

The Scholastic History of Fifty

Problem Children

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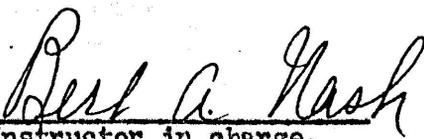
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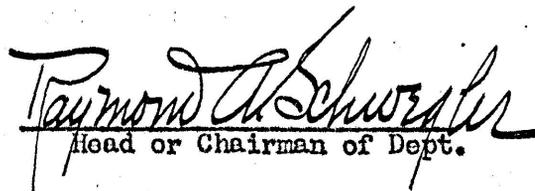
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Chapter I

Introduction

Since the beginning of the twentieth century an ever increasing amount of attention has been directed toward the problem of adjustment of the child of school age. Mental hygiene for the child is fast gaining a hold on the mind of all people as it has on the minds of most educators. The introduction of mental measurement with its accompanying problems has clearly indicated the need of education and reeducation in many kinds of behavior. Interest was further stimulated by the published results of the physical and mental examinations of drafted men during the World War.

It would seem that present society is becoming more unselfish, in the true sense of that term, in its relationship with children. Too, as we come to think more unselfishly of the future and think of it in terms of children, we take more interest in fitting the child for the problems he must face in the future. Such interest has its results in helping him to build adequate habit patterns and to utilize all the inherent possibilities of his brain and nervous system to the maximum degree. Present day psychologists consider that while society has the right to determine what class of

children shall be allowed to come into existence, once born, all children have the right to be saved from all forms of preventable disease, both physical and mental, and to be developed in all their capacities.

So certain social obligations to childhood are receiving more and more attention. The growth of child clinics, visiting teacher and school psychiatrist, who consider social relationship and personal problems other than those dependent upon the acquisition and utilization of the 3 R's as well as those growing out of school situations, is the result.

Failure to realize the adjustment problems of children in the past has been a financial burden upon society in the form of increased crime, economic inefficiency, and the up-keep of hospitals, juvenile courts and various institutions whose existence depends on unadjusted persons in social relations. Though much money is now being spent to develop the efficiency of children, this amount in no way equals the cost of, shall we say, giving "first aid" or emergency treatment to the more adult unadjusted population. A more thorough knowledge of natural laws has lowered the mortality rate among children. But the task remains to make those who are saved most productive and efficient, that is, socially adjusted.

There is at present in modern education, a felt need for clear thinking about educational values and objectives. There is always present the strain between tradition and new theories.

But such clear aims and knowledge of possibilities in education must in the end be based upon the nature of the individual. Between social life, which is in itself complex, and the individual who is a socially created person, the interactions ever increase in complexity, but the emphasis must still be placed on the individual.

Such psychological clinics as that of the School of Education of the University of Kansas, afford enlightened treatment of personality problems of individuals. School children are individuals in the process of formation and the school is one of the most important agencies directing this process. The children of today soon become the citizens of tomorrow, for weal or woe. For this reason we could wish each child to be educated and adjusted in the best possible way. But to accomplish such a result, all available facts need to be collected and analyzed. The cause of poor adjustments must be determined. The answers to these pertinent questions must be found: What are the present conditions? What personal and social conditions are at fault?

The scholastic records and clinical data of fifty problem children are herein presented and analyzed with these questions in mind.

Chapter II

Related Studies

Much literature is to be found on the method of case study and the presentation of various and sundry case studies. Problem children have been the subject of many theoretical discussions. Most cities and large school systems have their psychological clinics or some other agency for dealing with scholastic and personality problems of school children and many kinds of progress reports are published. Material about the method of dealing with the problems concerning normal children and the presentation of conditions found in the normal school population, make up much of the literature produced by educators. But inquiries into the facts concerning the problem children are not so numerous aside from those presented in case studies.

(1) Theodore M. Newcomb has written concerning "The Consistency of Certain Extrovert-Introvert Behavior Patterns in 51 Problem Boys". His experiment consisted of recording direct observations made of problem boys sent to a summer camp by various agencies, of treating such objective observations statistically, and of interpreting it in the light of case studies supplied by the agencies, in an effort "to determine whether or not certain types could be

- (1) Newcomb, Theodore M., "The Consistency of Certain Extrovert-Introvert Behavior Patterns in 51 Problem Boys." Teachers College, Columbia University, New York City, 1929. (Contribution to Education No. 382)

distinguished in problem children which would facilitate diagnosis and treatment."⁽¹⁾ From his results he concludes that, "the attempt to adopt therapeutic methods according to type distinctions is thus seen to be undesirable, since it would tend to obscure differences arising from subtle difference of environment, or from the peculiar motivation within the individual."⁽²⁾

Inasmuch as the problem children studied in this thesis were designated as such by their teachers, E. K. Wickman's study, "Children's Behavior and Teachers' Attitudes" is of much interest. Wickman investigated the behavior problems of children during 1925-26 in one public school in Cleveland. The subject of his experimental study is found in the answers to the questions, "What identifies the problem child? How do we determine that a child is well adjusted, or maladjusted? What kinds of behavior are desirable in any child? How normal is misbehavior in children?"⁽³⁾

He concludes from his analysis of prevailing attitudes of teachers toward behavior problems in children -

(4)₁. "That behavior problems in children are those forms of behavior which are declared undesirable or unwholesome by social and personal attitudes. When considered from an objective point of view, behavior disorders arise out of a discrepancy between a child's capacity to behave and the requirements

(1) Ibid. p. 13

(2) Ibid. p. 112

(3) "Children's Behavior and Teachers' Attitudes", Wickman, E. K. The Commonwealth Fund Division of Publications, New York, 1928. p. 1.

(4) Ibid. pp. 180-181.

of behavior which are imposed upon him by parents, schools, teachers, companions, and social organization. The factor of adult attitudes which determines these requirements is an integral part of the production of the behavior problem as well as of the child's future behavior adjustment.

2. That teachers' reactions to behavior problems of children are largely determined by the direct effect which the behavior produces on the teachers themselves. In so far as the behavior attacks the teacher's moral sensitivities, personal integrity, authority and immediate teaching purposes, it becomes recognized as a problem in behavior, in so far as behavior is agreeable to the teachers, respects their authority, fits in with their teaching purposes as well as their ethical beliefs, it is considered desirable behavior.

3. That attacking types of conduct are regarded by teachers as the most undesirable forms of behavior, while many unhealthy tendencies of withdrawal and dependency are not recognized as symptomatic of maladjustment.

4. That the usual treatment of behavior disorders in children is directed toward the undesirable behavior which is the symptom of maladjustment, instead of toward the underlying causes that produce the maladjustment.

5. That by the very attitudes taken toward behavior disorders in children, the tendencies are for teachers to counterattack the attacking types of behavior in children and to indulge habits of withdrawal and dependency. In either case the unhealthy modes of response are often entrenched instead of being remedied. By counter-attacking the attacking behavior of children, two risks are taken: the child's difficulty of adjusting to and accepting authority may be increased; feelings of guilt and of personal "badness" may be invoked. Under either condition, the attacking forms of behavior usually continue. By favoring withdrawal tendencies and fostering habits of dependency in children, the child's capacity for meeting and facing realities of social requirements in other situations is impaired.

6. That a child's behavior is naturally more active, aggressive and experimental than the adult's behavior. Much of this natural activity and experimentation of children is regarded as problem conduct because it does not fit in with adult standards of controlled, orderly behavior. The child cannot be considered a miniature adult in behavior any more than his is a miniature adult mind and body. The unique psychology of child

development applies as well to social behavior as it does to mental and physical development.

7. That social behavior is not transformed by knowledge or instruction until that knowledge becomes integrated into the behavior of the individual. The block to such integration lies in the child's emotional and social adjustments as well as in his conditional habits of behavior. Only in so far as the social experiences and attitudes of children are in harmony with the ideas that are presented to them, and to the extent that they can comfortably practice these ideas, can behavior be intellectually controlled."

In addition to these principles, Wickman indicates further that teachers need more general knowledge of child behavior as differentiated from adult behavior.

Reference will be made to Wickman's study again at various points in this thesis.

The records of the school history having been made up of teachers' estimations of ability, the book, "Teacher's Marks"⁽¹⁾ by Frederick James Kelly, is of interest. He presents a summary of the experimental work done in connection with teachers' marks up to the time of his study, together with an experiment of his own. He criticizes the value of teachers' marks but states, however, that "we should expect the average of the estimates of a dozen or more teachers to come pretty close to the correct ranking of young people."⁽²⁾

Clay Campbell Ross⁽³⁾ in his study, "The Relation Between Grade School Record and High School Achievement" used the method

(1) Kelly, Frederick James, "Teachers' Marks", Teachers College, Columbia University, New York City 1914, p. 20.

(2) Ibid. p. 20.

(3) Ross, Clay Campbell, "The Relation Between Grade School Record and High School Achievement". Teachers Colleges, Columbia University, New York City 1925.

of dealing with school marks that will be used here, that is, the method of averaging the marks of a number of years in each subject to determine the pupils accomplishments in that subject. The problem that he attempted to solve in this way was (1) "What is the relation between a pupils' grade school record and his success in the high school? (2) What is the relation between a pupil's grade school record and the length of stay in the high school?" He used partial and multiple correlation technique to determine the answers to his questions.

Chapter III

The Problem

What type of student is referred to a clinic as a problem child? Stated differently, the same question becomes, what type of student do teachers consider problem children?

In a general way, that question is the problem to be answered. More specifically we shall inquire into the following questions:

1. In what way do the school histories indicate that the distribution of marks of problem children differ from the normal frequency distribution?
2. What school subject or subjects stand out as being most difficult for problem children?
3. What light do the clinical reports throw upon the school history of problem children?

In considering the first two of these questions the teacher must be taken into account. It is her estimation of achievement which makes up most of the school history. Also, this group of children were referred to the clinic as problem cases by their various teachers. All in all, the teacher's judgment is certain to

play a large part in any report of school progress.

Answers to these questions shall be sought from an analysis of the scholastic records of fifty problem children in the Lawrence, Kansas, public school, and data secured from a clinic in educational psychology conducted by a class of eight graduate students under the direction of Dr. B. A. Nash at the University of Kansas.

Professor Raymond A. Schwegler established the clinic in 1912 for the purposes of training selected graduate students to assemble and interpret psychological and educational data relative to the special needs of school children, and to provide educational diagnoses and psychological service for the schools of Lawrence, Kansas. (1)

(1) Witty, Paul A., "The Clinic in Educational Psychology", Bulletin of Education, University of Kansas, V. I., Feb. 1928, No. 6, p. 23.

Chapter IV

Presentation of Data

A. Source of Data and General Description of the Group.

- Source of Data -

For each child sent to the clinic the teacher sent a reference blank for the clinic files. This blank gave the name of the pupil, his age, date of birth, his grade and school, his teacher, the school subject in which the teacher considered him best and that in which she considered him poorest, and a statement of the child's specific problem.

The teacher also rated each child on a series of behavior traits. Since such "ratings" are still of questionable value as to their validity and reliability, they have not been used in this statistical study. Teachers are apt to allow some characteristic to influence the rating on other related or like characteristics. The concept of "traits" inasmuch as it is based on their existence as unitary and isolated factors in any individual make-up, which equally effect behavior in all situations, or in all educational situations, appears to be faulty.⁽¹⁾ Personality traits are no doubt of importance in their effect upon achievement but the measurement of them has yet to be made highly reliable.

(1) St. John, Charles W., "Educational Achievement in Relation to Intelligence" (Harvard Studies in Education Vol. 15) Harvard University Press, Cambridge, Mass. 1930. p. 70.

The school records consisted of pink and white duplicate cards for the office record and of yellow sheets with the attendance and scholarship record, one for each child each year. The cards give the date of child's entrance into the system and the record of schools which he attended. The yellow sheets were accumulative records. The attendance was marked and totaled by the month. Scholarship grades were recorded by six weeks periods with the final grade for the year in each subject recorded. Promotions were given here also.

Each child was observed at the school, unknown to him, before he was brought to the clinic. Physical, mental, educational and emotional data was secured in connection with each child while under observation in the school room, clinic, playground and home.

At the clinic, each child was given the Stanford-Binet Intelligence Test and the Pintner-Patterson scale of performance tests. Each had his height, weight and vital capacity determined and his vision and hearing tested. Observations were made of the child's reactions in the clinic and of his general appearance. Follow up work consisted of seeing the child as often as possible thereafter, making such attempts at readjustments as each case demanded. Educational tests were given in some cases to supplement the teacher's judgment of the child's standing or needed remedial treatment in certain subjects.

- General Description of the Group -

Eighty children were referred to the clinic during the Spring semester of 1931. Of these, eight were from the Haskell Indian Institute of Lawrence, Kansas. Their school records were not obtainable. Two were sophomores in high school and so eliminated from this study. Three were sent to the clinic as normal children with different groups of problem cases. This was done to keep the fact from the children that they were regarded as "problems". Five were sent for classification, that year being their first in that school system. Seven had been in the system only three years or less and had entered above the first grade. The school records for five were very incomplete. Eliminating these various cases, fifty remain who had spent their entire school history in the Lawrence schools or had been in the system continuously for the last five years at least.

For these fifty, the records of forty-two were found for the kindergarten on to their present grade; the records of seven continue from the first grade and the remaining one from the second grade.

The children with whom the study deals are of the various ages and from the various Lawrence schools and grades as follows:

Table 1.

Age, Grade and School Distribution

School	Number	Age*	Number	Grade	Number
Cordley	11	6	2	First	4
Jr. High	10	7	4	Second	6
Lincoln	8	8	4	Third	7
McAllaster	7	9	9	Fourth	6
New York	5	10	7	Fifth	6
Pinckney	3	11	8	Sixth	7
Quincy	3	12	9	Seventh	10
Woodlawn	3	13	6	Opportunity	2
		14	1	Ungraded	2
Total	50		50		50

*Six years of age includes those from five years six months to six years five months; seven from six years six months to seven years five months, etc. Ages are as of the beginning of the school year 1930-1931.

Thirty-seven of these children were white and thirteen were colored. Of the white children, twenty-five were boys and twelve were girls. Of the colored children, eight were boys and five were girls.

Girls (W)	12	boys (W)	25
Girls (C)	<u>5</u>	boys (C)	<u>8</u>
	17		33

No attempt will be made to differentiate between the white and colored group, that is, no sort of race distinctions will be made. Lincoln school has all colored pupils while all of the other Lawrence schools except Woodlawn have a few colored pupils. The percent of colored children in this group is larger indeed than the percentage of colored children in the total elementary school population of Lawrence. Whether the large percent found here was due to racial prejudice or other difficulties is undetermined.

