of design. From these elements, the child was to proceed from the simple to the complex until the final stage as complex as an ordinary painting was finally reached. One of his former pupils, Boas²⁸ without applying her criticism explicitly

26

Tannahill, op. cit., p. 4.

27

Thomas Munro, "The Dow Method and Public School Art," Art and Education. The Barnes Foundation Press (printed by Quinn and Eeden Co., Inc., Rathway, N. J.), 1929. Pp. 333-334.

28

Belle Boas, Art in the School. Garden City, N.Y., Doubleday, Page and Company, 1924. p. 20.

to the Dow method, has put her finger upon its essential practical weakness.

A course of study in spelling doesn't arbitrarily begin with words of one syllable in the first grade to progress to complicated six-syllable words in the high school, but rather follows the growth of the child's vocabulary as he finds his spelling complexities grow through his needs.

Although the method which Dow taught was imperfect, nevertheless it carried in it the seed of original work. This seed began to sprout and take root about 1910. "Composition" was revised in 1913 and is still a source of help in teaching design.

Perhaps the best picture of the type of art courses prevalent to the public schools of the United States from 1900 to 1910 can be obtained by considering two books typical of that period. Froehlick, of Pratt Institute, Brooklyn, N. Y., and Snow, supervisor of drawing in the public schools of Minneapolis, Minnesota, collaborated on a series of books called "Text Books of Art Education." Book I²⁹ is a dainty volume containing some gently colored illustrations and some delicate poetry describing the sky, the weather, and some flowers. The illustrated stories about Red Riding-Hood and several childhood experiences perhaps interested the child, but could not have added in the least to his art education as such. Some stick men,

action silhouettes, and paper cut-outs are included for the child to copy. The book presents the color chart and suggests that the children use it in weaving paper strips into mats, and in constructing paper boxes. This was doubtlessly a wonderfully exciting book in 1904, not because it offered the child anything in "art education," but because it contained colored pictures.

The second book to be considered is "School Drawing, a Real Correlation"³⁰, published in 1909. The author, Daniels, (then the director of drawing in the public schools of Newton, Massachusetts), devotes the larger part of his book, despite its title, to the construction of common objects and sand pile villages from paper. To make these things, the child, or more probably the teacher, follows diagrams in the book. A comprehensive outline of what to draw on the blackboard about Japan is given the teacher. Concerning the making of valentines in the first grade, the author states,³¹

As with other problems with little children just entering school, it is best, perhaps, for the teacher to trace the hearts, or to hektograph the whole design and let the children fill in the color.

Near the end of the course, the child is permitted to draw his own animals for the circus parade, aquarium,

30

Fred Hamilton Daniels, School Drawing, A Real Correlation. Springfield, Mass.; Milton Bradley Company, 1909.

31

Ibid., p. 143.

and bird cage. But first he must "consult" other pictures and his work is not acceptable until he has drawn his figure several times.

The Arts and Crafts Movement³² made its appearance at the St. Louis Exposition in 1904. The relationship between art, manual training, and industrial education was further fostered by the Jamestown Exposition in 1907 and the San Francisco and the San Diego Exposition in 1915.

By 1925, the "creative" art movement, patterned from the educational principles expounded by Dewey, and modifying Dew's theories, had begun to appear in several "progressive" schools.³³ "Creative" art was concerned only with self-expression, with having the child project upon the world something from within himself. The child was not asked to do any analysis of art principles or to apply even the simplest of techniques. In 1924, McCarthy³⁴ wrote,

If drawing is a form of language, technique may be called its grammar. Grammatical rules and definitions have been banished from the primary curriculum. Even correct usage has been subordinated to freedom and spontaneity of expression. So in drawing, the first essential is that

³²

Whitford, op. cit., p. 12.

³³

Munro, op. cit., p. 312.

³⁴

Stella Agnes McCarthy, Children's Drawings, A Study of Interests and Abilities. Data collected by the Child Study Committee of the International Kindergarten Union. Baltimore: Wilkins and Wilkins Company, 1924, p. 138.

the children form the habit of thinking and expressing their thought through the medium of the graphic arts; the will to express, the sense of power.

The child was not expected to make pretty pictures. He selected his own topic to draw or paint, and he executed his work without any interference from the teacher. This new art method did not seek to train the child's artistic ability, but rather to develop and encourage his native spontaneity in self-expression. Hopkins³⁵, in 1929, argued,

Were overemphasis, or even the wrong type of emphasis desirable, I believe it could be safely argued that the error should be committed in favor of those areas in learning more directly related to the promotion of drives, urges, interests, and desires for expression.

The sole purpose of creative art was to give the child the habit of expressing his own thoughts in a medium relatively free from restraint, yet socially acceptable.

In "Fine Arts for Public School Administrators"³⁶, published in 1932, Tannahill contrasts the "old" and the "new" methods of teaching art:

³⁵ Art Education Today, op. cit., p 13.

³⁶ Tannahill, op. cit., pp. 10-11.

Old

New

Choice and Arrangement of Subject Matter

Ideas of teacher imposed upon children.
Set assignments with only the teacher's point of view considered.

Emphasis upon child interests, abilities, and ideas.
Child expression, and adaptation to individual variations.

Technique

Technique, the chief aim, Formal, unrelated drill to obtain skill, whether needed or not.

Technique, a resultant. Expression of creative ideas develops necessary techniques.

Results

Uniformity in results desired and definitely worked for.
Conformity to set patterns and formulas.
Static, lifeless quality of expression.

Evidences of individuality in expression, consistent with personality.
Dissimilarity, not similarity, the aim.
Vitality and strength of expression.

Effect on Children

Child becomes repressed, dull, loses interest in art, becomes a copyist and an imitator.
Dependent.
Dissatisfied with own efforts.
Self-conscious.

Child is freed from fear and inhibition, can express himself undisturbed by adults criticisms.
His interest is live and keen. A desire to go ahead and do more.
Independent, confident, shows initiative, self-respect.

B. Art in Schools for the Deaf

If one be permitted to draw conclusions from those articles concerning art education which have appeared in the last decade in the professional magazines for teachers of the deaf, one might conclude that the "new" conception

of art as a force for developing spontaneous, and original expression in the deaf child has been overlooked. At present the art experiences of the deaf children in America seem confined to crafts, manual training, and art appreciation. Those few schools for deaf children which may be giving their children experience in creative art seem neither to be displaying their work at conventions or exhibitions, nor to be writing about them in their professional magazines.

The Vocation and Arts Exhibit at the Twenty-Seventh Annual Meeting of American Instructors of the Deaf at Winnipeg in 1931 was confined chiefly to the crafts.³⁷ Orman's review³⁸ of the Art Group of the Vocational Section at the Twenty-Ninth Meeting of American Instructors of the Deaf which met in 1935 does not mention that any creative drawings or paintings were exhibited.

The experiment conducted in 1934 by Dean³⁹ at Northwestern University in rehabilitating two adolescent deaf girls mentions using art work frequently. But this

³⁷

David Mudgett, "The Vocational and Arts Exhibit at the Convention," American Annals of the Deaf, 86: 402-408, Sept., 1931.

³⁸

James N. Orman, "The Vocational and Art Group of the Twenty-Ninth Meeting of the American Instructors of the Deaf," American Annals of the Deaf, 80: 313-14, Sept. 1935.

³⁹

Louise Ebeling Dean, "Experiments in the Academic Education of Adolescent Deaf Pupils," American Annals of the Deaf, 79: 305, Sept., 1934.

art work was in the nature of crafts and map making. In speaking of 'A' Dean writes,

'A' considered herself unable to draw and was afraid to try; so art was approached through the craftsWhile 'A' selected her own subject and originated her own design, it was necessary in order to counteract her lack of confidence, to permit her to copy from a photograph the dog which was the central figure in her composition.

Kowalewski, in 1938, in his article "Art Education for the Deaf"⁴⁰ puts most of the stress on crafts and art appreciation. Though he says that the young child should be urged to draw various objects as often as possible, he makes no mention of the creative art experience for the deaf child.

In a letter dated January 22, 1940, from the Volta Bureau, Montague states that to her knowledge the only freehand drawings of deaf children ever published were those depicting the horror of nightmares in the article "Why Bed is Bad"⁴¹ published in the Volta Review in December, 1938.

A great deal has been written regarding the value to the child of experience in creative art but it appears that no scientific studies have been made to substantiate such opinions.

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Felix Kowalewski, "Art Education for the Deaf," American Annals of the Deaf, 83: 360, Sept., 1938.

41

Mary Virginia Davis, "Why Bed is Bad," Volta Review, 40: 764-65, Sept., 1938.

