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# A STUDY OF THE ALACHUA PUBLIC SCHOOLS, ALACHUA, FLORIDA

By

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THE UNIVERSITY OF FLORIDA  
TEACHERS COLLEGE  
GAINESVILLE

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## CHAPTER I

### Introduction

This Study of the Alachua Public Schools was made with the complete cooperation of the local Board of Trustees and Principal H. C. Johnson, and with the hearty approval of County Superintendent E. R. Simmons. A fine spirit was shown by all of these officials, as well as by the teachers and pupils of Alachua. Principal Johnson and his teachers assisted in many ways in securing and giving data concerning the schools.

Those who made this Study wish here to express their deep appreciation of the kindness so uniformly shown, and of the helpfulness so freely given by all connected with the Alachua Public Schools.

The primary object of the study or survey of a school system is to help those in charge of the school to give better service to the children of the system studied. Public schools need more intelligent publicity. Such publicity stimulates proper public action. Altho this Study has been made as a part of the class work of two groups of students in Education in Teachers College, in the University of Florida, the primary object has been kept in the forefront.

The purpose of this Study, as a class project from the standpoint of the instructor, is easiest given by reproducing the descriptions of the courses as listed in the general catalog of the University. The two courses are as follows:

EDUCATION IIIb.—*Problems in Public School Administration and Supervision.*—This course will include an intensive study of the supervision of instruction. Visits will be made to schools for the study of administrative and supervising practice. A survey will be made of one school system. (*Elective for juniors and seniors, second semester; 3 hours. Credit 1 1-2 year-hours. Professor Fulk.*)

EDUCATION 111b. (formerly Education XIb.).—*School Surveys.*—Seminar.—An intensive and analytical study of the principles and practices followed in making the leading surveys of the country. (*Elective for graduate students, second semester; 3 hours. Credit, 1½ year-hours. Professor Fulk.*)

The following students were in Education IIIb: L. B. Andrews, C. F. Byers, W. L. Carter, E. A. Clayton, G. R. Clegg, A. F. Johnson, J. H. Kelly, C. T. Lawhorne, S. W. Leonard, J. H. McDonald.

In Education 111*b* were: E. A. Clayton, M. R. Hinson, H. E. McClain, H. B. Slaughter, J. B. Walker.

R. S. Knowles, a student in Education X*b*, The Elementary School Curriculum, helped in the preparation of two chapters.

The writer of this chapter feels that it is right and proper that he should here express his gratitude to the above young men for their faithful and painstaking work. Many of them spent time at this Study far in excess of the requirements of the course they were taking.

The general scope of the Study and the divisions of the work are shown in the following outline:

Chapter I. Introduction—Mr. Fulk.

Chapter II. General Characteristics of Alachua, and the School District—Mr. Slaughter and Mr. McClain.

Chapter III. The School Plant—Mr. Johnson and Mr. Knowles.

Chapter IV. Organization and Administration—Mr. Slaughter and Mr. McClain (except G and H).

A. School Boards.

B. County Superintendent.

C. Principal.

D. Relations of Boards, Superintendent, Principal, Teachers and Patrons.

E. Consolidation and Transportation.

F. School Finance.

G. Instructional Records—Mr. Andrews and Mr. Byers.

H. Curricula—Mr. Andrews and Mr. Byers.

Chapter V. The Teachers—Mr. Kelly and Mr. Carter.

Chapter VI. Supervision of Classroom Instruction—Mr. Kelly and Mr. Carter.

Chapter VII. The Pupils.

A. Progress through the School—Mr. Clayton and Mr. Clegg.

B. Intelligence Tests—Mr. Clayton and Mr. Clegg.

C. Achievement Tests—Mr. Hinson, Mr. Lawhorne and Mr. Leonard.

D. Health Education—Mr. Johnson and Mr. Knowles.

E. Discipline and Character Education—Mr. Walker and Mr. McDonald.

Appendices—Mr. Fulk.

The student part of this Study was done during the second semester of the school year, 1923-1924. Several weeks of class work were spent in preparing for the survey. The actual work in the Alachua schools began in the early part of March and was completed in the last days of April. Alachua is nineteen miles from the University. An excellent paved road makes the trip an easy one. Each student committee made one or more trips to Alachua, usually spending the greater part of the day in the schools.

The writer spent a part of a day in the schools before the survey began, and a number of days with the various committees. On the invitation of Principal Johnson, he explained the plan and purpose of the survey to the teachers before the schools were visited by any of the committees.

In order that there might be a minimum of interference with the regular classwork in the schools, the committee visits were, in most cases, made one at a time.

The tests were given and scored by the students. Before giving the tests in the Alachua schools, the students discussed in class the use of the tests, and had practice in giving them to small groups of pupils and scoring the papers.

The interpretation of data was left largely to the students. Each committee reported to the entire survey group, and each report was discussed by the group. Some conclusions may be rather hastily drawn, and some recommendations may seem to be somewhat unreasonable, but on the whole, the Study is sound. It must be kept in mind, however, that this is an amateur piece of work.

The writer of this chapter has in some cases taken considerable liberty with the reports of the committees,—recommendations have been modified, further interpretation of the data has been made, additional explanatory matter has been introduced, in the interest of clearness parts have been re-written, and bibliographies have been extended.

After the publication of this Study all of the pupils' test papers, including intelligence and achievement tests, will be turned over to the principal of the Alachua schools. We hope that a study of these papers will help the principal and teachers in reaching the needs of individual children.

## CHAPTER II

## General Characteristics of Alachua and the School District

## A. LOCATION

The town of Alachua is located in School District 23 in the northern part of Alachua County, in the northern section of the State of Florida. (See maps, pages 13-14.) It is centrally located and is easy of access. It is situated on the main division of the Dixie Highway, which extends from Jacksonville to Tampa, being 90 miles southwest of the former and 212 miles north of Tampa. It is about 55 miles from the Gulf of Mexico, and about 75 miles from the Atlantic Ocean. There are three railway lines entering the town, with four passenger trains making connections with all points within and without the state. The school district in which Alachua is located in its greatest breadth from north to south is 13 miles, and from east to west 7 miles, thus forming an area of 78 square miles. The actual size and shape of this district with the communities, roads and boundaries will be found on the map on page . The Santa Fe River forms the natural boundary of the district on the northwest, separating Alachua County from Columbia County.

## B. POPULATION

The population of Alachua County has decreased within the past ten years, as evidenced by the United States Census Reports for 1910 and 1920. In 1910 the population of Alachua County was 34,305; whereas in 1920 the figures of the United States Census record the population as 31,689. (1.)\* This represents a decrease of 2,616 in a period of ten years, or an annual decrease of 261 for each year. The depopulation and exodus from the rural sections have been responsible for this decrease in population. The records in the office of the County Superintendent of Public Instruction of Alachua County indicate that the farmers in the rural sections have moved into town in this county and the adjacent counties, and that within the past five years a considerable part of the negro population has migrated to the North. (2.) What is

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\*Thruout this study the first number in parentheses refers to the corresponding number in the bibliography at the end of the chapter; a second number refers to the page of the reference.

true of Florida is likewise true of other Southern States. What is found in the counties with reference to the decrease and depopulation, is, in a large measure, true of the school districts. There are no definite figures giving the exact number of persons, white and negroes, leaving this district for the past decade, but it is safe to assume that the decrease within this district has been in almost direct proportion to that of the entire county. (2.) The school census report in the office of the County Superintendent shows that there are over 3,000 persons within this district. (2.) Of these approximately one-half are white people and the other half negroes. According to the best available information obtainable, no foreign element could be found. (2.) Should there be any foreigners within the district, the records investigated in the office of the County Superintendent failed to make mention of them. In the event that such an element exists it is safe to assume that it is of very little consequence.

From information obtained from the County Superintendent, there appear to be about 650 negroes of school age in District 23. Of this number 567 were enrolled in school for the past year. There are five negro schools within the district, located at the following places: Hague, 74 pupils, grades one thru the sixth; Haynesworth, 68 enrolled, grades one thru the fourth; Mount View, 82 enrolled, one thru the fourth grade; Nebo, 66, one thru the fourth grade, and the Alachua Training School, located at Alachua, embracing nine grades, with an enrollment of 277 pupils. From the information obtainable, it seems as if practically all of the negro children of school age are enrolled in school, or, at any rate, not more than 80 or 90 appear to be out of school. There were no exact figures on record indicating the number of negroes of school age. (2.)

There appear to be about 550 white children of school age in this district. The following communities send students to the Alachua High School: Hague, Gracy, Haynesworth and Brown Settlement. There are 100 pupils of school age at Hague, 50 at Haynesworth, 100 at Brown Settlement and 250 at Alachua. These figures indicate that practically every white pupil of school age is enrolled in school.

It is not possible in this study to give any definite information with reference to the exact figures in racial decrease

within the past decade. There is no source from which this information may be obtained. The best statement that can be made with reference to this decrease is to say that it has been almost proportional to the decrease in the county for the same given period. The country around Alachua is an agricultural community, and this in a measure explains the depopulation. From estimations made by the County Superintendent and the members of the County Board of Education, it seems as if the white people and the negroes have decreased at about an equal rate. (3).

It may be suggested that it would be worth while to keep on record in the office of the County Superintendent more systematized data with reference to the social and economic conditions in the various communities of the district. It has not been an easy matter to gain information along certain lines for lack of sufficient data. For example, there are no records showing the population of each community, the number of children of school age, the races, the sexes, nor the decrease in the communities for the decades. It would be useful to keep on file a record of each community, indicating the number of people, the number of families, the children of school age, the number actually enrolled, the number not enrolled, and the percentage of races in each place. This would furnish a kind of a social inventory of each community, its liabilities and its assets. However, all of these records are not required by law.

#### C. INDUSTRIES AND OCCUPATIONS

The section of the county in which the town of Alachua is situated is primarily an agricultural section. The entire region is given over to various types of agricultural pursuits. Trucking, intensive farming, dairying, cattle raising and naval stores constitute the principal enterprises of the people in this district. Since 1910 the actual acreage under cultivation has decreased, but the output in agricultural staples has shown an increase. (4). Of the total number of persons within this district, over three-fourths are engaged either directly or indirectly in agricultural pursuits.

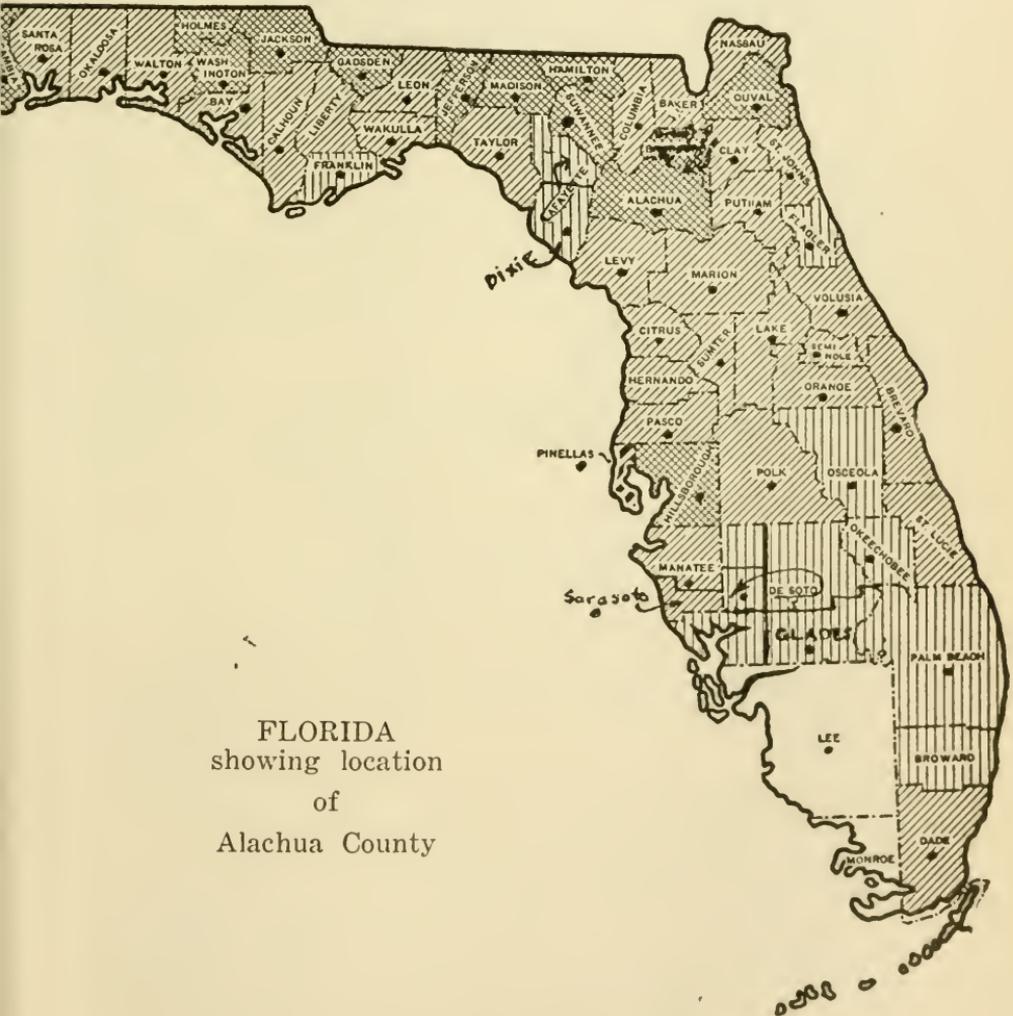
#### D. BIBLIOGRAPHY

1. United States Census Reports for the Years 1910 and 1920.

2. Record Book in the office of the County Superintendent of Public Instruction of Alachua County.

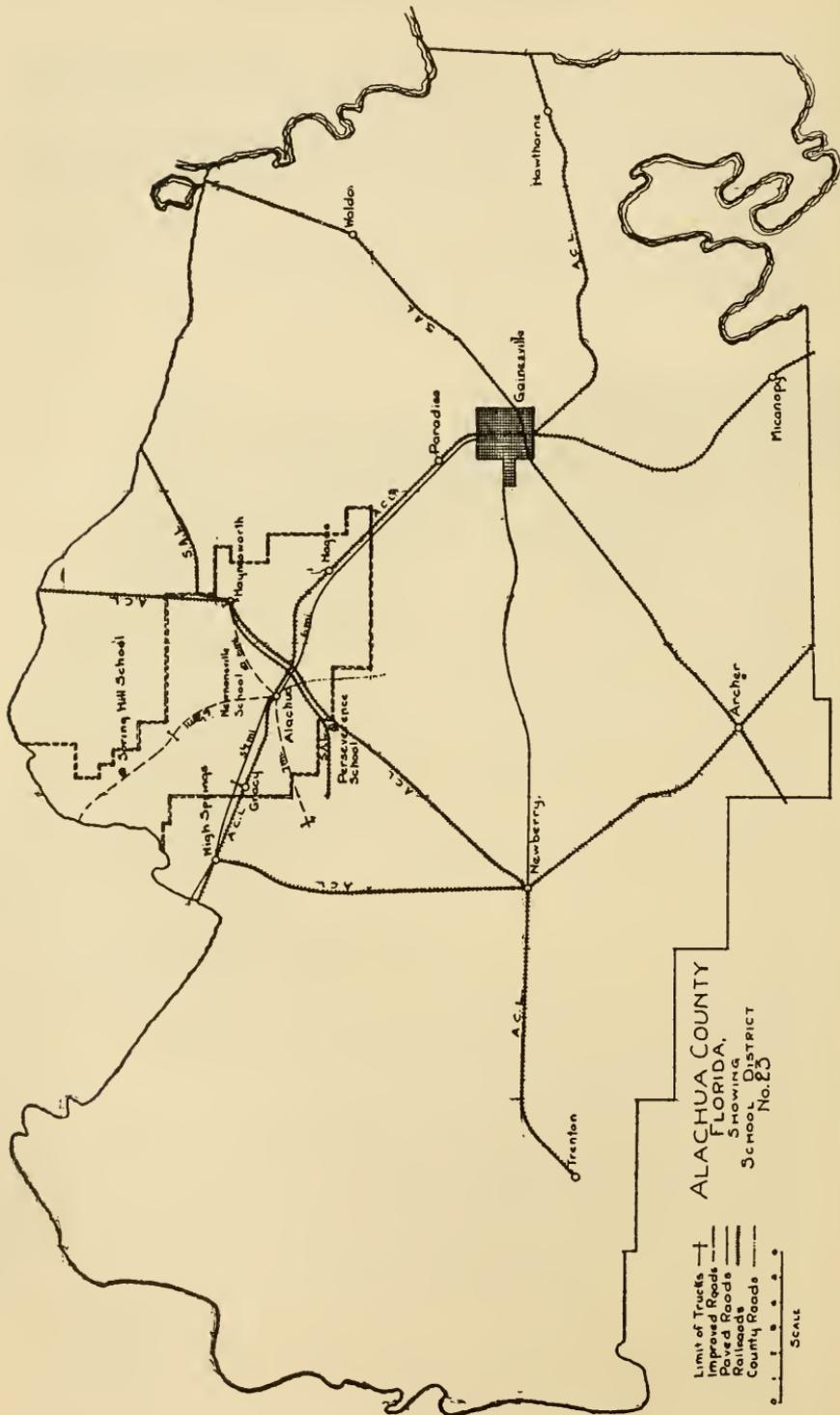
3. Conversations with the County Superintendent of Alachua County, and several members of the Board of Public Instruction.