The preponderance of boys in the group seems to indicate that teachers regard boys more often as problems than they do girls: This fact would tend to agree with Wickman's statement in his study of "Children's Behavior and Teachers' Attitudes"⁽¹⁾ that, "Behavior problems were observed by the teachers to occur more often in boys than in girls." In his study, the problem of oversensitiveness was the only one to be reported considerably more often for girls than for boys. In all other problem groups the percentage of boys was greater than that of girls. He concludes "that teachers' ideals of perfectly acceptable behavior tend in the direction of the distinguishing characteristics of girl behavior."⁽²⁾

Five of the fifty children were referred to the clinic with the statement by the teacher that reading disability alone was their specific problem. These five were all from the seventh grade.

(1) Ibid . p. 44

(2) Ibid . p. 44

Remedial work was carried out with them throughout the semester by a graduate class in psychology of reading.

The specific problems mentioned by the teachers for these children were distributed as listed in table 2.

Table 2.

Distribution of Specific Problems as Mentioned by Teachers

<u>Specific Problem</u>	<u>Times Mentioned</u>
*"slow"	12
* reading disability	12
* accelerated	2
inferiority feeling	6
nervous, unstable	6
* uninterested in work	5
* unable to concentrate	3
* cannot get along with others	4
* cannot work in group	2
bully, arrogant	3
"social" problem	2
speech difficulty	4
* no ability	1
weak physically	1
* continually wants promotion	1
* untidy	1
* no number concept	1
sullen and stubborn	1
dependent	1
smokes	1
* dishonest	1
timid	1
sissy and selfconscious	1
motor disability	1
deaf	1
fells superior	1
	<hr/>
	78
no statement	2

Those items starred are obviously problems which upset the organization of the classroom. For 77% of the children for whom problems were stated, one of the starred items appeared as a difficulty in the opinion of the teacher. No doubt most of the rest of the problems listed have much bearing on the child's relations within the classroom. Such problems comprise at least 62 per cent of the problems mentioned. Wickman has concluded on this point, "that teachers' reactions to the behavior problems of children are determined in direct relationship to the immediate effect of the behavior upon the teachers themselves. Those problems which transgress the teachers' moral sensitivities and authority or which frustrate their immediate teaching purpose are regarded as relatively more serious than problems which affect for the most part only the welfare of the individual child."⁽¹⁾

Although the problems in the majority of cases were scholastic difficulties of some sort, other personality and social relationship problems appear also.

It is encouraging to note that the teachers are recognizing that a feeling of inferiority is a serious problem. Children so handicapped, if not helped in making an adjustment, are apt to be unable to do so alone and may spend much time unhappy from this cause. Of the six for which this problem was reported, five were boys, one

(1) Ibid. p. 16.

a girl. In two cases the complex accompanied physical disabilities and in two cases, very low scholarship. By the very nature of dullness, some children are compelled to feel inferior to the majority of their classmates in the still rigid school system constructed to fit the average child. Such children often try to gain some sense of importance by bad conduct, sullenness, indifference or aggressive attempts to disorder the classroom routine.

For at least twenty-two of the forty-three children (eliminating the two for whom the teacher made no statement and the five "reading cases") the teacher listed two or more behavior problems, in some cases five and six, for each child. Any one act of undesirable behavior cannot be treated as a separate problem in remedial work, but each act must be regarded as only a symptom of a more fundamental disorder in social and emotional adjustment.

Such personality problems as timidity, nervousness, dishonesty, inferiority and superiority complexes, and sullenness are not the fundamental disorders, but symptoms of more deeply underlying disorders. Again, many of the scholastic difficulties are no doubt only symptoms of deeper adjustment difficulties. Teacher and pupil relationships are often at fault. Home conditions may make school success impossible for the child. While studying these cases in the clinic, it was noted how many of them come from divided, neglected or foster homes. At least two children in the group suffered from parent-teacher conflicts. So, often serious types of behavior problems

can be understood and corrected only when they are interpreted in terms of the child's experience and relationship outside of school. Getting at such difficulties is a part of the work assigned to the visiting teacher.

B. Data Secured From School Records.

- Progress -

Up to the school year of 1931-32, fifteen of these fifty children had repeated a grade once. Six had repeated two grades. One had repeated three grades. Of those repeating one grade, three were assigned to the opportunity⁽¹⁾ room sometime during their school history; one had spent one and one-half years in the opportunity room, one spent one-half year and one had not yet been promoted from it. One child had been assigned to the opportunity room without having repeated any grades. One child had repeated one grade three years. In addition, two were denied promotion from the first grade in the spring of 1931. These various repetitions were then distributed among the grades as follows:

<u>Grade</u>	<u>Times repeated</u>
Kg.	3
First	11
Second	7
Third	6
Fourth	2
Fifth	1
Assigned to Opp. room	1

Of this slow progress group, sixteen were boys and nine were girls. The other twenty-five children studied had made normal progress, that is, they had been promoted one grade each year. None of the fifty then, made 'rapid' progress. Evidently teachers

(1) The so-called opportunity room in Lawrence was a special room for children of low I.Q. This term is sometimes applied to classes for gifted children but was here used for the opposite group of children.

regard retardation as a greater problem than acceleration.

Of the eleven of the slow progress group who repeated the first grade, seven were six years or more of age but less than seven, and four were five years or more of age but less than six when they entered the first grade. The average age of entrance into the first grade was six years four months, with a range of five years two months to six years eight months, for this group of first grade repeaters. The fifteen children who repeated any grade once average six years four months at entering the first grade. Their ages ranged from five years to nine years. The six who repeated two grades entered the first grade between the ages of five years nine months and six years ten months, - averaging six years four months. The child who repeated three grades and the one who repeated the first grade for three years, entered the first grade at the ages of six years two months and six years eight months respectively.

It would appear that these children, for the most part, entered the first grade at the age accepted as best for beginning school life. Cooper, in studying the progress of Delaware pupils, states that pupils entering school before six years suffer a rather severe handicap in the educational race and suffer the greatest handicap at the beginning of school life.⁽¹⁾ His statistics show that those entering school at six or seven years of age entertain the best chance to make normal or rapid progress.

(1) Cooper, Herman, "The Progress Problem in Rural Schools" Teachers College, Columbia University, New York 1930, p. 37.

Those children in this study who made normal progress and who had entered the first grade in the Lawrence public schools, entered the first grade at an average of six years two months of age. Their ages ranged from five years to seven years one month. The eight girls in the group averaged six years 3.8 months while the boys averaged practically the same, six years 1.7 months, at entering the first grade. All three children repeating the kindergarten had entered that class under five years of age and so were not acceptable to the first grade until six years of age.

There appears to be no significant difference in the ages of entrance between the group of repeaters and the normal progress group. Also, in the light of the accepted best age of entrance into the first grade of school, the age of entrance of this problem group is neither delayed nor accelerated and therefore is apparently not a determining cause of their being problem children.

In view of the school laws of Kansas,⁽¹⁾ it was to be expected that this group of children should enter the first grade around six years of age, though children coming from other states or those kept at home on account of sickness, would make exceptions. Such entrance rules would no doubt be more acceptable if all six year old children had a mental age of six years also. Dickson, who tested first grade children and whose results are given in Terman's book,

(1) In Kansas the School Census Age in most cities is 5-20: "Statistics of City School Systems 1927-28," U. S. Department of Interior Office of Education Bulletin (1929) No. 34.

"The Intelligence of School Children"⁽¹⁾, found a mental age of six years to be sufficient to do acceptable first grade work, while those having a lesser mental age by as much as one-half year have a practically negligible chance of doing standard first grade work. Such findings help to account for the numerous statements found in studies of school progress that more failures occur in the first grade than in any one other grade in the elementary school.

Eleven of the fifty problem children changed schools within the school system during their school history up to Fall 1931. Seven changed schools once, two twice, and two three times. Four of 36% were retained an extra year in a grade on transference and one was assigned to the opportunity room.

It is rather an indefensible custom to grade pupils down when transferred from another school. Teachers are often influenced by the fact that the child may have used different texts or that his previous teachers may have followed different methods from their own. Intelligence and educational tests should certainly be a requisite in such cases.

Regarding the I. Q. and progress, the average I. Q. for the slow progress half of the group was 86. The average I. Q. for those who repeated two grades or more, or were in any grade two years or more, was 77. The following table indicates the relationship of I. Q. and progress.

(1) Terman, Lewis M., "The Intelligence of School Children" Houghton Mifflin Company, Cambridge, Massachusetts 1916, p. 82.

Table 3.

School Progress of Repeaters in Relation to I. Q.'s.

I. Q.	Assigned to Opportunity Room*	Repeated (exclusive of Kindergarten)			Kindergarten
		3 years	2 years	1 year	
110-119				1	
100-109					1
90-99	1		1	4	2
80-89	3		2	5	
70-79		1	2	1	
60-69		1	1	1	
Total	4	2	6	12	3

*The two children who both repeated a grade and had been assigned to the opportunity room are entered twice in this table.

None of the repeaters had more than average I. Q.'s. - the highest one being 110 - while 60% of them fell below the average, suggesting a very positive correlation between I. Q. and progress. Sixty per cent of this group were boys, again indicating the greater maladjustment in school among boys than girls. The average I. Q. of the boys was 91, of the girls 87.

The four children who had repeated only the first grade and were at the time of this study in the fourth or higher grade, had an average I. Q. of 96. It seems that difficulties other than that

of mental inability kept these children from coming up to the teacher's standard of achievement in the first grade. The first years of school life are the beginning of a big socialization period for the child. For some, this process is accomplished readily. For other children, longer periods are required to become accustomed to and to adopt the behavior expected from them by others, whether such others be adults or young playmates. Some children grow up to spend their lives attacking or retreating (withdrawing) from approved social and economic behavior which they never accept. Dr. Bernard Glueck has pointed out that, "The process of growing up is to a very large extent taken up with the problem of adjusting oneself to the guidance that comes from one or another of the authoritative sources surrounding the child."⁽¹⁾ Entrance into school introduces another such "authoritative source" and one which sometimes conflicts with those previously experienced in the family and playground activities. Every child must assume some independence in the school and a process of readjustment between it and the former rather complete authority of the parent is continuously taking place. Psychiatrists have concerned themselves greatly over this range of situations arising from the dependent part acted by the child under authority as closely related to problems of mental health.⁽²⁾

(1) "Constructive Possibilities of a Mental Hygiene of Childhood" *Mental Hygiene* July 1924, pp. 649-667. Quoted p. 5 "The Problem Child in School."

(2) Sayles, Mary B. "The Problem Child in School" Published Joint Comm. on Method of Preventing Delinquency, New York, 1925, p. 14.

Contrasting with the group of first grade repeaters are those (3 in number) who had repeated only one grade above the first. These had an average I. Q. of 85.

- Attendance -

Since the children under consideration have been in school for varying number of years, the average days absent per year has been determined for each and used as the basis of the analysis of their attendance records.

For the entire group the average number of days absent per year ranged from 2.5 days to 23.3 days. The median of the average absences was 10.5 days; the average was 9.6 days.

For the slow progress group, the average of the average absences per year was 9.2 days and the averages ranged from 3.2 to 23.3 days. For the group who repeated two years or more, the average was 9.6 days and ranged from 3.3 to 15.5 days.

Sixteen children had absences amounting to 25 or more days in any one year. Four of these repeated the grade during which the absences occurred. C. H. Keys, in his Progress Through the Grades of City Schools⁽¹⁾ "Found that a prolonged absence from school is an appreciable factor in producing "arrest", especially when it amounts to more than 25 days in any one school year. Up to 25 days, 60% of the absentees on their return make up for lost time and maintain their grades." He says further that after from 25 to 45 days of absence, there is still left one chance in two of avoiding "arrest".

(1) Keys, C. H., "Progress Through the Grades of City Schools" Teachers College, Columbia University, New York City, 1911, p. 68.

After absences greater than 50 days, there is one chance in four of avoiding "arrest". In this group of children 75% maintained their grade after 25 or more days of absence. The ability of grade maintenance of this group of problem children which had excessive absences is approximately the same as that of the normal groups studied by Key. Tardies were also recorded on the teachers' records. The median of the average tardies per person was less than one (.67).

- Subject Marks -

This section deals with teachers marks taken from school records. The value and reliability of teachers' marks have been widely questioned. No doubt there are wide differences in individual ratings on a single paper, or a single question. Kelly, Starch and Elliott, and others have pointed out such differences. F. Y. Edgeworth was among the first to call wide attention to this variation. His experiment dealt with the assigning of marks to Latin papers. (1)

For all the scholastic data used, the procedure in this study is that of averaging the final marks of each year of the total school history of each child in every subject and using that average to represent his ability in any subject. Averaging the grades in this manner, tends to eliminate inequalities in marking by each child's various teachers. Each average being the combined judgment of several teachers, it tends to represent the true ability of the child in any subject.

As Ross has pointed out, it is one thing to assign an absolute value to a question or any accomplishment and quite another thing to estimate its relative value (2). Teachers, after being

- (1) Kelly, Frederick James, "Teachers' Marks", Teachers College, Columbia University, New York City, 1914. p. 51 ff. (Teachers College Contribution to Education No. 66).
- (2) Ross, Clay Campbell, "The Relation Between Grade School Record and High School Achievement", Teachers College, Columbia, New York City, 1925. (Teachers College Contribution to Education, No. 166) p.5ff.

with children for a year or more, are able to differentiate between poor, average, good or excellent ones. Again, under departmental organization, as in Lawrence, each child's promotion depends upon the judgment of his scholastic achievement of a group of teachers. Even F. J. Kelly who severely criticizes the value of teachers' marks, says, "we should expect the average of the estimate of a dozen or more teachers to come pretty close to the correct ranking of young people". (1)

Again, T. L. Kelly has stated, "whatever capacity it is that a grade, say in mathematics, stands for, it is measured with a high degree of accuracy when the records of several years and of several teachers are combined. A pupil's record is the most complete, detailed and accurate of all records of the ordinary pupil from his entrance in school to his entrance into work." (2)

Accumulative records give a picture of the pupil under varying stages of development. Such a history is of more value, says Ross, than a single laboratory experiment, towards complete understanding. He quotes William James from his "Talks to Teachers" in which James says, "No elementary measurement capable of being performed in a laboratory, can throw any light on the actual efficiency of a subject; for the vital thing about him, his emotional and moral

(1) Kelly, Frederick James, Op. Cit. p. 20.

(2) Kelly, T. L., "Educational Guidance", Teachers College, Columbia University, 1914, New York City, p. 84. (Contributions to Education, No. 71).

doggedness can be measured by no single experiment, and becomes known only by the total results in the long run."⁽¹⁾ Standard tests, then, are of great value but only when used with the complete record or history, can complete knowledge come.

Psychologists, for the most part, are stressing factors other than merely school achievement in adjustment of problem children. It is not, however, improbable that teachers take into account in their marks some of these other factors, such as attitude toward school, habits of indolence and industry and the like.⁽²⁾ Marks afford a measure of pupil's attitude and habits of character, such as industry, persistence and conscientiousness, already acquired factors which have been reflected in the grade school record, and which will always be very important factors in determining an individual's success in school or out of school.⁽³⁾

Ability to learn has been found to be in no way synonymous with actual performance. Teachers have allowed the "halo" effects cast by habits of conscientiousness and perservance or other traits of personality considered desirable by her, to influence the marks she gave in subjects. This fact helps explain the low correlation found between I. Q. and school success.