CHAPTER III

PROCEDURES

A. The Procedure in Brief

The present investigation to determine the influence of creative art on the self-expression of the congenitally deaf child was made at Central Institute for the Deaf, St. Louis, Missouri. The subjects of this experiment were seven deaf girls whose ages ranged from eleven to seventeen years and whose intelligence quotients ranged from 87 to 113. These girls were provided experience in creative art and in written composition for twenty-four half-hour periods distributed over three months. The first fifteen minutes of each period were spent in creative drawing. The children were encouraged to draw about their own personal experiences and everyday activities. Each child selected her own topics and made as many drawings as she cared to in the fifteen minute drawing period. The children were given no formal instruction in drawing. Their work was never criticized but that which showed self-expression was praised.

In the last fifteen minutes of each period the children wrote compositions about their drawings. No comment was made about any of their compositions. The author never read any of the compositions in the presence of the children.

While the children were writing, the author made a drawing about an everyday experience of her own and wrote

a companion story for it. These were slipped into the pile of children's work as it accumulated. At the end of each period the children looked through this pile. The author's drawings and compositions were the only work, other than that done by themselves, which the children were shown.

At the end of the twenty-four half-hour periods, the author selected the best drawing and companion composition, from each period for each child, to represent that child's work. The twenty-four consecutive drawings and companion compositions thus obtained from each child were independently evaluated by four inexperienced judges and two experienced judges according to two five-point rating scales constructed by the author to measure improvement in written self-expression.

B. Making the Drawings and Compositions

1. The subjects of the Experiment

Child A, eleven years of age at the beginning of the experimental program, entered Central Institute at the age of three years and two months. As she was deaf from birth, she entered without speech and has been taught as a totally deaf child since her entrance. Her Intelligence Quotient, determined by the Advanced Performance Series, developed and standardized at Central Institute, measured in January, 1936, is 113. Although her Educational Age, as measured by the Stanford Achievement Test in March, 1940, of eleven years, and her Educational Quotient of 91 show her to be

only slightly retarded, she is constantly grouped with the duller children. Her teachers and supervisors have always considered her a phlegmatic child, extremely negative and unresponsive. She had had no experience in creative art prior to this experiment.

Child B, twelve years and nine months old when this experiment was begun, was also deaf from birth. She entered Central Institute when she was eight years and seven months old. Previously she had attended a state school for the deaf where she had learned a little speech. Although she has sufficient residual hearing to enable her to hear speech close to her ear, she does not use this residuum in acquiring language. Her Intelligence Quotient tested in November, 1935, is 110. The Stanford Achievement Test which she took in March, 1940, gave her an Educational age of eleven years and three months, and an Educational Quotient of 86, showing that she is retarded two years. Her teachers and supervisors consider her a very cooperative child, more imitative than original. Prior to this experiment she had had no experience in creative art.

Child C, fourteen years and eight months old when this experiment began, was also a congenitally deaf child. She had attended a school for hearing children for five years prior to her entrance into Central Institute. She entered Central Institute when she was eleven and a half years old. She has slightly less residual hearing than B but uses this residuum to acquire speech. She is able to take a large

part of her instruction through her ear. Her Intelligence Quotient as measured by the Performance Series in September, 1936, is recorded as 87. As she is slightly spastic, the Performance Series may not have given her true quotient. The Stanford Achievement Test which she took in March, 1940, gave her educational age as ten years and seven months and her Educational Quotient as 71, a retardation of four years and seven months. Her teachers and supervisors find her very cooperative and even-tempered, though nervous. She is more imitative than original, though spunky and independent in some matters.

Child D, fifteen years and two months old at the beginning of the experiment, entered Central Institute at the age of six. Her parents think she was born deaf although they did not notice this deficiency until she was a year and a half old. She has very little residual hearing and has been taught as a totally deaf child since her entrance into Central Institute. Her Intelligence Quotient measured in January, 1936, is 94. Her educational age, determined by the Stanford Achievement Test in March, 1940, is ten years and her Educational Quotient is 65. This indicated that she is retarded five years and six months educationally. She was an unusually shy child during her first years in school and spent much of her time in crying. Her progress in both spoken and written language has been slow. She is considered a poor lip-reader. It is said that she shows little interest or initiative in the classroom. Her conversation is chiefly confined to one word statements.

However, in her dormitory she is somewhat of a leader and sets the pace in fashions and interests for her close friends.

Child E, thirteen years and one month old when the experiment began, was born deaf. She was nearly five years old when she entered Central Institute to begin her education. She is totally deaf. She was tested in January, 1936, and her Intelligence Quotient is recorded as 111. Her educational age, as rated by the Stanford Achievement Test in March, 1940, is twelve years and ten months. Her Educational Quotient is 96. She is retarded only seven months educationally. She shows a natural talent for drawing and cartooning, but other than such experience as she has provided for herself, she has had no experience in creative art. Her teachers and supervisors state that she is full of initiative and originality. She has a sweet disposition and a gentle nature and is always ready to coöperate.

Child F, seventeen years and two months old at the beginning of the experimental program, was deaf from birth. She attended a day school in Ohio for eight years where she learned to speak and lipread. She entered Central Institute when she was thirteen years, four months old. She has no usable residual hearing. Her Intelligence Quotient as measured in October, 1938, on the Performance Series, is 100. Her educational age, estimated from the Stanford Achievement Test which she took in March, 1940, is fourteen years and one month. Her Educational Quotient

is recorded as 80. She is retarded three years and five months educationally. It is doubtful that she had had any experience in creative art prior to this experiment. Her teachers and supervisors find her a very cooperative, even-tempered person. Though she shows little initiative or originality, she is very self-reliant and uses mature judgment. Her speech is fluent and she can converse with enthusiasm on any subject within her experience.

Child G, thirteen years, eight months old when the experiment began, was deafened five weeks after birth. When she was four years, one month old she entered Central Institute to begin her education. She had enough residual hearing that she might have acquired some language prior to her entrance, but those who remember her at the time of her entrance say that she had not even a gibberish. At present she is able to hear a strong voice and she can converse about familiar topics with the speaker when her back is turned. She is such an excellent lip-reader that strangers frequently think she hears more than she actually does. Her Intelligence Quotient, recorded in May, 1936, is 113. For the past three years she has been attending a school for hearing children and in March, 1940, was in the first half of the eighth grade. Her educational age appears to be normal. Prior to the experiment she had had no experience in creative art. Her teachers and supervisors feel that she is emotional and moody. She is the self-

appointed leader of the girls in her dormitory. What she cannot accomplish by strategy, she accomplishes by force. She cooperates only when she must. Although she has a store of initiative, she has little, if any, originality. She is very self-willed and lacks good judgment.

2. The Program of Half-Hour Periods.

The original program for this study provided for three half-hour periods weekly for twenty weeks wherein the children were to be given opportunity first to draw, and then to write, about a personal experience. This program crowded the other activities of the girls and was reduced at the beginning of the fifth week to provide for two half-hour periods weekly for thirteen more weeks. Although the children were encouraged to stop at the end of the half-hour period, occasionally some of the girls became so absorbed in their work that they wanted to stay for an extra half-hour and gave either previous absences, or ones anticipated in the near future, for their reasons. These extra half-hour periods were treated as separate periods. Table I gives the dates on which half-hour periods were held, and the number, for purposes of labelling, which was put on the work done by each child on those dates showing the place of that work in her series of twenty-four half-hour periods. The crosses indicate that the child watched the teacher draw and did no original work during that period. Two numbers in some of the blocks indicate that the child worked for two periods on that date.

For example: Child A observed the experimenter draw on November 3, 9, and 10, put in her first half-hour of creative work on November 14, her second on November 17, and her twenty-fourth on February 10; on December 2 she put in her fourth and fifth half-hour periods.

3. Making the Drawings

In order that the children might know before the experiment began what was to be the nature of their drawings, the author availed herself of several opportunities to draw about incidents which were not only within the children's realm of experiences, but also in which the author was the central figure. The author illustrated such incidents as the following: watching the parade from the last row in the crowd, riding through the zoo on elephantback (an incident concerning the author about which all the children had heard) dragging home her second-hand bridge lamp. These drawings were executed quickly, in them little attention was given to extraneous details. On each occasion the children crowded around to watch the author draw.

The author's drawings were planned to constitute examples for the children's drawings of such a nature that only the creative spirit behind them could be copied. The incidents selected were so closely allied to the author that the children could not have redrawn these same incidents to center about themselves. The author kept all drawings so that no child would be able to copy any of the drawings line for line.

