A study of the academic success of Group Three in Halleck Hall Junior High School.

Irene T. Hughes
University of Louisville

Follow this and additional works at: http://ir.library.louisville.edu/etd

Part of the Education Commons

Recommended Citation
https://doi.org/10.18297/etd/1984

This Master's Thesis is brought to you for free and open access by ThinkIR: The University of Louisville's Institutional Repository. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of ThinkIR: The University of Louisville's Institutional Repository. This title appears here courtesy of the author, who has retained all other copyrights. For more information, please contact thinkir@louisville.edu.
UNIVERSITY OF LOUISVILLE

A Study of
The Academic Success of Group "Three"
in Halleck Hall Junior High School

A Dissertation
Submitted to the Faculty
Of the Graduate School of the University of Louisville
In Partial Fulfillment of the
Requirements for the Degree
Of Master of Arts

Department of Education
by

Irene T. Hughes

Year
1945
NAME OF STUDENT: Irene T. Hughes

TITLE OF THESIS: A Study of The Academic Success of Group "Three" in Halleck Hall Junior High School

APPROVED BY READING COMMITTEE COMPOSED OF THE FOLLOWING MEMBERS:

Noble H. Kelley
Hilda Threlkeld

NAME OF DIRECTOR: J. J. Oppenheimer

DATE: Sept. 14, 1945
A Study of
The Academic Success of Group "Three"
in Halleck Hall Junior High School
Table of Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1</td>
</tr>
<tr>
<td>II</td>
<td>8</td>
</tr>
<tr>
<td>III</td>
<td>34</td>
</tr>
<tr>
<td>IV</td>
<td>64</td>
</tr>
</tbody>
</table>

**I Introduction**

(a) Terms Defined:

1. Group Three
2. Homeroom
3. Success
4. Marking or Grading

(b) Problem

(c) Type

(d) Method

(e) Purpose

(f) Selection

(g) Evaluation

**II Survey of Related Literature**

**III Presentation of Data**

(a) Elementary Data:

1. Chronological Age
2. Mental Age
3. Intelligence Quotient
4. Progressive Achievement Test Scores
5. Principal Teacher Rating

(b) Junior High School Data:

1. English Grades
2. Mathematics Grades
3. Social Studies Grades
4. General Science Grades

(c) Summary

1. Elementary Data
2. Junior High School Data

**IV Suggestions**

**Bibliography**
### List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Chronological Age-Grade Distribution</td>
<td>37</td>
</tr>
<tr>
<td>II</td>
<td>Mental Age-Grade Distribution</td>
<td>39</td>
</tr>
<tr>
<td>III</td>
<td>I. Q. Score Distribution</td>
<td>41</td>
</tr>
<tr>
<td>IV</td>
<td>Progressive Achievement Test Distribution</td>
<td>45</td>
</tr>
<tr>
<td>V</td>
<td>Principal Teacher Rating</td>
<td>47</td>
</tr>
<tr>
<td>VI</td>
<td>English Grades</td>
<td>49</td>
</tr>
<tr>
<td>VII</td>
<td>Mathematics Grades</td>
<td>51</td>
</tr>
<tr>
<td>VIII</td>
<td>Social Studies Grades</td>
<td>53</td>
</tr>
<tr>
<td>IX</td>
<td>General Science Grades</td>
<td>55</td>
</tr>
<tr>
<td>X</td>
<td>Summary of Data Transferred from Elementary School to Junior High School</td>
<td>59</td>
</tr>
<tr>
<td>XI</td>
<td>Summary of Academic Grades Received in Junior High School</td>
<td>61</td>
</tr>
</tbody>
</table>
Chapter I

Introduction
Introduction

Success or failure - there are no other two words which can create more joy or sorrow to both pupils and teachers. Some of the teachers in Halleck Hall Junior High School feel that they are not satisfied with the achievement made by the slow-learners, or low groups, with whom they work. An attempt has been made, under the direction of the principal, to classify pupils entering Halleck Hall Junior High School, into homogeneous groups. The low group composed of slow learners is known as Group Three.

When the pupils enter Halleck Hall Junior High School, they are classified on the basis of the score they made on the Kuhlmann Anderson Intelligence Test which was administered to all Louisville pupils in the sixth grade. If the pupils are entering the Louisville school system for the first time, they are given the Otis Self Administering Test of Mental Ability. On this basis, the pupils are divided into three groups.

Group One - those pupils with high intelligence scores.
Group Two - those pupils with average, or normal intelligence scores.
Group Three - those pupils with low, or below average intelligence scores.

This last group is the group which furnishes the basic material for this study.
The above named groups are then broken down into smaller groups of not more than forty pupils each. The resulting groups are known as homerooms.

There were fifteen homerooms or approximately five hundred pupils in Group Three in Halleck Hall Junior High School for the year ending June, 1945.

The homeroom groups in regard to intelligence, are as nearly alike as is possible to make them with this plan of grouping.

The pupils chosen for this study were those in two homerooms, selected at random, from each of the seventh, eighth, and ninth grades. These groups will hereafter be known as the 7B, 7A, 8B, 8A, 9B, and 9A groups.

The word success indicates that the pupil has conformed to the standards of Halleck Hall Junior High School, which means that he has achieved a passing grade of seventy.

The grading, or marking system used and its interpretation is as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>95 - 100</td>
</tr>
<tr>
<td>B</td>
<td>88 - 94</td>
</tr>
<tr>
<td>C</td>
<td>80 - 87</td>
</tr>
<tr>
<td>D</td>
<td>70 - 79</td>
</tr>
<tr>
<td>E</td>
<td>Failure</td>
</tr>
</tbody>
</table>

Whether or not this is a true measure of success is not the concern of this study which is the analysis of the pupils'
grades, for the school year ending June, 1945, with the desire to show the need for a program which will attempt to meet the differences in pupils' needs and abilities. Hoppe says,

The occurrence of success and failure experience is independent, it is determined, rather by the goals, expectations, and aspirations of the person at the time of the action. 1

The problem for this study therefore is:

(1) to analyze, by the sampling method, the pupils' grades to determine the percentage of pupils, in Group Three, who are not achieving success in their academic subjects;

(2) to show the subjects, if any, where the failures are most frequent;

(3) to present evidence that the present program does not meet the wide differences in pupils' needs.

Differences in mental abilities require a program of studies constructed to meet the "developmental differences among pupils." 2

For this study the academic subjects will be limited to

1 Esther Barth, A Study of the Academic Success of Elementary Pupils During Their First Year in Highland Junior High School, Master's thesis, The University of Louisville, Louisville, Kentucky, 1944, p.l.

English, Mathematics, Social Studies and General Science. All junior high school students are required to take these four subjects. They are often referred to as the major subjects. The term academic subjects, or major subjects will be used interchangeably and will have reference to the above stated four subjects.

The investigation and study of this problem are an outgrowth:

(1) of the opinions expressed recently by fellow teachers
(2) of the writer's personal interest in the problem which has grown through the following experiences:

(a) The writer's years of teaching experience in the State of Michigan as an elementary teacher and as a teacher in a county normal and state normal schools.

(b) The writer's teaching experience in the State of Kentucky as an elementary school principal, attendance officer, and for the past three years as a teacher in Halleck Hall Junior High School.

(c) During the three years at Halleck Hall Junior High School, the writer's interest in Group Three has been greatly intensified because of having a Group Three for a homeroom and several Three Groups for classroom instruction.

The writer feels that much valuable time is being lost in examining the past records and in trying to justify the
pupil's present failures because of what his past records reveal instead of

(1) accepting the pupil as he is,

(2) studying the pupil's needs,

(3) trying to meet his needs for now and future adulthood.

Dr. Carl Whitaker in one of his recent lectures said that many times doctors, under the polite term, "History of the case", are being "nosey".

Past records are indispensable at times, but let us not forget that there are persons who have achieved outstanding success in their life's work who were failures in their academic school life and records substantiated the idea that failure was inevitable. As teachers, let us be sure the records we seek are worth the time consuming effort they require to collect.

The writer believes that an investigation of records for the purpose of analysis of pupils' success, as revealed by teachers' grades, to determine whether another type of school program is needed to meet more adequately the needs of Group Three is time well spent.

---

1 Carl Whitaker, Dr., In one of his classroom lectures, City Hospital, Louisville, Kentucky, Fall, 1944.
The writer does not propose, in this study, to say what type of program should be adopted to meet the needs of Group Three, but rather to limit the study to show that there is a need which should be met.

The writer believes that the study will have served its purpose if it can stimulate interest in the faculty of Halleck Hall Junior High School in a desire to start to develop a school program based on the needs and abilities of the pupils.

Since the teachers in their individual and collective capacities thus represent the key to effective curriculum development, everything depends upon their coming to appreciate the deeper issues of contemporary society. 1

Chapter II will be a survey of related literature which will be followed by a presentation of some findings and a summary concerning Group Three in Halleck Hall Junior High School.