Considering these various points, it is felt that,

- (1) James, Wm. "Talks to Teachers" New York 1899. p. 135. Quoted Ross, Op. Cit. p. 6.
- (2) Ross, Op. Cit. p. 24.
- (3) Ross, Op. Cit. p. 70.

however unreliable any one teacher's mark in any one year may be, the average of all the teachers' marks given in any subject throughout the school history of a child, indicates with some degree of accuracy his accomplishment in that subject.

In the records the grades given were E (excellent), G (good), M (medium or average), p (poor), and F (failure). To these grades, the values 2, 1, 0, -1, and -2 were respectively assigned for computation purposes and are used hereafter to represent the grades.

The fact that not all of the subject groups have fifty cases, is due to some of the children being in the lower grades where not all of the subjects are included in the curriculum or in Junior High where some have been dropped.

Table 4 has been prepared to indicate the number of cases in each subject, with the mean and sigma marks of each.

Table 4

Mean and Sigma of Marks of Subject Groups
(Entire School History)

Subject	Number of Cases	Mean (of averages) of Marks	Sigma
Reading	50	-.104	.97
Arithmetic	46	-.05	.88
Penmanship	48	.132	.74
Spelling	47	.142	.97
English	42	.15	.66
Art	49	.266	.675
Social Science	43	.268	.70
Music	49	.284	.91
Citizenship	50	.324	.84
Physical Education	47	.463	.495
Home Mechanics	6*	-.833	1.14
Home Economics	4	-.25	1.2
Science	11	-.272	.69
Total Scholastic Average (excepting Phy. Ed. and Citizenship)	50	.094	.59

*The data on the second group in the table, that is, home economics, home mechanics and science include only the junior high pupils involved in the study.

Reference to Table 4 shows that the mean of every subject group falls within the M (medium) interval, that is, within the interval of $-.5$ to $+.49$. Physical education marks are the highest, while reading has the lowest mean. The fact that the group of junior high school pupils who were referred to the clinic for reading disability is included has perhaps influenced the reading mean to make it lower; however, it is but slightly lower than the arithmetic mean. It is to be noticed that the fundamental subjects, the 3 Rs, have the three lowest means.

Seemingly the teachers consider reading, arithmetic, spelling, and penmanship as the most important of the school subjects, for they apparently have criticized ability in these three subjects more severely when designating children of the entire school as problem children.

Inspection of the means of the subject groups, does not bring to light any outstanding difficulty in any subject. It is realized that statistical treatment of any sort with data of this kind covers up individual variations and the difficulties of any one child are lost in the procedure. Again, among children whose I. Q.s are below average the accumulative decrement of intellectual growth is apt to become great enough at some point to interfere with success in a school subject. Averaging such a child's grades which include earlier satisfactory ones as well as latter unsatisfactory

ones, hides the fact that the child may now be doing most inferior work.

Table 5

Mean and Sigma of Marks
Of Subject Groups for Year 1930-31

Subject	No. of Cases	Mean	Sigma
Arithmetic	47	-.149	1.06
Reading	38	-.131	.95
Spelling	36	-.083	1.18
Social Studies	42	.095	.71
English	41	.097	.69
Physical Education	48	.132	.76
Penmanship	38	.157	.74
Art	48	.166	.85
Music	48	.229	.89
Citizenship	39	.538	.98
Home Mechanics	6	-.833	1.14
Home Economics	4	-.25	1.2
Science	11	-.272	.69

However means of the subject groups were worked out for comparison with those in Table 4 for the year 1930-31, that is, the year in which the children were sent to the clinic. It is seen in Table 5 that reading, spelling and arithmetic still have the lowest means. The positions of other subjects have changed however, so that the coefficient of correlation determined by the rank differences method is $-.132$, indicating that there is no significant correspondence in the two rankings.

Table 6

Distribution of the Averages Among the Five Marks
Given by Teachers for Entire School History

Subject	E*		G		M		P		F		Total No.
	No.	%									
Reading	3	6	11	22	19	38	12	24	5	10	50
English	2	5	8	19	27	64	5	12			42
Spelling	3	6	16	34	13	36	7	15	4	9	47
Pennmanship	1	2	11	33	27	56	8	17	1	2	48
Arithmetic	2	4	10	22	20	44	12	26	2	4	46
Social											
Science	3	7	8	19	27	62	5	12			43
Music	1	2	18	37	24	49	6	12			49
Art	2	4	12	25	31	63	3	6	1	2	49
Physical											
Education			24	51	21	45	2	4			47
Citizenship	6	12	19	38	16	32	9	18			50
Home Mechanics					2	33	3	50	1	17	6
Home Economics			1	25	1	25	1	25	1	25	4
Science			1	9	6	55	4	36			11
Total	23		139		237		75		15		
Total School											
History	1	2	10	20	33	66	5	10	1	2	50

*E being 2.49-1.50; G, 1.49-.50; M, .49 to -.50; P, -.51 to -1.50; F, -1.51 to -2.50.

Similar tabulation was made of the distribution of averages in each subject according to the five grade categories and presented in table 6 and 7. Again the fact appears that most grades fall in the M category and for all subjects except reading and arithmetic, slightly more cases fall above than below the average grade, M.

Table 7

Distribution of Averages Among the Five Marks in
Subject Groups for year 1930-31

Subject	E*		G		M		P		F		Total No. Subj. Mark
	No.	%	No.	%	No.	%	No.	%	No.	%	
Reading	3	8	6	16	16	42	9	24	4	10	38
English	2	5	6	15	27	66	6	15			41
Spelling	5	14	5	14	12	33	10	28	4	11	36
Penmanship	1	3	10	26	22	58	4	10	1	3	38
Arithmetic	4	8	7	15	20	43	11	23	5	11	47
Social Studies	3	7	4	10	29	69	6	16			42
Music	3	6	16	33	19	40	9	19	1	2	48
Art	4	8	8	17	30	63	4	8	2	4	48
Physical Education	3	6	13	28	28	58	4	18			48
Citizenship	7	18	14	36	11	28	7	18			39
Total	35		79		214		70		17		

*E being 2; G, 1; M, 0; P, -1; F -2. since just one year involved.

Table 7 was made for comparison with table 6. Arithmetic, spelling and reading still have the largest number of pupils falling in the P (poor) and F (failing) categories, so that regardless of whether the entire school marks or the marks for the last year are considered, these three subjects stand out as those causing the most difficulty for this group of school problem children.

Regarding the differences in grading the so-called fundamental subjects and those later introduced into the curriculum, we must consider the fact that the former have had a longer time in which to become standardized as to method and standard of achievement. Either the standards in reading, arithmetic and spelling are indeed placed higher, or the teachers consider them of more importance and so criticize accomplishment in them more severely and are inclined to be more lenient in assigning marks in the other, newer subjects.

Perhaps, due to the fact of a lesser degree of standardization in subjects other than reading, arithmetic and spelling, desirable personality characteristics of children, such as attitude, perseverance, ability to work well in a group, and the like, have more influence upon the mark which the teacher gives.

With the points just brought out, it is of interest to note that subjects which the teacher designated as best and poorest for each child on the blanks with which they were referred to the clinic.

Upon the blanks were spaces for the subject or subjects

in which the teacher considered the child best and for those in which she considered him poorest. Often the teacher mentioned more than one subject in each case. The following table shows the number of times each subject was mentioned as best or poorest for a child, together with similar data obtained from the school records for comparison. As averages were often the same for more than one subject in the marks also, each was counted once to agree with the procedure the teachers followed in mentioning more than one subject.

No doubt in most cases the teachers' ranking were made by one teacher, generally the home room teacher. The coefficient of correlation between the two rankings in the group of subjects designated as "best" is $-.004$, and between the two rankings of "poorest", $.975$, as determined by the rank-differences method.

It appears that the teachers more nearly approached the average judgment of several teachers as expressed in marks, when they consider the subject in which the child is poorest than when considering that subject in which he is best. Perhaps the teachers placed more importance to arriving at a just ranking of his poorest work than of his best when filling out the blanks for the simple reason that they were referring the child to a problem clinic.

Table 8

Teacher's Estimate of Best and Poorest Subject
Compared with School Records

Subject	Times mentioned by Teacher		Times found in Record	
	Best	Poorest	Best	Poorest
Arithmetic	11	14	2	14
Reading	8	20	6	15
Music	11	1	8	3
Art	4	1	10	3
Penmanship	3	2	7	5
Spelling	8	9	11	10
Social Science	2	2	8	5
Physical Ed.	4	1	14	1
English		2		6
Science	1			
Home Mechanics	1			
Home Economics		2		
Handwork	1			
All subjects	2	2		
No subjects	1	1		
Unstated	6	4		

Fig-1
Distribution of Reading
Marks Compared With Normal
Frequency Curves.

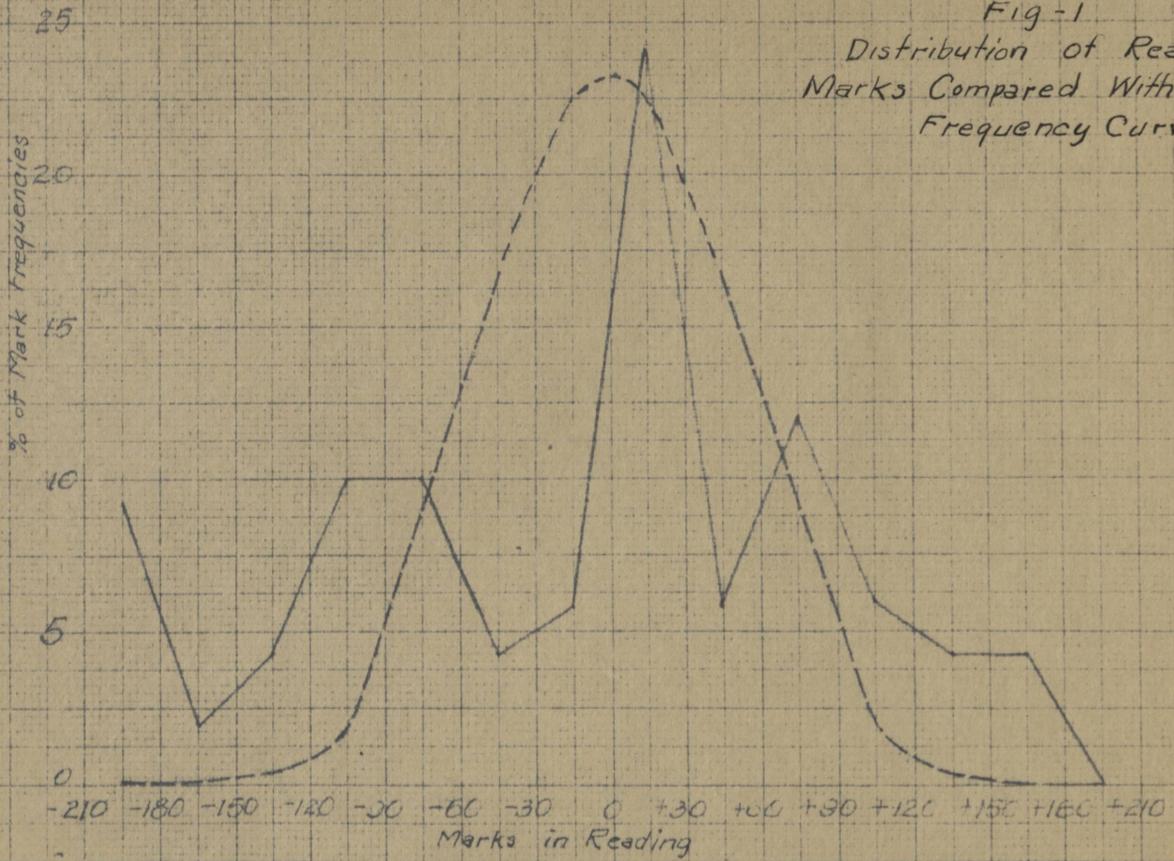
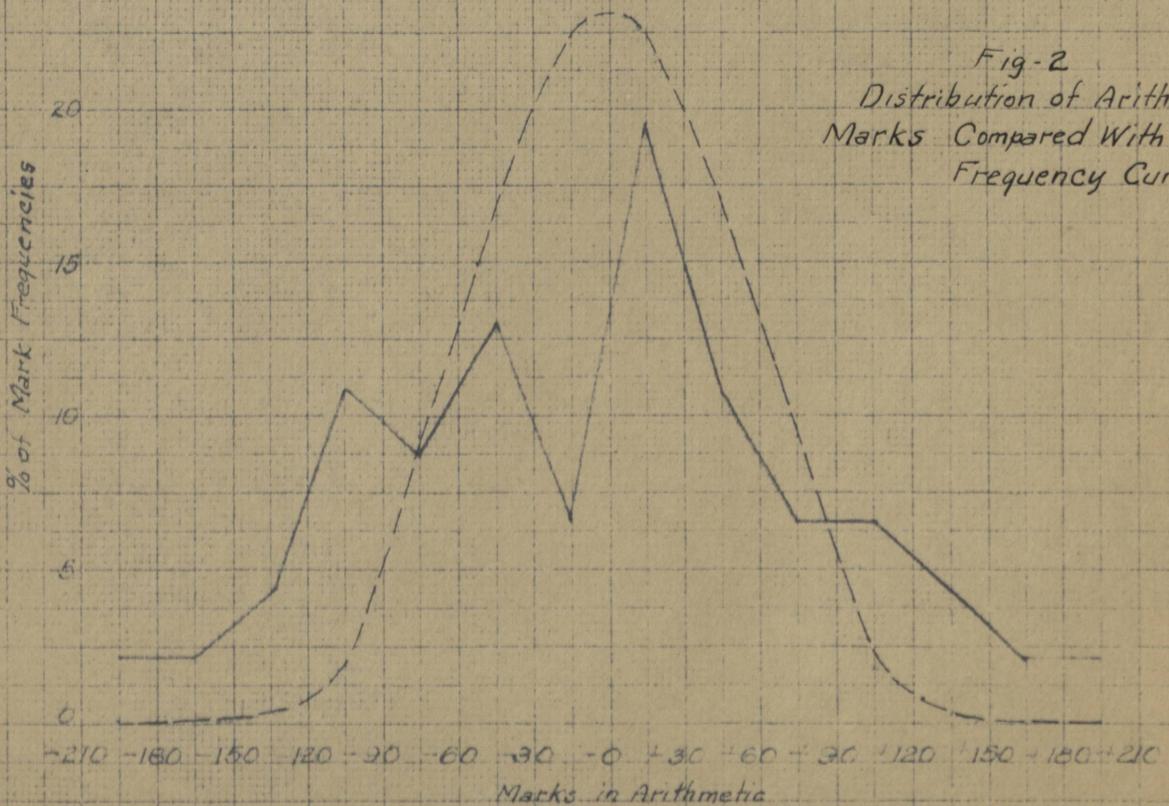


Fig-2
Distribution of Arithmetic
Marks Compared With Normal
Frequency Curves.