Table 1

Dates of Observations* and Half-Hour Periods,
And the Numbers** Labelling the Work Done
In Consecutive Periods for Each of
The Seven Children

Dates	Children						
	A	B	C	D	E	F	G
November 3	x	x	x	x	x		
" 9	x	x	x	x	x	x	x
" 10	x	x	x	x			
" 14	1	1	1	1	1	1	1
" 16		2	2	2	2		
" 17	2	3	3	3	3	2	
" 20	3	4	4	4	4		2
December 2	4 5	5 6	5 6	5 6			3
" 8	6	7	7	7		3	4
" 9	7 8	8 9	8 9	8 9	5 6	4	5
" 14	9	10	10	10	7	5	6
" 15	10 11	11	11	11 12	8 9		7 8
January 5	12	12	12		10	6 7	9 10
" 6	13	13	13		11 12	8 9	11 12
" 8						10	13
" 12	14	14	14		13	11	14
" 13	15 16	15	15		14	12	15
" 19	17	16	16	13	15	13	16
" 20	18 19	17	17 18	14 15	16 17	14	17 18
" 21				16		15	
" 27	20 21	18	19	17	17	16 17	19
February 2	22	19	20	18	18	18	20
" 9	23	20	21	19	19	19	21
" 10	24	21	22	20	20	20	22
" 16		22	23	21	21	21	23
March 1		23	24	22	22	22	24
" 2		24		23		23	
" 9					23		
" 15				24	24	24	

* Crosses indicate that period was spent in observation.

** Two numbers in same block indicate child worked for two periods on that date.

McCarthy,⁴² in writing about the use of model drawings with children, says,

Slavish imitation of a model is stultifying and harmful, especially in the initial stages of education, for the child soon loses his splendid courage and comes to depend upon the initiative of others.

After the author had drawn for the third evening, it was felt that the children had sufficient enthusiasm to begin making their own drawings. Each child was given two sheets of drawing paper nine and one-half by twelve inches, and each was told to draw about something she had recently seen or done, planned on doing, or wanted to do. It was desired that the drawings of each child center about her own experiences in order to rule out drawings of an imaginative or vicarious nature and to give preference to work that was entirely self-expressive.

Sargent and Miller⁴³ and Sobotka⁴⁴ have said that all children's drawings should be motivated by the desire to tell something, Perrine⁴⁵ further stipulates that the

42

Stella Agnes McCarthy, Children's Drawings, A Study of Interests and Abilities, (Data collected by the Child Study Committee of the International Kindergarten Union), Baltimore: Wilkins and Wilkins Company, 1924, p. 137.

43

Walter Sargent and Elizabeth E. Miller, How Children Learn to Draw. Boston, New York, etc.: Ginn and Co., 1918. Pp. 232-260.

44

Grace Sobotka, Art Instruction in the First Six Grades. Ann Arbor, Michigan: Edwards Brothers, Inc., 1935. p. 28.

45

Van Dearing Perrine, Let the Child Draw. New York: Frederick A. Stokes Company, 1936. Pp. 64-65.

best creative drawing is done when the child draws about those things which are within his actual experience. To quote Perrine⁴⁶ "The common things of life are always the great things of life."

The first fifteen minutes of each half-hour period was spent in creative drawing. While the very young child recognizes only his own previous efforts as his standard of attainment, the older child is sufficiently mature to realize the crudeness of his work and rejects it as his standards. The children in this study had had no previous experience in creative drawing, or training in art. Consequently their work would tend to be crude. It was feared that the girls, recognizing the immaturity of their drawings, would labor for perfection of form, an end beyond their immediate grasp. Laboring for perfection of form, without a background of training and experience sufficient to reach that perfection, might have led the children to forsake all attempts at original drawing and to resort to copying drawings created by someone else. Such labor was discouraged from the start. Not perfection of form in drawing, but rather freedom in self-expression through drawing was the desired end of this study. The author felt that no child should require more than fifteen minutes to make a comprehensive draft of an idea and the allotted time was consequently limited.

⁴⁶

Van Dearing Perrine, Ibid., p. 69.

Usually the children were able to complete two drawings in the fifteen minute period and occasionally some of the children completed more than two. If the second picture was not completed by the end of the drawing period the child was permitted to continue drawing. At no time did any child require more than fifteen minutes to complete one drawing.

It was desired to supply the children from time to time with examples of creative drawings which would stimulate the spirit of self-expression in the children. McCarthy⁴⁷ suggests that,

Seeing the products of others drawing is probably just as essential to drawing as hearing speech is to oral language.

It proved difficult to find drawings, however, which would stimulate, rather than depress, the creative spirit. Using the drawings of five and six year olds for models for adolescent children would probably have crushed the adolescents' desire to draw creatively. To show the girls of this study the work of other adolescents, children with a background of experience and training, might have led the girls to despise their own imperfect work and to shun creative drawing. Consequently the author continued drawing on into and throughout the experiment and made her drawings as near the level of the children's' ability as she could.

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McCarthy, op. cit., p. 137.

Sargent and Miller⁴⁸ feel that children derive much valuable stimulation from the drawings of their instructor.

The value of drawing for and with the children is inestimable. The example of the instructor will always be an important element in good methods of instruction. The actual demonstration exerts a contagious influence upon the children and gives the maximum of force to the impulse of their imitating minds.

But the author did not want too much force brought to their "imitating" minds. She waited until all the children had finished drawing and had begun their compositions before she began to draw. Thus the children could not copy either the theme or the lines of her drawing "verbatim" so to speak.

At first the girls tended to draw with such light lines that the picture could not be seen unless held close to the eyes. It was feared that these light pencil lines could not withstand the sorting and re-sorting which was to come later in the judging of the pictures. The children were instructed to go over each line of the finished picture with a heavy pencil stroke. No picture was accepted unless its lines were sufficiently dark.

Some of the children, ignoring the size of their drawing papers, tended to crowd their drawings into a small section and to leave the greater part of the drawing paper vacant. The author did not feel that much freedom of self-expression would result from cramped and restricted draw-

⁴⁸

Sargent and Miller, op. cit., pp. 260-61.

ing movements. It was hoped that by comparing their drawings with those of the other children and of the author, these few children would notice this defect by themselves. When it became apparent that these children would not notice this difference if left to themselves, the author brought it to their direct attention by means of three series of instructive models. The first series was introduced to the group at the end of the February 9th period. The second and third series were shown at the ends of the two following periods. The subject of all three pictures of one series was identical, but the manner of drawing was different in each picture. The picture in the first drawing was small, crowded into a corner of the paper, and drawn in faint lines. In the second drawing, the picture was larger, but off center and still very faintly drawn. The third drawing contained the same picture, now occupying the entire sheet of paper and drawn in heavy forceful lines. These three pictures were passed around the group at the end of the half-hour period. Each child was asked which of the three pictures she liked the best. On all three occasions the group unanimously voted for the third drawing. The group was then asked to tell why the third drawing was better than the other two. All the drawings remained in the possession of the author.

Except for the two foregoing incidents, no formal instruction in technique or art principles was given the girls prior to, or during, the experimental months. It

appears to be the unanimous opinion of numerous educators that no instruction of any kind should be given children in conjunction with creative art.

Ferrine⁴⁹ definitely refused to give any direct instruction and explains his belief in the following story:

Just what had Ann in mind when she drew the large object at the right of the picture? For several nights that followed I sat far into the small hours searching for an answer to that question.....

I began vaguely to comprehend Ann's purpose and, turning the picture over on its side, discovered the front of the house, a door, and a door-knob.

At last it was clear that Ann had a concept of a house as a solid, which she sought to express in terms of space dimension....

I could have shown Ann the trick of making that projection in a few minutes, but had I, what would have happened to those faculties through which she sought mastery of an unknown problem? Clearly, in so far as I was concerned, they would have remained exactly where they were.

Was it wrong not to show Ann that short-cut to her problem?.... It was not the answer, but the by-product of her search for that answer that was vital, bringing to focus faculties, co-ordination of eye, hand and imagination - these over prolonged periods in which was faced a problem self-induced.

Although little actual instruction was given the children, each drawing period was actively supervised by the author. Mearns⁵⁰ feels that supervision is essential

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Ferrine, op. cit., pp. 56-63.

50

Hughes Mearns, "The Creative Spirit," Progressive Education, 3: 98, April, May, June, 1926.

during the creative periods, and writes the following:

Children do very good work and they do very bad work. If no one is by to suggest to them the difference they may never grow in taste, in discriminating art judgment. Nature, the jade, may or may not help them. They may turn away from the sure voice of the instinctive creative spirit within them to copy the work of others, or worse, to copy themselves.

Hearn's⁵¹ opinion is shared by Tannahill⁵¹ who writes,

In school where free periods are provided for creative work, it is necessary for the teacher to be actively present to guide and inspire, to see that freedom does not become license and that real growth takes place. To leave children free to do what "they want to do" is not always profitable. Many bad habits may be formed in this way. Some children may not want to do anything.

Any attempt of the child that showed the least wee glimmer of self-expression met with praise. No comment was volunteered about the drawings that were flagrant copies. If a child insisted that some comment be made about the copy she was making, a comment similar to the following one was given.