Chapter IV will contain some suggestions which will serve as a basis for thought for further study and the development of a program which will more adequately meet the needs of the pupils in Group Three.

Chapter II

A Survey of Related Literature
A Survey of Related Literature

Because of the voluminous amount of literature which has been written about the handicapped child and closely related subjects and because of the present trend, as indicated by current literature, to develop a school program which will more adequately meet the needs of all youth, a survey of literature will be presented in this chapter.

In High School Methods with Slow Learners, the characteristics of mentally backward and retarded pupils are given as follows:

Intellectual capacities - In terms of intelligence test results, mentally backward and retarded children have I.Q.'s between about 50 or 55 and 85 or 90. Children with I.Q.'s above 90 are considered normal or superior,


2 Department of Education, Evaluating the Community School, Educational Bulletin, XII:7, Frankfort, Kentucky, September, 1944.


while those below 50 are usually ineducable in the technical sense and are practically never found in public schools. It would be absurd, of course, to say that all children above a certain point on the I.Q. scale need one kind of treatment while all below it need another kind. Yet many psychologists, school teachers find it useful to distinguish not only among the intelligence levels just mentioned, but also between mentally backward or dull children on the one hand and mentally retarded or defective children on the other.

Generally the point of distinction between the retarded and the merely backward is placed at about 70 or 75 I.Q. Children with I.Q.'s between 50 and 70 or 75, altho usually educable to a limited degree, are recognized as needing special instruction in separate class groups. . . .

Pupils of low I.Q. tend to be deficient in attention, perception, association, memory and reasoning. Of these defects the most severe are reasoning and memory, while the least severe are visual and auditory perception. . . .

The significance of these defects for the school seems reasonably clear. Attention can be improved by making the school program interesting and valuable to the slow pupil, and by convincing him that success in school is both possible and worthwhile for him. . . .

Mentally backward and retarded pupils usually have difficulty with the ordinary school curriculum. They are especially weak in fields which call for abstract learning, altho their achievements are likely to vary from one such field to another. . . . The mental activities in which dull and retarded children seem to approach children of average intelligence most closely are those involving certain perceptive and appreciative phases of music and pictorial art. 1

1 Givens, op. cit., p. 61.
Motor activities - On the whole, mentally backward and retarded children fall below average children of the same age in manual and other motor skills, altho not to the degree that they do in general intelligence or academic achievement. . . . Such pupils also tend to have more speech defects than their brighter schoolmates. Yet some mentally inferior individuals possess manual or mechanical abilities which equal or surpass the average.

. . . . But since most of these children can do such tasks better than they can do intellectual work, their school program should usually contain a larger proportion of manual and other motor activities than is provided for the brighter children. . . .

Physical characteristics - Pupils who are distinctly below average in intelligence tend also to be somewhat below normal in desirable physical characteristics. On the average they are less well developed, have a low level of vitality and general health, and have more sensory defects than do mentally normal children. . . .

The school may well give extra attention to the bodily development and corrective physical care of dull and retarded pupils for several reasons: (1) as a group they need such attention more than do other pupils; (2) they are less likely to receive the needed attention and care outside the school; (3) the removal of physical handicaps will enable their limited mental abilities to function more effectively than before; and (4) while these youngsters are not likely to surpass mentally normal groups in physical activities, they can usually succeed better in such activities than in those which depend largely upon the higher mental processes. 2

---

1 Givens, op.cit., p.62.
2 Givens, op.cit., p.62.
Social development - A child's social maturity seems to be influenced by his physiological development and general intelligence as well as by his experience with people. The mentally slow pupil usually wants to participate in the activities of other children his own age, but is somewhat handicapped in doing so by his limited mental capacity. While his mental level is similar to that of considerably younger children, his greater physical maturity and longer experience make him dissatisfied to associate chiefly with such children. Forcing him to do so may readily lead to antisocial behavior as well as poor school progress on his part.

The school, therefore, should avoid placing mentally dull or retarded pupils with younger children for a substantial part of their school work. Some ability grouping for pupils of a given age may be needed to facilitate abstract learning, while in activities which make relatively little demand upon the higher mental processes, children of similar ages should participate together irrespective of their general brightness. In addition, the slow pupil should receive special help in learning to meet the social situations and problems of his age group. 1

Emotional and moral traits - Among mentally slow children there is a somewhat larger proportion with abnormal emotional and nervous conditions than is found among youngsters of average or superior ability. . . . A majority of slow learners react emotionally very much as other people do - or very much as other pupils would react if subject to the same stresses and strains of daily living.

In schools which attempt to maintain the same standards for everyone, the dull and retarded pupils are under much greater pressure than the average and the bright. Small wonder,

---

1 Givens, op.cit., p.62.
then, that they more often seem worried, excitable, oversensitive, shy, apathetic, lazy, dishonest, rebellious or even vicious. Before concluding that a particular child temperamentally abnormal in any of these directions school authorities should make sure that his symptoms are not due to a physical disability or to a lack of adjustment between his abilities and the demands of his school or out of school environment. 1

A survey made by the White House Conference Committee estimated that approximately one-half of the total public school population in the United States was made up of handicapped children of all types. Of this number 450,000 are classified as mentally retarded. Ingram says, about two percent of the school population have definite limitations so extreme that their failure to succeed in school with normal children is conspicuous. 3

Others feel that a somewhat lower figure is probably a safer estimate and that about fifteen percent of the

1 Givens, _op. cit._, p. 62.


population would include both the slightly handicapped and the severely handicapped. Dr. Featherstone says,

In every sample of one hundred students selected at random from the elementary schools of the nation, there are at least twenty who must be regarded as slow learners. . . at least four million for the country as a whole. 1

One of the objectives of junior high school education is to provide suitable educational environments for all the children of all the people. The junior high school itself is maintained to solve unique educational problems of an age group. The fact that these are special problems within that age group that may not be handled with normative procedure means that junior high schools should use every means possible to provide special education in so far as these added services contribute to the welfare of exceptional children and in so far as special classes are not inimical to the welfare of other children. 2

3

Dr. Burton in one of his addresses emphasized the fact that "this world of ours is rapidly becoming democratic" and that "a democratic world must be educated".

1 W.B. Featherstone, Teaching the Slow Learner, Bureau of Publications, Teachers College, Columbia University, New York, 1941, Preface V, VI.


Democracy demands education, and without it is a dangerous experiment. Especially is this true as the lands of the world become more closely bound together by ties of commerce and diplomacy and common ideas. When international relationships are so intricate and as far reaching in their influence as they are in our world today, self government without knowledge and intelligence on the part of the people, who are both governed and governors, is an absurdity. 1

Dr. Burton further states,

... we do not yet know how to educate. ...  
Nor have we yet arrived at any satisfactory solution of the question as to what education should be given to all the people and what should be reserved for special classes of the youth or those preparing for certain occupations. If all out youth, boys and girls alike, are to be prepared for citizenship, they ought all indeed to know how to read and write. But it can no longer be assumed that the possessions of these tools for the acquiring of intelligence will itself fit them either for the economic struggle into which life will plunge them, or for the intelligent judgment of men and policies which ought to precede the casting of their vote. ... All education that trains the mind in thinking or provides equipment for the acquisition of knowledge is good. But that all education is equally good for all people, or that an education predominantly literary in character is for everybody the best preparation for life, the educational panacea, is really too absurd to be seriously maintained. 2

1 Burton, Ibid., p.8.
2 Burton, Ibid., pp.8-9.
One of the earliest studies made of former special class pupils, from the standpoint of adjustment, was made by V. V. Anderson and Flora May Fearing, in Cincinnati. The study was made of a group of pupils who had been out of school from one to six years. The report stated that "the occupations of these individuals were no means limited to odd jobs and simple day labors."

About half the group employed in industry were earning fifteen dollars a week or more. The individuals who were not additionally handicapped by personality difficulties and character defects were most likely to be in industry, and were likely to hold their jobs longer and to receive higher wages than the others.

Another study was made by the Children's Bureau of the United States Department of Labor. The investigation included about a thousand pupils who had left special classes over a period of four years to go to work. The cities included in the investigation were Detroit, Oakland, Newark, Rochester, San Francisco and Los Angeles.

1 V. V. Anderson and Flora May Fearing, A Study of the Careers of Three Hundred Twenty-two Feebleminded Persons, National Committee for Mental Hygiene, 50 West Fiftieth Street, New York, 1923, p.31.

The information gained from this study was that the majority of the pupils had gone into work of unskilled or semiskilled types. About half the pupils had gone into manufacturing and mechanical types of work. The next largest number of the boys went into some form of transportation. The girls went into personal and domestic services.

About fifty percent of the girls, in Rochester, had married by twenty years of age.  

Arthur B. Lord made a study in Massachusetts to determine the need for social supervision of former special class children under twenty-one years of age.