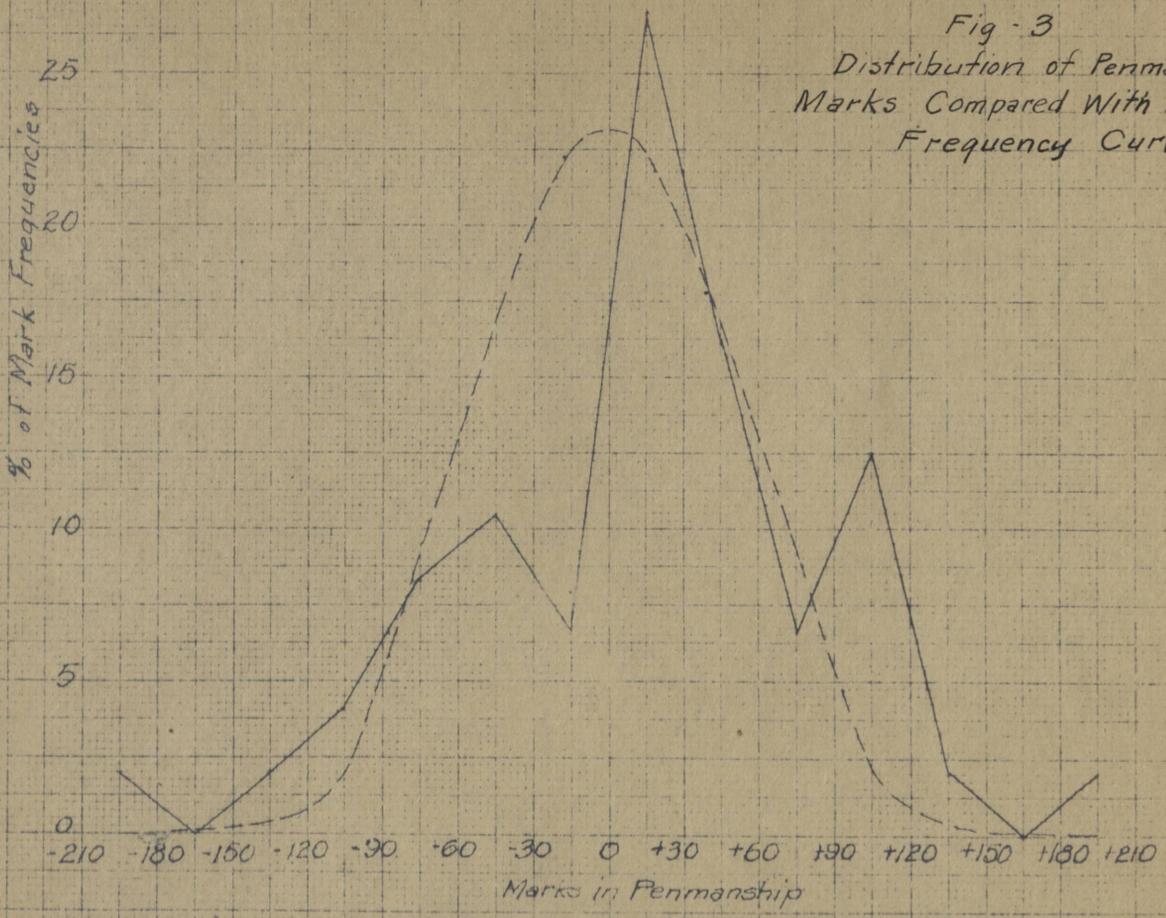


Fig - 3
Distribution of Penmanship
Marks Compared With Normal
Frequency Curves.

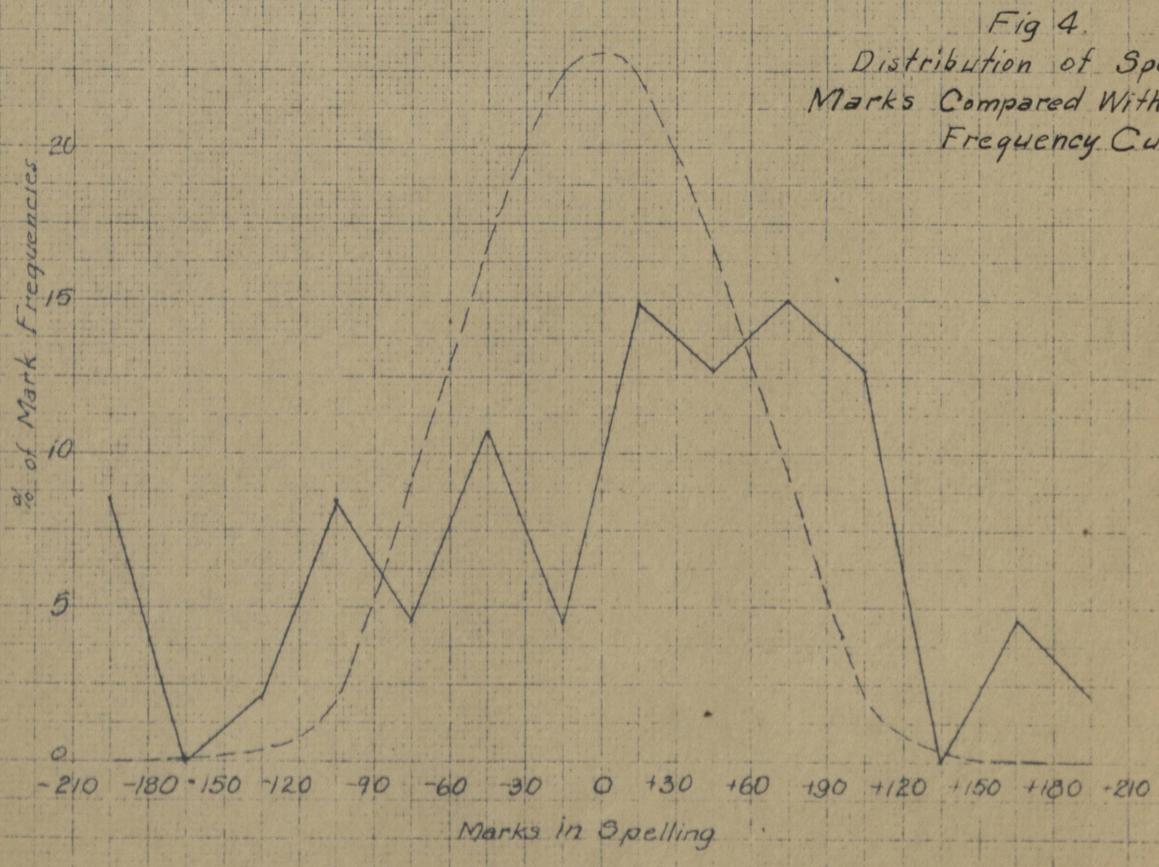
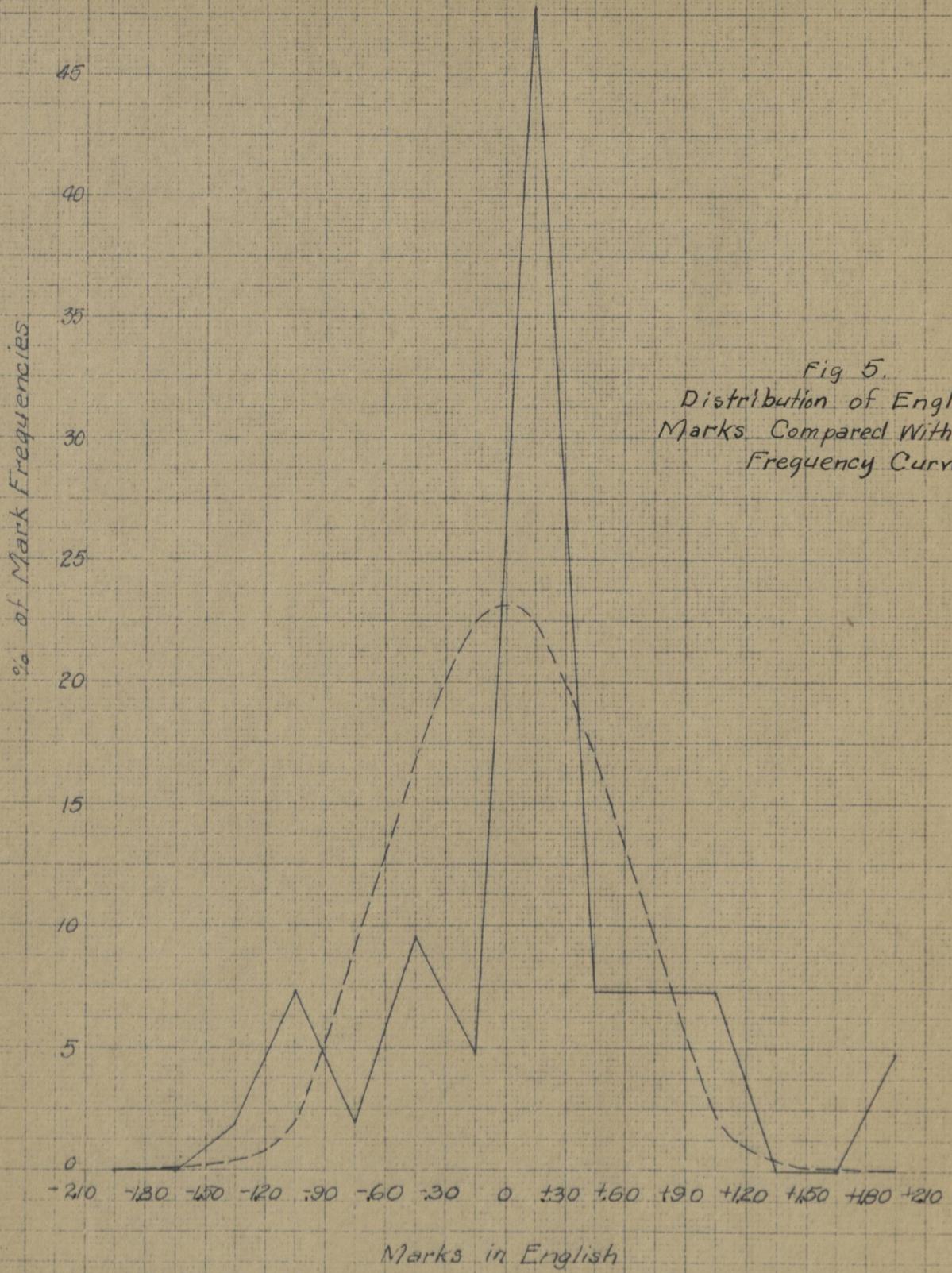