Well, it is all right. But the one you drew about the cooking class last time was so interesting, why do you copy someone else's drawing?

Often the child would continue drawing her copy for a while longer but would suddenly stop drawing and, on her own initiative would throw the copied drawing into the waste basket. In a few minutes she would begin to

⁵¹

Tannahill, op. cit., pp. 16.

draw an original piece of work. No drawing was ever criticized, but whatever there was in the drawing that could possibly be praised was praised.

Concerning criticism, Perrine⁵² makes these emphatic statements:

I have yet to criticize a child's work negatively and get results. Even if I thought negative criticism would bring results, I would not use it. In my attitude toward children, I always assume that they really wish to do something, that confidence must be built up in them subconsciously.....I use the psychology that every mother instinctively uses when her baby has fallen while trying to stand up and walk. She does not criticize him for falling, but applauds his courage for daring to attempt.

4. Making the Compositions.

The last fifteen minutes of each half-hour period were spent on the compositions. The children were given no direct instructions regarding their compositions other than to write brief stories about their drawings. If any child preferred, she could choose the drawing she wanted most to write about and write about that one first. In this way, all the compositions had companion drawings but not all the drawings had companion compositions. The children put the same title on the composition that they had put on its companion drawing. Each composition was

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Perrine, op. cit., p. 83.

written on a separate sheet of paper.

Occasionally one of the girls would ask how to spell a certain word, or would want to know the word related to something in her drawing. This information was supplied.

All compositions were accepted without comment. A composition of four sentences was accepted as readily as one of two pages. The author never read a single composition in the presence of the children. The children were never told whether their compositions were good, bad, or indifferent. Untidy compositions were returned at a later date to be recopied.

Throughout the experiment the author wrote a brief composition to accompany each of her drawings. These compositions, one for each period, were inconspicuously slipped into the pile of children's drawings and compositions as they accumulated on the desk. When the children had finished their drawings and compositions, they were led by curiosity to look through this pile of drawings and compositions done by one another. Occasionally the girls would select the drawings or compositions done that evening which they liked best. As the drawing and composition of the author had been slipped into this pile, each child was able to compare her work with that of the author as well as with that of the other pupils.

No instruction concerning creative writing was given to the seven girls either prior to or during the experimental period. The children's classroom activities in reading, writing, and language continued at the same pace

and in the same amount throughout the experimental period as had characterized these activities during the two months previous to the experiment.

5. Inertia to Drawing and to Writing Compositions.

At first the girls took their drawing with considerable enthusiasm. But gradually they became reluctant to come to the study room and made all kinds of excuses in hopes that they would be permitted to be absent. When they finally did enter the study room, they were slow in getting started. Every gentle means of persuasion was used to get them to begin. When at last they would take up their pencils to begin, it was with apathy and distaste. Occasionally some would absolutely refuse to begin and would sit idle until all the other girls were actively at work. Yet, once they had begun drawing, they became so absorbed in their work that often they begged to be allowed to stay for an extra half-hour.

The author is reminded of the remarks made by a colored drayman about his old mules: "You have to pull his head off to get him started and then hang onto his tail to keep him from running away." In physics, this phenomenon is called the Law of Inertia.⁵³

A body does not change its condition of rest, or of motion, unless an external force is applied to it.

53

Theodore Colen and Barclay M. Newman, Unit Outline in Physics. New York: College Entrance Book Co., Inc., 1935. Pp. 59.

This mule may or may not have had good reasons for its resistance to change. In the case of resisting the creative spirit, the author has frequently felt painful manifestations of inertia. The author speaks of her own experience:

At last the time had come when I could no longer postpone beginning. My canvas was stretched, my paints were ready. Behind me was my instructor, before me was the model.

I climbed onto my stool and squeezed out my colors. A terrible nausea had come over me. My muscles were limp. An intense pain stabbed my stomach. I could hear my heart pounding like mad someplace within me. Then, in one last desperate attempt, I gathered all the strength of will which I possessed and, smearing my brush around in some of the color, I put a dab of paint someplace on the canvas. The nausea had gone. I had won the struggle. I had begun.

From then on the road was easy. I had only to work like a fury hour after hour, unaware of the time, unaware of my own existence.

Hughes Hearn⁵⁴ in speaking about creative writing,

says,

Coercion, it is generally agreed, destroys, although many pupils insist that their best work has been produced under the terrible compulsion of necessity. The approach of the time of printing the school magazine has driven the editors to a levy upon contributors for copy which has often led to a half-the-night struggle to produce; but out of this artificial and really hateful task have come some astonishing revelations of the inner self.

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Hughes Hearn, Creative Youth. Garden City, New York: Doubleday, Page and Co., 1925. P. 5.

In writing their compositions, the children in this experiment did not show such marked reluctance to begin as they had shown for their drawings. Perhaps this was because they had been mentally planning their compositions all the time they had been drawing.

It is interesting to note that the girls who had been the most reluctant to begin their drawings and also the most eager to continue their work for an extra half-hour period were the ones who improved the most during the program. A subjective rating of the children's inertia to drawing was made by the author and used in comparisons made with other factors. These comparisons are further discussed in Chapter IV.

C. Evaluating the Drawings and Compositions

1. The Rating Scales

For Drawings: At the present time several scales which aim to measure the merit of children's drawings are available. The scales constructed by Kline and Carey⁵⁵ Thorndike⁵⁶, and Leverenz⁵⁷ stress technique, correctness,

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Linus Ward Kline and Gertrude L. Carey, A Measuring Scale for Free-Hand Drawing. John Hopkins University Studies in Education, Parts I, and II., Nos. 5 and 6a. Baltimore: The John Hopkins Press, 1922, 1923, 1933.

⁵⁶

Edward Lee Thorndike, Thorndike Drawing Scale. New York: Bureau of Publications, Teachers College, Columbia University, 1924.

⁵⁷

A. S. Leverenz, Tests of Fundamental Abilities of Visual Art. Los Angeles: Southern California School Book Depository, 1927.

proportion, and other art principles, but place little or no emphasis on the child's originality of expression. A test constructed by Nicholas, Mawhood, and Trilling⁵⁸ takes into account spontaneity of expression as well as skill in drawing, but can measure only those drawings which are done on one isolated theme.

Because a rating scale which met the specific needs of this experiment could not be found, the author constructed one. This scale consists of five ranked groupings which consider only self-expression. The criteria given in the five groups were drawn from a careful and subjective analysis of creative, self-expressive drawings made by hearing children. The drawings considered to be most "self-expressive" are classed in Group I., and the least in Group V.

The Scale for Drawings

- Group I. The incident or emotion depicted is made vital.
The essence of the situation is pointed out.
- Group II. The incident or emotion depicted has life, but is not made vital.
The essence of the situation is suggested rather than pointed out.
- Group III. The drawing misses the vital situation or emotion.
The subject of the drawing is vague.

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Florence W. Nicholas, Nellie C. Mawhood, Mabel D. Trilling, Art Activities in the Modern School. New York: McMillan Co., 1937.

- Group IV. The drawing lacks personal expression.
The drawing is dull and uninteresting.
There is pointless repetition of the same subject in other drawings.
- Group V. The drawing is not original.

For Compositions: Many scales for rating compositions have been produced, some of which are enumerated in the Bibliography, page 69 . Most of these scales aim to measure quality of compositions and give models for comparison without analyzing each model into its merits or defects. Consequently, although a composition may be superior in spontaneity and self-expression, it can be given an inferior rating due to attention focused on grammatical errors.

There seem to be no standardized rating scales available which aim to measure "self-expression." As this experiment was concerned only with the amount of self-expression which the children incorporated in their compositions, the author constructed a scale for compositions which closely paralleled the one constructed for drawings. The scale for compositions also consists of five groups which consider only self-expression. The criteria given in the five groups were drawn from a careful and subjective analysis of the compositions written prior to the beginning of this experiment by the deaf children in this study. The compositions considered to be most "self-expressive" are classed in Group I., and the least in Group V.

The Scale for Compositions

- Group I. The incident or emotion written about is unified and made vital. The essence of the situation is clearly pointed out.
- Group II. The composition is unified, but is not made vital. The essence of the situation is suggested, rather than closely pointed out.
- Group III. The composition misses the vital situation. The composition contains matter-of-fact listings of incidents.
- Group IV. The subject of the composition is vague and lacks unity. The sentences show a lack of initiative. There is pointless repetition of the same words.
- Group V. There are several compositions by the same child that are similar. The composition contains an excess of "teacher taught" sentences.