4. Bulletins, University of Florida Experiment Station, 1923 and 1922.



FLORIDA  
showing location  
of  
Alachua County

ALACHUA PUBLIC SCHOOLS



ALACHUA COUNTY  
 FLORIDA,  
 Showing  
 School District  
 No. 23

- +— Limit of Tracks
  - - - Improved Roads
  - Paved Roads
  - x-x- Railroads
  - School District
  - County Roads
- 0 1 2  
 Miles  
 SCALE

## CHAPTER III

## The School Plant

The committee on the school plant presents herewith its report on the school buildings and grounds at Alachua. The report is, in brief, as follows: A. A brief statement of standards for judging school buildings and grounds. B. The comparative scores of the two buildings. C. Summary of findings. D. Summary of recommendation. E. Bibliography.

The score card used in making this study of the school plant at Alachua is the Strayer-Engelhardt Score Card for Elementary School Buildings. All scores were made on the basis of the standards outlined in the Strayer-Engelhardt Standards for Elementary School Buildings. (6.)

#### A. A BRIEF STATEMENT OF STANDARDS FOR JUDGING SCHOOL BUILDINGS AND GROUNDS (7:3.)

##### SITE

1. Centrally located for children; 200 square feet playground for each pupil; not on car line or near factories; well drained.

##### BUILDINGS

###### A. Situation

Placed to secure best lighting in classrooms and least exposure for entrances; not too near street; aesthetic balance and possible future additions should be considered.

###### B. Gross structure

(1) Should be open T, H, E, V, or Y-type, with provisions for additions.

(2) Materials: Brick or concrete preferable; fireproof.

(3) Height: Not more than two stories above basement.

(4) Roof: Flat or with very slight pitch.

(5) Foundation: Water or damp proof.

(6) Entrances: Main, 10 to 12 feet; secondary, 8 to 10; entrances free from obstructions, outward swinging doors with panic bolts; entrance steps, few as possible and protected from weather.

###### C. Internal structure

(1) Stairways: Fireproof; hand rails on both sides; 5 feet wide, 10 to 12 inch tread, 6 to 7 inch riser; should be sound proof and well provided with natural and artificial lighting.

(2) Corridors: Should give easy access to stairways from classrooms fireproof; main corridor 12 feet, secondary 8 feet in width; adequately lighted and free from obstructions. In high school buildings should be wider.

(3) Basement: Not more than 3 feet below grade, boiler rooms, ventilating plants and coal pits should be outside of main building, separated from basement proper by fire doors; floors, walls and ceiling should be fire, water and soundproof.

## (4) Classrooms:

a. Size: grade rooms 22-23 feet wide, 28-29 feet long, 12 feet high; should allow not less than 15 square feet of floor space and 200 cubic feet air space per pupil. In large grade buildings one or two rooms may be made larger and one or two smaller for special classes. High school rooms should vary with size of class in different subjects.

b. Light: Glass area  $\frac{1}{5}$  to  $\frac{1}{4}$  of floor area; windows grouped on one side of room to prevent cross lighting.

c. Equipment: An adequate amount of slate or ground glass blackboard, placed at proper height; adequate book closet and cloak room or wardrobe facilities; individual adjustable, movable seats.

d. Special rooms: Auditorium for general school and community purposes; gymnasium accessible from playground; separate locker rooms, showers and dressing rooms for boys and girls; swimming pools in high schools; teachers' rest room equipped with dressing room and toilet facilities; should have some provision for use of school nurse and emergency sickness.

## D. Service systems

(1) Heating and ventilating: "Split system," heating and ventilating separated preferred; air taken from top of building, warmed and humidified; temperature under thermostatic control to save fuel and guarantee comfort.

(2) Toilets: Toilet provisions on each floor; rooms well lighted; equipment of non-absorbent and easily cleansed material; one seat and one urinal for each 25 boys and one seat for each 15 girls in the grade buildings. Towels and lavatories should be provided in toilet room or in room adjoining.

(3) Water supply: Bubbling fountains, one for each 75 children, with height adapted to children in different grades; should not be in toilet rooms.

(4) Fire protection: Automatic sprinklers or fire hose connected with city system and one hand extinguisher to every 3,000 to 5,000 square feet of floor area.

(5) Cleansing system: Vacuum system with hose outlet in each room and discharge into furnace.

(6) Electric service: Program clocks in junior and senior high school; clock in each room; bells for general signals and fire drills; telephone in principal's office; in every large building there should be an extension phone on each floor.

This brief statement of standards for judging school buildings, which the committee copied from the University of Iowa Extension Bulletin, No. 41, agrees in general with the Strayer-Engelhardt Standards, with the exception of the number of boys' urinals. The former recommends 1 urinal for each 25 boys, while the latter 1 for each 15 boys.

## B. THE COMPARATIVE SCORES OF THE TWO BUILDINGS

The scores given in the following table are: the standard score in the first column; the average scores made by members of the committee, for the new building in the second; and for the old building in the third.

COMPARATIVE SCORES OF THE BUILDINGS IN ALACHUA  
Data secured March and April, 1924

	Standard	New Building	Old Building
I. Site			
A. Location			
1. Accessibility .....	25	25	25
2. Environment .....	30	25	25
B. Drainage			
1. Elevation .....	20	20	20
2. Nature of soil.....	10	10	10
C. Size and form.....	40	40	40
II. Buildings			
A. Placement			
1. Orientation .....	15	15	13
2. Position on site.....	10	10	10
B. Gross structure			
1. Type .....	5	2	1
2. Material .....	10	6	5
3. Height .....	5	5	5
4. Roof .....	5	3	5
5. Foundation .....	5	5	5
6. Walls .....	5	5	5
7. Entrances .....	10	5	5
8. Aesthetic balance .....	5	4	4
9. Condition .....	10	9	7
C. Internal Structure			
1. Stairway .....	35	15	15
2. Corridors .....	20	8	5
3. Basement .....	15	15	15
4. Color scheme .....	5	3	2
5. Attic .....	5	5	5
III. Service Systems			
A. Heating and Ventilation			
1. Kind .....	10	5	5
2. Installation .....	10	8	8
3. Air supply .....	15	15	15
4. Fans and Motors .....	10	10	10*
5. Distribution .....	10	4	4
6. Temperature control .....	10	0	0
7. Special provisions .....	5	0	0
B. Fire protection system			
1. Apparatus .....	10	0	0
2. Fireproofness .....	15	0	0
3. Escapes .....	20	10	5
4. Electric wiring .....	5	5	5
5. Fire doors and partitions.....	10	0	0
6. Exit lights and signs.....	5	5	5
C. Cleaning system			
1. Kind .....	5	1	1
2. Installation .....	5	5	5
3. Efficiency .....	10	5	5

D.	Artificial lighting			
	1. Gas and Electricity .....	5	0	0
	2. Outlets and adjustments.....	5	2	1
	3. Illumination .....	5	0	0
	4. Method and fixtures.....	5	1	1
E.	Electric service system			
	1. Clock .....	5	3	5
	2. Bell .....	5	5	5
	3. Telephone .....	5	0	0
F.	Water supply system			
	1. Drinking .....	10	9	5
	2. Washing .....	10	6	4
	3. Bathing .....	5	5	5
	4. Hot and cold.....	5	0	0
G.	Toilet system			
	1. Distribution .....	10	10	10
	2. Fixtures .....	10	8	8
	3. Adequacy and arrangement.....	10	8	4
	4. Seclusion .....	5	2	2
	5. Sanitation .....	15	3	3
H	Mechanical service .....	10	10	10
IV.	Class Rooms			
A.	Location and connection.....	35	28	25
B.	Construction and finish			
	1. Size and number .....	25	25	20
	2. Shape .....	15	12	10
	3. Floor .....	10	10	3
	4. Walls and ceiling .....	10	10	10
	5. Doors .....	5	3	2
	6. Closets .....	5	5	1
	7. Blackboards .....	10	6	5
	8. Bulletin Boards .....	5	2	0
	9. Color scheme .....	10	3	3
C.	Illumination			
	1. Glass area .....	45	30	25
	2. Windows .....	30	18	15
	3. Shades .....	10	7	3
D.	Cloakrooms and wardrobes.....	25	21	10
E.	Equipment			
	1. Seats and desks .....	35	10	10
	2. Teacher's desk .....	10	10	10
	3. Other equipment .....	5	4	3
V.	Special Rooms			
A.	Large rooms for general use			
	1. Playroom .....	10	10	10
	2. Auditorium .....	15	8	0
	3. Library .....	10	4	0
	4. Gymnasium .....	15	15	15
	5. Swimming pool .....	5	5	5
	6. Lunch room .....	10	10	10
B.	Rooms for school officials			
	1. Officers .....	10	8	10
	2. Teachers' room .....	10	0	0
	3. Medical suite .....	10	0	0
	4. Janitor's room .....	5	5	2
C.	Other special service rooms			
	1. Household arts (Lab.).....	20	15	20
	2. Industrial arts (Lecture).....	10	10	5
	3. General science and drawing (Studio) .....	5	5	5
	4. Store rooms .....	5	2	0
	Totals .....	1000	681	597

\*When credit is allowed for any single item not present and not needed, score appears in bold type.

In using the Strayer-Engelhardt score card experts have agreed upon the following general interpretation of total scores:

900—1,000=Highly satisfactory.

700— 900=Fairly satisfactory.

600— 700=Many things needed to make the building satisfactory.

500— 600=Highly unsatisfactory, but fit for use with changes.

0— 500=Unfit for use.

The total scores of the Alachua buildings are high because of the excellent site. Out of a possible 125 points, this site scored 120. The beautiful campus recalls Ian Maclaren's description of the school at Drumtochty, given in his "Beside the Bonnie Brier Bush": "Some one with the love of God in his heart had built it long ago, and chose a site for the bairns in the sweet pine-wood . . ."

## C. SUMMARY OF FINDINGS

### SCHOOL GROUNDS

In Alachua the school buildings are situated on a high hill on the eastern outskirts of town, off the main route of travel, removed from the railroad and other possible disturbing factors. This gives a site which approaches very near to the ideal. The buildings are located on the summit of this hill which has a gradual slope in all directions. This gives ample drainage. The campus of 17 acres provides over 1,000 square feet of playground for each child enrolled. Standards only require 200. This allows expansion of the school plant for many years. Oak, pine and other native trees adorn the campus, furnishing plenty of shade. In this connection the committee did not give a perfect score on the grounds because some of the oak trees are less than twice their height from the buildings, thereby seriously interfering with the illumination. This is especially noticeable in the rooms occupied by the beginners and the third grade.

About 1905, five acres of ground were purchased for a school site, and a building (in this survey designated as the

old building) erected at a cost of about \$7,000. Later an additional 12 acres were purchased for \$1,200; and in 1917 the new school building was built at a cost of about \$14,000.

The biennial report of the Superintendent of Public Instruction of the State of Florida for the two years ending June 30, 1922, gives the following valuation of the school plant at Alachua for the year 1920-21:

Lot .....	\$2,500.00
Buildings .....	24,000.00
Teachers' desks .....	400.00
Pupils' desks .....	2,000.00
Laboratory apparatus .....	175.00
Library .....	600.00
Other property .....	1,000.00
	\$30,675.00
Total.....	\$30,675.00

The playground apparatus consist of the following: 2 horizontal bars, 3 swings, 2 teeter boards. They have 2 basketball courts.

The Smith-Hughes project plots are situated on the north side of the campus.

#### BUILDINGS

The school buildings at Alachua are well placed in regard to illumination of classrooms and the least exposure of entrances. The main entrance of the new building is on the south, while that of the old is on the west. The new building acts as a windbreak against the northwest wind for the entrance of the old building. This compensates for any bad effects due to the old building facing the west.

The old building is used for the elementary grades, beginners to the seventh, inclusive, and for the Smith-Hughes' department. The new building is used by the eighth grade and the high school.

Both buildings are of the rectangular type with no provision for future additions. The outer walls are made of brick and the interior of the buildings are wood. Both buildings are two stories in height and have no basement. Neither are fire-proof. The roof of each building is slate or some similar composition and has a moderate pitch. The roof of the new building needs to be repaired. The foundations are in excellent condition.

The main entrances are too narrow. They are only 5 feet

in width, while the standards are 10 to 12. They are free from obstructions and have outward swinging doors, but are not equipped with panic bolts. The steps to the entrance are made of concrete, few in number and partially protected.

#### INTERNAL STRUCTURE

The stairways in neither building are fireproof. In the old building the janitor keeps his supplies in a closet under the steps. This is a fire risk because of the inflammable supplies stored there. The stairways have hand rails on balustrade only. The stairway in the new building, leading from the second floor to the landing is 5 feet in width, and the two runs, leading from the landing to the first floor are each 5 feet in width. In the old building there are two runs, each 4 feet in width, leading from the second floor to a landing, and then a single stairway 6 feet 7 inches in width, leading from this to the first floor. The risers are 6 inches in the old building, and  $5\frac{1}{2}$  in the new. The standards require all stairways to be fireproof. (6:13.) Handrails should be provided on both sides, and be turned into the walls at the ends. Two sets of rails on balustrade and wall should be provided to meet the needs of the varying sizes of children. Width 5 feet; 10 to 12 inch tread; 6 to 7 inch risers are the standard dimensions for stairways. They should be soundproof and well provided with natural and artificial lighting. The stairways in neither buildings are soundproof, and are very poorly lighted.

The corridors in both buildings give easy access to the classrooms. They are not fireproof. In the new building the corridors are 9 feet 6 inches in width on each floor. The narrowest point on the first floor is 5 feet 6 inches, on the second floor 4 feet. The narrow places are due to the projection of the stairways, and determines the width of the line that can pass these points in case of an emergency. In the old building the corridor on the first floor is 9 feet in width, and its narrowest point is 4 feet in width. The corridor on the second floor averages 7 feet 6 inches in width and is free from obstructions. The corridors have very limited natural illumination, especially on the second floors of both buildings where the ends of the corridors have been made into rooms. They have no artificial lighting.

The standards for corridors are: Easy access from stair-

ways to classrooms; fireproof; main corridors 10 feet wide, secondary 8 feet for elementary buildings and 12 feet for high schools; adequately lighted and free from obstructions. (6:14.)

#### CLASSROOMS

In the new building the rooms are fairly regular in size and shape. The classrooms are 22 feet wide, 32 feet long and 12 feet high. On the basis of pupil capacity, the average for the four classrooms is 23.3 square feet of floor space and 280 cubic feet of air space per pupil. On the basis of pupil enrollment this allows 38.1 square feet of floor space and 435 cubic feet of air space per pupil. On the basis of 40 pupils in a class this allows 17.6 square feet of floor space and 210 cubic feet of air space per pupil.

In the old building the classrooms are very irregular in size and shape. As a whole, the classrooms are rectangular in shape. On the basis of pupil capacity the average for the 8 classrooms is 18 square feet of floor space and 217 cubic feet of air space. On the basis of pupil enrollment this allows 20 square feet of floor space and 250 cubic feet of air space per pupil. On the basis of 40 pupils in a class this allows 16 square feet of floor space and 193 cubic feet of air space per pupil.

The standards (6:31.) for classrooms are 22-23 feet wide, 28-29 feet long, and 12 feet high; should allow not less than 15 square feet of floor space and 200 cubic feet air space per pupil. In large grade buildings one or two rooms may be larger and one or two smaller for special classes. High school rooms should vary with size of class in different subjects.

From the above data we see that both buildings could accommodate more pupils than the present enrollment. This allows expansion without necessitating more classrooms. By equipping the auditorium with tablet armchairs still more could be accommodated and use made of the entire plant for the whole day.

In the new building the ratio of the glass area to the floor area in the classrooms is 1:5 to 1:6. The windows are not grouped on one side of the room, and cross lighting is the result.

In the old building the ratio of the glass area to the floor

area is 1:4 to 1:10. Cross lighting results for the same reason as in the new building.

Comparing the new building with the standards, we find that it is a little low, while the old building is far below the standard. The standard is glass area 1-5 to 1-4 of floor area; windows grouped on the left side of room to prevent cross lighting. (6:34.)

The buildings are as a whole adequately equipped with hyloplate blackboard. In most instances in the old building they are placed too high from the floor. In some rooms this is partially remedied by the use of long box-like platforms upon which the pupils stand when working at the blackboards. In the old building there are very few book closets, and the wardrobe facilities are inadequate. There are two closets, and hooks have been placed in the corridors where the children can hang their wraps. The seats and desks are the individual, non-adjustable, fixed type.

TABLE OF THE EQUIPMENT FOUND IN THE ELEMENTARY GRADES.

Grades	Beg.	1	2	3	4	5	6	7	8
Bookcase .....	..	1	..	..	..	..	..	..	1
Bulletin board.....	..	..	..	..	..	..	..	..	..
Clock .....	..	1	1	..	..	1	..	1	1
Dictionary holder ..	..	..	..	..	..	..	..	..	..
Dictionary, large ..	..	..	..	..	..	..	..	..	..
Flag .....	..	1	..	..	..	..	..	..	1
Globe .....	..	..	..	1	..	..	1	..	..
Ink wells .....	..	..	..	..	1	..	..	..	..
Maps .....	..	..	..	..	1	..	1	1	..
Pencil sharpener ..	1	1	1	1	1	1	..	1	1
Phonograph .....	1	..	..	..	..	..	..	..	..
Pictures, framed ..	..	..	..	..	1	..	1	..	1
Pointers .....	1	..	1	..	..	..	..	1	..
Pupils' chairs .....	1	1	..	..	..	..	..	..	..
Sand table.....	1	..	..	1	..	..	..	..	..
Scissors .....	1	1	1	1	..	..	..	..	..
Set of measures..	1	..	..	..	..	..	..	..	..
Supply cabinet ....	1	..	1	1	..	..	..	..	..
Table .....	1	..	..	..	..	..	..	..	..
Teacher's chair....	1	1	1	1	1	1	1	1	1
Thermometer .....	..	..	..	..	..	..	..	..	..
Visitors' chairs....	1	1	..	..	..	..	..	..	..
Waste basket.....	1	1	1	1	1	..	..	1	1
Window shades....	1	..	1	1	½	..	1/5	1	1

1 is used as a symbol of adequacy.