The report concluded that out of the group studied about forty-two percent need no supervision; about fourteen percent need family supervision; about eight percent are institutional problems and ought not to be in the public schools; others would profit by education, vocational guidance or general supervision.

Dr. Featherstone, who for years taught classes dealing with problems of slow learners says, "That the slow learners are capable of being effectively educated cannot be denied."  

---


2 Featherstone, *op.cit.*, Preface VI.
In *Education for All American Youth*, a suggestive program is outlined which, in the opinion of the writers, will more adequately meet the differences in pupils needs. It is interesting to note the flexibility in the program and the scope of the program. The suggestive program no longer contains just the conventional stereotyped subject matter classes which are more frequently seen in school curriculum and in pupil's class schedules of the old-fashioned type. But it does emphasize a program based on,

... sympathetic individual work for individuals, based upon a knowledge of psychological facts, pupils needs and instructional methods. 2

... learning will occur largely through concrete experience related to real life. 3

A guidance and personnel program is needed greater today than even a decade ago. Because of the new industrial and social changes, new adjustmental problems have risen which have caused the public to place more responsibility upon the school for an effective guidance and social adjustment program to meet the needs of pupils.

Harold Alexander says,

1 William G. Carr, and others. *op. cit.*.

2 Ingram, *op. cit.*, Preface XII.

3 *Ibid.*, Preface XI.
It was only after the Athenian began to develop subjects to be taught in schools just because the subjects were supposed to have some special magical power in themselves, after the subjects began to be more important than the children who were taught, after school masters began to teach grammar and mathematics instead of teachers of children, that Athenian education began to lose its grip and the quality of Athenian life began to decline. 

Doane seems to think that after an examination of the studies made on the needs of youth, one is likely to be more confused because of the differences of opinion expressed as to what youth's needs are.

In the *Needs of Youth*, Doane says, "it cannot be assumed that a need will be felt by a person because it can be shown by another that he needs it". 

A recent study made in Norwood, Ohio, for the purpose of securing data for developing a new curriculum was begun with four surveys to obtain information from the citizens of the community, the industrialists and business men, and from the youth both in and out of school which would answer these four questions.

---

1. What do the citizens observe to be the strong and the weak points of secondary education? What should the high school seek to accomplish in the education of youth?

2. What do business and industry expect in the high school? Should the training program in the school seek to prepare boys and girls for positions in business and industry? If so, what type of training should be provided?

3. What do youth, in and out of school, think of the program of education in Norwood? How effectively has it prepared them, or is preparing them, for life outside the school?

4. What kind of program of secondary education should be offered to the boys and girls of the community to serve their needs?

Some of the returns from the questions indicated the needs of Norwood to be:

1. More adequate training in the fundamentals with larger emphasis upon accuracy and neatness.

2. A program of general education in the early years of high school and specialized training in the latter years; an extension of the program upward to give larger opportunity to the non-college going youth. The fact that fifty-four percent of the respondents believed some boys and girls would be better off out of school and at work raised the issue of the desirability of a shorter high school program for a certain group of young people with the schedule emphasizing training in occupational skills for this group.

3. Greater emphasis on social education and training for citizenship.

4. A better program of academic guidance;

---

1 Bates, op.cit., pp.9-10.
vocational guidance and the placement of youth in positions had the unqualified support of the school constituency.
5. The development and supervision of community recreation.
6. Suitable courses in vocational trades, particularly the machine tool trades and auto mechanics.
7. Addition of courses in distributive trades which would combine instruction in salesmanship with practical experience.
8. A greater emphasis upon instruction in democratic principles, labor relationships and American history and government.
9. Such a criticism strongly suggested the need for junior placement services which not only would aid in the placement of an individual in a position but would provide a follow up service and re-training where necessary.

As a result of these findings the Norwood schools were in the process of making the following changes when the war interrupted and retarded their program.

1. One of the first accomplishments was the development of a new philosophy of education for the schools of the community.
2. A second attack was made on the curriculum; changes throughout the system have carried into action the recommendations of the survey.
3. At the secondary level special fields of training are College Preparatory, Vocational-Technical, Occupational. As soon as circumstances permit, the Vocational Technical program, will be extended to the thirteenth and fourteenth years. The General Occupational Course is designed to care for the pupils who formerly dropped from school as soon as the law permitted. The new program is pointed to help those youth to discover their talents; following such discovery the emphasis of the training program is to prepare the individual for employment in his field of interest.
4. Another major development in the Norwood schools is a Department of Pupil Personnel.

In a recent article About Guidance Programs, Wendell C. Allen and Samuel F. Miles say,

It is folly to pretend that the need can be met by the most informed, competent and understanding teachers. The intended objectives cannot be attained without the aid of specialized personnel. 1

With a school program which calls for educational opportunities for all, attention is being focused on administrative problems for educating the handicapped adolescent. 2

G. D. Stevens of Racine, Wisconsin, has described and evaluated five administrative programs which have been developed for this purpose. They are:

1. Non-segregation at the secondary school level.
2. Single elementary school special classes.
3. Elementary school special class center.
4. Special classes at the secondary level.
5. Vocational school special classes.

Five of the advantages and disadvantages listed by Stevens are given below:


Advantages

1. Under the principle of equal educational opportunity the child is allowed to enter classes at the secondary school level which provide opportunity to all children who have the capacity for reasonably good social adjustment. Traditionally, secondary schools have catered only to children of average or above average intelligence and slow learners were denied the privilege of secondary education.

2. Broader experiences are possible in the secondary schools than in the elementary schools. Under proper guidance the contacts with many teachers and students alike tend to promote social and personality growth.

3. There is less stigma attached to the child. The feeling of inferiority commonly associated with the older child in the elementary school is reduced or eliminated.

4. There is much better opportunity for more adequate vocational training by reason of the equipment and personnel in the high school.

5. In some communities transfer to other training institutions such as the vocational school is easier out of classes at the junior or senior high school than from classes in the elementary schools.

Disadvantages

1. The smaller high schools cannot provide adequate personnel, equipment, and suitable varied curricular offerings.

2. It is often pointed out that it is the function of the high school to train people for college and for 'white collar' jobs and the slow learners must be educated in other ways.

3. Untrained teachers in the average high schools, especially if the curriculum is quite formal, make little contribution to the slow-learning child since they do not understand his limitations and his needs.

4. Trained secondary-school special class teachers are difficult to get. Only a limited number are being trained in teacher-training institutions.
5. Special classes become stigmatized easily. When a child is handicapped by such stigma the advantage of special classes are out-weighted.

Whatever type of program organization is carried out will depend largely on local conditions.

In 1940 the Research Division of the National Education Association undertook a study of superior and slow-learning pupils in junior and senior high school. A printed questionnaire was sent to the principals in about 5000 high schools of various types and sizes throughout the United States. The information thus obtained concerning the education of the slow learners was published in the October, 1943 Research Bulletin.

A description of some of the practices in organization and administration; and the instructional and curriculum, as reported by principals and other faculty members, is presented here.

The Mound Junior High School of Columbus, Ohio is a downtown school of about 1000 pupils in Grades VII, VIII, and IX. To provide for the extremely wide ranges of general intelligence and of social and economic status among pupils, the following administrative arrangements are made:

(1) Grouping according to ability and special interests with curriculum adjustments to meet the needs of each group,
(2) "trade schedules", (3) a special, ungraded room for boys, and (4) an extensive activity program.

The general plan of grouping according to ability and interests applies chiefly to

1 Givens, op.cit., pp.68-87.
the academic subjects, such as English, mathematics, science, and history. For example, there may be as many as six sections of VII-A English, each one organized to represent a different general level of proficiency in reading and other language activities. To serve these groups adequately, the teachers of each subject field have worked out minimum requirements together with enrichment programs suitable for each successive level of ability. Frequently the lowest group of a given grade uses entirely different textbooks, plans, and procedures from those used by higher sections. The teachers are selected and assigned according to their ability to succeed with particular types of pupils.

The "trade schedule" procedure is a modification of the regular school program whereby mentally backward pupils are permitted to schedule those subjects in which they have the best chance of succeeding and which will give them the best preparation for early withdrawal from school. Under this plan a pupil may pursue any subject in which he shows special interest and ability - such as shop work or physical education - for several periods each day, together with a minimum of academic work according to his individual needs. Schedule adjustments of this kind improve the attitudes of many pupils and encourage them to remain in school longer than they otherwise would. However, while no pupil is denied the opportunity to make up his academic deficiencies and complete the regular schedule of courses, graduation as usually defined is the exception rather than the rule among pupils who have been given trade schedules.