2. Selecting the Judges.

No mention of the correct choice of words, or correct usage of language principles is made in the scale for compositions. Also, no mention of correct proportion, perspective, or technique is made in the scale for the drawings. Both scales aim to place all the stress on "self-expression." As persons who were in the habit of stressing correctness, accuracy, and technique in writing and drawing might not be unbiased judges of self-expression, the problem of selecting judges to evaluate the creative work of the children was a difficult one. It was preferred that the judges not only be without preconceived opinions in this matter, but that they also understand children and

be familiar with the special problems of the deaf children.

Four persons, Judges 1,2,3, and 4, who met all three of these qualifications, were selected. Two other persons, Judges 5 and 6, both with wide experience in teaching deaf children were also asked to evaluate the children's work. Judge 5 has had several years experience in teaching composition to congenitally deaf children and was thoroughly aware of the problems involved in that field. Judge 6 has had several years experience in supervising creative drawing for young deaf children but has had little contact with the creative art of older children. Judges, 1,2,3, and 4 evaluated both drawings and compositions. Judge 5 had only the compositions, and Judge 6 only the drawings.

3. Procedure in Rating the Drawings and Compositions.

From the two or more companion drawings and compositions of any child's half-hour period, the author had selected the best pair for judging and had discarded the others. The best pair had not been hard to determine, as it had obviously received most of the child's attention. When there had been doubt as to which pair was the best, one pair had been selected at random. The author had then separated the companion compositions and drawings from each other for their independent ranking by the judges.

The drawings were ranked first by all the judges. When all the drawings had been ranked, they were laid aside and the compositions were then ranked. The following system was used in ranking the drawings:

1. The drawings of only one child was considered at a time.

2. All the drawings were glanced over quickly to get a general idea of their quality.

3. The ones, if any, that obviously belonged in Group I. were put aside in a pile.

4. The ones, if any, that obviously belonged in Group V. were put aside in another pile.

5. The remainder of the drawings were sorted into Groups II. IV. and III. If there was a Group into which no drawings seemed to fit, that Group was skipped.

6. The drawings in each pile were compared with one another and were changed about from pile to pile until final decision was reached.

7. The number of the Group into which the drawing best fitted was recorded on the back of the drawing.

The same procedure was used to rate the compositions. A copy of the instructions for rating which was given the judges is given in the Appendix, page 62.

4. Obtaining the Score for Each Drawing and for Each Composition.

All the judges showed considerable agreement with one another in the ratings which they gave the drawings and compositions. The author felt that the ratings given each piece of work agreed sufficiently to merit equal influence upon the ultimate score of that piece of work.

To determine the ultimate score for each piece of work its five ratings were each given numerical values which were summed up and averaged. A rating in Group I of the scale was given twenty credits; in Group II, fifteen credits; in Group III, ten credits; in Group IV, five credits. A rating in Group V of the scale was given no credit because it showed no self-expression. The highest possible sum for any one piece of work was one hundred, and consequently the highest possible average was twenty. The average thus obtained for each piece of work became the score for that piece of work.

CHAPTER IV

OBJECTIVE AND SUBJECTIVE INTERPRETATION OF DATA

The results obtained indicate that experience in creative art does lead the deaf child to use more self-expression in written composition. This fact can be seen from the scores accredited the compositions of A, B, E, F, and G, on the Tables 2 and 3. The compositions of D show less than ten percent improvement and the compositions of C show no improvement at all. Some of this improvement is doubtlessly due to maturation and to classroom work. However, the improvement shown in creative drawing was so consistent with the improvement shown in written composition that the author believes the experience in creative drawing was a strong influence. Evidence for these findings lies in the impartial ratings given the drawings and compositions by six qualified judges in accordance with the Rating Scales which may be found on pages 41-43.

Table 2 shows the average of the ratings given by the judges to the twenty-four drawings and the twenty-four companion compositions selected to represent the work of the seven girls. From this table, the improvement in self-expression is evident. The average scores for the work of each child and for the work of the group as a whole are shown. The average of the scores given the work of the last half of the experimental program are contrasted with the average scores of the first half.

Table 2

Average Scores Given Creative Work of First and Last Halves,
and First, Second, Third and Fourth Quarters of
Experimental Program for Each Child
and for Group as a Whole

Drawings						
Child	Halves		Quarters			
	First	Second	First	Second	Third	Fourth
A	10.7	14.2	10.7	10.7	14.3	14.0
B	11.4	15.3	10.8	12.0	15.5	15.0
C	12.9	14.8	13.2	12.7	13.7	16.0
D	9.4	12.1	11.2	7.8	10.3	13.8
E	14.8	17.0	14.2	15.6	17.2	17.0
F	15.4	14.4	14.8	16.0	14.7	14.2
G	11.7	15.5	10.2	13.2	16.5	14.5
Group Average	12.30	14.75	12.14	12.57	14.60	14.92

Compositions						
Child	Halves		Quarters			
	First	Second	First	Second	Third	Fourth
A	10.4	15.9	9.7	11.3	15.5	16.3
B	12.5	17.3	11.5	13.5	16.8	17.7
C	10.4	9.3	11.2	9.7	10.3	8.2
D	11.7	13.4	10.3	13.2	13.5	12.7
E	13.3	16.4	11.0	15.7	17.3	15.6
F	12.7	15.6	11.3	14.0	15.7	15.5
G	13.3	15.8	13.7	13.0	15.2	16.5
Group Average	12.05	14.81	11.24	12.91	14.90	14.65

These divisions are further subdivided and the average of the scores given the work of each quarter of the experimental program is included. Considering Table 2 as a whole, it will be seen that the drawings of the fourth quarter were but slightly superior to those of the third quarter, and that the compositions of the fourth quarter were slightly inferior to those of the third quarter. The author is unable to account for the slight decline of the quality of the work done in the fourth quarter.

Table 3 gives the percentage of improvement from the standpoint of self-expression in the drawings and compositions of the last half of the experimental period over the first half both for the children as individuals and for the group as a whole. This percentage was computed on the basis that twenty points equals a perfect score. As was explained on page 46, the highest possible average score for any single piece of work on both scales was twenty. Comparing the group as a whole, the self-expression manifested in the compositions of the second half of the experimental program showed an improvement over that of the first half of 2.8, or 13.8 percent.

It can be seen from Table 3 that, of all the girls in the experiment, A showed the most improvement in self-expression in her compositions. This improvement was 5.4, or 27 percent. The author feels that this experiment had a very desirable effect on A.

Table 3

Percentage of Improvement of Scores on Work from Second Half over Work from First Half of Experiment for Each Child and Group Average

Drawings				
Child	First Half	Second Half	Increase in Points	Percentage of Improvement
A	10.7	14.2	3.5	17.5
B	11.4	15.3	3.9	19.5
C	12.9	14.8	1.9	9.5
D	9.4	12.1	2.7	13.5
E	14.8	17.0	2.2	11.0
F	15.4	14.4	-1.0	-5.0
G	11.7	15.5	3.8	19.0
Group Average	12.3	14.8	2.4	12.1

Compositions				
Child	First Half	Second Half	Increase in Points	Percentage of Improvement
A	10.5	15.9	5.4	27.0
B	12.5	17.3	4.8	24.0
C	10.4	9.3	-1.1	-5.5
D	11.7	13.4	1.7	8.5
E	13.3	16.4	3.1	15.5
F	12.7	15.6	2.9	14.5
G	13.3	15.8	2.5	12.5
Group Average	12.1	14.9	2.8	13.8

In the foregoing description of A on page 22, it was stated that A's teachers and supervisors considered her very unresponsive and greatly lacking in originality in language and in all other matters. While the score given her work for the last half of the experimental program is surpassed by ratings given the work of four other girls, it must be noted that her work in the first half received one of the two lowest scores given the compositions.

B also showed considerably more self-expression in her compositions in the last half of the experimental program. This improvement was 4.8, or an increase of 24.0 percent.

C was the only one of the seven girls who did not show any improvement in self-expression in her compositions. When she had finished each drawing, it was her habit to bring the drawing to the author and to tell about it orally. Her oral story was usually very self-expressive and free from stilted language. But C never seemed to put into writing the same vivid account which she had just told the author. Perhaps C felt that there was no need to repeat the whole story the second time because the author had heard it all once. Perhaps C gave the story orally in hope that she would not have to write it all down. As soon as the author noticed this trait of C's, she declined to listen to the oral account but enthusiastically suggested that C write down just what she would otherwise have told the author. Though C would begin at once to write her composition, the language she put into it was still very

stilted and smacked of the daily news account written on the slate in her classroom. This experiment definitely did not reach C.

D showed improvement in self-expression in her compositions, but this improvement was less than ten percent. Before the experiment was begun the author felt from previous observations of D, that, however much influence creative drawing might have on the other girls, D would be unaffected by the program.

E's supervisors and teachers generally agreed that E had the most originality of any child in the group before the experiment began. Her compositions received the highest ratings given in the first half of the experimental program. Though her compositions written during the last half of the program did not maintain this superiority, they did show a 15.5 percent increase in self-expression over those of the first half.