Phonograph and part of other equipment circulated through class rooms.

The blackboards in the new building are about the right height. The book closet and wardrobe facilities are adequate. The majority of the seats are of the same type and kind as the old building.

The standard equipment requires an adequate amount of slate or ground glass blackboard, placed at the right height for the children using them; adequate book closet and cloak room facilities; individual, adjustable, movable seats and desks (6:33).

Each classroom is equipped with a regulation type of teacher's desk. The other classroom equipment is given in the table below. Standard elementary classroom should contain much of this equipment. (6:35.)

#### SPECIAL ROOMS

The auditorium is 23 feet wide, 45 feet long, and 24 feet high, except in the gallery, which is 12 feet high. The main entrance is from the corridor. The exit is on the opposite side from the main entrance. The auditorium is on the first floor. The entrance to the galley is on the second floor. A moving picture machine is installed in a fireproof booth in the gallery. The stage is well equipped. The auditorium is used twice a week for chapel services. The rest of the school hours it is in charge of the private music teacher. It is also used as the community center. By equipping the auditorium with tablet armchairs, as was stated before, it could be used as a study room and would release some of the present assembly room for other purposes. The auditorium is in the new building.

In the new building on the second floor the secondary corridor has been partitioned off and made into a room 10 feet wide by 26 feet long. This is used as a lecture room and a library. Although two window sashes placed high up in the above partition let in some light, the corridor does not have enough light. The library contains over 450 volumes. They are arranged upon wall shelves and in a bookcase. The rest of the equipment consisted of a table and a few chairs.

The principal's office is located on the second floor of the new building. The equipment consists of an office desk, a bench, and two chairs. In the closet of an adjoining room we found an Edison mimeograph, which is probably part of the office equipment.

On the first floor of the new building one of the classrooms is used as a lecture room and laboratory. The laboratory tables are placed at the back of the room. The closet has been converted into a storeroom and apparatus cabinet. The equipment is adequate for the courses offered.

In the old building a room is used as a lecture room and laboratory for the Smith-Hughes' course in agriculture. The equipment is adequate. The work is of such a nature part of the time that it is a disturbing factor to the adjoining rooms.

#### SERVICE SYSTEMS

The buildings are heated by ordinary unjacketed stoves, which are in poor condition. The heating is very unsatisfactory and poorly distributed over the room. There is no special ventilating system.

#### TOILETS

In both buildings the toilet for boys is located on the first floor, while that for the girls is on the second. Since neither building is large, the number of toilets is sufficient, even though standards say there should be one toilet for each sex on each floor and preferably at opposite ends of the building. (6:30.)

All the fixtures are below standard. The seats are the closed type, with individual non-automatic flush. The urinals are enameled open troughs. The lavatories are regulation type. The toilet seats are in compartments without any doors. All seats are the same height and there is no provision made to meet the varying height of the children enrolled. The flushing system is uncertain in its action. The bowls are often clogged and overflow, causing the plastering to fall from the ceiling in the toilet directly underneath on the first floor, when the toilets on the second floor overflow. The supply of toilet paper is limited. No soap or towels are supplied.

In the new building the number of toilet seats and urinals is adequate and the distribution of the toilets is good. In the old building there is one toilet seat to each 50 boys and one toilet to each 50 girls. The standards (6:31.) for adequacy are:

Boys' toilet seats.....	1 for each 25 boys
Boys' urinals .....	1 for each 15 boys
Girls' toilet seats.....	1 for each 15 girls

A comparison of the above figures show that the adequacy for the boys is 50 per cent below standard, and that the adequacy for the girls is 70 per cent below standard.

There is very little seclusion. The sanitation is far from satisfactory. The lighting is insufficient and some of the window panes are broken, which make it possible to see into the toilets from a classroom. This condition exists in the girls' toilet on the second floor of the old building. The floors are made of ordinary flooring, which is now in bad condition. The walls and ceiling are plastered. Some of the ceiling has fallen. The walls are marked and scarred. The fixtures were unsanitary and unsightly; the floor was littered and very unsanitary at the times the committee inspected the toilets. Due to the foregoing reasons and insufficient janitorial service odors are transmitted into the corridors and classrooms.

#### WATER SUPPLY

The two fountains in the new building are adequate for the present enrollment in that building, while the two fountains in the old building is less than 50 per cent adequate for the enrollment of 300. In each building there is one fountain on each floor in the corridor just outside the toilets.

No facilities are provided for bathing. The athletes take their baths after practice at home.

#### FIRE PROTECTION

Neither of the buildings has protection against fire. In the corridor on the lower floor of the new building there is a water plug for attaching a water hose, but there is no hose. There are no hand fire extinguishers in either building.

The fire escape on the old building is made of wood and was built this year. The risers are about 13 inches. This makes it very difficult for one to descend without being percipitated headlong down the escape. It is not used in fire drill on this account.

The fire escape on the new building is iron. The platform is flush with the window ledges of the library windows. The platform is reached by climbing over an opera seat and then crawling through the window with the lower sash raised. The bottom of the window is 40 inches from the floor. The tread

and platform are made of flat bar iron with quite a space between the bars, making it risky for girls with high heel shoes to use the escape. The balustrade is supported by very weak posts fastened with small bolts. If a child should be pushed hard against the balustrade there is great danger that the bolts would shear off. The center rail of the balustrade is loose where it should fasten to the post at the platform. The principal reports having fire drills once a month. He does not use the fire escapes often in the drills, and keeps no record of date fire drills are held. By systematizing the movement of the lines he reduced the time of clearing the buildings of pupils from three minutes to one minute twenty seconds.

#### CLEANING SYSTEM

The buildings are cleaned by a student janitor, who is paid \$32 per month for his services. He sweeps daily the 13 classrooms, 4 corridors, 4 toilets, library, and the principal's office. The auditorium is swept once a week. The floors were dirty and did not have the appearance of having been oiled very often. No sweeping compound is used. The dusting is done with a woolen duster. The floors have been much abused, especially in the old building. The soap and water method used in cleaning the floor has caused the floors to crack and splinter. In some places there are holes worn through the floor in the old building. It is impossible for anyone to keep such floors clean.

#### ELECTRIC SERVICE

The program clock is located in the corridor on the first floor of the new building. It is run by dry cell batteries. It is out of repair. A large gong is used for general signals. Fire drill signals are given with a whistle carried by the principal.

#### D. SUMMARY OF RECOMMENDATIONS

1. The roads leading to the school buildings should be repaired, as they are becoming gullied.
2. The shade trees, which are less than twice their height from the buildings, should be cut down, for they interfere with the illumination in the classrooms.
3. The school grounds should be beautified by planting flowers and shrubs.

4. Jacketed stoves should be installed in the classrooms. The Heatrola is recommended for the auditorium.

5. The toilets should be thoroly renovated and brought as near to the standards as possible. This would include tile or moisture-proof cement floors. The wainscot should be of a hard non-absorbent material, white and readily washable. Ceilings should be sound and odor proof, and white. The present urinals should be replaced by an adequate number of modern urinals varying in width and height to suit the ages of the children using them. Soap and paper towels should be provided. Light swinging doors should be provided for each seat to give seclusion. In the old building there should be installed 3 more toilet seats for the boys and 7 more for the girls. They should be the open type and should vary in height to suit the children using them. More lavatories are needed for the girls in the old building.

6. A full time, efficient janitor should be employed. In addition to his regular janitorial duties, he should be able to do such odd jobs as repairing desks, replacing broken window panes, repairing doors, etc. Such a janitor should be paid not less than \$75 or \$80 per month for his services. He should be employed the year round. This will be money well spent. Too great stress cannot be placed upon the upkeep of the school plant both from an economic and hygienic standpoint. Next to the principal of the school, the duties and opportunities of the janitor call for good judgment, initiative, and special knowledge almost as much as to do those of any teacher. (5:30-37.)

7. A teachers' rest room should be provided. (6:38.)

8. When new desks are bought, they should be the movable and adjustable type.

9. The principal's office should be equipped with a filing cabinet for the school records. (6:38.)

10. A part of the auditorium, at least, should be supplied with tablet armchairs or some of the desks from the classrooms moved in so that the auditorium may be used for a study hall. The music teacher could be moved to a smaller room.

11. The boxes should be dispensed with and the height of the blackboard changed according to the standards for the grades using them. A chalk and eraser trough, with an

open wire cover of  $\frac{1}{4}$  of an inch mesh, with hinges or with an easily removable tray should be placed at the bottom of each blackboard. (6:33.)

12. New floors should be put in on top of the present ones and then these should be cleaned without using soap and water, and oiled. Sweeping compound is recommended. A dampened cloth should replace the woolen duster. (5:30-37 and 3:345-346.)

13. The walls and ceilings should be retinted to conform to the standards. (6:33.)

14. Some kind of artificial light should be provided on the stairways, in the corridors and in the classrooms on cloudy days. (6:29.)

15. The library room should not be used as a lecture room. It should be equipped with tables and chairs. Acceptable current magazines for boys and girls, as well as for teachers and other adults should be provided, and more books should be bought. (6:37.)

16. A special gong should be used in fire drills because the principal might be absent in case of an emergency. There should be at least one button on each floor for fire drill signals.

17. A partial list of the needed repairs: 13 broken or cracked window panes; loose seats need fastening; broken seats need repairing; window guards need fastening; glass broken out of transoms; a number of shades needed; picture of Lee needs protection by glass; fire escape on new building, and roof on same.

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## CHAPTER IV

## Organization and Administration

## A. SCHOOL BOARDS

1. The County Board of Public Instruction. The county board of public instruction in Alachua County, as in all other counties of this state, has been limited in accordance with the State law, to three members, elected every two years by the qualified voters of the county. The remuneration which the members of the county board receives depends upon the population of the county. In counties having a population of 37,000 to 40,000, the members of the county board receive a salary of \$800.00 per year. (1:20-21.) The population of Alachua County was 31,305, as indicated by the United States census report for the year 1920. (2.) The members of the county board of public instruction in the county are paid \$4.00 a day for each day that they are engaged in work and are allowed ten cents a mile for traveling expenses. At the head of the county board is the county superintendent of public instruction, who is also secretary to the board.

The duties of the county board of public instruction are set forth in detail in "The School Laws of the State of Florida, 1923," pages 22-30. The board is required by law to exercise certain supervisory duties over the schools within the county. The board disposes of all property, possessed or acquired by the county for school purposes. It selects and advises as to the location of schools in the county; audits and pays all accounts against the board of public instruction; and keeps an accurate account of the official acts. It is the duty of the county board to borrow money for school purposes, to hold regular meetings for the transaction of business, to convene in special session when necessary. To the board is intrusted the duty of studying the financial needs of each school and making out an annual budget for school purposes, stating the amount in mills on the dollar of taxable property in the county. (1:20-30.)

. From conferences with the County Superintendent of Public Instruction of Alachua County many facts have been ascertained with reference to the work of the Board of Public Instruction of Alachua County. From the information gath-

ered it has been the chief work of the board to employ teachers; to audit all school accounts; to keep a record of all moneys received, and expended for educational purposes; to borrow money for school purposes; to study the county schools, their finances, and needs, and to make the annual budget based upon these findings. From the record book kept in the office of the Superintendent, it seems as if a very accurate account has been kept of the county finances.

It may be suggested that it would be worth while to have a record book indicating information such as the number of people in each community, the proportion of the races, sexes, adults and children. In this record may be kept the number of all children of school ages and the number that are actually in school. It is worth while, too, to keep an accurate account of all the official acts, proceedings, and decisions of the County Board of Public Instruction. At present there do not appear to be complete records of these matters, and for that reason it has not been easy to collect definite information concerning these facts. (3.) The state laws do not require all of these records.

2. The District or Local Board. Each county in the State of Florida constitutes a single unit in the educational system. The counties have been divided into districts, each depending upon the size and population of the county. In Alachua County there are 32 districts, each district having a local or district board consisting of three members. These members are selected every two years by the qualified voters of the district. All persons residing within the district who pay a tax on real or personal property are entitled to vote in these elections.

The duties exercised by the local or district board are, in a measure, similar to those of the county board. These duties are for the most part administrative and supervisory. The members of this board have general charge of the supervision of the schools within the district. They have the power to suggest and advise in matters of general interest and welfare. They are required under the state laws to have charge of and to make out an annual budget, stating the amount to be raised for teachers, buildings, equipment and for general purposes.

From an interview with a member of the Local Board in the town of Alachua it was learned that the board meets at no

regular intervals. Meetings are called from time to time as necessity requires. The board usually meets on Saturday afternoons, and the principal is sometimes invited to attend these meetings. There is no definite place of meeting, but on most occasions the board meets down town in a hardware store. The business transacted relates to the management of the school, the finances, and the making out of the annual budget. No other than brief and uncertain records are kept of the meetings. The management of the school is, in a large measure, subject to the recommendation of the Local Board. It may be suggested that it would be a wise policy to keep a record of the meetings, the acts and the proceedings, indicating in detail the actual business entered into and transacted.

#### B. THE COUNTY SUPERINTENDENT

At the head of the county educational system is the county superintendent of public instruction. He is selected every four years by the qualified voters of the county. The salary of the county superintendent depends upon the population of the county or upon the total annual receipts of the county (1:21-22). Some of his important duties are: To visit each school at least once during the term; to awaken interest in parents, guardians, and teachers; to keep a record of the schools; to decide upon questions and disputes submitted to him (1:38-39).

#### C. THE PRINCIPAL

The principal of a secondary or elementary school in the State of Florida is first nominated by the members of the local board and elected by the county board of public instruction. All public schools conducted within a special tax school district are under the direction and control of the county board of public instruction, and the superintendent of public instruction, subject to the rules and regulations prescribed in "The Schools Laws of the State of Florida." In districts where there are trustees they have the power to nominate, according to the state laws, all teachers and principals within the special districts.

The principal under the laws of this state is generally elected for one year only. He is nominated by the local board

and elected by the county board of public instruction. The duties of the principal are executive and supervisory. He issues every month a report to the county superintendent of public instruction, indicating the number of pupils in attendance, the delinquencies, and the general status of the school. He is supposed to keep a uniform system of records and reports; to send out from time to time report cards to the parents indicating the achievement of each pupil; to supervise classroom instruction; to give suggestions to teachers; to have charge of discipline; to hold teachers' meetings; to cooperate in community affairs; to assist in parent-teacher associations; to supervise and look after the school plant and equipment.

From the information ascertained and interviews held, it seems that the principal of the high school at Alachua is exercising in a most satisfactory manner these duties. In addition to these duties, he is teaching three periods a day, devoting almost one-third of his entire time to classroom instruction. (4.)

Teachers' meetings are held the last Thursday in each month. They are held after school hours. The business transacted relates to school activities, school problems, discipline, regulations, methods and classroom work. All matters relating to the school in any way are taken up and the teachers and principal cooperate in the work. (5.)

#### D. RELATIONS OF BOARDS, SUPERINTENDENT, PRINCIPAL AND TEACHERS

The local board exercises duties similar to that of the county board of public instruction. It has power to suggest and to advise in matters of general interest and concern. The local board nominates the teachers and the principal, and assists the principal in selecting teachers. The election of the principal and the teachers rests with the county board of public instruction.

The county board of public instruction operates through the local board. Among the powers may be mentioned the following: To maintain and locate schools; to employ and contract with teachers; to keep an accurate account of all expenditures and money appropriated; to report to the state superintendent

of public instruction; to hold regular and special meetings; to borrow money, and to acquire land.

The county superintendent of public instruction is secretary of the county board of public instruction. He works in cooperation with the members of the county board, and the local board. He has general oversight of the principal and teachers.

The principal is chosen by the county board of public instruction, but is usually first nominated by the local or district board. He is directly responsible to the local board, and his chief duties are local in nature. The teachers are nominated by the local board and confirmed or elected by the county board. Both the principal and the teachers are required to sign a contract with the county board of public instruction.

#### E. CONSOLIDATION AND TRANSPORTATION

The economic forces in this district have had a great deal to do with the origin and development of consolidation. Education first began as a matter of local responsibility, each locality administering its own schools. With the changes in our economic life have come changes in our educational standards. The administration of the school is no longer a matter of local concern; it has assumed larger proportions. The depopulation and exodus from the rural sections have brought a large number of children into towns and cities, and more or less forced the setting up of organized, consolidated schools, with a wider curriculum. Where conditions have forced rural organizations to organize for production, protection or marketing, some form of consolidated school has been fostered at the same time, or has followed at an early date. The improvement of highways has had a far-reaching influence upon consolidation. The better the roads, the greater the area traveled, and the greater the number of pupils transported. (6:34-50.)

The shift in the change from local administration to county or district control has brought about very great changes in the education system within this district. Four years ago there were four separate communities, each maintaining its own school, and one year later the communities of Hague, Gracy, Haynesworth and Alachua were united into one district with the latter town as the center. Consolidation at that

time was tried as a matter of experiment, and there is no evidence to indicate that it has not been an overwhelming success. The boundaries of this district are indicated on the map in Chapter II. (See page 14.)