A number of boys who cannot be expected to benefit from the arrangements already mentioned are placed in the special ungraded room. Some of these boys . . . have been included because of their poor adjustment after reaching junior high school. The personnel of this room, which usually numbers about thirty, is not limited to pupils of
low mentality but includes also those having physical handicaps, language handicaps or personality problems that interfere with their progress under the regular school routine. Each pupil does individual work and may progress at his own rate. Part of the day is spent in academic learning and the remainder is devoted to shop work, art, music, dramatics, physical education, typing and other activities for which the pupil shows particular aptitude. The room is especially equipped for manual activities, including general repair work, refinishing furniture, mending chairs, shining shoes, repairing shoes, and making toys. Occasionally a boy in this room overcomes his handicap and is assigned to the regular curriculum. The program of pupil activities includes an organization for pupil government and a variety of clubs. The pupil government organization is patterned after the city government of Columbus. There are several service clubs in which about one-fourth of the pupils participate, and a group of interested clubs whose membership includes more than 80 per cent of the pupils. Thru these activities the slow youngster as well as the bright and the average is given a chance to find and develop his special interests and abilities.

In addition to these provisions within the junior high school itself, the school system operates two opportunity schools, one for boys and the other for girls. The opportunity schools accept from the elementary school a limited number of pupils who, because of extremely low intelligence, poor scholarship or serious personality difficulties, cannot benefit significantly from the junior high school offerings. Each semester about fifteen such pupils are sent to these two schools instead of the Mound Junior High School.

All reports from the various schools showed a much greater tendency toward the operation of separate classes for slow learners and think that such classes should have teachers
with special qualifications.

The slow learning groups of South Milwaukee, Wisconsin have planned the work in English "primarily to increase skill in reading" and is carried out in the following way:

At the beginning of the school year the Iowa Silent Reading Tests are used to diagnose individual disabilities, and if the pupils are unusually poor readers, Gray's Oral Reading Test is given for further diagnosis. At the end of the year the pupils are retested to ascertain their progress.

The first method used to improve reading ability consists of exercises to overcome the specific deficiencies revealed by the reading tests. Two series of reading work-books are used for this purpose—one on grades VII, VIII, IX, and the other in grades X, XI, XII. . . . The second method used is an extensive reading program. To make it easy for pupils to select suitable books, each teacher has his own class library composed of books having a high interest level and a low reading difficulty level.

While the remedial reading program is carried on throughout the year, special emphasis is placed on related English composition during one semester and on literature during the next semester. The work in composition is highly practical. Grammar is presented only as it facilitates everyday speaking and writing, and much time is spent in direct study and practice of correct forms. The sentence is studied as a unit of clear expression without technical analysis of its structure except for the subject and predicate.

The semester of literature includes

---

Givens, op.cit., p.65.
some intensive study of selections carefully chosen to suit the reading ability of slow learners. . . . The course contains a wide variety of materials - short stories, essays, biography, novels, plays, and poetry - but understanding is not sacrificed for literary value. In the seventh grade, for example, the slow sections read *Mutiny on the Bounty* instead of *The House of Seven Gables* because the former seems to interest such pupils more and is far easier for them to comprehend. . . .

Each pupil is required to write and address in class ten neat, correct, and well-worded letters or notes of various types. Letters are handed to the teacher as soon as they are written, and as many as possible are looked over during the class period. From one to five or six practice letters are usually required before a pupil succeeds in having letter No. 1 accepted. Each pupil keeps his accepted letters and then turns in all ten when he has completed the unit. 1

In Garfield Heights, Ohio, a history unit correlating several subjects for slow learning classes is given as a suggestive program.

. . . slow-learning classes carry on activity units to increase basic skills in reading, writing, arithmetic, and art, as well as to develop social concepts, understandings, and attitudes thru a variety of related subject-matter. In a unit planned for an eighth-grade group in American history, one of the topics studied was "Westward Ho!". In history class the group traced the movement of the Colonists beyond the Appalachian Mountains and across the continent to the Pacific. In science the pupils studies methods of transportation, defense, and sanitation used by these travelers, as well as the early

1 Givens, *op. cit.*, pp.78-79.
occupations of mining, lumbering, trapping, and agriculture. The home economics class contributed information on types of food, houses, clothing, furniture, and amusements of the time. In music the songs and dances of the frontier were enjoyed, including "Oh, Susannah", "Arkansas Traveler", "Turkey in the Straw", and "Pop Goes the Weasel". Related songs of today, such as "Git Along Little Dogie" and "Home on the Range" were played on the phonograph and sung by the group. The mathematics class prepared charts showing the number of immigrants moving into areas at different times, changing centers of population, costs of transportation, and other pertinent facts.

Notebooks were used to preserve themes, outlines, reports, graphs, sketches, and pictures collected or prepared by the pupils. The art teacher gave suggestions for making attractive drawings and other illustrations for these booklets. Models of pioneer life, such as whips, covered wagons, campfires, early forts, guns, log cabins, and clothing were made and were exhibited and the display held at the end of the unit.

A practical course in mathematics for eighth and ninth grades in the junior-senior high school at Freeport, New York, for slow learners is based on three principles:

(1) the material must be within the ability of the group - concrete, expressed in simple language, and involving much repetition;
(2) the material must increase the pupil's ability in the accurate use of fundamental skills; (3) it must acquaint the pupil with social situations in which mathematics is needed and help him to apply mathematical tools in these situations.

---

1 Givens, op.cit., pp.79-81.
Experience in this school has shown that slow-learning boys who are to continue with industrial art courses, thru the senior high school need some practical work in mathematics beyond the eighth grade. Accordingly, a special course in this subject is now required of ninth-grade pupils who do not study algebra but who major in industrial arts. The topics included are closely related to shop problems, and time is allowed for necessary drill on phases of arithmetic which are used constantly in shop work. 1

The Keith Junior High School of Altoona, Pennsylvania, has a modified home economics course in junior high school.

. . . the work in home economics has been especially adjusted to meet the needs of low I.Q. girls in the eighth and ninth grades. Instead of the two fifty-minute periods each week which are allotted to the other girls in the school, these slow-learners have five such periods weekly. In Grade VIII the course emphasizes such topics as food requirements of the body, proper selection of school luncheons, preparation of simple breakfast and luncheon dishes, diets for the sick, table service, and marketing. Meals are planned, prepared, and served to guests. Exhibits showing daily food requirements, standard sizes and contents of cans, and sickroom trays are prepared by the girls. Trips are made to local stores, markets, and dairies. Table service is studied intensively for the benefit of those who may become waitresses or household helpers. Food budgets for a two week period are made by the girls for their respective families with the cooperation of the mothers. 2

---

1 Givens, op. cit., pp.31-32.
2 Givens, op. cit., p.82.
At Glen Falls, New York, a child-care and home-apprenticeship project has been developed for some of the slow eighth grade girls.

Six girls with good personalities were selected who were both dependable and interested in caring for children. The instructor found six young mothers in the community, who needed help between the hours of four and seven each evening and the women were willing to take these eighth graders into their home and teach them.

The young mothers had to instruct the girls in

(1) preparing the evening meal for the infant and family, (2) feeding the infant, (3) putting him to bed, (4) serving the evening meal, (5) washing dishes, (6) cleaning up the kitchen, and (7) reading to the older children. An apprenticeship of four weeks was agreed upon and, while no pay was stipulated, the girls usually were paid: Three of them stayed on with the women under whom they had served as apprentices, and the others were recommended for jobs in other homes. 1

The Handy Junior High School of Bay City, Michigan, has a "work service" program.

... a program of work service to help mentally slow pupils develop good habits and attitudes with respect to manual work. Each pupil chooses the kind of service he prefers from those available, and agrees to work at it for one period each day. The pupils are not forced to do this, but none refused to select a job. The jobs available for boys

1 Givens, op.cit., p.83.
include care of the school lawn and shrubs, and such custodial work as dusting, sweeping, painting, and repairing. For girls there are cafeteria service, dusting, custodial work in the school library, and rest room supervision. No one may begin a job until he understands it thoroughly. Each pupil is issued a worksheet upon which is recorded his name and his job. His performance is marked daily by the instructor in charge, and the reason for the mark is explained. Marks are based upon attitude, thoroughness, and industry. A careful check is made several times each work period to discourage any tendency to loaf.

As a result of a study made by the National Educational Association, concerning points of view and provisions made for slow-learning pupils, the following facts were obtained:

1. Nearly nine out of ten principals favor a curriculum with provisions for slow-learning pupils but fewer than one-third of their schools have such a curriculum in operation.

2. More of the larger schools than the smaller ones reported provisions for slow learners which differ from those for average pupils.

3. Seventy-four percent of the schools enrolling 1000 pupils or more favor separate classes for slow-learners while only 7 percent of the smaller schools with enrollments below 200 favor separate classes.

---

1 Givens, op.cit., p.83.
4. Many schools still require the slow learning pupils to repeat subjects in which they have failed altho this practice is approved by fewer principals than any other practice listed.