F showed an improvement of 2.9, or 14 percent in the self-expression of her compositions of the second half. She was the only child whose drawings in the second half showed no improvement over those of the first half.

G showed an improvement in the self-expression of her compositions of 2.5, or 12.5 percent. Although they ranked first in the first half of the program, her compositions slipped to fourth place in the second half.

It is highly probable that a child's creative work is affected by his chronological age, his intelligence, and his

inertia to that work. It would be stupid to generalize regarding the influence of any one of these factors from a study of only seven children. Nevertheless, a comparison of the results with each of these factors may be interesting and may help to explain some of the results found.

Table 4 gives the percentage of improvement in creative drawing of the second half of the experimental program over the first, the chronological age, the intelligence quotient, the educational quotient, and rank in inertia in drawing for each of the seven children and for the group as a whole. The chronological ages are the ages of the children at the beginning of the experiment. The intelligence quotients were determined on an Advanced Performance Series, standardized at Central Institute. The educational quotients were determined by the Stanford Achievement Test which all the children but G took in March, 1940; G is indicated as having a "normal" educational quotient because she is in the proper grade for her age in a school for hearing children. The rank of the children in inertia in drawing is the subjective opinion of the author. Number seven indicates the least inertia and number one the most.

From Table 4 it can be seen that the three children, B, G, and D, who showed the most improvement in drawing, were the three youngest of the group, had three of the four highest intelligence quotients, ranked second, third, and first in inertia in drawing, but varied considerably as to educational achievement.

Table 4

Percentage of Improvement in Creative Drawing, Chronological Age, Intelligence Quotient, Educational Quotient, Rank in Inertia for Each Child and for the Group Average

Child	Percentage of Improvement In Drawing	C.A.*	I.Q.**	E.Q.***	Rank****in Inertia to Drawing
B	19.5	12-9	110	36	2
G	19.0	13-8	113	Normal#	3
A	17.5	11-0	113	91	1
D	13.5	15-2	94	65	6
E	11.0	13-1	111	96	4
C	9.5	14-8	87	71	7
F	-5.0	17-2	100	80	5
Group Average	12.1	14-4	104	84	-

* Ages of children at beginning of experiment.

** Determined by the "Advanced Performance Series," developed and standardized at Central Institute.

*** Determined by Stanford Achievement Tests in March, 1940.

**** Author's subjective rating. Number seven indicates the least and number one the most.

In proper grade for her age in a school for hearing children.

G, who had the lowest intelligence quotient and also showed the least inertia, showed less than ten percent improvement. F was the oldest child in the group and showed the least improvement in drawing.

Table 5 gives the percentage of improvement in self-expression in written composition of the second half of the experimental program over the first, the chronological age, the intelligence quotient, the educational quotient, and rank in inertia in drawing, for each of the seven children and for the group as a whole. The same information that was used in Table 4 is also used in Table 5, except that the scores of the compositions have been substituted for those of the drawings. From Table 5, it can be seen that A, the child who made the most improvement, was also the youngest child, had the highest intelligence quotient and showed the most inertia in drawing. B, who made the next highest improvement, was the next youngest child. Her intelligence quotient is close to A's. She ranked second in inertia. E, who showed the third most improvement, was the third youngest child in the group, had an intelligence quotient two points less than A's, and was ranked fourth in inertia. G, who showed the least improvement in her compositions, also had the lowest intelligence quotient and showed the least inertia to creative drawing. The oldest child, F, showed above average improvement in composition; although she showed no improvement in drawing.

Table 5

Percentage of Improvement in Self-Expression in Written Composition, Chronological Age, Intelligence Quotient, Educational Quotient, Rank in Inertia, for Each Child and for the Group Average

Child	Percentage of Improvement In Composition	C.A.*	I.Q.**	E.Q.***	Rank****in Inertia to Drawing
A	27.0	11-0	113	91	1
B	24.0	12-9	110	86	2
E	15.5	13-1	111	96	4
F	14.5	17-2	100	80	5
G	12.5	13-8	113	Normal#	3
D	8.5	15-2	94	65	6
C	-5.5	14-8	87	71	7
Group Average	13.8	14-4	104	84	-

* Ages of children at beginning of experiment.

** Determined by the "Advanced Performance Series," developed and standardized at Central Institute.

*** Determined by Stanford Achievement Tests in March, 1940.

**** Author's subjective rating. Number seven indicates the least and number one the most.

In proper grade for her age in a school for hearing children.

A careful study of the data presented in Tables 4 and 5 brings to light the similarity of the influence exerted by chronological age, intelligence and inertia on both the drawings and compositions. The data indicates that there seems to be a positive correlation between the amount of improvement in self-expression in written composition developed through experience in creative drawing and intelligence. It also seems that chronological age affects improvement in creative drawing adversely, but has less affect upon self-expression in written compositions.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

A. Summary and Conclusions.

The present experiment was organized to determine to what extent and in what direction experience in creative art would influence, if at all, the self-expression in written compositions of deaf children. A group of seven congenitally deaf girls whose ages ranged from eleven to seventeen years was given experience in creative art and in written composition for twenty-four half-hour periods distributed over three months. Though the girls received no formal instruction in drawing, they were given a great deal of encouragement. At the end of the time given to drawing, the children each wrote compositions about their drawings. No instruction, comment, or opinion was given concerning their compositions.

The twenty-four consecutive drawings and their companion compositions obtained from each child were independently evaluated by four inexperienced judges and two experienced judges according to two five-point rating scales constructed by the author to measure improvement in self-expression. From a comparison of the ratings given by the judges to the drawings and compositions written by each child in the experimental program with the chronological age, intelligence quotient, and inertia in drawing, the following conclusions can be made:

1. Experience in creative art does lead the deaf child to use more self-expression in compositions related to his drawings.
2. The amount of self-expression the deaf child uses in such compositions is consistent with that used also in his creative art work.
3. The amount of inertia in creative drawing shown by a child is an indication of the amount of improvement in self-expression which will ultimately be manifested in his drawings and the compositions related to the drawings.
4. Higher intelligence would seem to be more conducive to improvement in self-expression resulting from experience in creative drawing than lower intelligence.
5. Improvement in creative drawing seems to be adversely affected by chronological age.
6. The amount of self-expression in compositions written before experience in creative art is no indication of the amount of improvement that will result from experience in creative art.
7. Drawing skill does not influence the amount of self-expression contained in the drawings.

or the amount of self-expression contained in the written compositions related to the drawings.

B. Recommendations

It is recommended that:

1. Further research be made with larger groups to determine the influence of intelligence, chronological age, and educational quotient on improvement in written self-expression resulting from experience in creative art. Such research would determine which children profit the most from experience in creative art, and which profit the least.
2. Experience in creative drawing be provided all deaf children with normal intelligence as a means of leading them to use more self-expression in their written compositions. This program should be extended to include any other children shown by future experiments to profit definitely by such participation.
3. Participation in creative art be provided for children during school hours, since it requires so little time and yet yields such beneficial results, and can be so readily adapted to the program for the day.
4. Writing about their creative drawings be used

as a means of developing deaf children's vocabulary and store of language principles.

5. Writing about their creative drawings be used to strengthen deaf children's feeling of need for new language.

APPENDIX A

APPENDIX A

INSTRUCTIONS GIVEN TO THE JUDGES CONCERNING
THE RATING OF DRAWINGS AND COMPOSITIONS

Each of you has been assigned a number from one to six. Judge 5 will judge only the compositions and Judge 6 will judge only the drawings.

Here are seven folders each containing twenty-four drawings. Grade the work in each folder independently of the work in any other folders. In other words, do not consider the drawings in Folder A in comparison with the drawings in any other of the folders.

Pick up the drawings in Folder A. Glance through them to determine their general calibre. Then glance through them again. Put all the drawings, if any, which you think definitely fit into Group I. (as described in the rating scale for drawings) into the first pile and all the drawings, if any, which fit into Group V. in the last pile. You now have the three middle Groups left to consider. Sort through these. Put all drawings, if any, which best fit into Group II. into the second pile and all the drawings, if any, which best fit into Group IV. into the fourth pile. You now have the drawings of Group III. left. Put them into the middle pile. (It is possible that one, or more, of the five Groups may not have a single drawing from Folder A. In that case, leave a space for the empty pile. Example: perhaps there are no drawings which fit into Group II.

Your piles would be arranged thus:

I. III. IV. V.

Now, again carefully consider each drawing of each pile to be sure you have it in the correct Group. This is the time to shift the drawings about from pile to pile. There is no definite number of drawings that belong in any Group. Groups I. and II. may have all the drawings between them, or half the drawings may belong in Group IV. So put as many drawings into any Group as you feel best belong there, according to the rating scale.