Within the past five years better roads have been constructed in the district and the rural sections are thus enabled to send pupils to the local school at Alachua. Six trucks are operated, carrying pupils to and from the adjacent communities within the district. Each truck has a capacity of 30 students. The communities represented are Hague, Haynesworth, Gracy and the Brown Settlement. There are two trucks traveling to and from Hague, a distance of six miles away, carrying 55 pupils; one truck to Haynesworth, east six miles, carrying 28 students; the third truck follows the main line of the Dixie Highway to Gracy, a distance of six miles, and brings 28 pupils; the fifth truck goes northwest for about six miles over an improved country road and transports 30 students; the sixth truck goes into the Brown Settlement over a fair country road 7 miles, and transports 30 students. (See map, page 14.) The entire number transported is 187.

The trucks leave the school grounds at 7:30 A. M. and return at 8:30 A. M. In the afternoon they leave at 4:15, and return at 5:15. The trucks are stored in a garage in the town of Alachua when school is over. During the school term they are left on the local school grounds. These trucks are driven by two students and four other white men. The students are 18 years of age and receive a salary of \$10.00 per month. The four men drivers receive a salary of \$25.00 per month each.

No rules have been established for the truck drivers to observe other than to drive carefully. Places of danger, such as railway crossings, are approached with care, and so far there have been no accidents from wrecks of any kind. In time of rain and stormy weather the trucks drive off the highways to the homes of the students.

About three miles from the town of Alachua is the community of Perseverence. It has been invited several times to consolidate with the other communities, but they have so far declined to be united. Nine miles to the northeast is the Spring Hill School, and, because of the long distance and the bad conditions of the roads, it, too, has remained isolated.

(See map, page 14.) It maintains a small school with an enrollment of 19 pupils.

The cost of transportation is very small in proportion to the service rendered. (3.) The approximate actual cost per month may be stated briefly :

4 trucks; salary of driver \$25.00 each.....	\$100.00
2 trucks; salary of driver \$10.00 each.....	20.00
Gasoline and oil about \$3.00 per day.....	90.00
	\$210.00
Total cost per month.....	\$210.00
Cost per pupil per month.....	1.12

Recommendations: There should be formulated some rules for the drivers in order to guarantee safety. No pupils should be permitted to stand on the trucks while in motion. The steps of several of the trucks are in need of repairs, and the curtains need mending. It would be advisable to have built on the local grounds a building to house the trucks.

F. SCHOOL FINANCE

The tax evaluation of school property in this district is \$751,870. This includes property of all kinds. A ten-mill tax was voted in this district three years ago and also a school bond tax of five mills. Three years ago there was a three-mill tax until the communities were consolidated, and then it was raised to ten.

In order to appreciate the per capita cost in the elementary and in the high school it is necessary to take into consideration a few facts and figures gathered from the office of the County Superintendent of Public Instruction. These figures are as follows:

ALACHUA SCHOOL, TERM OF 1922-23

Apparatus .....	\$52.55	Special Fund
Repairs .....	107.36	“ “
Fuel .....	35.50	“ “
Incidentals .....	734.97	“ “
Transportation .....	445.80	“ “
Transportation .....	3,107.38	General Fund
Principal of both grammar and high school.....	1,800.00	\$750.00 of this
	\$6,283.56	amount from
Total running expenses for both grammar and high school.....	\$6,283.56	District Fund, and \$1,050.00 from General Fund.
Enrollment of entire school.....		400
Enrollment of high school.....		72
Enrollment of grammar school.....		328

The total running expenses of both schools, the elementary and the high, amounted to \$6,283.56 for the school year 1922-23. This amount divided by 400, the number of pupils attending school, gives the per capita cost based on enrollment. This cost amounts to \$15.71 per pupil.

There are three teachers employed in the high school receiving the following salaries. (3.):

The first receives.....	\$1,000.00
The second receives.....	720.00
The third .....	720.00
	\$2,440.00

This total, \$2,440, divided by 72, the number of pupils in the high school, gives \$33.89. This amount added to \$15.71, the running expense per pupil, gives a total of \$49.60, the per capita cost for each high school pupil enrolled.

There are eight grade teachers, each receiving \$600 per year. This represents a total of \$4,800. One receives \$680. This makes a total of \$5,480. This amount, divided by 328, the number of pupils enrolled in elementary school, equals \$16.70. The running expense of \$15.71, added to this, gives a total of \$31.40, which represents the per capita cost of each elementary pupil enrolled.

Data are not available for comparing Alachua with other Florida towns of similar size and resources. The Alachua school represents the average consolidated school in this section of Florida.

## G. INSTRUCTIONAL RECORDS

### 1. Findings

The committee on investigating the Alachua school in regard to records and reports found the following were used:

1. Monthly report cards of pupils.
2. Annual reports for the elementary grades.
3. Annual reports for the high school.
4. Daily report of absentees and tardiness.

The monthly report cards are little folders about six by six inches, which are given to the pupils each month by the teacher. These cards have vertically across the page a list of all the subjects taught in the elementary

grades, and horizontally across the page a place for the grade made each month. Still farther out to the right is a place for the first and second semester examinations, examination average, and general average. On the same side of the card is provided a place for the promotion of the pupil. On the opposite side of this card is provided a place for the signature of the parent for each month, followed by some suggestions to the parents soliciting their support and cooperation. There is also provided a space for the name of the school and signature of the teacher. This card is to be preserved for future reference and presentation to the pupil's instructor for the next grade.

The annual report for the elementary grade is similar to the one described above, only it is kept on file, one in the principal's office and the other in the office of the county superintendent.

The sheet for the daily report of absentees is a sheet of ruled paper providing places for the names of the pupils vertically across the sheet; and to the right of each pupil's name is a place for all the different classes of which he is a member, and also a place for the checking of each assembly during the day. Each teacher and truck driver is provided with one of these sheets. These are carefully kept by the teachers and truck drivers, and turned in to the principal at the end of each day, with a "T" for each tardy and an "A" for each absence checked in the proper place, whether it be a class or an assembly.

This sheet is very commendable in that any pupil can be located at any period during the day, and, too, it makes it possible for the principal to attend to any cases needing investigation by him.

The annual report for the high school pupils is a large folder fourteen by ten inches. Vertically across the folder is listed all the courses offered in the high school, fourteen in all. Opposite each subject, out to the right, horizontally across the sheet, is marked off places for class average, examination average, general average, and the number of credits each course offers towards graduation. There is a place on the same card for the entire four years of high school work, and what credits the

pupil may have from any other high school. This card serves almost the same purpose as a diploma, only it is better, in that the parent, instructor, and pupil may know just what progress is being made by the pupil from year to year. On the same side of the sheet at the foot of the page is provided a place for the name of the pupil, place of birth, parent, parent's address, date pupil entered school, when quit school, when reentered, and when graduated. About the middle of this page is provided a place for general department for each of the four years of high school work, and what other remarks the principal may see fit to make.

This seems to be a complete record of the pupil during his high school career. The accomplishments of each successive year are kept in the principal's office, so that it is possible to check up on the pupil at any time. It seems that this would have a great tendency to encourage the pupil to do better work in order that his standing in the school will be as good as possible.

All of the cards enumerated and described above are printed by the Pepper Printing Company, Gainesville, Florida.

Each teacher has a teacher's register, furnished by the State, in which is kept the daily attendance of the pupils of all the grades. However, these are used State-wide and are not peculiar to this particular school.

## 2. Purpose of Records

Before recommending what records and reports should be adopted and used by the Alachua school, it might be well to offer some of the purposes for which records and reports are kept. These aims and purposes are taken mainly from Finney & Schafer's "Administration of Village and Consolidated Schools". (7: Chap. 15.)

The immediate purpose of records is to keep permanent account of data that teachers, school officers, pupils, or patrons may at any time need or care to know. Numerous occasions arise when it is desirable or even necessary to refer to a pupil's scholarship record.

The immediate purpose of records is the traditional one, and beyond this purpose too few persons, even edu-

cators, ever think. But there is another purpose, and that is to render data available for educational science. So necessary are records for all schools that the United States Bureau of Education has issued a report on this subject alone. (3.)

Another purpose might be designated the intermediate, to signify their use by county, State and federal government in tabulating statistical data for the guidance of governmental instruction, or administration. The main point is that school records imply a great cloud of witnesses; and with this in mind it will seem far more significant and far less irksome to teachers and superintendents alike. (7:194.)

### 3. Recommendations

While realizing that a small school system like the one found at Alachua would not be expected to have the equipment of a large system, we recommend that the following, so far as may be possible, be adopted:

1. A form for reporting detention after school. Teachers who appreciate the careful parent's point of view will see the need for this blank. Many children have begun wrong courses by getting into mischief when their parents supposed they were staying in after school. These blanks should not be kept where the pupils could get them. The necessity for regular forms made for this purpose is obvious, for the simple fact that if only a slip of paper is used, the pupil may forge one.

2. A registration card, which should have a place for the name, address, school, date of birth, place of birth, sex, parents' name and address, nationality, occupation of father, and age of child at last birthday. This is all important in securing the attendance of all the children within the district. This card is to be filled out by the parent or guardian and returned to the principal. It is known as the "registration card." One card should be had for every child living within the district.

3. A health record, providing for the data resulting from a physical examination of each pupil. This card has a place for the child's and parent's name, nationality, address, date of examination, grade, height, weight, list

of diseases, and treatments the child may have had, and is very important in caring for the health of the pupils. No school should attempt to get along without them, for no child that is in poor health can do satisfactory work. This card is known as the "physical record of the pupils."

4. Following the above record should be a notification card, which should contain a similar list of diseases, and each one that the child is found to have had checked; along with the ones that the pupil may chance to have at the time of the examination, and recommendations for treatment in all cases where it is necessary.

5. The principal should keep regular application blanks which each teacher should be required to fill out on making application for a position in the Alachua school. This will furnish the principal data which he should know concerning each teacher under his supervision, as regards morals, professional record, etc.

6. The principal should have a regular score card for scoring his teachers, providing a place for:

- a. Personality.
- b. Scholarship.
- c. Method.
- d. Pupil reaction.
- e. Room condition.
- f. Counteracting factors.

These main headings are subdivided into from three to seven subheadings, with a score for each; the total score, or the perfect teacher rating, one hundred per cent. This would be an invaluable asset to the principal in getting the best of work and cooperation from his teachers. They know that a permanent record is kept from day to day of their work, and that it is likely to affect their salary the following year.

7. The principal is supplied with no files whatever. We noticed that he was very much confused in getting together the data for us. The county should furnish him with a complete set of catalogue files, and also files for miscellaneous purposes. If the board will not furnish them, it would be an easy matter for the manual arts department to make them, and would furnish good work for this department.

All the equipment recommended above, with the exception of the files, may be obtained from C. F. Williams & Son, listed in the bibliography at the end of this chapter. (9.)

H. CURRICULA.

Obviously the curriculum is the most important consideration in the school system. It is the skeleton upon which is built the entire school regime. Upon a properly constructed course of study depends, in a large measure, the success or failure of the school to hold its pupils. A new age needs new curricula. It is absurd to suppose the subjects studied by our grandfathers are sufficient to meet the needs of modern children. Yet we see just this thing in many of our schools, of which Alachua is no exception. The course of study prescribed by Florida State law is used in Alachua. The eternal three "R's" are given a prominent place, and comparatively little time is spent on the newer subjects.

1. The Elementary School

The following table gives the curriculum for the Alachua elementary school. The figures refer to the number of minutes a week the subject is taught:

TABLE OF ELEMENTARY SCHOOL CURRICULUM

Grade	Begin	One	Two	Three	Four	Five	Six	Seven	Eight	Total
Reading	250	175	300	200	175	150	90	150	75	1565
Writing	75	100	75	50	75	125	125	75	75	775
Arithmetic	150	150	200	250	225	225	225	225	225	1875
Language	.....	.....	.....	100	225	150	150	225	150	1000
Phonics	150	150	100	75	.....	.....	.....	.....	.....	475
Spelling	.....	.....	100	100	75	150	150	75	90	740
History	.....	.....	.....	.....	.....	150	150	225	90	615
Geography	.....	.....	.....	90	225	225	225	150	.....	915
Civics	.....	.....	.....	.....	.....	.....	.....	.....	150	150
Hygiene	.....	.....	.....	60	75	.....	60	.....	.....	195
Physiology	.....	.....	.....	.....	.....	.....	.....	.....	60	60
Nature Study	150	90	100	60	.....	.....	.....	.....	.....	340
			(Alternating)							
			(Alternating)							
Agriculture	.....	.....	.....	.....	.....	.....	.....	.....	150	150
Music	125	100	.....	.....	.....	.....	.....	.....	.....	225
Drawing	150	135	150	150	.....	.....	.....	.....	.....	585
Study Period	.....	100	100	50	275	300	375	300	300	1800

The subjects in this table are divided into major and minor subjects. The major subjects are required by the Florida State law, while the minor subjects may be required by the local authorities. (10.)

MAJOR SUBJECTS (Required by Law)	MINOR SUBJECTS (May be Required)
1—Reading	1—Phonics
2—Arithmetic	2—Hygiene
3—Grammar (Language)	3—Nature Study
4—Spelling	4—Music
5—History	5—Drawing
6—Geography	6—Physical Culture
7—Civics	7—Manual Training
8—Physiology	8—Home Economics
9—Agriculture	
10—Writing	

The Alachua elementary school curriculum complies with the law, as can be seen by a comparison of the two above tables. In the opinion of this committee, the following changes should be made in the Alachua curriculum in order to have it meet, in a more efficient way, the needs of the school child of today:

1. By the common consent of the community, children should be admitted to the first grade during the first two weeks of each semester only. Thus the "beginner's class" could be done away with.

2. The time devoted to the study of arithmetic should be decreased. It can be seen from the table that 1,875 minutes a week are spent on arithmetic in the elementary school, or more than the combined time spent on history, civics, the sciences and music. While an important subject, arithmetic does not require this much attention.

3. Civics should be introduced in the seventh grade along with the study of history.

4. Music should be given at least once a week to the entire school.

5. Supplementary reading of good literature should be encouraged in grades seven and eight by giving credit on book reports.

6. Nature study and hygiene should be taught in the eight grades, as outlined in the "Florida State Course of Study."\*

7. Manual training and home economics should be given for two two-hour periods a week, to the seventh and eighth grades.

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\*This was written before the new Course of Study for the Elementary Schools of Florida was published.

## 2. The High School

It is quite impossible for a small high school to offer an extensive program of electives. Therefore, the following table, taken from the "Program of Studies for Florida High Schools," should be considered with this thought in mind (11).

### PROGRAM OF STUDIES FOR THE FOUR-YEAR HIGH SCHOOL

#### NINTH GRADE

Required:

1. English
2. Mathematics

Two to be chosen:

1. Social Study
2. General Science
3. Foreign Language
4. Practical Arts
5. Fine Arts

#### ELEVENTH GRADE

Required:

1. English

Three to be chosen:

1. Social Study
2. Chemistry, Physics or Biology
3. Foreign Language
4. Mathematics
5. Practical Arts
6. Fine Arts
7. Teacher Training

#### TENTH GRADE

Required:

1. English
2. Social Study

Two to be chosen:

1. Biology
2. Foreign Language
3. Mathematics
4. Practical Arts
5. Fine Arts

#### TWELFTH GRADE

Required:

1. English

Three to be chosen:

1. Social Study
2. Physics or Chemistry
3. Foreign Language
4. Mathematics
5. Practical Arts
6. Fine Arts
7. Teacher Training

Required of all pupils:

1. Four units of English.
2. One unit of Mathematics.
3. Two units of the Social Studies, at least one of which shall be American History and Civics.
4. One unit of Science (either General Science in the ninth, or Biology in the tenth or eleventh grades).
5. One unit of Home Economics (girls)—after July 1, 1924.
6. One unit of Physical Education, which work should be distributed over two years at least, and preferably over four.

With this program, the State program for Florida high schools, let us look over the Alachua high school curriculum.

### ALACHUA HIGH SCHOOL CURRICULUM

#### NINTH GRADE

Required:

1. English
2. Algebra.

Two to be chosen:

1. General Science
2. History (Ancient)
3. Agriculture (Smith-Hughes)
4. Beginning Latin

#### TENTH GRADE

Required:

1. English
2. History (General European)

Two to be chosen:

1. Biology
2. Caesar
3. Agriculture
4. History

## ELEVENTH GRADE

Required:

1. English

Three to be chosen:

1. Physics
2. History (General European)
3. Psychology and Sociology
4. Cicero

## TWELFTH GRADE

Required:

1. English

Three to be chosen:

1. Commercial Arithmetic
2. Psychology and Sociology
3. American History

Chapel twice a week, and Physical Education three times a week.

Taking into consideration the size of the school and the community of Alachua, we think this curriculum is quite praiseworthy. To be ideal, there should be given courses in music and art—the things that enable one to make a more worthy use of leisure time. There is a private piano instructor, who gives lessons in the high school auditorium, but this kind of school music instruction reaches only a small number of pupils. It does not take the place of public school music.

The Smith-Hughes work is only in its infancy at Alachua. There is one course given in plant production. However, next year plans are being made to enlarge the scope of the work and to enroll many more pupils. The Smith-Hughes agricultural work is a fine thing to have in any community of agricultural interests. Not only does the instructor train the coming farmer in the most economic and scientific methods of growing, but he is also able to save the community quite a sum of money in the buying and regulating of farm products.