Fig 4.
Distribution of Spelling
Marks Compared With Normal
Frequency Curve



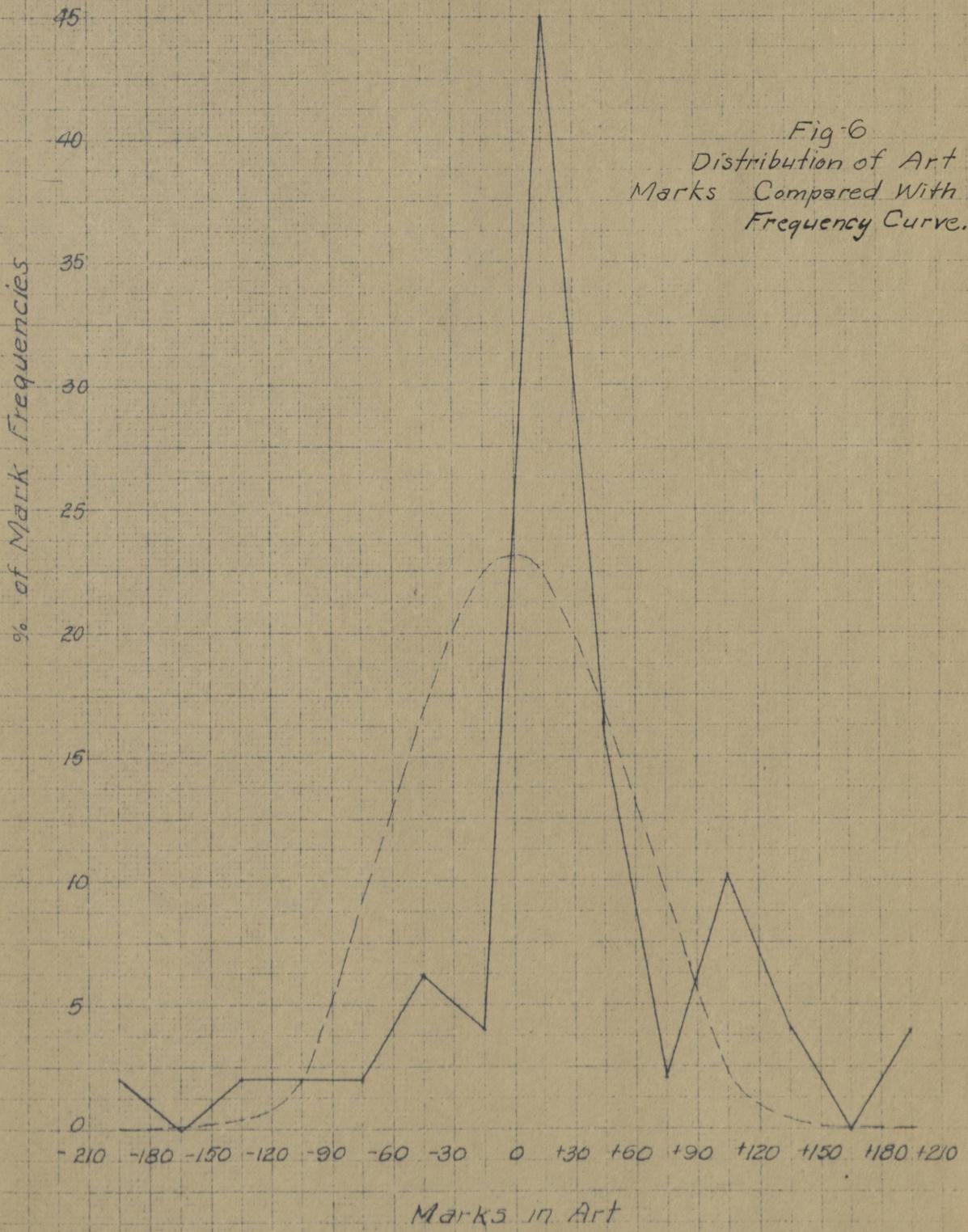
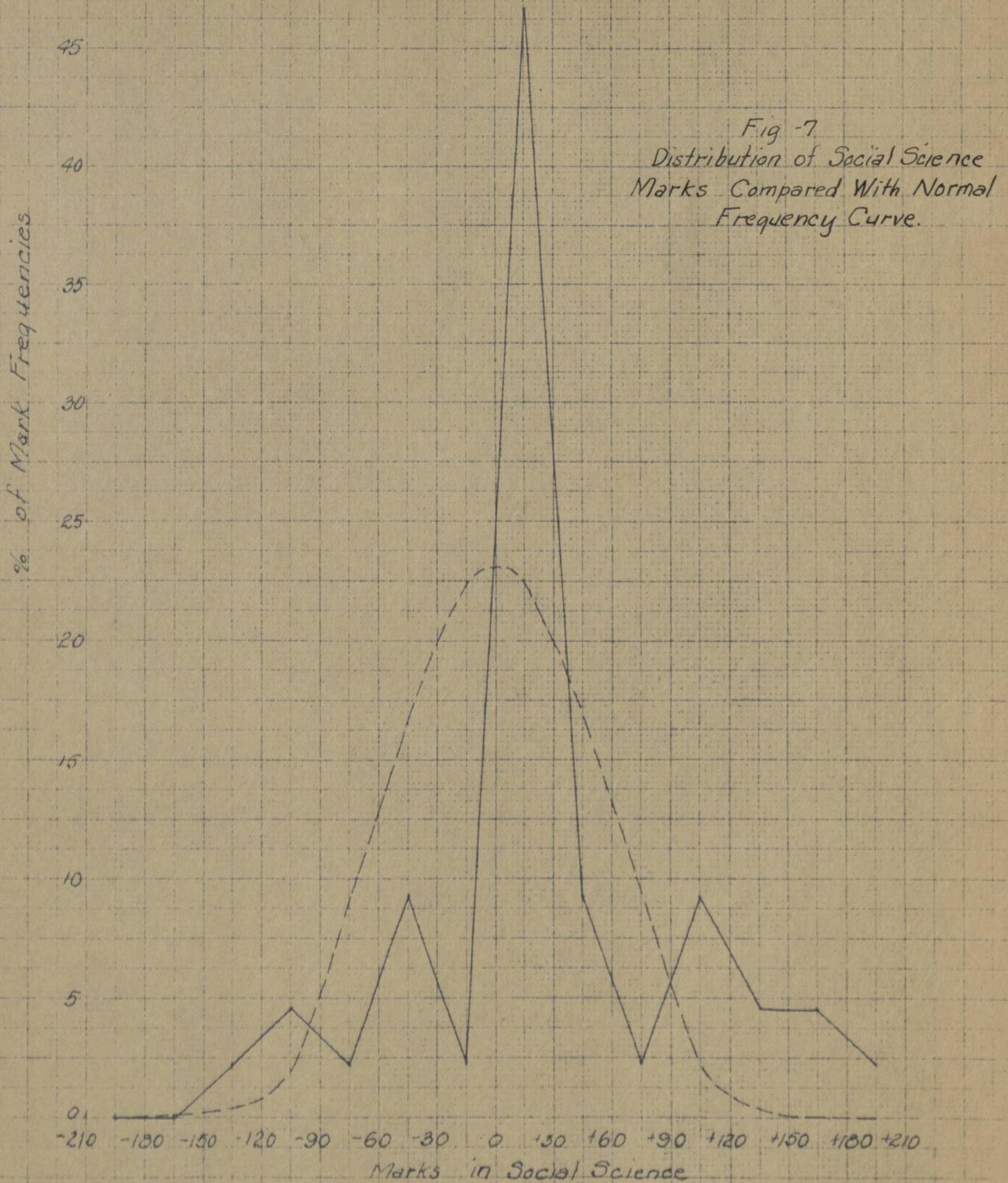
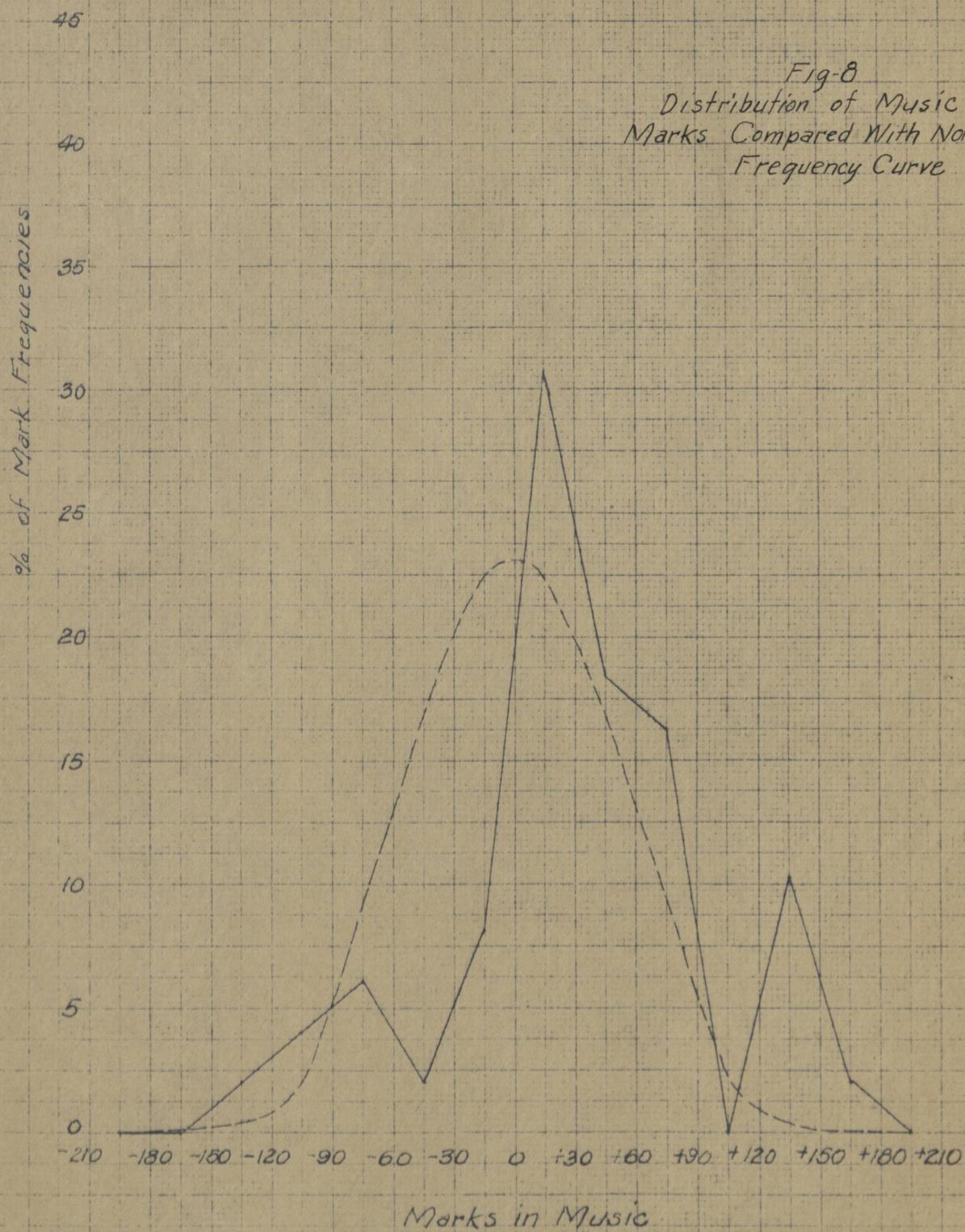
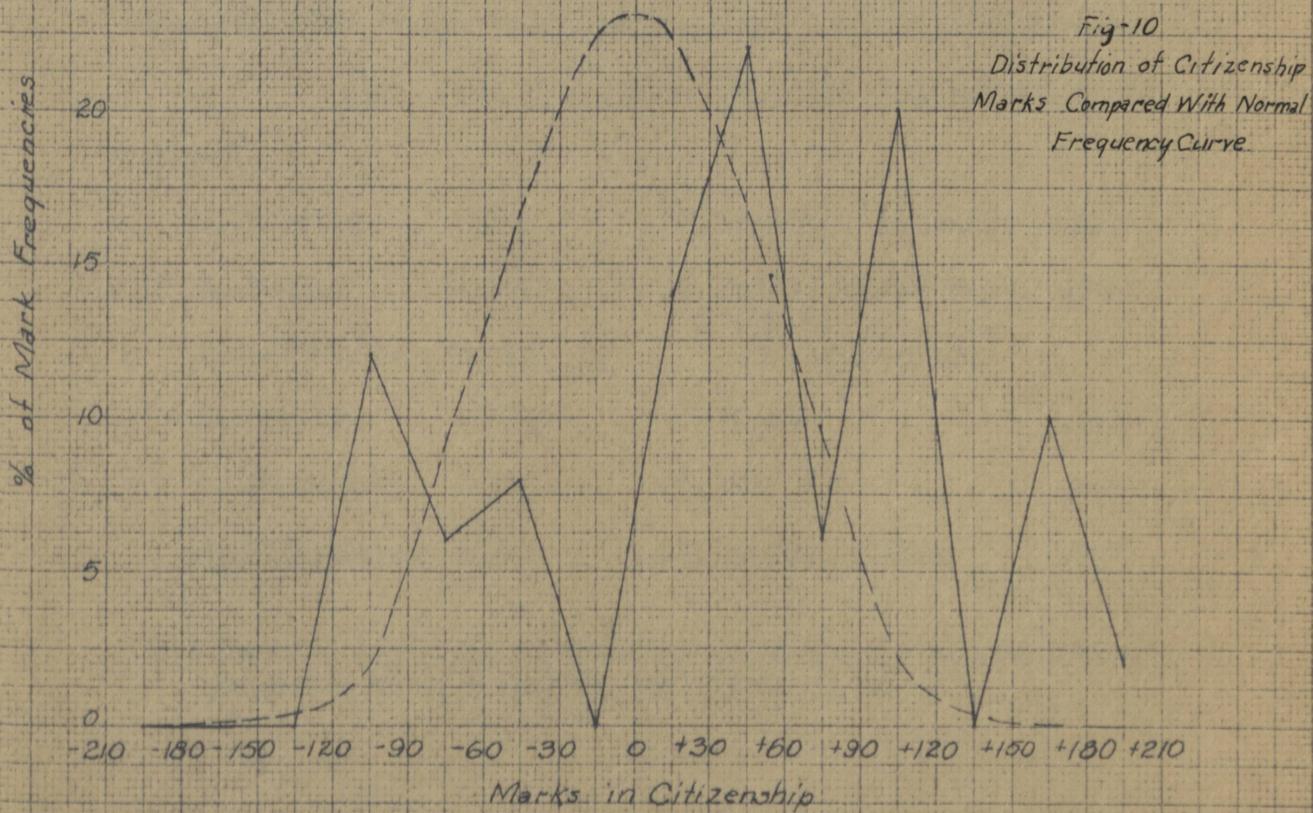
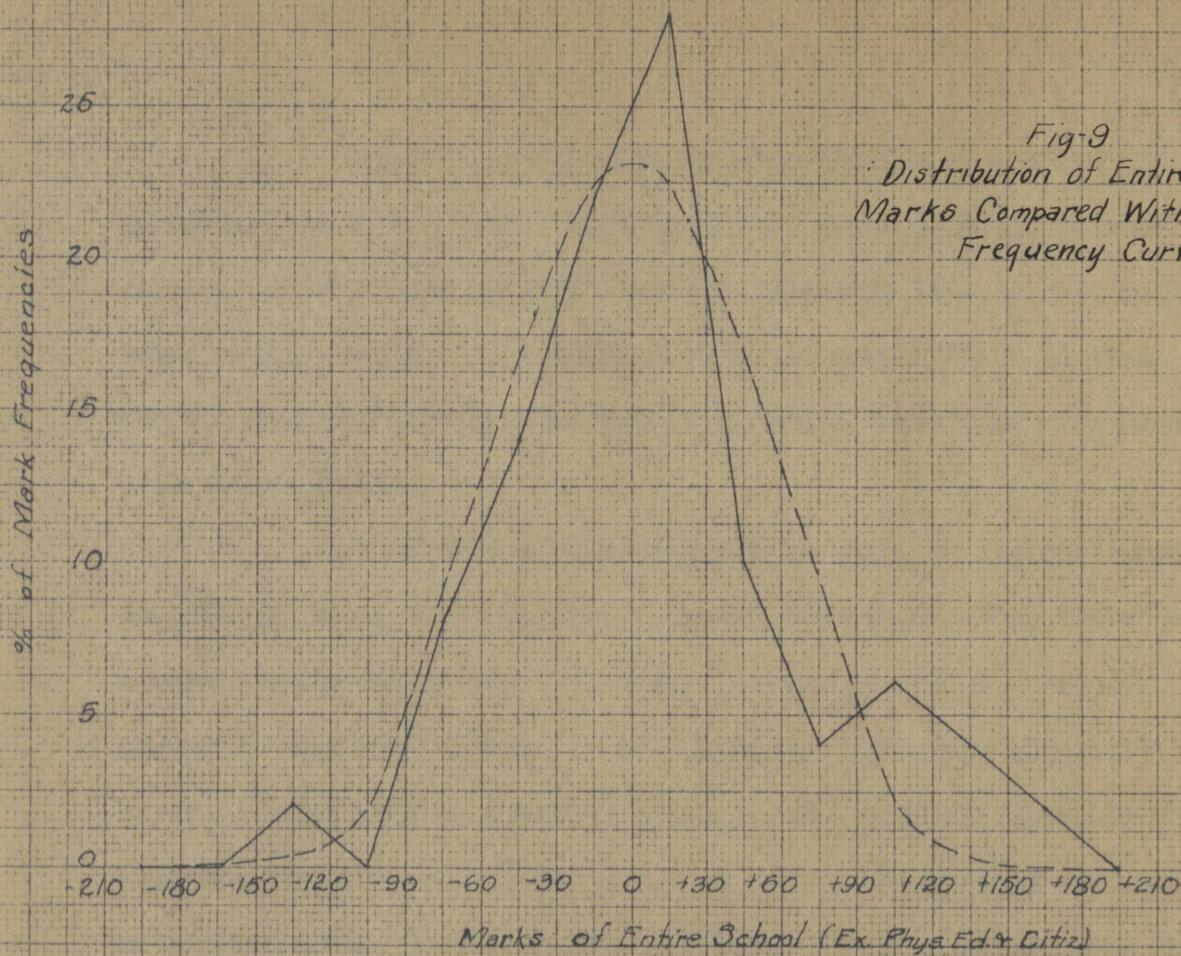


Fig-6
Distribution of Art
Marks Compared With Normal
Frequency Curve.







Figures 1 to 10 show the distribution of the average marks for the entire school history in each subject group, in comparison with the distribution one would expect to find in an unselected group, that is, in comparison with the normal curve plotted for the fourteen intervals in which the school marks were also distributed as found.