When you have all the drawings of this folder finally sorted into their Groups, turn the first pile, or Group I., over, face downward. You will see a diagram like this on the back:

1	2	3	4	5	6

Disregard all other ratings of other judges. Put the Group number indicating the rank of that pile of drawings in the square under your number, like this:

	3	
	1	

When you have marked all the drawings for Group I., go on to the drawings in Groups II., III., IV., and V. When all the drawings in Folder A have been evaluated and recorded on the back, shuffle the drawings and return

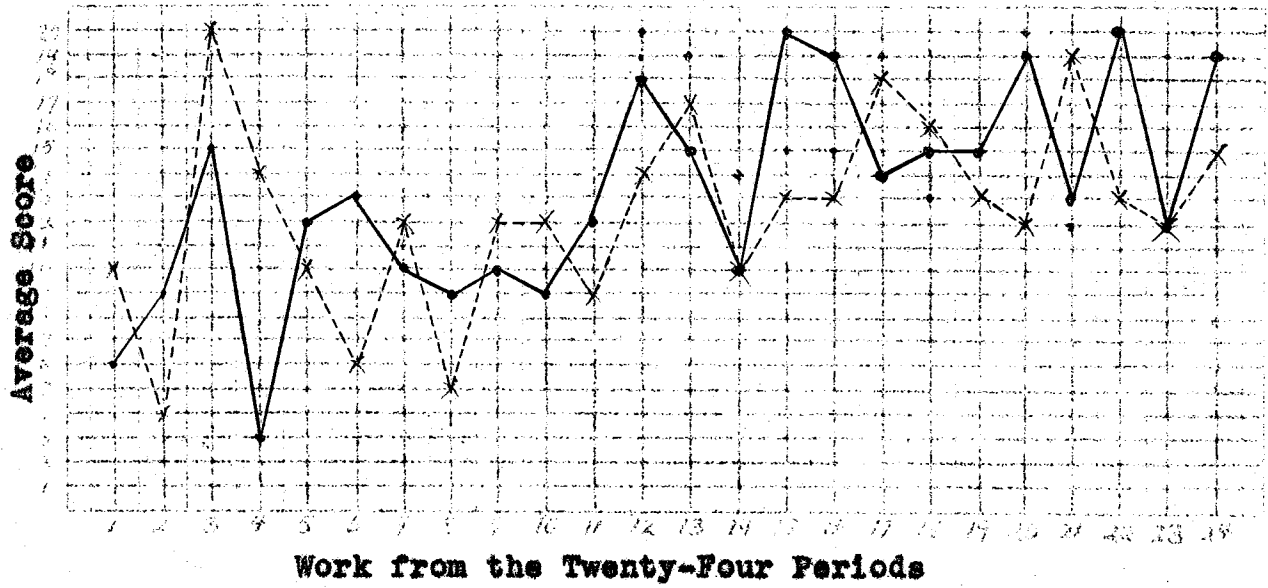
them to their folder. Put a check mark opposite your number as Judge on the folder.

Repeat this procedure with the drawings in Folder B, and so on, until all the drawings in all the folders have been judged. When you have finished rating all the drawings, proceed to the rating of the compositions. Rate the compositions and make the record just as you did the drawings, but use the rating scale for compositions.

APPENDIX B

Figure 1

Profile Chart for Work of Child A



Drawings - - - - .
Compositions ——— .

Figure 2

Profile Chart for Work of Child B

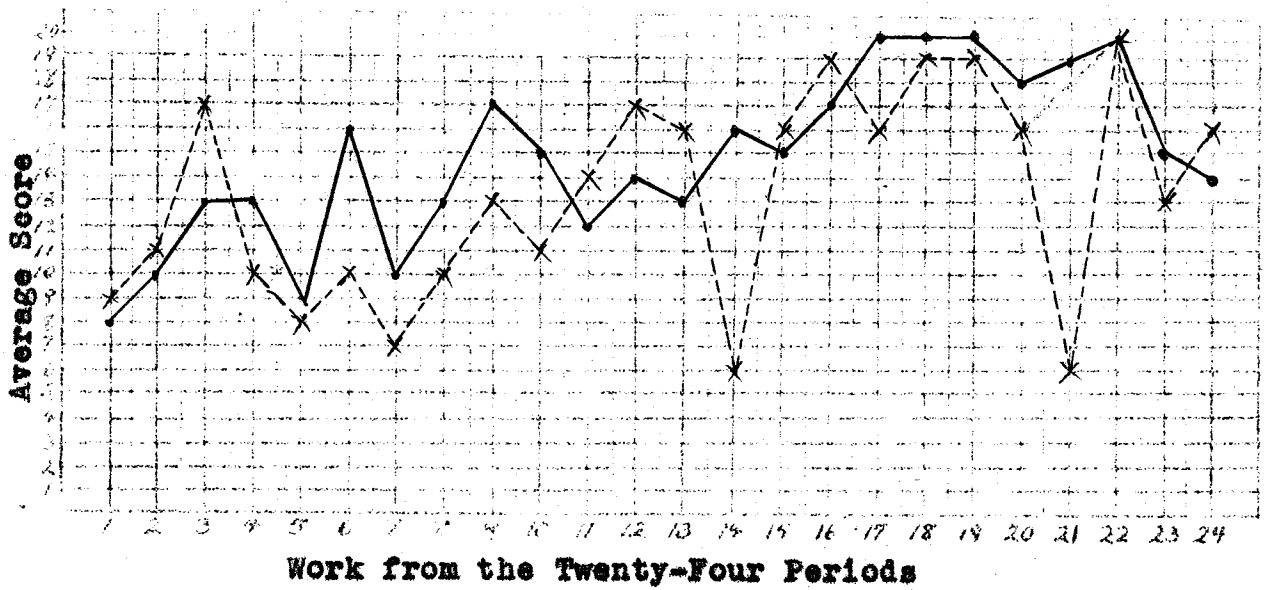
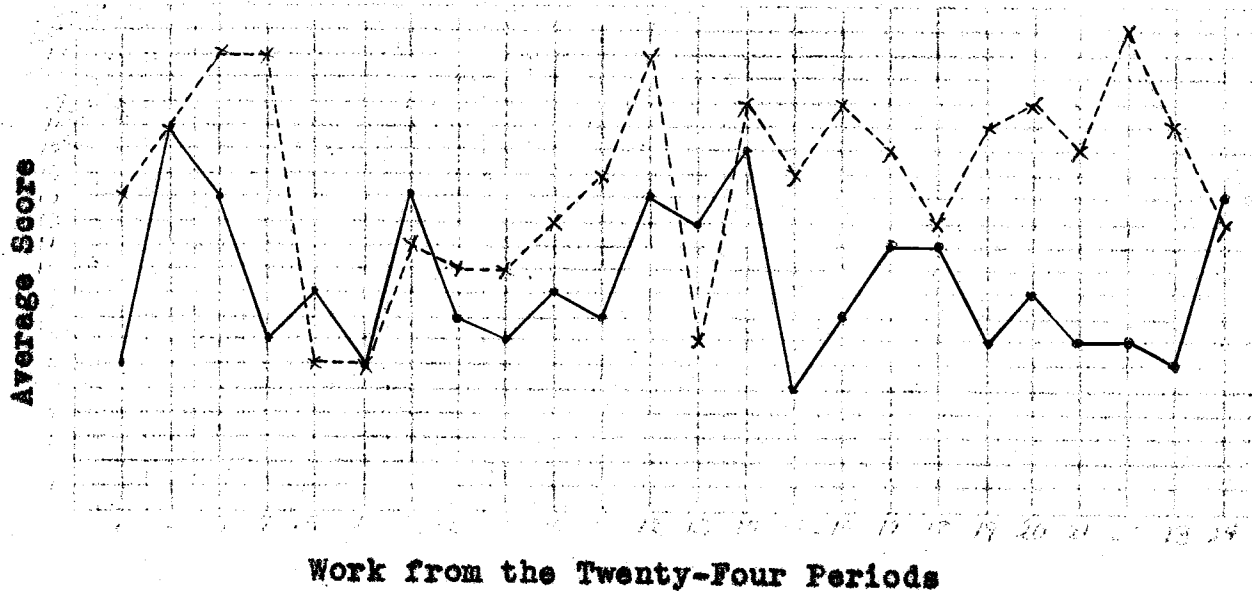


Figure 3

Profile Chart for Work of Child C



Drawings - - - -
Compositions —.