In this review of current literature there is an attempt to show (1) the characteristics of the slow-learning pupil, (2) the number of slow learning pupils in the United States, (3) the need for a school program which will coincide with a democratic form of government, and (4) the programs and methods used in various school systems in the United States in teaching the slow-learning pupils.

The mentally handicapped adolescent must be provided for educationally in such a way as to make him a happy, healthy, competent and self sufficient adult. 1

1 Stevens, op.cit.,p.203.
Chapter III

A Presentation of Data
A Presentation of Data

This chapter contains an objective report of some of the findings, as revealed from a study of the individual pupil's permanent record cards, obtained in the files at Halleck Hall Junior High School.

When the pupils leave a Louisville elementary school, there are certain facts which are considered of such importance that it is deemed advisable to transfer this information to the junior high school to which the pupils are entering.

These facts are then placed on individual cards which become the individual pupil's permanent record card. The grades which the pupils continue to make during the time they are in junior high school are also placed on these cards. Thus the cards become a basic source for information concerning pupils in an out of school and right, or wrong, play an important part in determining the future course of the pupils.

Data transferred from elementary school to junior high school.

Wherever schools are operating the problem of pupil progress and age always seems to be an interesting factor.

In Louisville, children enter the first grade at about six or six and one half. If they make normal progress and
pass at the rate of one grade each year, they will reach junior high school, or the seventh grade, at about twelve or twelve and a half years of age. It is on this basis that the chronological age-grade distribution has been figured.

Table I, shows the chronological age distribution by grades, of Group Three pupils, and the percent of pupils who are underage, average age, or over age.

An examination of the table, shows that a large percentage of the pupils are over age. In order of percentages of over age, the groups are:

7B - 94.5 percent; 8B - 78.8 percent;
9B - 91.4 percent; 9A - 74.0 percent;
7A - 84.8 percent; 8A - 65.6 percent.

Only two groups, 7A and 8A, have one pupil each whose age grade progress is above average.

The table shows that the age range, for the groups studied, extends over a period of seven years or from eleven and a half years to eighteen and a half years of age. The largest number at any one age level, which is fifteen to fifteen and a half, is forty-three out of a possible one hundred ninety-six. The median age is also at this level.

In addition to the above facts, the table reveals that 161 or 82.2 percent of the pupils are making below average progress. Of this number, 42.2 percent are one year below
Table I
"Chronological Age Grade Distribution", The Total for Each Grade Level, The Classification and Percentages of a Group of Students in Group Three in Halleck Hall.

<table>
<thead>
<tr>
<th>Grades</th>
<th>Total Classification</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. A.</td>
<td>7B 7A 8B 8A 9B 9A</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>----------------------</td>
<td>------------</td>
</tr>
<tr>
<td>11½ - 12</td>
<td>1 - - - - 1</td>
<td>above avg. 1.0</td>
</tr>
<tr>
<td>12 - 12½</td>
<td>- - - - -</td>
<td>2</td>
</tr>
<tr>
<td>12½ - 13</td>
<td>2 2 - 1 - 5</td>
<td></td>
</tr>
<tr>
<td>13 - 13½</td>
<td>3 2 1 - - 6</td>
<td></td>
</tr>
<tr>
<td>13½ - 14</td>
<td>3 5 6 9 - 23</td>
<td></td>
</tr>
<tr>
<td>14 - 14½</td>
<td>6 5 6 1 1 19</td>
<td></td>
</tr>
<tr>
<td>14½ - 15</td>
<td>5 3 4 5 2 1 20</td>
<td>average</td>
</tr>
<tr>
<td>15 - 15½</td>
<td>10 7 7 5 8 6 43</td>
<td>33 16.8</td>
</tr>
<tr>
<td>15½ - 16</td>
<td>3 3 6 6 9 6 33</td>
<td>below average</td>
</tr>
<tr>
<td>16 - 16½</td>
<td>3 4 3 3 8 8 29</td>
<td></td>
</tr>
<tr>
<td>16½ - 17</td>
<td>1 1 - 1 4 4 11 161</td>
<td>82.2</td>
</tr>
<tr>
<td>17 - 17½</td>
<td>- - - 1 1 2 4</td>
<td></td>
</tr>
<tr>
<td>17½ - 18</td>
<td>- - - - 1 - 1</td>
<td></td>
</tr>
<tr>
<td>18 - 18½</td>
<td>- - - - 1 - 1</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>36 33 33 32 35 27 196</td>
<td></td>
</tr>
</tbody>
</table>
average and 39.9 percent are more than one year below average; 33 or 16.8 percent of the pupils are making average progress and 2 or 1 percent of the pupils are making above average.

**Mental age data:**

Table II shows the mental age distribution, by grades, of Group Three pupils. Since the Kuhlmann-Anderson Test, which was the basis for computing the mental age, was administered during the last half of the sixth grade, the average mental age for all groups should be between twelve and twelve and a half, a study of the table will reveal the following facts:

1. The mental age range extends over seven and a half years. 7B grade shows the greatest mental age range of six and a half years; 9A grade shows the smallest range of two years.

2. Many of the pupils, 85 or 43.4 percent, have no mental age recorded on their permanent record card.

3. Out of 196 pupils studied there were: 87 or 44.3 percent below average; 10 or 5.1 percent average; 14 or 7.1 percent above average; 85 or 43.4 percent had no report.
Table II
Distribution of Mental Age, by Grades, the Classification and Percentages of a Group of Students in Group Three in Halleck Hall

<table>
<thead>
<tr>
<th>Mental Age</th>
<th>Grades</th>
<th>Classification</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 - 15½</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15½ - 15</td>
<td></td>
<td>above average</td>
<td>7.1</td>
</tr>
<tr>
<td>15 - 14½</td>
<td></td>
<td>average</td>
<td></td>
</tr>
<tr>
<td>14½ - 14</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>14 - 13½</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>13½ - 13</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>13 - 12½</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>12½ - 12</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>12 - 11½</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>11½ - 11</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>11 - 10½</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>10½ - 10</td>
<td>8</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10 - 9½</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>9½ - 9</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>9 - 8½</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>8½ - 8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 - 7½</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7½ - 7</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. report</td>
<td>10</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>33</td>
<td>100</td>
</tr>
<tr>
<td>No. report</td>
<td>85</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Intelligence Test data:

Table III shows the distribution of the intelligence test scores, by grades, for Group Three pupils and their classification.

The classification has been arranged to show pupils with a score of 110 and above as possessing above average intelligence; scores of 90 to 110 as representing those of average intelligence; scores from 75 to 89 indicating those of below average and scores from 50 to 74 as typifying those of inferior or retarded intelligence.

A study of the table reveals that the scores range from a score of 52 in the 7B grade to 115 found in the 8B grade. The largest number obtaining any given score is nine with the scores of 88, 89 and 92. The median score for the entire group is 88.

The numbers from high to low, of above and average I. Q. scores, by grades, are in the following order: 8B, 8A, 9B, 9A, 7A, 7B. There are 4.6 percent classified as above average; 34.8 percent as average; 42.3 percent as below average; 15.2 percent as inferior and 2.6 percent have no score records.
### Table III

Distribution of I.Q. Scores, by Grades, The Classification and Percentages of a Group of Students in Group Three in Halleck Hall

<table>
<thead>
<tr>
<th>Score</th>
<th>7B</th>
<th>7A</th>
<th>8B</th>
<th>8A</th>
<th>9B</th>
<th>9A</th>
<th>Total</th>
<th>Classification</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>115</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>114</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>113</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>above average</td>
<td>9</td>
</tr>
<tr>
<td>112</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>111</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>average 68</td>
<td>34.8</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>109</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>108</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>107</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>average 68</td>
<td>34.8</td>
</tr>
<tr>
<td>106</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>105</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>104</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103</td>
<td>-</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>101</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>98</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>97</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Score</td>
<td>7B</td>
<td>7A</td>
<td>8B</td>
<td>8A</td>
<td>9B</td>
<td>9A</td>
<td>Total</td>
<td>Classification</td>
<td>%</td>
</tr>
<tr>
<td>-------</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>-------</td>
<td>---------------</td>
<td>---</td>
</tr>
<tr>
<td>96</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>95</td>
<td>1</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>94</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>93</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>92</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>91</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>5</td>
<td>18</td>
<td>14</td>
<td>15</td>
<td>14</td>
<td>68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>89</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>88</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>87</td>
<td>-</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>86</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>below average</td>
<td></td>
</tr>
<tr>
<td>85</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>2</td>
<td>82</td>
<td>42.3</td>
</tr>
<tr>
<td>84</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>83</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>82</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>81</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>79</td>
<td>-</td>
<td>3</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>78</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>77</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>76</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>19</td>
<td>8</td>
<td>10</td>
<td>14</td>
<td>12</td>
<td>82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Score</td>
<td>7B</td>
<td>7A</td>
<td>8B</td>
<td>8A</td>
<td>9B</td>
<td>9A</td>
<td>Total</td>
<td>Classification</td>
<td>%</td>
</tr>
<tr>
<td>-------</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>-------</td>
<td>---------------</td>
<td>---</td>
</tr>
<tr>
<td>74</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>inferior</td>
<td></td>
</tr>
<tr>
<td>73</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>72</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>6</td>
<td>retarded</td>
<td></td>
</tr>
<tr>
<td>71</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>intelligence</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td></td>
<td>32</td>
</tr>
<tr>
<td>69</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>68</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>67</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>66</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>64</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>63</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>59</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no score</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>7</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>36</td>
<td>33</td>
<td>33</td>
<td>32</td>
<td>35</td>
<td>27</td>
<td>196</td>
<td></td>
<td>99.9</td>
</tr>
</tbody>
</table>
Progressive Achievement Test data.