The test of the efficiency of a school curricula is its holding power. Does it hold the interest of the pupil? Does it meet his needs? Does it keep him in school? We have the following figures from Alachua high school in answer to these questions.

1919—40 enrolled; 1923, 13 graduated—all girls.

1920—39 enrolled; 1924, 9 graduated—6 girls, 3 boys.

This shows that, deducting the average rate of failures, Alachua is holding about the normal number of students—25 per cent. However, it is abnormal to have such a low percentage of male graduates, even for an agricultural community. This seems to indicate that the curriculum is deficient in its holding power for boys. We are hoping that in the future the new Smith-Hughes work will succeed in holding more of the boys.

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## CHAPTER V

## The Teachers

## A. SELECTION.

Under the statutes of the State of Florida, the duty of selecting teachers falls largely upon the local board of trustees who make their recommendations to the county board of education.

We find in this particular school that the local board of trustees worked in harmony with the county board and with Teachers College of the University of Florida in securing the present principal, and upon the selection of the present principal, he was given through the local board a wide margin in the selection of the teachers who were to work with him.

## B. QUALIFICATIONS, TENURE AND SALARY.

For the qualifications, tenure and salary of teachers, see Table I.

From this table we desire to call attention to the following facts, which are well worthy of note:

First, all teachers employed in the high school hold degrees from standard colleges, except number 4, who has a normal diploma. In addition all, except number 3, have supplemented their training by attending summer schools. Number 3 is teaching her first year.

Second, all the grade teachers are graduates from standard high schools, and in addition to this, they have pursued regular courses in various summer schools of the South, namely: Asheville, North Carolina; Nashville, Tennessee; Gainesville and Tallahassee, Florida.

Third, the teachers of the primary department are especially well-equipped for their work. All are high school graduates with one exception. They have increased their efficiency through practical experience, and by acquainting themselves with the most modern and best primary methods administered by capable instructors in summer schools.

We find after a thorough investigation that the salaries in this school compare favorably to salaries paid in other schools of the same type throughout this section of the State.

TABLE I. TEACHERS—QUALIFICATIONS, TENURE AND SALARY

Number	Sex	Grade	Salary per Month	Certificate	Experience, Years	Tenure in Alachua	Highest Grade Completed	Summer Schools Attended	Years in College	Other Schooling	Degree	College
1	M.	Prim.	\$200	Grad. S.	8	2	12	2	4	.....	B.S.	U. of Fla.
2	F.	H.S.	100	Grad. S.	5	3	12	3	4	.....	B.S.	Fla. S. C. W.
3	F.	H.S.	100	Grad. S.	1	1	12	.....	4	.....	A.B.	Fla. S. C. W.
4	M.	H.S.	100	Prof. 1st Specials	21	1	12	4	3	U. of Ga.	Normal Diploma	U. of Fla.
5	F.	8	75	Grade 2	8	6	12	4	3	Southern	.....	.....
6	F.	7	75	Grade 1	2	1	12	2	.....	.....	.....	.....
7	F.	6	75	Grade 2	2	1	12	2	.....	.....	.....	.....
8	F.	5	75	Grade 2	3	1	12	2	.....	.....	.....	.....
9	F.	4	75	Grade 2	2	1	12	2	.....	.....	.....	.....
10	F.	3	75	Grade 2	2	1	12	2	.....	.....	.....	.....
11	F.	2	75	Grade 2	4	1	12	2	.....	.....	.....	.....
12	F.	1	75	Grade 3	12	5	9	5	.....	.....	.....	.....
13	F.	Prim. Direct.	100	Pri. State	9	3	12	8	3	Meridian	.....	.....

### C. SUMMARY OF FINDINGS, AND RECOMMENDATIONS.

We find that the problem of the selection and the employment of a full corps of teachers for a school of this size is not a small matter. Many disturbing factors enter other than certification, qualification and personality. Due regard for the best interest of the school and of the community requires those in authority to retain the most efficient teachers, adding new teachers to fill vacancies when then occur. This policy insures a working body at all times. The problem of organization, administration and supervision is made more simple. Since the success of the school depends primarily upon the vision, tact, executive ability and the capacity for constructive leadership of the principal, justice demands that he be vested with the authority to select his teachers. Too often teachers hold positions as a result of financial, social or political prestige without due regard for educational or teaching ability. With this fact in view, we recommend that the principal be given the authority to select and employ his own teaching staff.

Statistics show that more than fifty per cent of the principals transfer from one school to another every year. The other fifty per cent has a tenure in one position that rarely exceeds five years. The few that exceed this tenure are the exceptions and can be counted on the fingers of one hand. (4:28.)

Expert opinion gives three years as a minimum tenure required for a principal to plan, inaugurate, and work out his program for the development of his school. The principal cannot learn and know his community in less time than this.

This school has been rather fortunate in retaining not only the principal but also a number of the teachers. The principal who preceded the present principal had a tenure of three years. The present principal remained only two years. We recommend a tenure of at least five years.

We also recommend that the county superintendent mail all warrants to the principal for distribution to the respective teachers.

### D. BIBLIOGRAPHY.

The bibliography for this chapter is placed at the close of chapter VI.

## CHAPTER VI

## Supervision of Classroom Instruction

## A. VALUE AND NEED OF SUPERVISION.

Supervision is the most overworked word in the school dictionary. Too often what principals call supervision is not supervision at all but merely visitation or inspection. Some one has pithily said that we have snoopervision instead of supervision, and John Dewey has fittingly said that it consists of too much super and too little vision.

When compared with administrative organization, and social duties, it far out-ranks them all in importance. With our present facilities for training teachers we cannot hope to do more than train a few men and women for educational leadership. The majority of Florida teachers come to their positions with a limited amount of educational and professional training. And in comparison with other great nations of the world, we are the least efficient educationally. A military strategist takes the soldier in the raw and soon in service develops him into a thoroughly and efficient fighting machine. In the public school work as well as in other lines of human effort where an end is reached by the combined labor of many, there is need of a co-ordinating and evaluating agency with a vision of the completed whole. There is a need of supervision. The class-room teachers of the United States are not professionally trained. Four-fifths of our teachers have had schooling less than two years beyond the high school; one-fourth have not completed a two-year high school course. In 1921-22 there were employed in Florida 58, 45 white teachers. Fifty-two per cent held second grade, third grade, or temporary certificates. In 251 one-, two-, and three-teacher schools seventy-five per cent of the teachers held second and third grade certificates; in the one-teacher schools, eighty-six per cent; and in the 32 four- to ten-teacher schools fifty-one per cent held the same grade of certificate. Certification facts just given furnish a measure of our teachers' preparation for their work. (4:15-19.)

In village and city schools there is more care given to this important phase of school management. However, in many cases the principal is little more than a teaching principal.

In 1921-22, Dr. Fulk of Teachers College at the University of Florida sent a questionnaire to the principals throughout the state, asking each to state definitely the number of classes each taught daily and the actual time each gave to supervision. Ninety-six per cent of these principals were merely teaching principals. 118 of these principals gave only ten per cent of their time to supervision, 12 gave less than twenty per cent while the other 20 gave from twenty to fifty per cent of their time to supervision. Only six principals did no teaching. (4:20-21.)

Self-supervision was the earliest form of supervision of teachers, and it is still the most prevalent form. The supervisor who is most effective now is the one whose visits, suggestions, and conferences lead the teacher to be consciously critical of her own efforts. Realization of the ends of supervision of instruction must awaken hope and aspiration in the teacher and not develop a low species of cunning and calculation. As teaching preceded supervision, so self-supervision must still be a part of the reaction to the teacher of her own work. Constant steady effort cannot be aroused except by a spiritual appeal. Measurement to be valuable must have sincerity of desire and purpose on which to base itself. Still better is it, if the supervisor can discuss and elaborate the standard of requirements with his teachers. The belief that being a trained teacher you need no supervision has received many hard knocks, but they have not been frequent enough nor hard enough to make us realize that the theory learned in the normal school needs to be specifically shown what is expected to be the form of the practice of the school room.

The teachers have the following catalog of rights:

1. The right to know on what merits, excellencies, or faults her work is to be appraised or judged.
2. The right to a difference of opinion, but must support it by reference to competent authority or by unquestioned excellent results of the variant practice.
3. The right to know what is the opinion of the supervisor concerning the work observed.
4. The right to expect a suggestion for improvement of the method condemned in practice.

5. The right to know when the supervisor is coming to observe her work.

6. A right to conferences with the supervisor both before and after supervision.

7. A right to ask for a second trial for any work pronounced unsatisfactory if she feels that the circumstances were not favorable to the best effort.

8. The supervisor should use tact and skill in her visitations to the younger teachers. If supervision brings help and resource, fear and nervousness will easily pass into gladness to see the helpful friend.

9. The right to expect all her teaching to be seen and valued when the composite judgment of her work is to be fixed.

10. The young or beginning teacher has a right to help, advice, counsel and suggestion before supervision so as to avoid criticism after supervision.

11. The teacher has a right to expect allowances to be made to the fact that no teacher can be a specialist in every subject.

12. She has a right to be treated with respect and consideration before her class.

## B. SUPERVISION BY THE PRINCIPAL.

We have shown above that the principals of many schools throughout the state carry a large teaching load. In this school the principal carries a large share of the teaching load, and since he is paid twice as much as anyone of his teachers, it is rather a poor economic policy to make of him a mere class-room teacher. He devotes his talent and knowledge as well as his energy to a very small number, and denies to the others the benefit of his professional training. In addition to this, much of the principal's time is given over to office work, making up reports and records which could be kept just as efficiently by a stenographer at a greatly reduced cost. The principal is employed as an expert and is expected to guard carefully the best interests of the school. This practice defeats the very plan for which he is employed. No great business enterprise would tolerate a policy of this kind. The time has arrived when it is necessary to enlist the very best economic idea in our school policies. The principal can-

not render his best service to society and to his school by being reduced to a desk-clerk and a class-room teacher.

The principal planned originally to devote fifty per cent of his time to class-room supervision, but conditions over which he had no control compelled him to give not more than fifteen per cent of his time to supervision. The principal teaches seventeen class periods each week. No supervision is exercised by any special teachers except the principal and the primary director.

#### C. SUPERVISION BY PRIMARY DIRECTOR.

The primary department, which includes the first three grades, is under the supervision of a director who devotes one-half of her time in planning, outlining and correlating the work of these grades. She supplements her supervisory program with regular teachers' meetings in her department.

#### D. TEACHER RATING.

In evaluating the work of this school we used the F. C. Landsittel quantitative score card, a copy of which with key is given on pages 55-56. (3:209-210.) The rating of the respective teachers on this possible score is given in Table II, page 56. The evaluating of these teachers by the committee is more or less arbitrary due to the limited amount of time in which the work had to be completed. However, we wish to comment the uniform courtesy and receptive attitude of the principal and teachers. In the rating of teachers there has been no arbitrary standard of excellent evolved. Hence it is rather a difficult task to grade teaching quality.

#### E. RECOMMENDATIONS.

(1) That as a further aid to supervision the teachers in this school build up a professional library, equipping the same with contributions from the private collections of the respective teachers, and from such other sources as are available.

(2) That regular meeting for round-table discussions of teacher problems be instituted bi-weekly; that some definite phase of school-work be instituted and followed up throughout the entire term.

(3) That this evaluating card be used by the principal throughout the year in scoring his teachers.

(4) That in this school the term be lengthened to nine months.

(5) That the principal be not required to teach more than two classes each day, so that he can give more time to classroom supervision.

**SUPERVISOR'S SCORE CARD.**

Devised by F. C. Landsittel

Name of Teacher	School	Location
Subjects and Grades		

Date.....Time of Visitation: Beginning.....End.....

**PERSONALITY 250**

1. Appearance .....(30).....
2. Poise .....(35).....
3. Health, animation (35).....
4. Judicial sense.....(35).....
5. Moral-social and religious interests (35).....
6. Professional spirit (35).....
7. Aggressiveness, initiative .....(45).....

**II. SCHOLARSHIP 220**

1. General .....(45).....
2. Special .....(35).....
3. Professional training .....(50).....
4. Command of English .....(45).....
5. Scholastic ideals ..(45).....

**III. METHOD 205**

1. Selection and organization of subject matter .....(45).....
2. Skill and judgment in questioning .....(35).....
3. Facility in exposition .....(30).....
4. Mental concentration .....(30).....
5. Conclusiveness, thoroughness .....(20).....
6. Economy .....(20).....
7. Assignment .....(25).....

**IV. PUPIL REACTION 220**

1. Command of subject matter .....(40).....
2. Completeness and correctness of expression .....(30).....
3. Using knowledge..(30).....
4. Tastes and appreciations .....(25).....
5. Democratic self-control, initiative (45).....
6. Spirit in inquiry and endeavor.....(30).....
7. Special skills.....(20).....

**V. ROOM CONDITIONS 105**

1. Arrangement, order .....(25).....
2. Attractiveness ....(30).....
3. Controllable hygienic factors.....(50).....

**\*VI. COUNTERACTING FACTORS 100**

1. Unfavorable social environment .....(15).....
2. Depressing professional relations (15).....
3. Deleterious hygienic or affective conditions .....(25).....
4. Temporary physical disability.....(20).....
5. Inferiority of pupils .....(25).....

Total score.....  
Perfect score 1000

\*Section VI seeks to correct error arising from handicaps against which the teacher may be working.

## DEFINITIVE TERMS.

Explanation of terms used in Supervisor's Score Card. (3:210.)

- I.
  1. Personal attractiveness, cleanliness, neatness, dress.
  2. Posture, dignity, grace, self-command, composure.
  3. Physical vigor, wholesomeness, buoyancy, hygienity.
  4. Rational behavior, freedom from impulsiveness and irascibility.
  5. Moral character, spirit of reverence, tendency toward social service.
  6. Temperament, attitude toward pupils, co-operative tendencies, open-mindedness.
  7. Driving power, incisiveness, inventiveness.
- II.
  1. Command of subject-matter, stock of general information, breadth, acquaintance with current happenings.
  2. Specialized scholarship, adaptedness to position.
  3. Special studies in education and training in teaching, experience under competent supervision.
  4. Clearness, fluency, accuracy.
  5. Scholarship standards, conception of educational aims and values.
- III.
  1. Adaptation, sequence, correlation, rational procedure.
  2. Speed, manner, form of questions, treatment of answers.
  3. Illustration, analysis or synthesis, use of devices.
  4. Motivation, attention, cooperation, suggestion.
  5. Effectiveness, finish, definiteness and sufficiency of modification in pupils.
  6. Absence of non-essentials, completeness of utilization of time.
  7. Time, adequacy, definiteness, clearness, motivation.
- IV.
  1. Command and evaluation of knowledge materials, sensing meaning, reflective thinking, success in reaching independent conclusions.
  2. Habits of response, use of language, quality of written work, respect for proprieties in discussion.
  3. Application of knowledge to life situations.
  4. Refined permanent interests, ideals.
  5. Responsiveness to social demands, social habits.
  6. Alertness, concentration, self-activity, relevant questions, criticism.
  7. Study, reading, speaking, writing, handicrafts, fine arts.
- V.
  1. Seating of pupils, convenience of furniture and equipment.
  2. Interior furnishings, decorations.
  3. Cleanliness, light, temperature, ventilation.
- VI.
  1. Low standards of life in community, bad home conditions.
  2. Poor supervision, annoying colleagues, insufficient salary, poor equipment.
  3. Unfit schoolroom, bad weather conditions, distractions.
  4. Indisposition, exhaustion, personal injury.
  5. Subnormality, poor previous teaching, under-nourishment, insufficiency or unfitness of clothing.

TABLE II. Rating of Teachers—Landsittel's Score Card

	Personality	Scholarship	Methods	Pupil Reaction	Room Conditions	Counteracting Factors	Total
Perfect score .....	250	220	205	220	105	100	1000
Prin. ....	240	200	190	200	75	.....	905
H. S. Tea. ....	225	175	175	150	75	.....	800
H. S. Tea. ....	200	160	150	150	75	.....	735
H. S. Tea. ....	240	200	190	175	75	.....	880
8th G. ....	225	190	190	175	90	.....	870
7th G. ....	220	150	140	150	50	50	760
6th G. ....	225	150	180	175	90	.....	820
5th G. ....	240	150	180	175	75	.....	820
4th G. ....	225	150	175	180	85	.....	815
3rd G. ....	225	150	180	190	90	.....	835
2nd G. ....	230	150	175	175	90	.....	820
1st G. ....	225	160	180	150	50	50	815
Primary .....	240	200	190	200	75	25	930

Note.—Figures in double lines represent perfect score.

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## CHAPTER VII

## The Pupils

## A. PROGRESS THRU THE SCHOOL.

## 1. SCHOOL POPULATION—CENSUS VS. ENROLLMENT

Although a census is required by law, there are no available census records with which the actual enrollment can be compared and from which the school efficiency can be figured. The actual enrollment, as found from records in the county superintendent's office, is given below.

TABLE III. ENROLLMENT

Grade	Male	Female	Total
I	22	28	50
II	20	16	36
III	20	19	39
IV	23	23	46
V	19	17	36
VI	23	19	42
VII	18	12	30
VIII	6	14	20
IX	22	23	45
X	11	13	24
XI	1	11	12
XII	4	7	11
Total	189	202	391

In an average situation we expect the enrollment to decrease gradually from the first thru the twelfth grades. Since our schools have not yet been adapted to the needs of our children, we have the grades from the fourth thru the seventh overflowing with retarded adolescents. This is true throughout our entire school system and explains why the enrollment in Alachua does not decrease from the fourth through the seventh grades as might be expected.