Figure 4

Profile Chart for Work of Child D

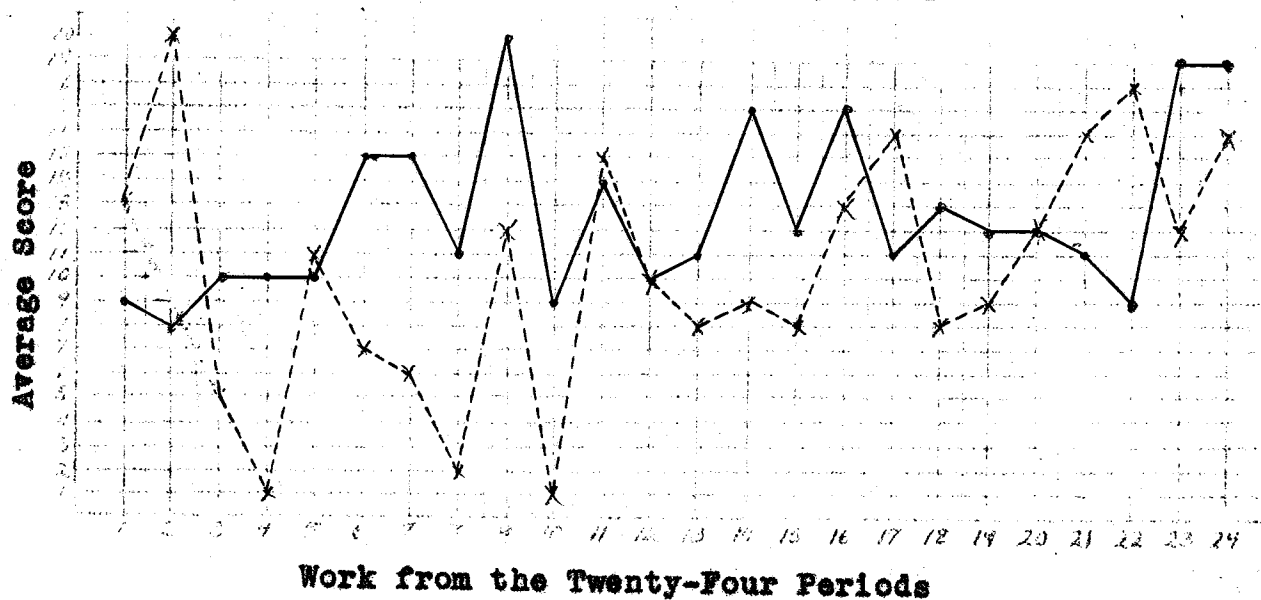
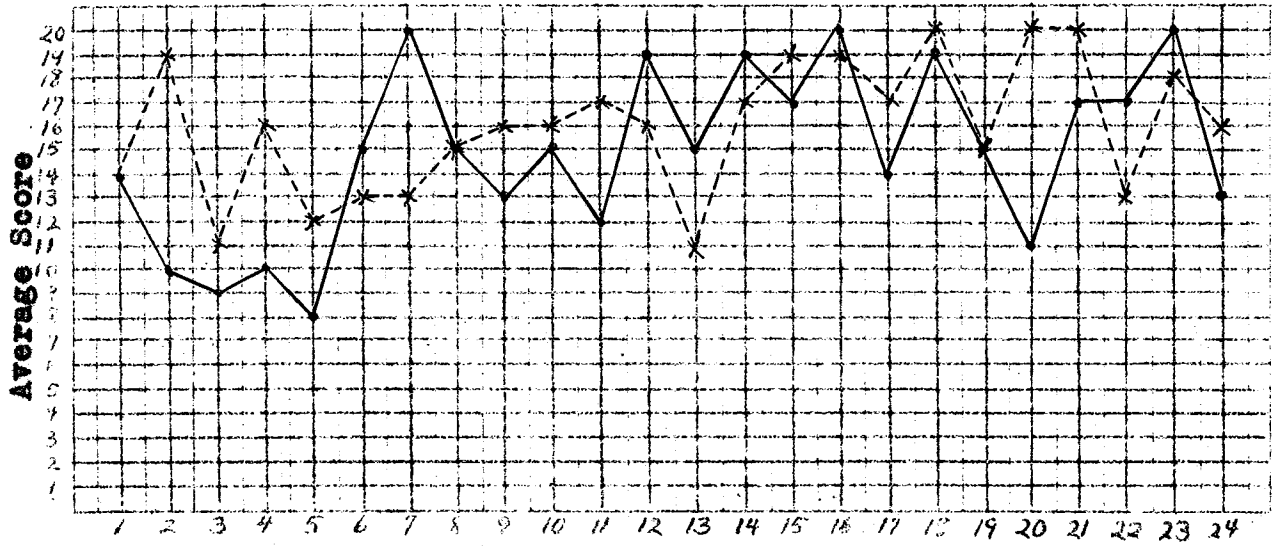


Figure 5

Profile Chart for Work of Child E

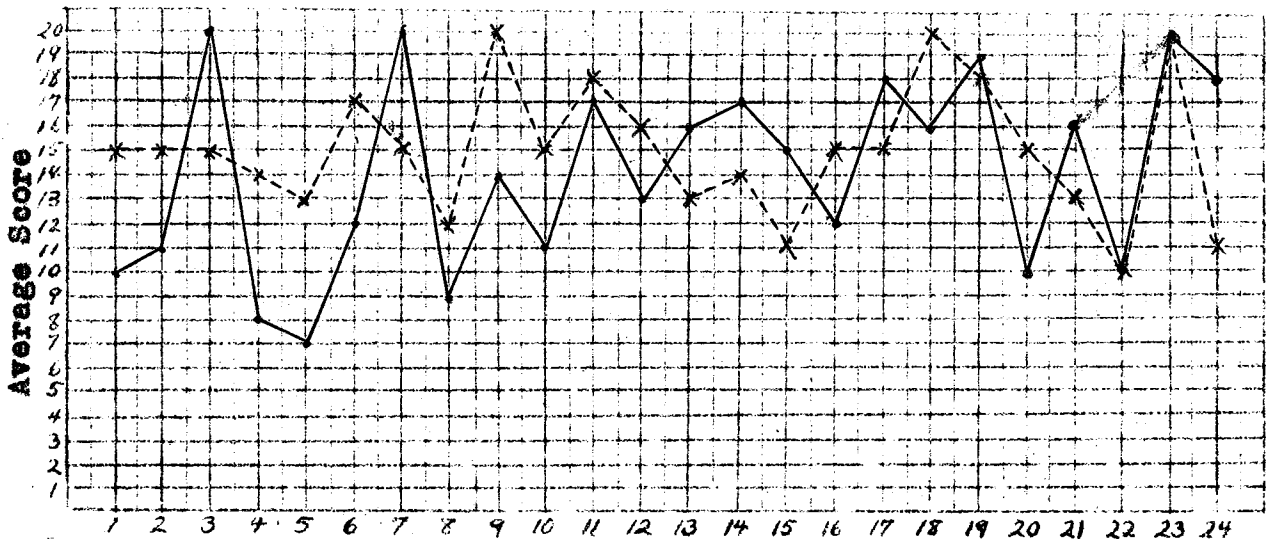


Work from the Twenty-Four Periods

Drawings - - - -
Compositions - - - -

Figure 6

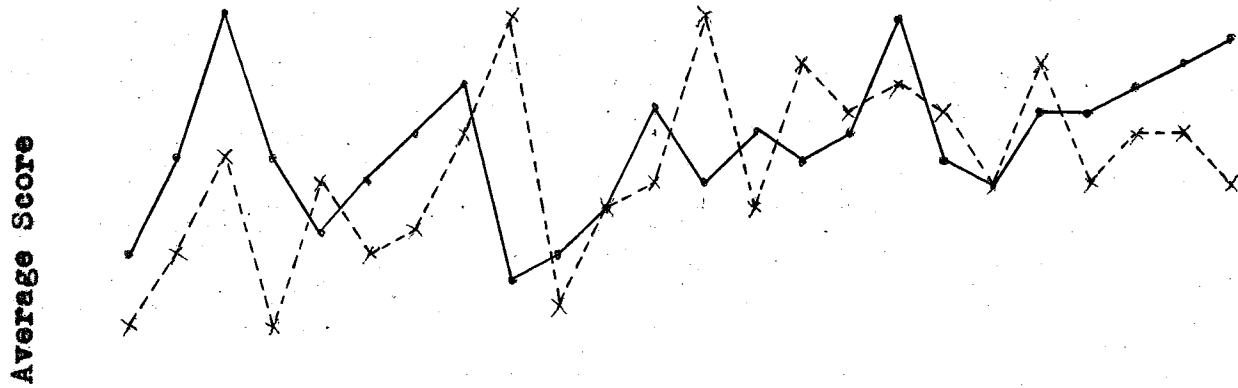
Profile Chart for Work of Child F



Work from the Twenty-Four Periods

Figure 7

Profile Chart for Work of Child G



Work from the Twenty-Four Periods

Drawings - - - - .
Compositions ——— .

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