During the last half of the sixth grade year, the pupils were given the Progressive Achievement Test, Elementary Battery, Form A.

The tests of reading comprehension, and arithmetic reasoning and the average for all tests in the battery are used in this study.

Featherstone says,

\[\ldots\] one should not employ the results of tests in the content subjects, such as social studies or science, \[\ldots\]; the correlation between them and verbal intelligence are too low or too uncertain. 1

Table IV shows the number, percentage and the average grade of achievement, on the above named tests, made by pupils at each grade of achievement.

The table reveals that the range in grade achievement extends over a period of six years or from the second grade to the eighth.

Since this test was given in the last half of the sixth grade, the normal grade of achievement should be between the sixth and seventh grades. On this basis the following conclusions were made.

The largest percent of pupils are between the fifth and sixth grade level of achievement which is slightly below

---

1 Featherstone, op.cit., p.15.
Table IV

Achievement Test - The Classification, Number and Percentage of Pupils at Each Grade Level of Achievement in Reading, Arithmetic, and the Average For All Tests in the Battery for a Group of Pupils in Group Three at Halleck Hall.

<table>
<thead>
<tr>
<th>Grade level</th>
<th>no. of pupils</th>
<th>% pupils</th>
<th>no. of pupils</th>
<th>% pupils</th>
<th>no. of pupils</th>
<th>% pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 - 7½</td>
<td>1</td>
<td>.5</td>
<td>1</td>
<td>.5</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>7½ - 7</td>
<td>2</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above avg.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>.5</td>
<td>3</td>
<td>1.5</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>7 - 6½</td>
<td>7</td>
<td>3.6</td>
<td>4</td>
<td>2.0</td>
<td>5</td>
<td>2.6</td>
</tr>
<tr>
<td>6½ - 6</td>
<td>14</td>
<td>7.1</td>
<td>13</td>
<td>6.7</td>
<td>21</td>
<td>10.6</td>
</tr>
<tr>
<td>Average</td>
<td>21</td>
<td>10.8</td>
<td>17</td>
<td>8.7</td>
<td>26</td>
<td>13.2</td>
</tr>
<tr>
<td>6 - 5½</td>
<td>19</td>
<td>9.7</td>
<td>22</td>
<td>11.2</td>
<td>20</td>
<td>10.2</td>
</tr>
<tr>
<td>5½ - 5</td>
<td>24</td>
<td>12.2</td>
<td>18</td>
<td>9.2</td>
<td>25</td>
<td>12.8</td>
</tr>
<tr>
<td>Slightly below average Total</td>
<td>43</td>
<td>21.9</td>
<td>40</td>
<td>20.4</td>
<td>45</td>
<td>23.0</td>
</tr>
<tr>
<td>5 - 4½</td>
<td>17</td>
<td>8.6</td>
<td>21</td>
<td>10.6</td>
<td>13</td>
<td>6.5</td>
</tr>
<tr>
<td>4½ - 4</td>
<td>13</td>
<td>6.5</td>
<td>11</td>
<td>5.6</td>
<td>11</td>
<td>5.6</td>
</tr>
<tr>
<td>4 - 3½</td>
<td>5</td>
<td>2.6</td>
<td>4</td>
<td>2.0</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>3½ - 3</td>
<td>1</td>
<td>.5</td>
<td>4</td>
<td>2.0</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>Inferior</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total no. tests</td>
<td>37</td>
<td>18.7</td>
<td>42</td>
<td>21.2</td>
<td>30</td>
<td>15.1</td>
</tr>
<tr>
<td>Sum Total</td>
<td>196</td>
<td>99.8</td>
<td>196</td>
<td>99.7</td>
<td>196</td>
<td>99.6</td>
</tr>
</tbody>
</table>

45
average. The scores on the arithmetic test show a slightly larger percentage of pupils above average grade level, while the results of the reading test show more pupils have achieved the "average" grade level. The "below average" grade was slightly greater in mathematics which shows 82 or 41.8 percent of the pupils below average.

The average scores for all tests in the battery show that 1 or .5 percent, of the pupils are above average; 1 or .5 percent are average; 45 or 23 percent are slightly below average, and 30 or 15.1 percent are retarded or inferior.

Ninety-four children or 47.9 percent have no achievement grade recorded for this test.

Principal teacher rating data:

Another source of information as to the abilities of the pupils is found in the principal teacher rating. This becomes known as the P.T.R. 1, 2, or 3. The figures indicate the group in which in the opinion of the principal and teachers the child can best work.

1 - indicates the best group,
2 - indicates average group,
3 - indicates below average group.

Table V shows the distribution of the P.T.R., by grades, for the pupils in Group Three.
Table V

Principal Teacher Rating by Grades and the Percentage at Each Rating for a Group of Pupils in Halleck Hall.

<table>
<thead>
<tr>
<th>Rating</th>
<th>7A</th>
<th>7B</th>
<th>8A</th>
<th>8B</th>
<th>9A</th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>11</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>15.3</td>
</tr>
<tr>
<td>3</td>
<td>23</td>
<td>15</td>
<td>14</td>
<td>11</td>
<td>10</td>
<td>4</td>
<td>39.3</td>
</tr>
</tbody>
</table>

- no. rating: 8715181919869643.8
- Total: 36333332352719692.9

The information proves to be rather limited as were the mental age and achievement test data. Nearly one half the pupils were not rated. Out of 196 pupils, 3 or 1.5 percent were rated 1, 30 or 15.3 percent were given a 2 rating and 77 or 39.3 percent were rated 3.

The pupils with no rating were placed in Group Three because of their low I.Q. scores, which proved to be the only information concerning the pupils which had been transferred to the junior high schools.

All the findings reported thus far, have been data which were transferred from the elementary school to the junior high school. Now, the data concerning the pupils since they entered junior high school will be presented.
Junior high school data:

The following findings deal with the teachers' grades, which the pupils have received in the academic subjects for the school year ending June, 1945.

The tables show that many pupils received no grade. In most cases, this is due to absence. A child must be present at least one half the time, after entering school, to receive a grade. Because there is no special class for these pupils when they return to school, they are required to repeat the whole grade they were in, and right or wrong, are in the class with the pupils who are failures. Therefore, they are considered as failures in this study.

Children who left the city are listed separately because it is assumed that the child entered school in another school district and received a grade there.

Table VI shows the English grades received by pupils in Group Three. The table reveals that 17 or 8.6 percent of the pupils were above average; 108 or 55 percent of the pupils were average or slightly below average and 36 or 29.7 percent of the pupils are considered as failures.

The median grade for the group is "D".

There was none who received the grade of "A". The 9A grade had the smallest number of failures; 7B had the largest number of failures.
Table VI

The English Grades, the Distribution Number and Percent of Pupils Who Were Above Average, Average or Slightly Below Average and Failures, June, 1945.

<table>
<thead>
<tr>
<th>Teachers' grades</th>
<th>7B</th>
<th>7A</th>
<th>8B</th>
<th>8A</th>
<th>9B</th>
<th>9A</th>
<th>Total</th>
<th>Classification</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>above average</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>8</td>
<td>17</td>
<td>8.6</td>
<td>17</td>
<td>8.6</td>
</tr>
<tr>
<td>C</td>
<td>8</td>
<td>9</td>
<td>6</td>
<td>10</td>
<td>6</td>
<td>14</td>
<td>53</td>
<td>26.8</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>6</td>
<td>10</td>
<td>6</td>
<td>13</td>
<td>19</td>
<td>1</td>
<td>55</td>
<td>28.2</td>
<td>108</td>
</tr>
<tr>
<td>E</td>
<td>7</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>22</td>
<td>11.3</td>
<td></td>
</tr>
<tr>
<td>no grade</td>
<td>10</td>
<td>5</td>
<td>8</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>36</td>
<td>18.4</td>
<td>58</td>
</tr>
<tr>
<td>left city</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td></td>
<td>13</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>33</td>
<td>33</td>
<td>32</td>
<td>35</td>
<td>27</td>
<td>196</td>
<td>99.9</td>
<td></td>
</tr>
</tbody>
</table>

Median grade "D"
Table VII shows the mathematics grades for Group Three pupils. The table shows that there were 13 failures in 7B, and 1 "A" in 8A. The median grade is "D".