However, the large enrollment in the ninth and tenth grades, as compared with the eighth grade, needs further explanation. Since six small rural schools are transported into Alachua, many children, who graduated from the eighth grade in the rural schools, two and even three years before, are drawn back into school to finish their high school education. Short terms in the rural schools and the lack of high school opportunities have produced a large number of retards in the grammar grades and in the ninth and tenth

grades. Of 34 cases studied in the ninth grade 16 are over-age, and, of 20 cases in the tenth grade, 10 are over-age. The principal was of the opinion that short terms produced the greatest amount of retardation in the grammar grades and that lack of high school opportunities produced the greatest amount of retardation in the high school. Illness, work, loss of interest, and general dissatisfaction with school, are other causes of retardation.

## 2. HOLDING POWER OF THE SCHOOL

The holding power of the school cannot be accurately measured because there are no cumulative census or enrollment records from which definite conclusions can be drawn. To have a true measure of the holding power, each grade should have its present enrollment compared with the enrollment of that grade when it was a first grade, proper deductions being made for, (1) entrants from other schools, (2) transfers to other schools, (3) retards due to illness, (4) accelerates and (5) deaths. For example, let us take a hypothetical case and show the school accounting necessary for a complete study of the holding power of a school. Let us measure the holding power of the school (a hypothetical school) by a comparison of the enrollment of those pupils now in the eighth grade, who have come straight thru the school from the first grade, with the enrollment of the first grade eight years before.

TABLE IV.—CHILD ACCOUNTING.

First Grade Enrollment of present	Male	Female	Total
Eighth Grade .....	25	30	55
Deductions			
Transfers to other schools.....	4	3	7
Retards from grades above.....	3	1	4
Accelerates from grades below..	2	3	5
Deaths .....	1	2	3
Total deductions .....	10	9	19
Pupils remaining in school district .....	15	21	36

TABLE V.—CHILD ACCOUNTING.

	Male	Female	Total
Present enrollment of Eighth Grade .....	15	19	34
Deductions:			
Transfers from other schools....	3	2	5
Retards from grades above.....	2	1	3
Accelerates from grades below..	1	1	2
Total deductions .....	6	4	10
Eighth Grade Pupils from original First Grade.....	9	15	24
I. Pupils remaining in School District .....	15	21	36
II. Pupils from original First Grade .....	9	15	24
III. Delinquent Pupils .....	6	6	12

A comparison of item II with item I above would show that the hypothetical school has held only 60% of the boys and 71.4% of the girls, or 66.7% of those pupils, remaining in the school district, who should now be in the eighth grade. Therefore, the holding power of the hypothetical case, as determined by this study of an eighth grade is only 66.7%.

In like manner the holding power of the Alachua Public School could be measured. However, there are no available records of the various class enrollments over a period of years. School accounting is only one of the many phases of our educational system, which needs much study and improvement.

### 3. THE EXTENT TO WHICH REGULAR ATTENDANCE IS MAINTAINED

A study of the attendance record found in the final report of the principal indicates that regular attendance is not maintained thruout the year. There were 189 boys enrolled and their average attendance was 129, showing a loss of 31.8%. There were 202 girls enrolled and their average attendance, strange to say, was 130, showing a loss of 35.6%. This presents a grave problem and shows that the compulsory attendance law is not well enforced. It probably explains the fact that, of those cases studied, 39.9% were retards and only 3.4% accelerates. On account of work or desire to be self-supporting boys usually have a poorer average attendance than girls. Therefore the fact that there is more loss in at-

tendance among the girls than among the boys is strange and needs very careful study and investigation.

#### 4. PROMOTIONAL PLANS

Pupils in the elementary school are promoted annually if they pass in all subjects, but are required to repeat if they fail in one subject. Entrance examinations, under the supervision of the principal, are given to pupils who, thru summer study, have tried to make up their deficiencies. If the deficiencies are removed, the pupils are allowed to advance with their respective classes, otherwise they repeat the entire work of the previous grade.

Pupils in the high school are promoted annually in each subject. Deficiencies may be removed in the same way as in the elementary school, however, no students are required to repeat any subject not failed.

The annual promotion plan is not peculiar to the Alachua Public School. Instead it is the most commonly used method of all promotional schemes. In fact, Dr. Fulk has recently found that it is the most common method used in the Florida elementary schools. (5:36.)

"A year is a long time in the life of a child. If children must be promoted regularly by the almanac, such promotions should, if possible, be made at least twice a year." (5:37.) In a school of this size the classes should be separated into two groups, known as the High and Low classes; that is, the work of the High should be a half year in advance of the Low.

In introducing the semi-annual promotion plan into a school, such as Alachua, there are at least two difficult problems to be solved. First, some plan has to be devised by which the pupils of each grade can be placed with fairness in two classes, High and Low. The other problem is how to combine and alternate the work of the two classes so that the teacher will not be swamped by the large number of daily classes.

In this day of mental and achievement tests a just division of the pupils can be made very easily during the first semester. This would allow teacher judgments to be made and individual intelligence tests to be given in addition to

the group tests, thereby insuring a just division of the classes into homogenous mental groups. If mental and achievement tests are not used, it will take one year to make a just division and, even then, there will probably be a very wide mental age range. In the long run, intelligence tests are indispensable for dividing the classes with justice to all.

On the other hand, if the principal, at the beginning of the school year, explains the plan of dividing into two classes to his teachers and discusses it thoroly at his faculty meetings, the division can be made without any serious objections by parents or pupils. A standard should be set for each class at the beginning of the year and the teachers and principal should determine, during the year, the class for which each pupil is fitted by the quality of his work, his efforts, and his physical condition. This can be done fairly well without the use of intelligence tests. At the close of the year all pupils should be promoted as usual but the best pupils should be promoted one full year while the others should be promoted one-half year. For example, pupils in Grade V would be promoted regularly to Grade V High and Grade VI Low. Most grades, by this plan, will fall into two almost equal divisions. For obvious reasons the plan should not be discussed with pupils until the change is made at the end of the year.

Now the problem of combining and alternating the work of the High and Low classes must be solved by a thoro study of the content of each subject in the curriculum, followed by casting the results of this study into a workable daily program of recitation and study periods. This the principal and teachers must work out co-operatively before making the change. The High and Low classes in the same grade may, without serious hindrance to either class, be combined in the following so-called minor subjects: manual training, home economics, nature study, music, drawing, and health lessons. The two classes may also be combined in spelling and penmanship in Grades V, VI, VII, and VIII; in reading in Grades VI, VII, and VIII; and civil government and agriculture in Grade VII. The number of pupils in the grade and in the classes might make possible other combinations. The State Course of Study permits many alternations that

would help in the formation of the daily schedules. In Grades V, VI, VII, and VIII, the number of recitations a week in the different subjects, and the time given to each subject could be varied according to the ability of the class and the number of pupils in the class. (5:37-38.)

While semi-annual promotions are not urged here as the only solution of the promotional problem, it is believed that this, with individual promotions, will solve the problem more advantageously than the annual promotion plan has done.

#### 5. AGE-SEX-GRADE DISTRIBUTION

In Florida, children may enter school at six years of age and the compulsory attendance law requires them to enter at seven, therefore, we have chosen a two-year age-grade standard thruout the entire school. For instance, Grade I, 6-8 means the age standard for Grade I includes all children from six years, no months to seven years, eleven months.

TABLE VI.—AGE-GRADE STANDARD.

Grade	Age
I	6-8
II	7-9
III	8-10
IV	9-11
V	10-12
VI	11-13
VII	12-14
VIII	13-15
IX	14-16
X	15-17
XI	16-18
XII	17-19

In the following table, showing the age-sex-grade distribution of 296 cases present when the survey was made, normal-aged pupils are in heavy faced type; under-aged pupils at the right; and over-aged pupils at the left of the heavy faced type. These are called normals, accelerates, and retards, respectively. Of course it must be remembered that this refers only to the classification according to age. For example, if a pupil in the eighth grade is twelve years of age or under, he is accelerated; if 13 to 15 years of age, he is normal; and if 15 years of age or above, he is retarded, for the normal age for the eighth grade is 13 to 15 years (meaning 13 years no months to 14 years 11 months).

TABLE VII.—CHRONOLOGICAL AGE-SEX-GRADE DISTRIBUTION.

Grade	I		II		III		IV		V		VI		VII		VIII		IX		X		XI		XII		Age Sex Total		Total by Ages		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F			
Age																													
6-7	8	9																									8	9	17
7-8	6	6	4	4	1																					11	10	21	
8-9	3	1	4	3	4	3	1																			11	8	19	
9-10			4	6	10	2	3	7																			17	15	32
10-11			1	2	7	1	5	6	5	4	1															18	14	32	
11-12			1	1	6	5	5	1	2	7	1	1													14	15	29		
12-13					1	1	3	1	2	3	1	1													7	5	12		
13-14					1	1	3	1	4	4	3	5	1	2	1											14	12	26	
14-15							4	1	1	1	2	4	3	4	2	5	2									12	17	29	
15-16									2	2	1	4	4	6	3	1									8	15	23		
16-17										2	4	1	3	3	2	3	4	1							8	15	23		
17-18												2	4	3	2	3	1	1	2					7	11	18			
18-19														2	1	2		3					3		3	5	8		
19-20																1	1	1	2	1					2	4	6		
20-21																									0	0	0		
21-22																									1	0	1		
Grade-Sex Total	17	16	13	16	24	6	16	19	20	8	11	16	10	15	4	14	16	18	6	14	1	8	3	5	141	155	296		
Grade Total	33		29		30		35		28		27		25		18		34		20		9		8		296		296		

An age-grade table, in a school system in which there is a uniform or nearly uniform school year for all pupils, and in which the curriculum is in every way adapted to the needs and abilities of the pupils, will show approximately the following distribution of pupils: 15% retards, 70% normals, and 15% accelerates. In general, over-ageness or retardation should balance under-ageness or acceleration. (5:48.) This is further supported by the fact that intelligence testing has within the last few years, proved conclusively that "taking large groups of unselected children there are approximately as many children of superior ability, per thousand, as there are of inferior ability." (3:351-352.)

TABLE VIII.—PERCENTAGE OF RETARDS, NORMALS, AND ACCELERATES IN ALACHUA, AND IN FLORIDA, ALABAMA, KENTUCKY, AND IN INDIANA. (5:48, EXCEPT IN ALACHUA.)

	Retards	Normals	Accelerates
Alachua .....	39.9	56.7	3.4
Florida: (9-15 teachers).....	32.3	61.1	6.6
Alabama: Rural .....	54.4	40.1	5.5
Kentucky: Rural .....	39.0	53.2	7.8
Indiana: County .....	26.5	64.3	9.2

A comparison of Alachua with Florida schools of the same type shows that Alachua has 25% more retards, 8% less normals, and 50% less accelerates than we would expect. This presents an unusual situation and needs very careful investigation.

## 6. FINDINGS AND RECOMMENDATIONS

(a) In the first place the irregular attendance must be stopped. We therefore recommend strict enforcement of the present compulsory attendance laws.

(b) In the next place, provision must be made for the more regular promotion of the students. Since this cannot be done by the annual promotion plan, we recommend the adoption of the semi-annual promotion plan.

(c) Finally, we recommend the reclassification of the entire school by means of group and individual intelligence tests and teacher judgment of pupils. To aid in solving this problem, we gave intelligence tests to every pupil in the school. A detailed account of our findings and recommendations will now be taken up.

## B. INTELLIGENCE TESTS.

### 1. RELIABILITY OF INTELLIGENCE TESTS

Intelligence tests, within the last few years, have proved conclusively that pupils can be classified by grades more homogeneously than they have been by old subjective standards. (7:32-52.) It is true that their reliability has been questioned, but intensive and extensive experiments and surveys have proved that the probable error of Mental Age measurement can be reduced in individual cases from 6.4 months for one test to 3.2 months for four tests. "If you wish to know merely the average mental ability of your class or to divide it roughly into two or three ability groups, then one test or at most two will give sufficient data for classification." (1:b.) Intelligence tests are now considered highly reliable. They are now being used by some school officials, not only for reclassifying their schools into homogenous mental age groups but also for determining the fitness of under-aged children for school. (1:a, b, and c.)

### 2. TESTS USED—OTIS GROUP, PRIMARY AND ADVANCED, FORMS A.

In making this survey the Otis Group Intelligence Scale was used. The Primary Examination, Form A, was used in grades I to IV inclusive and the Advanced Examination, Form A, was used in grades V to XII inclusive. No individual tests were given due to the lack of time.

### 3. INDIVIDUAL TESTS AND TEACHER JUDGMENT

All doubtful cases should be given the Stanford Revision of the Simon-Binet Individual Intelligence Scale. Teacher judgment should play a large part in classification. Judgment of the quality of work, the efforts of the pupil, and his physical condition should be carefully made.

### 4. SCALE OF INTELLIGENCE QUOTIENT CLASSIFICATION.

Terman's Scale for Intelligence Quotient Classification has been used for classifying all the cases in this survey. (6:79.)

TABLE IX. CLASSIFICATION OF I. Q., TERMAN.

I. Q.	Classification
Above 140	"Near" genius or genius
120-140	Very superior intelligence
110-120	Superior intelligence
90-110	Normal or average intelligence
80-90	Dullness, rarely classifiable as feeble-mindedness
70-80	Border-line deficiency, sometimes classified as dullness, often as feeble-mindedness
Below 70	Definite feeble-mindedness

5. RESULTS

(a) Intelligence Quotient Distribution.

Table X shows the I. Q. distribution by sex and grade.

TABLE X.—INTELLIGENCE QUOTIENT DISTRIBUTED BY SEX AND GRADE.

Classification	Moron		Border Line		Dull		Normal		Superior		Very Superior		Grand Total by Grades		
	I. Q.		I. Q.		I. Q.		I. Q.		I. Q.		I. Q.				
	0-69		70-79		80-89		90-109		110-119		120-140		Sex Total		
Sex	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Grade I	..	..	1	1	0	1	10	10	6	1	0	3	17	16	33
Grade II	..	..	2	1	4	3	5	9	2	3	..	..	13	16	29
Grade III	2	0	5	2	7	1	9	3	1	0	..	..	24	6	30
Grade IV	..	..	6	2	6	5	3	12	1	0	..	..	16	19	35
Grade V	..	..	5	1	4	3	11	4	..	..	..	..	20	8	28
Grade VI	..	..	4	0	2	3	5	12	0	1	..	..	11	16	27
Grade VII	..	..	2	2	2	6	6	7	..	..	..	..	10	15	25
Grade VIII	..	..	0	2	1	6	3	5	0	1	..	..	4	14	18
Grade IX	..	..	1	0	6	2	7	15	2	1	..	..	16	18	34
Grade X	..	..	..	..	2	4	4	10	..	..	..	..	6	14	20
Grade XI	..	..	..	..	..	..	1	6	0	2	..	..	1	8	9
Grade XII	..	..	..	..	..	..	1	4	2	1	..	..	3	5	8
Classification by sex	2	0	26	11	34	34	65	97	14	10	0	3	141	155	296
Total Classification	2	0	37	68	162	24	3	296	296						

(b) Mental Age Distribution.



The Mental Age-Grade Standards are the same as those used for the Chronological Age-Grade Standards in Table IV. All pupils at the right of the heavy faced type are accelerates; that is, they are pupils working, for some reason, in higher grades than the tests show them fitted for. All pupils in heavy faced type are normals; that is they are pupils who rightfully belong there. Finally, all pupils at the left of the heavy faced type are retards; that is, they are pupils working, for some reason, in lower grades than the tests show them fitted for. Re-classification of the school should provide a just opportunity for advancement to all of these classes. It is quite obvious that the accelerate group (pupils of low M. A.) cannot advance as rapidly as the normals or the detards (pupils of high M. A.). Proper adjustments must be made to suit the needs and capacities of all groups. These adjustments will consist of an enriched curriculum in some cases or the simple fundamentals in other cases. Besides the adjustments of the curriculum, there will be adjustments of the teaching method. In both cases these adjustments can be made more easily thru re-classification of the pupils into homogeneous Mental Age groups. That is now our aim.

## 6. FINDINGS

(a) By a study of Table IX it was found that the variation in Mental Age, within the respective grades, is very high. In fact, it is obvious that the range is too great for successful work in several grades. For instance, in the lowest cases, Grades I and II, in the Mental Age varies from 6 years for the youngest pupil to 10 years for the oldest pupil—a total range of 4 years in each grade. Then in Grade VI the range is 6 years while in Grades VIII and IX the range is 10 years.

(b) From the above facts it is quite plain that if the rate of class progress is to be determined by the abilities of the best pupils (i. e. those of highest M. A.) the pupils of lowest Mental Age will suffer and vice-versa.

It is also quite clear that the present classification does not make provision for the fair and impartial instruction of retards or of accelerates, but considers only those in the

normal group. Semi-annual promotions, as recommended in A. 6 (b) of this chapter, with High and Low classes a half-year apart, would readily make such provisions. It is apparent that slower pupils could and should be allowed, if necessary three semesters to complete two semester's work and faster pupils could and should be permitted to advance at a more rapid rate, even completing three semester's work in two semesters.

#### 7. OUR PROBLEM

In the interest of economy we ask:

(a) How shall the Alachua Public School be reclassified so as to give a fair and impartial opportunity to all Mental Age groups in accordance with their needs and capacities?