Inspection of the graphs shows that for the most part the distributions as found follow closely that which would occur in a normal unselected group. However a certain amount of skewness, generally negative, appears in most of them. From mere inspection however, it is hard to determine in all cases in which direction the skewness lies and the relative amount. For a better interpretation of the variations in the graphs, the amount of skewness has been determined by use of the formula, $3(\text{mean}-\text{median})^{(1)}$, in each case.

The amount of skewness found for each subject is as follows:

1. Reading	-.549	7. Physical Education	-.091
2. English	-.308	8. Entire School Marks	.003
3. Arithmetic	-.283	(except Phys. Ed.	
4. Spelling	-.201	and Citizenship)	
5. Penmanship	-.158	9. Music	.046
6. Citizenship	-.146	10. Art	.244
		11. Social Studies	.347

(1) Garrett, Henry E., "Statistics in Psychology and Education" Longmans, Green & Co. New York 1926, p. 86.

In interpreting these figures of skewness, it is understood that left, or negative skewness indicates that the marks are piled up toward the end consisting of the high marks.

Banker⁽¹⁾ has found that the distributions of teachers' marks have a definite negative skewness, that is, the mode is removed from the mean to the higher end of the scale. He quotes Rugg as concluding "that regardless of subjects of study, the typical distribution of teachers' marks results in a form of curve which may be described as skewed to the high end of the percentile scale, namely, the peak of the curve will be considerably above the mean of the base line upon which the curve is plotted and above the theoretic mean of the normal frequency curve plotted on that line."⁽²⁾ All of the studies which Rugg summarized and from which he drew his conclusions were of distributions of high school or college marks however. Banker says the distribution of marks of children in the elementary school are less likely to be disturbed by complicating factors since the teacher gives marks on a few subjects, methods of instruction are more highly standardized and here the teachers have few incentives to accentuate their personal eccentricities. He also states that averaging several grades "tends to neutralize the personal equations of the marker." Banker thinks we are possibly dealing with something

- (1) Banker, Howard J. "The Significance of Teachers' Marks" Journal of Educational Research, Vol. 16, pp. 159 ff. Also pp. 271 ff.
- (2) Rugg, Harold O., "Teachers Marks and Marking Systems" Education-
al Administration and Supervision 1: 129 Feb. 1915.

more than chance variations or personal equations of teachers. He concludes that the skewness found is due to the fact that skewness is a fundamental function of the fact that the upper limit of the marking scale is fixed at 100 while the lower limit trails out indefinitely and therefore the median is indeterminate; that it is a function of faulty grading, there being a small but constant excess of extremely low marks (this should happen in retarded or special classes); that it is a function of selective elimination from advanced classes (rather retardation in elementary schools because of compulsory attendance); that it is a function of student personality, for the incentive to surpass the class is continually upheld and results in a crowding toward the top.

Banker in a study of his own in elementary schools found the distributions to be consistently skewed negatively which he attributes to causes only found in inherent characteristics of the different elements of the total school population. The amounts of skewness which he found in various different elementary schools ranged from $-.586$ to $-.231$. His distributions were averages of many subject marks.

Reference to the graphs show that here the amount of skewness ranked from $-.549$ in reading marks to $.347$ in social studies. If the distributions of teachers' marks in normal school populations are skewed consistently negatively, the marks of this group of children in music, art, social studies and perhaps physical education had a greater number of above average marks than one would expect in an unselected group, much less a "problem" group; while in

Table 9

Intercorrelations of Subject Marks

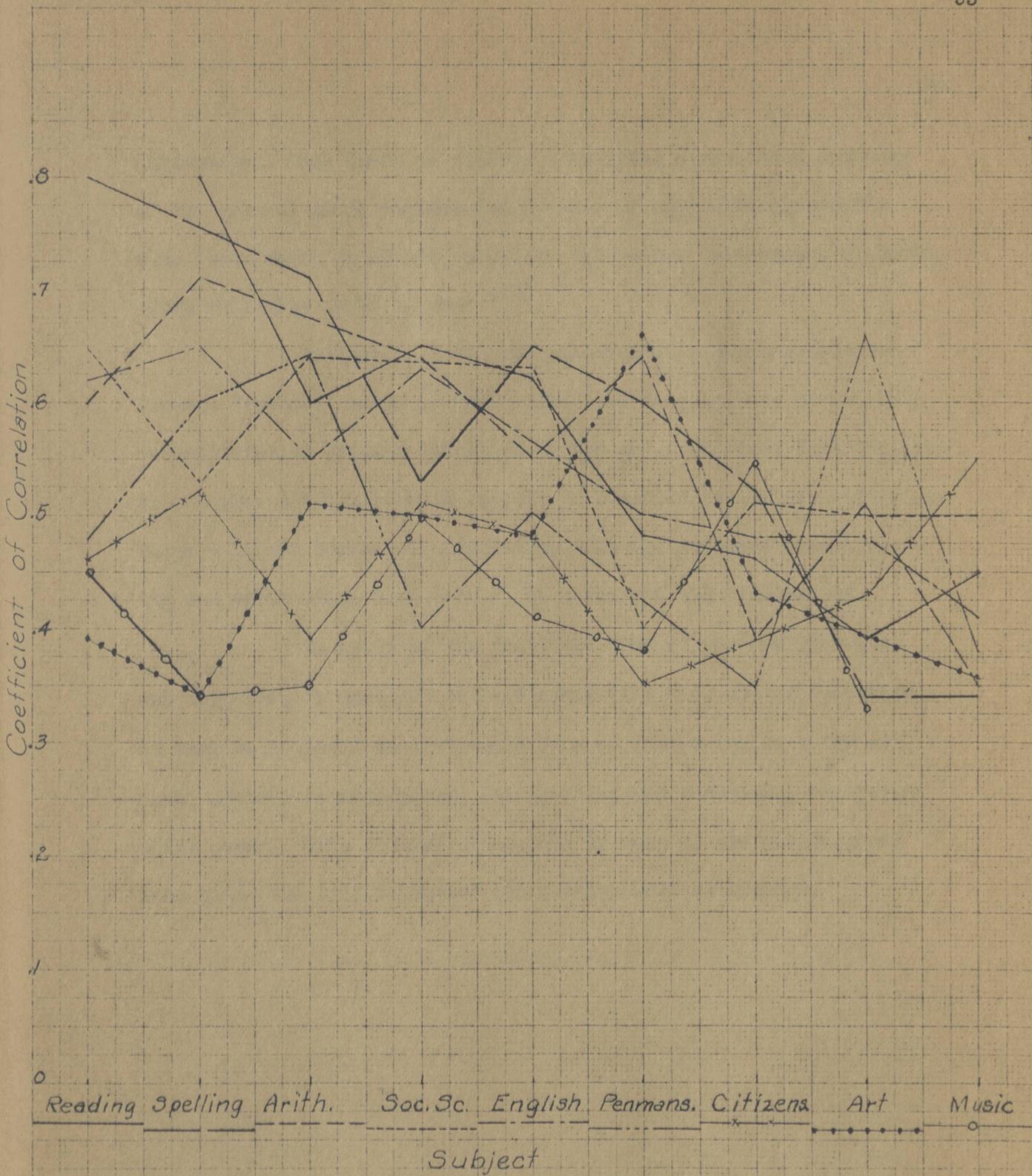
- Coefficient of correlation with P. E. of each -

Subject	Reading	English	Spelling	Penman- ship	Arith- metic	Social Science	Music	Art	Citizen- ship
Reading		.62 ± .06	.80 ± .03	.48 ± .07	.60 ± .06	.65 ± .054	.45 ± .07	.39 ± .08	.41 ± .08
English			.65 ± .06	.50 ± .08	.55 ± .07	.63 ± .066	.41 ± .087	.48 ± .08	.48 ± .08
Spelling				.60 ± .06	.71 ± .05	.53 ± .077	.34 ± .08	.34 ± .08	.52 ± .07
Penmanship					.64 ± .06	.40 ± .08	.39 ± .08	.66 ± .08	.35 ± .08
Arithmetic						.64 ± .06	.35 ± .08	.51 ± .075	.39 ± .08
Social Science							.50 ± .075	.50 ± .077	.51 ± .079
Music								.33 ± .08	.55 ± .066
Art									.43 ± .08
Citizenship									
I. Q.	.53 ± .07	.26 ± .09	.27 ± .09	.16 ± .09	.36 ± .08	.38 ± .09	.21 ± .09	.30 ± .08	.25 ± .089

reading, english, arithmetic, spelling and penmanship the marks are distributed more or less as one would find them in normal groups.

Table 9 indicates the coefficients of simple correlation between the various subjects, one with another, and between each of them and I. Q. To be sure of a low degree of correlation an r should be five or six times its P. E. For about one-fourth of the combinations, the correlation is then negligible while the rest show various degrees of relationship, the highest being reading with spelling. In general, for this group of children it appears that reading marks are the best indication of general ability or accomplishment in any other subject, which is to be expected since reading forms the basis of most other subjects. Prophecy of various subject marks could better be made from regression equations with reading than any other subject. An attempt has been made to show this tendency in figure 11. The slope of the various lines in this graph is in no case great but is always rather consistently downward from reading toward music.

The degree of correlation of the various subjects with I. Q. was insignificant, except with reading, where the coefficient was $.53 \pm .07$. The r between entire school achievement and I. Q. was $.18 \pm .09$. Such a lack of correlation between I. Q. and achievement as represented by teachers' marks, is rather consistently found in studies of entire school populations. Though St. John concludes from his correlation between I. Q. and the quality of educational



Trend of
MARK INTERCORRELATIONS
Fig-11

achievement "that there is clearly a positive correlation probably of the general order represented by an r of approximately $+0.50$ "; also "that marks in effort correlate with other achievement criteria about as highly as I. Q. does."⁽¹⁾

Ability to learn and achievement are not synonymous terms. Teachers' marks no doubt take into account many personality characteristics besides intelligence per se. The fact that citizenship marks, which are based largely on behavior traits and attitudes, shows a higher degree of correlation with all subjects except reading and arithmetic, than does I. Q. bears out this indication.

In spite of the fact that some of the coefficients are very low, it must not be overlooked that they are all positive. It must be realized that it would be a serious error to think of these matters in mass terms, disregarding the individual exceptions which occur. Wide scattering appears in many of the scattergrams from which the coefficients of correlation were determined.

(1) St. John, Charles W., "Educational Achievement in Relation to Intelligence", Cambridge, Harvard University Press, 1930 p. 147. (Harvard Studies in Ed. Vol. 15)

C. Clinical Data

- Intelligence Tests -

The Stanford-Binet test was given to each child sent to the clinic. The findings on this test were in no way used as final in classifying the pupil in regard to his problems, but rather, as evidence to support (or contradict) the teacher's estimate and as another item in the total picture of the child's mental, physical and experiential capacities. For it is to be realized that regardless, or in spite of, any supply or lack of any innate capacities, it is in the past and present experiences of children, or adults, that the underlying causes of personality problems are to be found. So, though intelligence test scores often furnish important clues to causes of problems, they cannot form the entire basis for remedial work or for classification. However, used intelligently in connection with social and emotional study they are the most important contribution psychology has made to education. (1)

The intelligence tests were given to the children in small individual testing rooms which materially minimized disturbing factors. Graduate students, after being trained in the technique of the tests, gave them to the children. Often the testing period was lengthened into an interview period with the child in order to better

(1) Wentworth, Mary M. "Individual Differences in the Intelligence of School Children." Cambridge, Harvard University Press 1926. p. 48.

secure his reactions and to allow him to discuss his difficulties in as far as he was aware of them.

In the group of fifty problem children, the intelligence quotients were found to range from 63 to 144, a range of 81 points. The average of the I. Q's. was 96 and the median of them 97. Their distribution according to Terman's scaling of intelligence groups was as follows:

Genius	140 and above	1
Very superior	120-140	2
Superior	110-120	4
Normal	90-110	28
Dull	80-90	9
Border-line	70-80	3
Feeble-minded	70 and below	3

It is seen that slightly more than half of the children were in the normal group but more fell below this group than above it. It is realized that such a classification is often misleading. A low normal child may do more inferior work in school than one in the dull group because of the greater amount of effort, concentration and perseverance put forth by the dull child. But, as was shown in discussing the progress of this group, only one child whose I. Q. was below 90 made normal progress through the grades. That most of this sub-normal group was found in the regular classes, clearly indicates the need of special or ungraded classes in this school system. For these children to compete with those of normal

intelligence and fail, as they must, and with failure begin to feel inferior, destroys any competence which they may have had or might have been taught in special classes.

Six or twelve per cent of these children had an I. Q. of less than 80. This is a larger per cent than would probably be found in an unselected group. In Terman's distribution of the I. Q.'s. of 905 unselected children five to fourteen years of age⁽¹⁾ about seven per cent fall below the I. Q. of 80 level. Blanchard and Paynter⁽²⁾ found about five times as many mental defectives in the problem group as in their control group of unselected children (28.2% as contrasted with 5%). Although the per cent of mental defectives in this group of fifty problem children is not as great as that found in Blanchard and Paynter's group, it is somewhat more than twice the per cent found in their control group.

The mental ages of the groups, as found on the Stanford-Binet test, ranged from six years to fifteen years five months, a range of nine years five months.

The chronological ages at the time of testing ranged from seven years one month to fifteen years five months.

Median M. A. = 10-2	Median C. A. = 10-9
Average M. A. = 8-1	Average C. A. = 10-9
Sigma = 2.15	Sigma = 5

(1) Terman, T. L., "Measurement of Intelligence" Houghton Mifflin Company 1916, p. 66.

(2) Blanchard and Paynter, "The Problem Child" Mental Hygiene, Vol. 8, p. 26, Jan. 1924.

Analyzing the difference in chronological and mental age further, it is found that of the 50 children, 31 mental ages are less than their chronological ages, 18 greater and 1 equal. Of the 18 whose M. A. was greater than their C. A., the M. A. for 6 was greater by a year or more and for 2, two years or more. Of the 31 whose M. A. was less than their C. A., the M. A. for 18 was less by a year or more, for 11 two years or more, and for 5 three years or more. So that while the average mental age was approximately the average chronological age, further inquiry reveals that more of the children's I. Q.'s were below than above 100 and that for them the distance below 100 was farther than the distance above 100 was for the other group.

The average I. Q. for the normal progress group was 102 and for the slow progress group 86. The range, that is, the number of years above the basal year in which any part of the years tests were answered satisfactorily, averaged 3.4 years for the entire group. The number of years in which tests were passed, ranged from one to nine.

It is beyond the scope of this thesis to investigate the quality of answers these problem children made to the intelligence tests. However, the answer to each test was scored satisfactory or unsatisfactory, that is, plus or minus and these scores appear in table 10. Such an all or none basis as Terman has employed in the construction of his tests could be criticized on the ground that the

individual child who barely passes tests surely has less ability than one who passes the same tests easily with much better stated answers. But again, the tests are but crude measures of intelligence at best, and that criticism can be answered by the fact that finer scoring would yield no significant higher reliability.