Out of 196 pupils studies there were 21 or 10.6 percent who were above average; 104 or 53. percent who were average or slightly below average; and 58 or 29.7 percent who were classified as failures. There were 13 or 6.5 percent who moved out of the city.

9A had the smallest number of failures while 8A had the largest number of above average grades.
Table VII

The Mathematics Grades, the Distribution, Number and Percent of Pupils Above Average, Average or Slightly Below Average, and Failures, June, 1945.

<table>
<thead>
<tr>
<th>Teachers' grades</th>
<th>7B</th>
<th>7A</th>
<th>8B</th>
<th>8A</th>
<th>9B</th>
<th>9A</th>
<th>Total</th>
<th>%</th>
<th>Classification</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1.5</td>
<td>5</td>
<td>above average</td>
<td>5</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>20</td>
<td>10.1</td>
<td>average</td>
<td>10.6</td>
</tr>
<tr>
<td>C</td>
<td>10</td>
<td>6</td>
<td>8</td>
<td>6</td>
<td>8</td>
<td>11</td>
<td>49</td>
<td>25.0</td>
<td>or slightly below</td>
<td>25.0</td>
</tr>
<tr>
<td>D</td>
<td>10</td>
<td>8</td>
<td>5</td>
<td>8</td>
<td>17</td>
<td>9</td>
<td>55</td>
<td>28.0</td>
<td>below</td>
<td>28.0</td>
</tr>
<tr>
<td>E</td>
<td>3</td>
<td>9</td>
<td>2</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>23</td>
<td>11.8</td>
<td>failed</td>
<td>11.8</td>
</tr>
<tr>
<td>no grade</td>
<td>10</td>
<td>5</td>
<td>8</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>35</td>
<td>17.9</td>
<td>58</td>
<td>29.7</td>
</tr>
<tr>
<td>left city</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>13</td>
<td>6.5</td>
<td>13</td>
<td>13.0</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>33</td>
<td>33</td>
<td>32</td>
<td>35</td>
<td>27</td>
<td>196</td>
<td>99.8</td>
<td></td>
<td>99.8</td>
</tr>
</tbody>
</table>

Median grade "D"
Table VIII shows the grades by pupils in social studies. The median grade as in English and mathematics is "D". The table shows that there is 1 "A" in the 7B grade: Seven or 3.8 percent were above average; 119 or 62.2 percent were average or slightly below; and 57 or 29.1 were failures. The largest number of failures was made in the 8A group, while the largest number of grades above average was 2 made in each of the 7B, 7A and 9A groups.
Table VIII

The Social Studies Grades, the Distribution, Number and Percent of Pupils Who Were Above Average, Average or Failed, June, 1945.

<table>
<thead>
<tr>
<th>Teachers' grades</th>
<th>7B</th>
<th>7A</th>
<th>8B</th>
<th>8A</th>
<th>9B</th>
<th>9A</th>
<th>Total</th>
<th>Classifica-</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td>above</td>
<td>.5</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td></td>
<td>7</td>
<td>average</td>
<td>3.3</td>
<td>3.8</td>
</tr>
<tr>
<td>C</td>
<td>11</td>
<td>14</td>
<td>6</td>
<td>5</td>
<td>7</td>
<td>6</td>
<td>49</td>
<td>or slightly below</td>
<td>25.0</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>5</td>
<td>8</td>
<td>10</td>
<td>10</td>
<td>17</td>
<td>17</td>
<td>79</td>
<td>failure</td>
<td>37.2</td>
<td>119</td>
</tr>
<tr>
<td>E</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>9</td>
<td>2</td>
<td>-</td>
<td>21</td>
<td></td>
<td>10.7</td>
<td></td>
</tr>
<tr>
<td>no grade</td>
<td>10</td>
<td>5</td>
<td>8</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>36</td>
<td></td>
<td>18.4</td>
<td>57</td>
</tr>
<tr>
<td>left city</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>13</td>
<td></td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>33</td>
<td>33</td>
<td>32</td>
<td>35</td>
<td>27</td>
<td>196</td>
<td></td>
<td>99.6</td>
<td>99.6</td>
</tr>
</tbody>
</table>

Median grade "D"
Table IX shows the general science grades, made by pupils in Group Three, the distribution, number and percentage who were above average, average or failed. The table shows that 69 or 35.2 percent of the pupils failed. This figure is somewhat higher than the failures in the other academic subjects. There were no "A" grades and only 12 "B" grades which represent 6.1 percent above average. The average or slightly below average, numbered 102 or 52 percent of the pupils for the entire group studied.

The median grade, as in the other academic subjects, is "D".

9B had the largest number of failures while 7B and 7A had the largest number of above average grades.
Table IX

The General Science Grades, the Distribution, Number and Percent of Pupils Who Were Above Average, Average or Failed, June, 1945.

<table>
<thead>
<tr>
<th>Teachers' grades</th>
<th>7B</th>
<th>7A</th>
<th>8B</th>
<th>8A</th>
<th>9B</th>
<th>9A</th>
<th>Total</th>
<th>%</th>
<th>Classification</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>above average</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>12</td>
<td>6.1</td>
<td></td>
<td>average</td>
<td>12</td>
</tr>
<tr>
<td>C</td>
<td>7</td>
<td>3</td>
<td>11</td>
<td>10</td>
<td>2</td>
<td>15</td>
<td>48</td>
<td>24.5</td>
<td>slightly below</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>9</td>
<td>14</td>
<td>3</td>
<td>8</td>
<td>17</td>
<td>3</td>
<td>54</td>
<td>27.5</td>
<td>failure</td>
<td>102</td>
</tr>
<tr>
<td>E</td>
<td>3</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>9</td>
<td>5</td>
<td>33</td>
<td>16.8</td>
<td></td>
<td>69</td>
</tr>
</tbody>
</table>

| no grade         | 10 | 5  | 8  | 6  | 5  | 2  | 36    | 18.4 |               | 69 |
| left city        | 4  | 2  | 5  | 1  | 1  |    | 13    | 6.5  |               |    |
| Total            | 36 | 33 | 33 | 32 | 35 | 27 | 196   | 99.8 |               | 99.8|

Median grade "D"
Summary. If the data reported in this study reflect the actual academic achievement of the pupils in Group Three at Halleck Hall Junior High School, the following conclusions would seem justified:

1. A pupil who enters the elementary school at the age of six or six and a half years of age should enter junior high school at twelve or twelve and a half years of age. On this basis eighty-two percent of the pupils are overage; approximately forty-eight percent are more than one year overage.

2. The intelligence quotient scores, based on the Kuhlmann Anderson Intelligence Test range from a high score of one hundred fifteen in 8B to a low score of fifty-two in 7B. The median score for all the pupils in Group Three studied is 88, which is considered slightly below average ability. About 42.3 percent of the pupils are, under this classification, considered as dull or below average, which indicates their intelligence score to be somewhere between seventy-five and ninety. Fifteen and seven-tenths percent have an intelligence score of between seventy-five and fifty and therefore are classified as having inferior intelligence. It would seem then, that over one half the group, fifty-eight percent, have an intelligence quotient below average.

3. Since the test for computing mental age was adminis-
tered during the last half of the sixth grade and since
twelve to twelve and a half is considered the average chrono-
logical age for this grade, the mental age has been computed
on this basis. Almost half of the pupils have no mental age
recorded. Of those reported, 44.3 percent are below average.
The mental age distribution extends over a period of seven
and a half years or from age seven in the 7B to fourteen
in 9B.

4. The Progressive Achievement Test data show that the
grade placement distribution extends from the second grade
to the eighth grade level. There seems to be no appreciable
difference in the number reported as below average in the
reading comprehension and the arithmetic reasoning. The
average for all tests, shows 22.4 percent of the pupils at
one year below average and 15.2 percent of the pupils show
a placement of more than a year below average.

The average or above average achievement level in
reading was 10.8 percent which is slightly higher than the
arithmetic reasoning which shows 8.6 percent of the pupils
average or above average. The average for all tests in the
battery indicates that 13 percent of the pupils have achieved
a grade level of average or above.

5. The principal-teacher rating is approximately the
same as the intelligence quotient classification. Thirty-
nine and three tenths percent of the pupils were given a
three rating and 43.8 percent of the pupils had no rating
recorded.

6. An average of all available data which were trans­
ferred from the elementary school to the junior high school
Table X, page 59 shows that 1.9 percent of the pupils above
average, 16 percent of the pupils are average, 24.4 percent
of the pupils are slightly below average, 26.6 percent of the
pupils are retarded, and 30.9 percent of the pupils had no
report.