(b) How shall we do this so there will be no increase in the cost of maintaining the school?

#### 8. RECOMMENDATIONS

(a) That the group intelligence tests be followed by individual tests in all doubtful cases, using the Simon-Binet Individual Intelligence Scale and supplementing these by teacher judgment of the efforts, quality of work, and physical condition of such cases.

(b) That all re-classification be made kindly and sympathetically, keeping in mind physical and sociological as well schoolas psychological differences. That is, make the school fit the child rather than the child fit the school.

(c) That, in Grades I-V inclusive, all pupils who are within one year of the standard Mental Age for their respective grades, be divided into two fairly homogeneous Mental Age groups, called High and Low and that the work be one-half year apart in these sections.

(d) That Grades VI-VIII inclusive, be departmentalized and only two teachers be placed in charge.

(e) That, in the Elementary School, (i. e. Grades I-VIII inclusive) all pupils who are more than one year below the Mental Age Grade standard, be divided into groups, as nearly homogeneous as possible, and placed in two opportunity rooms, each under the care and instruction of a very skillfull and well-trained teacher. One such room by all means should be provided.

(f) (1) That High School pupils of high Mental Age be permitted to carry a maximum of five subjects and that those of low Mental Age be permitted to carry only as many as they can profitably.

(2) That pupils of high Mental Age in the first eight grades be permitted to double back or forward in subjects they are weak or well prepared for so as to keep them up to maximum effort.

TABLE XII. TEACHERS AND PUPILS AFTER RE-CLASSIFICATION.

Grade	Pupils, Normals and Retards	Sections to the Grade	Teachers to the Grade	Pupils for Opportunity Room
I .....	33	2	1	
II .....	29	2	1	
III .....	27	2	1	3
IV .....	34	2	1	1
V .....	22	2	1	6
VI .....	19	1	2	8
VII .....	16	1		9
VIII .....	10	1		8
IX .....	34	}	2	Total 35
X .....	20		4	
XI .....	9			
XII .....	8			
Special Teachers:				
	Music .....		1	
	Agriculture .....		1	
	Total .....		15	

9. CONCLUSION

While the above study is known not to be perfect, it is submitted with the hope that the suggestions will prove helpful not only to the Alachua Public School officials but helpful to officials in other schools of similar size. The authors of this chapter recognize their limitations, but, thru the kind assistance of Dr. Joseph R. Fulk, feel that we have been enabled to make a fairly comprehensive study of the situation, and that others might be helped thereby.

## C. ACHIEVEMENT TESTS

### 1. General Statement

“The most widely used form of measurement in education is the classroom examination. Practically every teacher, from the primary grades through the university, attempts, from time to time, to discover by means of examinations what progress is being made by his pupils. Many teachers base their estimates of individual pupils almost altogether upon the written examinations held in their classes. . . . No other attempt at measurements in education is so universal as the attempt to determine by means of questions and answers the quality of work pupils are accomplishing. (6:34.)

That such a system of measuring can mean little is very evident. When a pupil has taken such a test and has been assigned a grade, say, of 85, all that it signifies is that the pupil's teacher has determined upon an arbitrary amount of work that the pupil should be able to do in order to demonstrate the fact that he should or should not pass, and that the teacher has expressed an opinion that said pupil did 85 per cent of the work, or answered 85 percent of the questions, as the case may be. One teacher, with a given set of questions, will assign one mark to an examination paper and another teacher will give a mark very much at variance with the first on the same paper. Marks have been known to vary from 28 to 92 on the same geometry paper, when graded by one hundred teachers of geometry in the high schools of the North Central Association. Trabue, in his “Measuring Results in Education,” Chapter II, gives a number of studies showing the variance in teachers' marks. (7.)

A need for a more objective measure for classroom work has long been felt in educational circles. Standardized tests to measure the achievement of pupils in the various subjects are the direct answer to this felt need. They are not entirely new, but have been developing for a half century or more, but only since about 1909, when Professor Thorndike presented his scale for the measurement of handwriting before the American Association for the Advancement of Science, have they attracted

much attention. Since that time they have been rapidly developing till at present there are standardized tests for almost every subject in the elementary school, and for most of the high school subjects. They are coming into use more and more and it is to be hoped that they will eventually be perfected to the point where the old system of subjective measurement will be eliminated.

A standardized test is one that has been given to thousands of school children in the various grades and the median score worked out so that when the test is given to a group of pupils in a grade of a given school it can be determined with considerable accuracy just how they compare with pupils in this same grade in schools all over the country. A pupil is measured against other pupils in the same grade and not against an arbitrary standard fixed by some teacher. They are a far more fair test of the pupil's ability than the examination given by some teacher, no matter how efficient that teacher may be. It is impossible for any teacher to determine subjectively just how a pupil's ability in a given subject compares with other pupils of the same grade in other schools of the country. The purpose of the standard test is to do this very thing. The tests given to the pupils of the Alachua school were standardized tests and the grades or scores assigned show how the Alachua school compares with other schools all over the United States. Fortunately, we have been able to compare Alachua with another Florida school of about the same size, as many of the same tests were given in the Dunnellon school by a group of Teachers College students, working under the direction of Dr. Fulk, in 1912. The Dunnellon study has not been published. (1.)

That achievement or educational tests are widely used to place pupils is shown by studying Table 3, in Appendix C.

## 2. SPELLING

A spelling test was given to all the pupils in grades II to XII, inclusive. The words used in the test are given on page 75 of this study. The method used in giving the test was to pronounce each word, explain its meaning, and then have the pupils write it. The results of the

test are given in the table on page 76. The table is read thus: In Grade II, words taken from column "I" of the Buckingham Extension of the Ayres Scale—6 pupils made a grade of 0; 4, a grade of 4; 3, a grade of 10; 1, a grade of 15; 2, a grade of 20; none made a grade of 25 or 30; 2, a grade of 35; none, a grade of 40, 45, or 50; 1, a grade of 55; none, a grade of 60; 1, a grade of 65; none, a grade of 70; 1, a grade of 75; none, a grade of 80, 85 or 90; 2, a grade of 95; and, none, a grade of 100. The median score for this grade is given in the next column; the standard score that pupils of this grade should make, in the next column; the number of pupils in this grade that were above the standard is given in the next column, and the per cent of pupils in this grade above standard is given in the last column.

A study of the median scores will show that only one grade, the sixth, approaches the standard. This is so close that this grade might be considered up to standard. Grades IV, XI, and XII do not fall far short of the standard. On the other hand, grade II, with a median score of 13.2, is only about 18 per cent of standard. Special attention is called to the wide range of scores in grades II, III, IV, VII, and IX. Grade III leads with a range of from 0 to 100. The heavy line between 70 and 75 in the table divides it in such a way that to the right are those pupils that are above standard and those to the left are those that are below standard. A glance will show the condition of the school and where the great majority lies; namely, to the left. In all 247 pupils took the test. Of these 67 made scores above standard and 180 made scores below standard, or below 73.

A test in spelling was given in the Dunnellon study also, but the words were taken from columns with standards of 84 for each grade. At Dunnellon it was not given to the second grade or in the high school. In order then to get at a comparison of the two schools, we figured the median score of grades III to VIII, and then reduced these to per cent of the standard. Alachua's median for these grades was 55, or 55/73, or 75.3 per cent of standard. Dunnellon's standard for these grades was 83, or 83/84, or 99 per cent of standard.

This study reveals a condition that is all too prevalent in many of our schools. Our pupils cannot spell the common every day words that are used by everyone. Reference to the list of words below will show that no technical words are included in these lists, but the common words of everyday usage. More time should be spent in teaching the pupils to spell such words as these, and little time given to spelling difficult and more technical words. They can learn to spell these as they come in contact with them and need to use them.

LISTS OF WORDS FROM THE BUCKINGHAM EXTENSION OF THE AYRES SPELLING SCALE USED IN TESTING THE SPELLING AT ALACHUA

Grade II Column "I"	Grade III Column "L"	Grade IV Column "O"	Grade V Column "Q"
nine	small	judge	sometimes
face	war	weather	declare
miss	summer	worth	engage
ride	above	contain	final
tree	express	figure	terrible
sick	turn	sudden	surprise
got	lesson	forty	period
north	half	instead	addition
white	father	throw	employ
spent	anything	personal	property
foot	table	everything	select
blow	high	rate	connection
block	talk	chief	firm
spring	June	perfect	region
river	right	second	convict
plant	date	slide	private
cut	road	farther	command
song	March	duty	debate
winter	next	intend	crowd
stone	indeed	company	factory
Grade VI Column "S"	Grade VII Column "U"	Grade VIII Column "W"	Grades IX-XII Column "Y"
often	meant	organization	decision
stopped	earliest	emergency	principle
motion	whether	appreciate	accommodate
theater	distinguish	sincerely	accuracy
improvement	consideration	athletic	counterfeit
century	colonies	extreme	desert
total	assure	practical	digestible
mention	relief	proceed	immense
arrive	occupy	cordially	leopard
supply	probably	character	marmalade
assist	foreign	separate	millionaire
difference	expense	February	mucilage
examination	responsible	antique	orchestra
particular	beginning	bicycle	parliament
affair	application	calendar	perceived
course	difficulty	consequence	possess
neither	scene	disease	precipice
local	finally	fatigue	recommend
marriage	develop	foreigners	resemblance
further	circumstance	grease	restaurant

TABLE XIII. DISTRIBUTION SCORES IN SPELLING IN GRADES II TO XII, INCLUSIVE OF THE ALACHUA PUBLIC SCHOOL

Scores	Column																No.		% Above Standard							
		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80		85	90	95	100	Med.	Stand	
Grade II	6	4	3	1	2	1	2	2	2	2	2	1	1	1	1	1	1	1	1	2	2	1	13.2	73	3	13.0
Grade III	3	2	1	1	4	1	3	1	1	2	1	2	3	3	2	2	2	3	3	5	5	1	38.6	73	4	15.4
Grade IV			1	1	1	1	2	2	1	1	1	4	1	3	2	2	2	3	3	3	5	1	62.0	73	14	40.0
Grade V				1	1	1	2	2	1	1	1	1	1	1	1	2	2	2	2	1	1	1	55	73	7	29.2
Grade VI					1	1	4	1	1	1	1	1	1	3	3	2	2	2	2	5	3	1	70	73	14	48.3
Grade VII	1	1	1	1	1	2	2	2	1	1	1	4	1	2	1	1	1	1	1	1	2	1	52	73	4	16.5
Grade VIII				1	1	1	1	2	1	2	2	2	3	1	1	1	1	1	1	1	2	1	55	73	2	12.5
Grade IX			5		1	1	3	2	2	2	6	1	1	2	1	1	1	3	2	2	2	2	48.3	73	8	22.0
Grade X					2	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	51.2	73	4	25
Grade XI							2	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2	66.1	73	4	44.4
Grade XII							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	64.4	73	3	33.3
Total of H. S.	5	4	4	3	3	4	4	6	6	4	8	3	3	3	4	4	3	6	6	4	4	49.0	73	19	27.1	

## 3. READING

Monroe's Standardized Silent Reading Test was given to the pupils in grades III to XII, inclusive. This test was also given to the pupils of these same grades at Dunnellon, in 1922, and the Dunnellon medians for these grades are given with those of Alachua in the distribution tables on pages 79 and 80.

This test measures both rate and comprehension. The rate score is the number of words read per minute. The comprehension score is the number obtained by adding the assigned comprehension values of each exercise in the test that has been answered correctly. There are three separate tests of graduate difficulty. Test I is for grades III, IV and V. The highest possible rate score for this test if all the material is read, is 141 words per minute. The highest possible comprehension score for this test, if each exercise is answered correctly, is 34. Test II is for grades VI, VII, and VIII. The highest possible rate score for this test, if all material is read, is 146; the highest possible comprehension score, if all exercises are answered correctly, is 45. Test III is for grades IX, X, XI, and XII. The highest possible rate score for this test, if all the material is read, is 151; the highest possible comprehension score, if all exercises are answered correctly, is 81.

To read the tables, let us take grade VI as a typical grade and follow it through both tables. Taking grade VI, in the rate distribution table on page 80, we read as follows: None in grade VI made a rate score of less than 30-39; that is, the slowest pupils in grade VI read as many as from 30 to 39 words per minute, and two made a score of 30-39; three made a score of 40-49; seven made a score of 50-59; two, a score of 60-69; none, a score of 70-79; six, a score of 80-89; six, a score of 90-99; none, a score of 100-139; two, a score of 140-149—the maximum. The class median was 75, the standard score for this grade is 90. The Dunnellon median for this grade was 54. Taking the same grade in the comprehension table on page 79, it will be seen that two made a score of 0-2; that is, they did not understand but just enough of what they read to answer one or two questions

correctly. Six made a score of 3-5, and so on to the highest score. It will be seen that two made a score 30-32. The class median is 11, the standard is 18.5. The Dunnellon score for this grade is 14.

A study of the tables will show that the school as a whole is much below standard, both in rate and comprehension. The rate score, however, is generally above that of Dunnellon. This is especially true in the high school. Grades IX and X are almost up to standard, while grades XI and XII are above standard in comprehension. Grade XI is the only grade that scores above grade in both rate and comprehension. It is decidedly above grade in comprehension. Grade III is badly below standard in comprehension. Only four pupils in this grade were up to or above standard in comprehension, and the class median is only about 15 per cent of what it should be.

Special attention is called to the wide range of distribution in some of the grades. In the third grade four pupils read only from 0-9 words per minute, when they should have been able to have read at the rate of 52 words per minute; while one pupil in this grade read at the rate of 105-109 words per minute, which is twice as fast as the average third grade pupil reads, over twice as fast the average member of his class reads and about fifty times as fast as the slowest member of the class reads. In the fourth grade the range is wider still, going from 0-9 to 140-149, some of the pupils reading from sixty to seventy times as fast as others. The range in comprehension is not quite so decided in most of the grades, but attention is called to the fact that in the ninth and tenth grades it is very wide. In grade IX it is especially marked; three made a score of from 3-5, while one made a score of from 54-56. Such wide distributions as this show poor classification of pupils.

The reading situation is rather serious and should receive the prompt attention of the supervisors and teachers in order to improve the instruction in this subject. A study of the individual scores of the pupils should be of great help in showing just where the stress should be placed. More attention to silent reading, espe-





cially in the primary grades, would tend to remedy the situation. Timed silent reading tests from the text could be given at frequent intervals, having the pupils read for a given time and mark the place to which they had read when time was called. In this way the slow readers could be definitely located and given special attention, perhaps in the opportunity room, if such could be established. We might say just here that every school of this size would do well to maintain such a room in the school.

#### 4. HANDWRITING

A test in handwriting was given in grades II to VIII, inclusive. The material used was the simple little sentence, "Mary had a little lamb." This sentence was chosen because it was something that even a primary child could hold in mind, and so in writing it was not necessary to be continuously looking at the copy, thus diminishing the speed of writing. The copy was written on the blackboard and when every pupil was ready to write they were instructed to begin writing at the word "go" and continue until they were ordered to "stop"; and to write as rapidly as they could and to write well. Two minutes from the word "go" they were ordered to "stop" and the papers were taken up.

The Gettysburg Edition of the Ayres Handwriting Scale was used in grading the specimens. Each paper was graded by three different people and an average of the grades given by these graders was taken as the correct grade for any given sample. The results of the test are given in the distribution tables on page 82 of this study. There are two tables, one showing the quality as judged by the committee from the scale, and one showing the rate, or number of letters written per minute. This test was given at Dunnellon also in grades III to VIII, inclusive. The Dunnellon medians are given in the tables with the Alachua medians for purposes of comparison. The tables are read like the other tables in the study. It will be noticed that in quality the Dunnellon school scored a good bit above Alachua and even above the standard in every grade except the fifth and the eighth. Alachua is slightly below standard. In the table on rate, however, it will be noted that Alachua

scored above standard in grades IV, VII, and VIII and is not far below standard in the other grades. In speed Alachua scores higher than Dunnellon.

TABLE XVI. DISTRIBUTION OF RATE SCORES IN LETTERS PER MINUTE WRITING, ALACHUA PUBLIC SCHOOL

Scores	0 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 to 99	100 to 109	110 to 119	Median	Standard	Dun. Med.
Grade II.....	1	3	11	8	5								29	32	
Grade III.....			5	9	9	4	3						40	44	56
Grade IV.....				2	8	10	7	5	2				57	56	63
Grade V.....				3	4	9	3	5		1			55	64	54
Grade VI.....				3	1	1	5	10	6	2			70	72	50
Grade VII.....							2	7	5	4	1		80	76	84
Grade VIII.....							2	1	3	9	1	2	95	80	86

TABLE XVII. DISTRIBUTION OF QUALITY SCORES IN HANDWRITING, AYRES SCALE, ALACHUA PUBLIC SCHOOL

Scores	20	30	40	50	60	70	80	90	Median	Standard	Dun. Med.
Grade II.....	5	11	10	2					30	38	
Grade III.....	3	16	7	3	1				28	42	50
Grade IV.....	2	13	5	7	6	1			35	46	50
Grade V.....		3	10	9	3				40	50	50
Grade VI.....		1	8	12	4	2	1		50	54	62
Grade VII.....		2	6	5	5	1			50	58	60
Grade VIII.....	1	1	8	6	2				46	62	60

## 5. UNITED STATES HISTORY

The Harlan Test of Information in American History was given in the seventh and eighth grades. The results of this test are given in the tables on page 84. The standards for this test are for the end of the year, while this test was given in March. This being the case, it would be expected that the Alachua medians would fall short of these standards. It would not, however, account for them falling as far below standard as they did. The standard for grade VII is 56; the Alachua median is only 14.1. The standard for grade VIII is 86; the Alachua median is 22.5. From the tables of individual scores, it will be seen that only one pupil in the eighth grade made a score as high as the seventh grade end-year median should be. The median score in each grade is about 25 per cent of the Harlan end-year standards. This would indicate a decided weakness in history in these two grades. It must be borne in mind, too, that this is not

some arbitrary test made up by some teacher with an arbitrary standard, but that it has been tried on thousands of other seventh and eighth grades, and that the standard is established from scores actually made by these thousands of pupils.