In regard to the intelligence scores as well as the school marks, it must be pointed out that a statement as to the median achievement does not indicate the quantity or degree of individual variation. Reference to table 10 will indicate the wide range and scatter of ability in individual test scores.

- Performance Tests -

A scale of performance tests was also given for additional information concerning each child's ability. The median mental age of this group of tests was used as his score on the performance tests.

Table 11

Median and Average M. A. with Sigma
of Clinic Tests.

	Median	Average	Sigma
Chronological Age	10-9	10-9	5 years
Stanford-Binet Mental Age	10-2	8-1	2.15
Performance Scale Mental Age	11-7.5	11-4	2.73
Portius Maze Mental Age	12-10.5	12-.6	2.99
Knox Cube Mental Age	14-2	13-4	2.24

For the entire performance scale, the percentile ranking of each child was found from the percentile norms for each test. As for the mental age, the median of all the percentile ranks of all tests in the scale was used to indicate the child's percentile ranking. As a group, the fifty children tended to fall in the 60 percentile rank. Two tests, Knox Cube and Portius Maze, from the performance scale were also taken separately for comparison with the Stanford-

Binet test. Table 11 indicates the differences found.

The performance tests tended to place the average mental age of this problem group higher than did the Stanford-Binet test, perhaps because success in the latter depends more upon reading ability and the group was found to be low in that particular ability.

The coefficients of correlation between the mental age as found on the Stanford-Binet test and as found by the performance scale, the Knox Cube test and the Portius Maze test were respectively $.65 \pm .05$, $.67 \pm .05$, $.63 \pm .06$. On the whole, the tests disclosed a slight prevalence of motor ability as determined by performance tests over linguistic ability which the Stanford-Binet test appears to be based upon. However, the difference was not great and does not conflict with the accepted opinion that underlying all specific abilities is one general ability conditioning the degree of development of them.

- Physical Tests -

As for the available physical material, in only a few cases did it furnish any clue as to possible causes of difficulties. Statistics of visual defect are rendered difficult of comparison because of differences in method used, and in this case, because of the various degrees of experience in testing had by the testers. However, the records show 27 having normal vision, seven "far-sighted" and 14 of various degrees of near-sightedness. Two were not tested.

The hearing of the children, as tested by the whispered speech test, was normal for all but three.

Twenty-three children were more than 4.5 kg. (10 lbs.) overweight and two more than 4.5 kg. underweight, leaving 25 having normal weight for their ages as determined by a table of normal weights (with clothing) by C. C. Smedley.

Thirty-nine were to some degree too tall for their age, two normal, and eight to some degree under height.

Speech defects were recorded for three children in the clinic.

Chapter V

Summary and General Interpretation of Statistical Findings

The statistical facts as found in this study are summarized in this chapter and a general interpretation of the findings given.

A. The Statistical Facts

1. More boys than girls were referred to the clinic as problem children, both in the white and colored groups. Sixty-six per cent were boys.

2. At least seventy per cent of the children's specific problems as stated by the teachers were such problems as directly interfere with the school room organization.

3. Half of the group made normal school progress and half, slow progress. In the former group, each child's I. Q. was normal (above 90) except one child having an I. Q. of 81. In the latter group, forty per cent had I. Q.'s of 90 or more.

4. The average age of entrance into the first grade for the normal progress group was 6.2 years, for the slow progress group 6.3 years.

5. The average marks in reading, arithmetic, and spelling were consistently the lowest in the tabulations of teachers' marks in the various school subjects.

6. Arithmetic, spelling and reading have the highest percentage of the group in the P (poor) and F (failure) categories.

7. The distributions of marks in reading, english, spelling, penmanship and arithmetic are much as would be found for an unselected group of children, somewhat skewed to the left. The distributions for social sciences, music, and art include more high marks than would be expected in an unselected group, since each shows positive skewness.

8. Simple inter-correlations among the various subjects disclose positive coefficients in all cases; reading and spelling having the highest coefficient, $.80 \pm .03$, and music and art the lowest $.33 \pm .08$.

9. Correlation between I. Q. and the various subjects is negligible except between I. Q. and reading which was $.53 \pm .07$. Reading correlated more highly in most cases with the other subjects than any other one of them.

10. The average I. Q. for the group was 96, with a few more children below the normal group than above. Fifty-six per cent had "normal" intelligence. Twelve per cent were classified as defective - below 80 I. Q.

11. This group of children tended to score a higher

mental age on the performance scale than on the Stanford-Binet intelligence test. The median on the former was 11 years 7.5 months, on the latter, 10 years 2 months.

B. General Interpretation

The statistical significance of the findings which have been summarized will be considered and the more general interpretation of them and their implication with reference to the general problem, made.

Let us go back to the problem as it was stated in Chapter III to answer the questions in view of the statistical facts. First, 'in what way do the school histories indicate that the distribution of marks of these fifty problem children differ from the normal frequency distribution?' Or in other words, how are the distributions different from those that we might expect to find in an unselected group? The percentage of "slow progress" pupils is certainly much larger in the problem group than in an unselected group. Though much attention has been directed toward retardates and accelerates, it is still the usual thing for children to make normal progress through the grades, - the majority of children tending toward the "average" for which the schools are organized. Such organization results in more than average pressure being brought to bear on the child below-average in intelligence and less than average pressure upon the above-average.

The former procedure makes for the growth of feelings of inferiority, inhibitions and compensating behavior in sullenness, rebellion, misbehavior and indifference. Such problems as the teachers stated in "uninterested in work", "cannot concentrate", "cannot get along with other children" may readily be the result of a feeling of uselessness in trying to succeed in the school where experience has taught the below-normal that the effort is ineffectual.

The fact that half of this group made less than normal progress brings up the question whether perhaps it is not in the school organization that the source of much of the unadjustment the teachers felt in this group, is to be found. That all of the children who had less than normal I. Q.'s. were still in the regular classes of the system, surely indicates one need - that of special or ungraded classes to take such children from classes of normal children where they are unable to succeed themselves and hinder the progress of others. It is not meant that every child whose I. Q. is found to be slightly below 90 should be arbitrarily assigned to a special class, for it is realized that children whose I. Q. would place them in the "dull" group in Terman's classification may, and often do, surpass children of much higher I. Q. Children who have been educated to habits of attention, self-control and regard for others, have a much better chance of succeeding in school. It is not entirely a matter of intelligence as low correlation between school marks and I. Q. show. As Wentworth has stated

"a low I. Q. does not prophesy failure, nor a high I. Q. success. Wrong habit reactions formed early in childhood, or in the first years of school life are the basis of many neurotic symptoms, and of much that passes for mental deficiency. This is especially notable in poor habits of attention, memory and learning."⁽¹⁾

The per cent of boys in the group is also large. It was found that sixty-six per cent of the group were boys. Blanchard and Paynter found two-thirds of their group of 500 problem children to be boys as contrasted with an unselected group of 337 children used as a control group in which the sexes were equally divided.⁽²⁾ Haggerty⁽³⁾ in a study of 526 mild problem cases in public schools found misbehavior twice as frequent in boys as in girls.

Johnson, after her study of 52 conduct cases, made the general conclusion that: 1. "Dull boys are more likely than others to get into difficulties, largely because they want, and need, more work with their hands and less intellectual work, but do not get it. 2. Boys who are scholastically retarded are twice as likely as others to be delinquent, and the schools deal ineffectively with the situation because of their inadequate adaption to individual pupils. There is a higher correlation between repetition

- (1) Wentworth, Mary M., "Individual Differences in the Intelligence of School Children" Harvard Univ. Press, Cambridge 1926, p.158.
- (2) Blanchard, Phyllis, & Paynter, Richard A., "The Problem Child" Mental Hygiene, Vol. 8, Jan. 1924, p. 26-54.
- (3) Haggerty, M. E., "The Incidence of Undesirable Behavior in Public School Children", Journal of Ed. Research, V. 12, p. 102-122, Sept. 1925.

of grades and conduct difficulties, than between repetition and I. Q."(1)

Some reason, whether it be in organization and presentation of material so that it appeals more to girls, or in the lack of understanding by the teacher of "boy" characteristics, causes boys to become adjusted less easily to the requirements of school organization. Perhaps the trouble lies in the fact that almost all elementary school teachers are women and as such, their experiences outside the school have been different from that of boys and so not conducive to understanding. Understanding human nature is more important for effective teaching than a few tricks of instruction can ever be. This lack of knowledge on the part of the teachers regarding the many social, emotional, and intellectual possible variations in individuals, is shown again in the statements of specific problems of these fifty children made by them. The majority of problems stated by the teachers were such as directly interfere with the successful accomplishment of school tasks. Ten teachers indicated the real "problem" - the factors of experience causing the child to respond with the behavior symptoms generally stated.

Comparison of the distributions of teachers' marks in the various school subjects for this group of problem children with

- (1) Johnson, E. H., "The Relation of the Conduct Difficulties of a Group of Public School Boys to Their Mental Status and Home Environment." *Journal of Delinquency*, V. 6, p. 549-574, Nov. 1921.

the normal frequency curve, that is, with the distribution of marks that could be expected in an unselected group, was undertaken to discover how this group under consideration deviated from the average in educational achievement as shown by teachers' marks. This comparison indicated that the distributions of marks in reading, english, arithmetic, spelling, and penmanship, are quite like those which would be anticipated in an unselected group. The plotted curves for these subjects were somewhat negatively skewed. This characteristic of distributions of teachers' marks points to the fact that teachers usually give more quite low marks than is perhaps justified - if we accept the fact that intelligence as at present tested, closely follows the normal frequency curve. However, in view of the fact that this group contained a larger per cent of children of below-normal intelligence than is found in unselected groups, the distribution of marks as found in these subjects is probably justified. Plotted curves for the distributions of marks in art, music, social sciences, and perhaps physical education, show some positive skewness when compared with the normal curve. For these subjects then, marks given to the group tended to be rather high and few children received very low marks.

These facts indicate the answer to the second question of Chapter 3, 'What school subjects stand out as being most difficult for problem children?' Various tabulations of teachers' marks consistently reveal that school marks for this group were lowest in reading, arithmetic, and spelling, with those for penmanship and

and English usually appearing among the five subjects having the lowest marks.

Correlation between the various school subjects and I. Q. for this group, produced positive coefficients in all cases but negligible, except in the case of reading. That intelligence, as tested, corresponds so poorly with the various school subjects apparently points to the fact that other factors are involved.

Coefficients of correlation between the various subjects, one with another, vary from .33 to .80. Evidently children frequently attain different degrees of accomplishment in different subjects. St. John, in discussing this fact, points out that from birth, the quota of native capacity is stimulated by environment, casual experience, and training, and so becomes "actualized into abilities, interests, emotional habits and other general dispositions of all kinds, all more or less well integrated in the developing personality."⁽¹⁾ However some environment is more favorable and more stimulating, therefore equal native capacities do not develop to the same level of ability or in the same direction. Obscure factors, as attitude and behavior of parents, sisters and brothers, and playmates, may "induce habits of emotions, attitudes, inhibitions and other general tendencies which greatly condition development in response to environmental influence."⁽²⁾ "The school

(1) St. John, Charles W., "Educational Achievement in Relation to Intelligence" Harvard University Press, Cambridge, 1930, p. 148. (Harvard Studies in Education, Vol. 15)

(2) Ibid. p. 148.

situation may be so much more favorable and effectively stimulating than the extra-school situation has been, and is, that education achievement reaches a higher level than intelligence or reverse situations and outcomes may obtain."⁽¹⁾ Purposiveness, industry, perseverance and other such traits are other complicating factors.

Since positive correlation would be expected between I. Q. and education achievement, the significant factors involved are why exceptions occur. The scattergrams used for determination of correlation indicate to what extent exceptions occur, but statistical treatment does not bring to light why. No doubt excessive absences and repetition of grades affect attitudes, habits and predispositions which greatly condition school achievement. It appears logical that individual differences in such habits, interests, personality traits, etc, must be among the chief causes of this discrepancy between I. Q. and educational achievement.⁽²⁾

The third question, 'what light do the clinical records throw upon the school histories of problem children?', can be answered only partially by a review of the statistical facts of the group. It can better be answered for each individual case in the light of the various individual differences found in each child.

However, the twelve per cent of mental defectives, that is, children whose I. Q's. were below 80, points out why at least that per cent of the group were "slow progress" pupils.

(1) Ibid. p. 149.

(2) Ibid. p. 150.

Again, table 10 has clearly indicated the wide range of development of some children in some abilities and the absence of development in others. This is but another evidence that individual differences are many and varied in this group.

That the performance tests placed the median mental age of the group 10.5 months above the median chronological age, while the Stanford-Binet intelligence test placed it 7 months below, points to the fact that linguistic ability is low for the group. This corresponds with the low average marks in reading. That the coefficient of correlation between the performance test and Stanford-Binet test was $.64 \pm .05$, which is marked but not high, indicates again the individual variations among the children.

No definite conclusions can be made as to the part played by physical defects in making children problems, except in relation to the other factors in each child's history. Defects in vision, hearing and speech may easily become the cause for many behavior problems. A defect often leads to compensating behavior or inhibitions which in turn become problems and a series of causes develops for specific behavior problems developing later.

Since the general statistical part of the investigation is rather inconclusive as to the reasons why individual children were problem cases, a few illustrative case studies are reviewed in the following chapter.

Chapter VI

Case Studies

The four case studies presented in this chapter are not to be used as the basis for any generalizations concerning them, but to illustrate some of the more obvious conditions such as general behavior and reactions, school habits and abilities, and general characteristics of personality which may affect school achievement.

They have not been selected in any systematic way out of the entire group of problem cases, but were chosen merely as cases with which the writer was perhaps more familiar than with many of the others. The case number referred to in each case is the number under which the child's Stanford-Binet intelligence test score is tabulated on page 60.

Dorothy - Case No. 17

Dorothy was a little dark-haired girl of seven years eight months of age when she was sent to the clinic with her problem as stated by her teacher as, "Is very unstable, cannot work with a group. Has been in school three years and cannot read well in the primer. Cannot pay attention. Has much trouble with other children. Seldom happy."

Dorothy was now in the opportunity room. She had entered kindergarten at five years of age, had been promoted to the first grade, and at the end of her second year in school, had been assigned to the opportunity room. In the kindergarten, both her conduct and scholarship were rated M+ and health, G. However, in the first grade both conduct and scholarship, as well as health were rated P with her teacher indicating the reason on her card as "nervous trouble." So though not failing her first grade work, she had been assigned to the special class.

It was in this class room that we first observed Dorothy. She was industriously working at handwork and gave the task her entire attention. Her posture was noticeably very poor. She bent down close to her handwork, giving the effect of being near-sighted, which was found to be the case. In addition, however, she sat first on one foot, then on the other and never straight and facing ahead at her desk.