7. The academic achievement of Group Three pupils in
Halleck Hall Junior High School, as indicated by teachers
grades, show no significant difference between the grades
received by the pupils in any of the academic subjects. A
slightly higher percentage of average and above average grades
was made in mathematics while a larger percentage of failures
was made in general science.
Summary of Data Transferred From Elementary School for a Group of Students to Halleck Hall.

<table>
<thead>
<tr>
<th>Type of data</th>
<th>of pupils above average</th>
<th>of pupils average</th>
<th>of pupils slightly retarded</th>
<th>of pupils below average</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. A.</td>
<td>1.0</td>
<td>16.8</td>
<td>42.3</td>
<td>39.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M. A.</td>
<td>7.1</td>
<td>5.1</td>
<td>19.3</td>
<td>25.0</td>
<td>43.4</td>
<td></td>
</tr>
<tr>
<td>I. Q.</td>
<td>0.0</td>
<td>39.2</td>
<td>42.3</td>
<td>15.7</td>
<td>2.6</td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>.5</td>
<td>10.8</td>
<td>21.9</td>
<td>18.7</td>
<td>47.9</td>
<td></td>
</tr>
<tr>
<td>Arith.</td>
<td>1.5</td>
<td>8.7</td>
<td>20.4</td>
<td>21.2</td>
<td>47.9</td>
<td></td>
</tr>
<tr>
<td>P. T. R.</td>
<td>1.5</td>
<td>15.3</td>
<td>0.0</td>
<td>39.3</td>
<td>43.8</td>
<td></td>
</tr>
<tr>
<td>average %</td>
<td>1.9</td>
<td>16.0</td>
<td>24.4</td>
<td>26.6</td>
<td>30.9</td>
<td></td>
</tr>
</tbody>
</table>
8. An average of the grades received in the academic subjects, Table XI, page 61, shows the percentage of pupils above average to be 7.3 percent, average to be 25.3 percent, slightly below average to be 30.2 percent and failures to be 30.9 percent.

9. If the data received from the elementary school indicate the academic success in the junior high school, the following comparisons may be made:

(1) The data from the elementary school indicate that 1.9 percent of the pupils would receive above average grades; in reality, 7.3 percent of the pupils received above average grades.

(2) Indications were that 16 percent of the pupils would be expected to do average work; 25.3 percent of the pupils did average, as indicated by their grades.

(3) Twenty-four and four tenths percent of the pupils could be expected to do slightly below average work; 30.2 percent of the pupils did slightly below average work.

(4) Indications were that 26.6 percent of the pupils are retarded, or inferior in their work; 30.9 percent of the pupils actually failed.

(5) In the elementary school data transferred an average of 30.9 percent had no data recorded; only 6.5 percent had no report in their academic subjects in junior high school, due to their leaving the city.
Table XI

Summary of Academic Grades Received in Junior High School

June, 1945

<table>
<thead>
<tr>
<th>academic subjects</th>
<th>% of pupils above average</th>
<th>% of pupils average</th>
<th>% of pupils slightly below average</th>
<th>% of pupils failure</th>
<th>% of pupils left city</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>8.6</td>
<td>26.8</td>
<td>28.2</td>
<td>29.7</td>
<td>6.5</td>
</tr>
<tr>
<td>Mathematics</td>
<td>10.6</td>
<td>25.0</td>
<td>28.0</td>
<td>29.7</td>
<td>6.5</td>
</tr>
<tr>
<td>Social Studies</td>
<td>3.8</td>
<td>25.0</td>
<td>37.2</td>
<td>29.1</td>
<td>6.5</td>
</tr>
<tr>
<td>General Science</td>
<td>6.1</td>
<td>24.5</td>
<td>27.5</td>
<td>35.2</td>
<td>6.5</td>
</tr>
<tr>
<td>average %</td>
<td>7.3</td>
<td>25.3</td>
<td>30.2</td>
<td>30.9</td>
<td>6.5</td>
</tr>
</tbody>
</table>
It may be said in explanation of the facts indicated in the tables in this study and especially with reference to the higher percentage of failures and below average success in the junior high school, that the following are possible explanations:

1. The economic status has changed due to the war. "Thousands of youth who would normally have remained in high school are dropping out to obtain paid employment," thus the ability to earn money has reduced interest in academic learning.

2. Some pupils have felt that they would be called into the armed services regardless of their academic success.

3. A change in school curriculum from elementary school to junior high school may cause a feeling of complication especially for the slow-learner who is less able to make rapid adjustments.

4. Teacher's skill and experience in handling pupils in low groups is a factor to be considered.

5. Variation in native ability of pupils from year to year, and in war times, may explain academic success or failure.

---


2 Mound High School, Columbus, Ohio. See page 24.
6. Other factors such as effort, attitude, personality, initiative and cooperation effect pupils' achievement.

7. It is possible that the program does not meet the needs and abilities of pupils in low groups and of those who find it necessary to go to work as soon as the compulsory school attendance laws permit.

8. Home conditions, such as those in which parents who are separated or where there is lack of proper adjustment between other members of the family, and the neighborhood environment, as, library facilities, parks, proper playground supervision, churches and many other everyday experiences, are generally understood to influence a pupil's success in school.

9. The size of the class, especially for the low groups, affects learning. In a large class, the pupil cannot get the individual help he needs.

---

1 See page 24. (Opportunity School, Mound Junior High School, Columbus, Ohio.)
Chapter IV

Suggestions
Suggestions

Since this study was made for the purpose of showing the need for, rather than the development of, a program which would more adequately meet the needs of pupils in Group Three, the writer does not propose, in this study, to outline a program, but rather to make a few general suggestions which in her opinion might be used with the low groups in Halleck Hall Junior High School. Any seeming criticism of the present school personnel or school administration is wholly unintentional.

The suggestions are:

1. A changing society demands a change in its philosophy of education. Breckenridge and Vincent say that the schools have evolved from a book centered, through a child centered to a society centered school. One of the first things to be accomplished then, it would seem, would be to develop a philosophy of education in the school and the community, especially concerning the pupils in Group Three, to meet the new demands society has placed upon the school.

2. The needs of youth are many and unique not only among the individual pupils, but also in each community. Therefore,

---

the second suggestion would be for further study to determine the needs of the pupils in Group Three at Halleck Hall Junior High School.

3. Since pupils who fall below the average in their academic achievement do not meet with the same degree of failure in manual and other motor skills, their school program should provide every opportunity to make the most of their abilities by providing a larger portion of time to be devoted to these activities than is provided for the brighter pupils in the academic subjects.

4. The academic work should be modified to suit the abilities and interests of the slow-learners. The materials presented should be less abstract and more concrete. There should be more individual supervision and guidance by the teacher and more repetition and drill provided.

5. As a means for carrying out suggestion number 4, the writer proposes that the pupils have one special teacher for the academic subjects, but be assigned to the regular classes in art, music, physical education, cooking, sewing, mechanical drawing and shop work. The plan combines the advantages of separate classes for the pupils with limited ability in the

---

intellectually difficult academic subjects, with the social advantages of having pupils mingle freely with other pupils and other teachers. It further provides the teacher of the academic subjects with a more intimate knowledge of a few pupils, rather than the limited knowledge she is able to acquire from mass teaching. Thus, she is better able to help the child because she has a better understanding of him and his problems.

6. The number of pupils in a slow-learning class should be reduced. The present forty pupils as a maximum number in a class may not be too large for pupils of average or above average intellectual ability, but do not provide for the individual supervision needed by the slow-learning pupils. This is not wholly a new idea because there is an effort shown on the part of the principal to reduce the maximum number of pupils in the slow-learning classes.

7. A "work service" program to help slow-learning pupils develop good habits and attitudes with respect to manual labor; and to develop basic skills required for a regular job in industry, should be provided. A program of this nature might be worked out with local industry under school supervision and cooperation with industry might provide some monetary compensation for the pupil.

8. The guidance and personnel program needs to be expanded. A school with an enrollment of approximately three
thousand pupils needs in addition to a dean, several trained workers and counselors besides the regular homeroom teachers.

More informal individual assistance and less formalized group instruction is needed. In many guidance classes, unless guarded against carefully, the great tendency is to make these classes into just another formal class period.

9. The teachers of slow learning pupils should be selected because of their special training or because of their interest and understanding of the problems of the slow learning pupils.

10. A plan for giving credit for achievement in relation to individual pupils' abilities and pupils' accomplishment should be devised and thus reduce the stigma of failure.

In case some of the above suggestions are not deemed practical at this time due to the school budget and the personnel available, they do furnish a basis for working out a more satisfactory program for future citizens who learn more slowly than the average child.
Bibliography
Bibliography

A Books

Belting, Paul E., and Belting, Natalia Marie, Modern High School Curriculum, Garrard Press, Champaign, Illinois, 1942. 276 PP.


C Reports


D Bulletins and Pamphlets


Whitaker, Carl, Classroom Lecture, City Hospital, Louisville, Kentucky, Fall, 1944.