At the clinic, Dorothy was quiet and rather self-conscious. She often needed encouragement to respond on the intelligence test. On that test her performance gave her an I. Q. of 92, placing her as having low normal mental capacity. She responded more eagerly to the performance tests where her achievement placed her in the 60 percentile for her age. Neither performance tests nor intelligence test disclosed any particular defect or ability, though on the Knox cube test, a test of visual memory, she did exceedingly

well. In view of the fact that no special disabilities came to light and all of her school work was of about the same quality, though her teacher gave arithmetic as the subject in which she was poorest, no remedial work in school subjects was at first attempted.

After seeing the child casually a few times to become better acquainted with her personality characteristics, an attempt was made to impress upon her the desirability of good posture, since it was felt that if her posture were corrected it would improve her ability to attend to school tasks and better her ability to concentrate in general. So, for a week she was given the task of improving her posture, rather independent of correction by the teacher. Returning at the end of the week to receive her report regarding her progress, we were rather surprised at her response to the task set for her, for she had needed to be reminded of her posture only a very few times by the teacher. A reward for her effort took the form of a movie, the writer going to the school for her in a car. Such attentions pleased her and rather increased her feeling of self-importance. Noticeable improvement was reported by the teacher in her general appearance of cheerfulness.

Visiting her class during reading and arithmetic periods brought up Dorothy's need for improvement here. Therefore we planned to spend a week working hard on reading, the next on arithmetic, with reading reviews, etc. Reading improved and though arithmetic was still most difficult progress was made. Her parents re-

ported an interest in reading appearing at home also. At the end of the year, improvement was such that she was to try the first grade again, with the report of the teacher that she, "has an educational age of almost six - work is difficult - has made much improvement - will require much effort,"

Why did Dorothy's health and school work become poor in her second year of school? Inquiry revealed that Dorothy was a foster child. Her foster parents were now divorced and she and her foster father were living with his parents. Evidently the breaking up of the foster parents' home brought on the difficulty. The fact that she was a foster child probably was then told to her. This, together with the fact that her mother did not want her, though she did come to see the child sometimes, led to such an emotional disturbance that the "nervous trouble" reported by her teacher followed. Her present teacher reported that the "grandmother" only kept the child because she felt there was no other place for her except the orphan's home.

That some interest was being taken in her by someone, together with the fact that such tasks were given her that she could attain some success in accomplishing them and realize her improvement, with the praise that followed, made Dorothy happier and diverted her attention from her worries.

In this case, the I. Q. of 92 may be raised somewhat with improvement in school subjects. However, such an I. Q. indicates

ability to do the elementary school work satisfactorily when her emotional adjustments are completely made.

The influence that parents behavior is able to exert on a child's school achievement is clearly illustrated in this case. If the home life of this child is not bettered, as regards the attitude of its adults toward her, it will be very difficult for her to become entirely at ease emotionally. Often little is done to help straighten out the warped and twisted views that children hold on many problems of everyday life. Even a high I. Q. would be of small use as long as she is handicapped by feelings of inferiority, jealousy or fear.⁽¹⁾

Marguerite - Case No. 29

Marguerite was referred to the clinic because of "low scholarship." She was then eleven years ten months of age and in the third grade. She had entered kindergarten at the age of five years two months. She changed schools in the middle of her kindergarten year but was promoted to the first grade at the end of the year. She then spent two years in both the first and second grades and was now finishing her second year in the third grade. A generous number of P and F marks appear on her accumulated school record, and

(1) Thom, Douglas A., "Everyday Problems of Every Child" Journal N. E. A. June 1931, V. 20, No. 6, p. 195-6.

when referred to the clinic was receiving P in reading and english, G in penmanship and M in all other subjects, with a G in citizenship.

Marguerite was a fair-skinned child, with rather coarse features and stolid figure. She was practically at weight for her age but lacked eighteen cm of coming up to the normal height - in general appearance, she rather suggested thyroid deficiency.

On the Stanford-Binet intelligence test, Marguerite's basal year was eight and she passed all tests but the one of weight discrimination at year nine where ability terminated sharply. Her mental age was eight years ten months and her I. Q. 75. On the performance tests, her median mental age of nine corresponded well with findings on the previous test. Her accomplishment placed her in the 30 percentile rank for her age. In neither test did special disabilities appear. General ability was in every way about two years below the average for her age.

Marguerite, while under observation, was always happy and contented. Her teachers also reported that she always seemed happy and willing to help, and got along well with other children. She sometimes needed urging to play games with the others for she tended to stand by and idly watch them. However she belonged to a junior garden club, a penmanship club, had some pets and all in all, seemed socially and emotionally well adjusted. The practice of promoting a child after two years in a grade, has so far about kept Marguerite with children with whom she can compete on more or less

even terms and has not produced any bad behavior traits. An attempt was made to have her transferred to a special class but her parents refused to consider the change. Soon even two years will be insufficient time for Marguerite to grow enough mentally to successfully accomplish the next grades objectives. Her maturity is even now accountable for part of her ability no doubt.

Marguerite comes from a home of poor economic status and her mother is probably "dull" also. Two younger children of the family are also experiencing difficulty in progressing normally.

The ability of children of this type should be concentrated upon acquiring the use of the most fundamental subjects and they need to be trained in some kind of hand work by means of which they may perhaps become economically independent and so able to retain self-respect. A happy contentment in doing simple tasks is the best thing to be hoped for them.

Billy - Case No. 27.

"Feels that he is superior - continually asks or expects promotion, etc. - mother the same," - this was the statement of Billy's problem on reference to the clinic. He was then in the fifth grade, having entered the kindergarten at four years nine months of age and having progressed normally, being when tested in the fifth grade, ten years five months old. The average of all of Billy's school marks up

to and including the fifth grade was .575 - falling low in the G. interval of marks. At the time studied he was doing his poorest school work in spelling - probably due to inattention during the "matches" which seemed the usual procedure during the class period.

On the playground Billy was somewhat over-aggressive. He was inclined to direct the activity of his playmates, and since he was in no way superior in his ability to play the games, was not liked so well. Motor-coordination during play seemed rather inferior. This was noticed again during his performance on the performance tests. While his Stanford-Binet intelligence test score gave him a mental age of eleven years eleven months, as contrasted with a chronological age of ten years five months, on the performance tests was only eight years nine months, which gave him a percentile ranking of 35. He fell down on all of these tests except the Knox cube test, in which his mental age score was thirteen, the two-figure board and the mare and foal tests.

On the Terman test, Billy's basal year was ten, further passing five tests at year twelve and two at year fourteen. At years thirteen and fourteen, he did not consistently fail any particular type of question. Here, as on the performance tests, his ability was rather erratic. During the testing period, the thing of most interest to him was the "grade" which he was making. As it is always customary to encourage response on the tests by praise, he was well

satisfied with his performance and asked if it would be shown to his teacher. This desire for his teachers to know of his good work, fit in with their complaint that Billy was always asking for promotion. That promotions were given in the school at mid-year or often-er in most of the subjects kept before him the desirability of being promoted.

His mother had no doubt instilled this desire in him, for she, too, was always asking his teachers about Billy's progress. He was evidently being impressed by the need of excelling in school work. That he had been taught to play the piano, cornet and drums was evidence of this wish to have him out-do his classmates. Even when he was allowed to play in some of the inter-class basketball games, his mother was pleased, and felt for the moment that his teachers were appreciating some of Billy's many abilities.

If the pressure being brought to bear on Billy by his mother were lessened, no doubt he would succeed as well or better in school. Since his I. Q. of 115 indicates ability to do the work successfully. A speech defect which he has of running his words together in an effort to impress by talking fast, would probably disappear. He presents somewhat of a disciplinary problem also in school because he has not been taught that he must abide by regulations in any way at home, and so no cooperation is forthcoming from the home on this matter. Though here the father has been consulted and realized a need in Billy's training but in view of his mother's firmly implanted ideas on discipline, did nothing.

This over-anxiety to surpass his classmates has produced the lack of good motor-coordination and of ability to concentrate since he must be in every thing taking place in the classroom. He is even negligent about his appearance, his clothes look as if he were neatly dressed when he left home, but have become disarranged along the way. All of his energy has been directed toward excellence in school work. When he is unable to come up to the desired accomplishment he feels that the teachers are picking on him, have singled him out to hold back.

This case again brings out the influence which parents' attitudes and behavior may have on a child. The attitude assumed toward Billy that he has superior ability makes him feel more superior than his actual ability warrants. Since his playmates are able to judge ability, his assumption of leadership is resented and therefore, his relationships with children are not the best.

Paul - Case No. 6

Paul's teacher stated his specific problems as "nervous, sissy, deaf, over-conscientious, over-polite, self-conscious" - all of which is quite a list of difficulties.

Paul had entered the first grade at five years ten months of age and because of illness repeated this grade. From there on, he had progressed normally, though his health continued poor for two more years. During his first year in school his conduct was poor, there-

after medium until the fifth and sixth grades where it was rated G. After the first grade, his scholarship was medium or average until the sixth grade where it became somewhat better. When tested he was in the sixth grade, being twelve years five months old, and doing excellent work in reading, good in English and average in other subjects. Citizenship was also good which is to be expected since it is the kind of behavior suggested by his teacher in the statement of his problems that is desired in the classroom as being less disturbing to the routine than the other extreme, manifested in boisterousness and activity.

Paul was a sturdy looking youngster, but under observation became very affected in manner, very polite, self-conscious, and took on effeminate mannerisms, as talking and walking mincingly. Though reported by the teacher as not getting along well with other children, when he was observed on the playground nothing unusual happened except that he did seem to take part rather passively in the games being played.

Reading and English have been the subjects in which Paul has consistently received his highest marks throughout his school history. His reading ability and the background it gave him showed up during his Terman test. Though his basal year was only nine, he passed tests up to and including the average adult or sixteen year old level. The tests passed at this highest year level were the interpretation of fables and differences between abstract words.

At the fourteen year the only test failed was that one about reversing the hands of a clock. The quality of his statements in answer to each test was very good and concisely made. His vocabulary was adequate at fourteen years. Table 10, page 60, gives his complete score as case No. 6. His achievement gave him a mental age of thirteen years eight months and an I. Q. of 110 - high normal. His median mental age on the performance tests was above fourteen, placing him in the 80 percentile for his age. Motor coordination appeared quick and accurate.

Inquiry revealed that Paul spent most of his spare time at home reading. He had bought a copy of Chaucer in old English with Christmas money. The ill health during childhood had probably kept him from participating in active games then. Perhaps it was because his parents had shielded him and protected him from physical play life with other children that he had now built up habits of behavior producing difficulties in meeting the play requirements of children in school. He responded by remaining a solitary individual who soon became labeled "sissy" by his classmates and secured gratification by turning to reading and the "identification" it afforded him with situations in which he played a part not "different" from others.

Paul has had a mastoid operation and is somewhat deaf, and has been diagnosed as having incipient tuberculosis which complicates readjustment for him.

Interest in active, outdoor games should be aroused in Paul, for his health as well as for social training. Participation in the normal interests of boys would help break up the habit he has acquired of thinking aloud.

He was promoted to the junior high school at the end of the term. There he will continue to be restrained and effeminate if he cannot become interested in outdoor activities of boys, but among the greater number of students it will not be so noticeable and perhaps the self-consciousness will decrease because of lack of teasing or attention.

As Bassett says, the child who is self-conscious, unable to make friends or play with others, who is always by himself, withdrawn and absorbed in day dreams, causing no trouble in school, is often a more serious problem from the standpoint of mental health than the obviously delinquent child. Such a child often lives permanently characterized by inability to make friends or have a good time, a feeling of inferiority and inadequacy, a sense of being different.

He often becomes a "sissy" and a bookworm. Such behavior is due to mistakes in handling in the first years of life - often too much affection, allowing no independent expression. The mother enjoys shielding the child especially if ill health is manifested. He needs the prompt and sympathetic help of an interested adult, for he "cannot help himself." (1)

(1) Bassett, Clara, "Fear, a Mental Health Hazard", Journal of N.E.A. Vol. 20, No. 2, Feb. 1931, p. 49-50.

Reviews of these few case studies, indicate the great importance of the obscure immeasurables in human make-up; how very complex is each individual in his make-up, his traits, attitudes, habits and tendencies, and how various are the ways in which maladjustment may occur between school and pupil. In every case, the conscious or unconscious purpose behind the questionable behavior needs to be sought out. Such behavior is necessarily the logical outcome of experience. Only a history of cause and effect can lead to a satisfactory solution.

Every child needs security, attention and approval, successful achievement, friends, and varied and interesting outlets for energy in work and play. Thwarting these fundamental needs results in misbehavior and unhappy personality traits.⁽¹⁾ It is not wise to try to eradicate undesirable behavior without attempting to alter the factors contributing to the development of it. Indeed, it is doubtful if "problem child" is the best term in which to speak of these children. After all, it is not in the child himself that the problem lies, but in the situations surrounding him to which he must react in ways considered undesirable.

(1) Ibid. p. 50.

Chapter VII

Conclusion

Problem children present the most urgent and most interesting problem in the field of education, and the most complicated in view of the complex factors evinced in each of them.

Any solution to the problem of caring for individual differences of pupils in the school cannot be based on the differences found in any small group of children, for the variations are innumerable among the entire school population. No two "average" children are alike, much less any among the unnormal groups. Even two I. Q's. are never really alike for individual personality affects the thing called intelligence. Since we have accepted the idea that the school exists for the individual, rather than to perpetuate principles of church or state, the schemes advanced to care for individual differences have been many and varied, and none completely adequate. However there appears to be evolving a "combination of ability grouping, individual progress, at least in the acquisition of basic knowledges and skills, thorough-going adoption of both curriculum and teaching method, and socialized activities in heterogeneous groups, some of these activities being incorporated into the curriculum and some being extra-curricular."⁽¹⁾

(1) St. John, Charles W., Op. Cit. p. 190.

However such a composite plan is administered, its effectiveness must be the result of good teaching.

Acquisition of the tool subjects, and they appear to be the most difficult part of the curriculum, plays a big part in the socialization of the individual and should be fostered and incorporated into the education of children to the highest degree that their native capacity makes feasible. Such native capacity is not merely a matter of intelligence, as tested by present day methods, but includes the inherent possible development of desirable traits, attitudes and habits in general. It has been well illustrated that these obscure factors play a big role in school achievement. Reason really plays a small part in the lives of children. They respond to all stimuli by the way the situation affects them - by how they feel about it.

It may be, indeed, that the formation of good habits of thought, of action, and of emotional control as a part of every child, is the most important function of the school. For it is true, that outside of the school the success of a child's education is not judged by his acquisition of facts in arithmetic and history, or by his skill in spelling and penmanship, but by the uses to which these instruments of civilization are put. After all, motives, purposes, and ideas must always be the real signs of a successful life.

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