A study of the maximum score for each exercise in the test, and the score made by each pupil on this exercise will reveal the particular weakness of each individual pupil. Exercises VIII and X show especial weakness in the eighth grade, with exercises VII and IX running them a close second. Exercise VII is a group of five dates to be connected with an important event in history. In exercise VIII the pupil is given some general statements to be proven true by citing a typical example of each from American History. In exercise IX the pupil is given several topics of importance in the history of the United States and is asked to state definitely of what significance each has been. The seventh grade scored low throughout the test, but made its highest scores on exercises I and V, both exercises requiring that outstanding men in American History be selected from a list and connected with a given important events or periods in history in which they took an active part.

This same test was given by the Teachers' College of the University of Florida in the seventh and eighth grades of the Dunnellon school, in 1922. The median for each grade in this school were: Grade VII, 50; grade VIII, 38. (1.) It seems strange that the seventh grade should have made a better score than the eighth grade.

It can be readily seen that these grades are not up to standard in history. With this test, however, the teacher should be able to see in some way wherein the instruction is falling short, and make an effort to remedy this condition. It may be lack of interest on the part of the pupils, or inability to read well enough to grasp what the text gives. A study of the reading scores in connection with the history scores ought to show whether the trouble is with the reading or not. Certainly the situation is one that deserves the attention and study of the teacher and supervisor.

The character and difficulty of this history test may

be determined by examining the sample exercises given in Appendix A.

TABLE XVIII. INDIVIDUAL SCORES IN HARLAN'S TEST OF INFORMATION IN AMERICAN HISTORY

Median Score, Alachua, Grade VII, 14.1  
Grade VII Standard End-Year Score, Grade VII, 56

Exercise	I	II	III	IV	V	VI	VII	VIII	IX	X	Tot'l
Maximum Score....	10	20	10	4	10	10	10	8	8	10	100
Pupil No.											
1. ....	2	0	0	1	0	0	0	0	0	0	3
2. ....	2	1	0	0	0	0	0	0	0	0	3
3. ....	2	0	0	0	1	0	0	0	0	0	3
4. ....	4	0	0	0	0	0	0	0	0	0	4
5. ....	4	0	0	1	0	0	0	0	0	0	5
6. ....	2	0	0	2	0	0	0	0	2	0	6
7. ....	6	0	0	0	0	0	0	0	0	0	6
8. ....	2	0	0	2	0	0	0	0	2	0	6
9. ....	6	0	0	1	0	0	0	0	0	0	7
10. ....	8	0	0	0	0	0	2	0	0	0	10
11. ....	6	1	0	0	3	0	0	0	0	0	10
12. ....	6	0	0	1	4	0	2	0	0	0	13
13. ....	6	6	0	2	0	0	0	0	0	0	14
14. ....	10	0	0	0	5	0	0	0	0	0	15
15. ....	6	1	0	2	0	2	2	0	4	0	17
16. ....	8	0	2	2	5	2	2	0	2	0	23
17. ....	8	6	0	1	2	2	2	0	4	0	25
18. ....	10	0	0	0	9	2	2	0	6	0	29
19. ....	6	6	2	1	8	2	2	0	1	2	30
20. ....	10	6	8	2	4	2	0	0	0	0	32
21. ....	8	10	5	2	4	2	2	0	2	2	42

TABLE XIX. INDIVIDUAL SCORES IN HARLAN'S TEST OF INFORMATION IN AMERICAN HISTORY

Median Score, Alachua, Grade VIII, 22.5  
Grade VIII Standard End-Year Score, Grade VIII, 86

Exercise	I	II	III	IV	V	VI	VII	VIII	IX	X	Tot'l
Maximum Score....	10	20	10	4	10	10	10	8	8	10	100
Pupil No.											
1. ....	4	0	0	0	0	0	0	0	2	0	6
2. ....	6	0	0	0	0	2	0	0	0	0	8
3. ....	6	0	0	0	6	0	0	0	0	0	12
4. ....	4	1	2	2	3	0	0	0	2	0	14
5. ....	6	2	0	0	0	2	4	0	0	0	14
6. ....	8	1	2	0	3	2	0	0	0	0	16
7. ....	10	0	0	2	1	4	0	0	0	0	17
8. ....	6	2	2	1	4	2	1	0	0	0	18
9. ....	8	4	0	2	0	2	2	2	0	0	20
10. ....	8	2	2	0	4	2	2	2	2	0	24
11. ....	8	6	2	2	0	4	0	4	0	0	26
12. ....	8	3	5	0	5	0	2	2	2	0	27
13. ....	6	4	4	2	5	4	2	0	0	0	27
14. ....	10	5	4	2	3	0	2	0	2	0	28
15. ....	8	4	5	3	7	0	0	4	2	0	33
16. ....	8	3	4	1	5	2	3	4	3	4	37
17. ....	8	7	0	2	5	4	2	2	4	3	37
18. ....	10	8	8	4	10	4	0	6	2	3	55

## 6. ENGLISH COMPOSITION

Compositions were collected from grades four through eight in the elementary school, and from every grade in high school. In order that the same conditions might prevail in every room contributing such compositions, one member of the survey committee gave the directions and collected the papers in each case according to a definite program. The subject, "The Most Exciting Ride I Ever Had," was written plainly upon the board after paper had been distributed. It was explained to the pupils that they were to write the best composition they could on this subject in thirty minutes. This was the procedure in every case.

The Hudelson English Composition Scale, which is a product of the movement began in 1912 by Hillegas, who attempted to establish some standard by which compositions might be scored objectively, was used in this survey. It consists of sixteen samples of English compositions that range from very poor to very good in quality. The score agreed upon by highly trained judges, who attempted to judge the true value of the compositions as to form and thought, is affixed to each of these. Our standard in grading the compositions from Alachua was these sixteen compositions, which are known as the Hudelson Scale. (3:4-19.)

Table XX gives the distribution of scores assigned English compositions written in the Alachua school through the fourth and twelfth grades, inclusive. This table reads as follows: In the fourth grade fifteen pupils wrote compositions of qualities from 0 to 1.8; fifteen, wrote qualities from 1.9 to 2.6; and five, wrote qualities from 2.7 to 3.7, making a total of thirty-five compositions whose median quality was 2.0. The standard median for the grade is 2.98 (in the middle of the year—the time of this survey), which makes the fourth grade 32 per cent below standard; and so on for each grade. The median is that score of a series which has as many scores above it as below it.

Samples of the compositions, the poorest and the best for each grade, are given in Appendix B. These are

printed, showing all of the pupils' errors in spelling, form, etc.

TABLE XX. DISTRIBUTION OF ENGLISH COMPOSITION SCORES, THE HUDELSON SCALE

Grade	RATED AT								Total Papers	Median Score for Alachua Standard Med. (3:23.)	Per Cent Below Standard	
	0 to 1.8	1.9 to 2.6	2.7 to 3.7	3.8 to 4.7	4.8 to 5.8	5.9 to 6.7	6.8 to 7.7	7.8 to 8.5				
Fourth .....	15	15	5	...	...	...	...	...	35	2.00	2.98	32+
Fifth .....	4	14	5	1	...	...	...	...	24	2.30	3.60	36+
Sixth .....	1	13	9	2	1	...	...	...	26	2.60	4.15	37+
Seventh .....	1	7	6	3	1	...	...	...	18	2.75	4.71	42+
Eighth .....	...	...	5	11	1	1	...	...	18	4.00	5.26	23+
Ninth .....	...	...	4	11	12	3	...	...	30	4.60	5.22	11+
Tenth .....	...	...	...	3	5	1	...	...	9	5.10	5.87	13+
Eleventh .....	...	...	...	...	4	1	...	...	5	5.10	6.33	19+
Twelfth .....	...	...	...	...	4	3	...	...	7	5.70	6.68	14+
Total .....	21	49	34	31	28	9	...	...	172	.....	.....	....

It will be noticed that the medians of the compositions are quite a bit below normal. The best was eleven per cent, and the poorest forty-two per cent below standard. The average of all the classes from which compositions were taken was more than twenty-five per cent below. This is very poor.

In grades four through eight very often a child would write down the subject, "The Most Exciting Ride I Ever Had," and would not adhere to it whatsoever. This undoubtedly shows that composition work has not been given here very often before. This is true of the lower grades particularly. Spelling is often poor, and so is punctuation.

The punctuation of the high school pupils is very poor generally. Only a few knew how to use the paragraph. Some use none at all, others seem to have used them for artistic effect only.

Perhaps one reason for the compositions not being any better is because of the lack of any standard of what should be expected. So far as we know, this is the first time compositions have been measured objectively in the Alachua school. Such comparisons should be made rather often in order to prevent enthusiastic teachers



Table XXII not only gives the nutrition grades, but also the number in each grade who were more than 10 per cent above and 10 per cent below the standard weight, according to age and height.

TABLE XXII. NUTRITION GRADE, UNDERWEIGHTS AND OVERWEIGHTS

Grade	No. of Pupils	Nutrition Grade				No. of Pupils	
		1	2	3	4	Under-weight	Over-weight
B .....	19	10	8	1	0	6	0
I .....	16	7	9	0	0	5	1
II .....	25	11	11	3	0	7	0
III .....	27	11	12	4	0	9	2
IV .....	35	21	13	1	0	14	2
V .....	24	11	12	1	0	7	2
VI .....	30	15	14	1	0	11	7
VII .....	23	15	8	0	0	4	5
VIII .....	17	9	8	0	0	3	4
IX .....	33	19	14	0	0	2	5
X .....	18	12	6	0	0	1	1
XI .....	7	4	3	0	0	1	0
XII .....	8	4	4	0	0	1	0
Total .....	282	149	122	11	0	71	27
Percent ....	100%	52.8	42.3	3.9	0	25.2	9.5

Table XXII indicates that the average health of the pupils in Alachua is very high. According to observation, 52.8 per cent were excellent, 42.3 per cent fair, only 3.9 per cent distinctly below par, and not any very bad. According to weight and measurement, 25.2 per cent were more than 10 per cent underweight and 9.5 per cent were more than 10 per cent overweight. These figures should encourage the pupils, parents, and teachers of Alachua, and also show the lines along which standards of health may be raised.

## 2. SUGGESTIONS FOR HEALTH WORK

The following general suggestions are given for the health work of the school:

The importance of health work should be stressed. The teacher should keep in mind that health is the first objective in education. "What shall it profit a child if he gain the whole world of knowledge and lose his health?" The World War aroused us to a realization of our physi-

cal defects as a nation, and as a result increased emphasis is laid on health education.

The primary aim is not to teach facts, but to establish right habits of living. The stress should be placed on the observance of health rules. A record should be kept of results.

The ultimate results to be sought are a well developed responsive body and general efficiency.

Two methods are suggested by which to secure these results:

(a) Health Supervision: A thorough examination should be made of each child twice each year, preferably in September and March. Treatment should be provided where necessary. Children more than 10 per cent underweight should be examined by an expert, and where a lack of proper nourishment is evident, the parents should be informed and proper food should be provided for the child. All ailments and defects of children, both physical and mental, should have careful consideration. Inspection, at least in the primary grades, should be made every morning in order to impress the importance of cleanliness and good habits. The sanitary conditions of the school plant should be the best possible. Attention should be given to ventilation, lighting, temperature control, toilet facilities, and general cleanliness. The rules of the health game should be practiced daily by all pupils.

(b) Physical Education: The program for physical education should include games of various kinds, gymnastics, school excursions, and work, such as gardening, caring for animals or other physical labor.

The essential rules of health are very simple and should be practiced every day by every child. They must be repeated constantly to secure best results. The Modern Health Crusade work gives very valuable training in the formation of health habits.

For a specific course of study and methods for carrying it out, the committee recommends a recent book by Theresa Dansdill, "Health Training in Schools," pub-

lished by the National Tuberculosis Association, 370 Seventh Avenue, New York.\*

## E. DISCIPLINE AND CHARACTER EDUCATION IN THE ALACHUA SCHOOL

### 1. PROVISION FOR PLAY

In recent years many new ideas have been advanced on the subject of school discipline. According to Nutt, the old theory of discipline had as its foundation the "Ten Commandments," which aimed at controlling human conduct by external means. The value and importance of this great and exalted Mosiac Code to civilization has been apparent thruout the ages, and certainly our present Christianity would be incomplete without it. But he clearly points out the fact that the Savior gave us a new theory which aims at regulating human behavior by means of "internal criteria" which perhaps serves our present day needs better. The old theory was based on the negative command, "Thou shalt not," while the new is based on the positive command, "Love thy neighbor as thyself." (12.)

Whatever may be the true theory of discipline, it seems to be a generally accepted fact that the conduct of the pupils in any school can be largely regulated through wise provision for play. This is certainly true if we accept Spencer's "Surplus Energy Theory," by which he maintains that play is merely a process for disposing of pent-up physical energy. (7:1.)

According to his views, the rapidly growing child must have an outlet through some form of muscular activity for this supply of energy or it will crop out through some other channel.

The committee is not defending Spencer's idea. Perhaps the most widely recognized theory at present is that

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\*Since the above was written, the new "Course of Study for the Elementary Schools of Florida" has been published, and is now (May, 1925) in use thruout the State. Health Education is made a major subject, and is definitely outlined in a usable form in this new course. The Modern Health Crusade forms the basis for the work from grade II to the high school. In the high schools of the State one unit in Physical Education is required of all students.

play should be organized in every school not altogether because it affords an outlet for surplus energy, nor because it is instinctive, as Hall points out (7:3-4.), but because it is desirable on the part of the pupil and because through it the child learns more effectively than perhaps in any other way how to adjust himself to actual needs in later life.

With this view in mind the committee made a very close study of the provisions for play in the Alachua school. We first wish to point out the farsightedness of the people of this community in providing their school with such a beautiful and spacious playground. On an average each pupil in this school is provided with 1,089 square feet of play space. One hundred square feet per pupil used to be considered by leading authorities to be sufficiently large. A moderate start has been made in equipping this playground through the efforts of the principal. No funds have been contributed from outside sources. Such equipment as swings, seesaws and slides for the lower grade pupils and basketball courts for the upper grades have been purchased with funds raised through school entertainments, etc. The primary grades are provided with swings in their study room. They are also assigned to a definite portion of the playground during the play period.

Strictly speaking, there is no play supervision in this school. At the signal for recess the pupils all file out on the grounds. Some play handball, some basketball, some swing, and others loaf around. During this time all the teachers are required to be on the grounds. They merely wander around with apparently no object in view. During the noon hour only one-fourth of the teachers are required to remain on the grounds, although they do not supervise the lunch. After school is dismissed no pupils are allowed to remain on the grounds. This regulation seems to be rather unfair to the pupils. There can be no safer nor better place for children to play than on the school grounds with a teacher in charge. If they can be made to enjoy play here they will probably have a greater desire to come to school. In the larger cities, where the school grounds are adequately equipped for play, they

are kept open the entire year under the supervision of a competent playground supervisor.

The committee was informed that about all the trouble that arose in connection with the play period was the fact that the larger boys occasionally left the grounds without permission for the purpose of smoking. Such offences could not occur under a well organized playground system with the teachers in charge and with every pupil a part to perform.

For the larger boys and girls inter-scholastic basketball, baseball and soccer football are provided. These games, if properly supervised, could be made to keep all of the high school pupils busy during the play period. But, as a matter of fact, only a very few pupils are engaged in this manner, and hence a splendid opportunity is thus afforded for considerable trouble-making, such as teasing, nagging and fussing among the pupils. Before a pupil is allowed to play on an athletic team he must have complied with the State Athletic Association rules, chief among which is one that requires the pupil to have a certain reasonably high average in all his academic work. Through this regulation the principal stated that the school authorities were abundantly able to control the conduct of the pupils who wished to participate in inter-scholastic games. The weakness of such a system of regulating pupil conduct lies in the fact that it fails to reach the great majority of the total enrollment.

## 2. Extra-Curricular Activities.

It is very evident that discipline is one of the greatest problems confronting the modern school man, yet if one makes a thorough study of the question he will be able to reduce it. The fostering of extra-curricular activities will be found to assist materially in its solution they will tend to motivate the school work, also build up a strong school spirit.

The neglect to take advantage of plain facts and tendencies leads almost invariably to some form of trouble in the administration of school affairs. (1:193.) Athletics is one of the best activities that we used today. In the games, the child learns that the individual must be sacri-

ficed for the group, that good sportsmanship must prevail if his team is to succeed.

In literary societies he learns the art of debating, parliamentary procedure, public speaking and other worthwhile practices. In a large school there should be enough societies to practically absorb all the students. They should cover a wide field and give an opportunity for talent to express itself in a larger and freer way than is possible in the school room. Teachers should be members ex-officio of these societies, and should strive in every possible way to have them do those things which will be most creditable to the school and most helpful to its members. (9:229.)

In addition to the above mentioned extra-curricular activities, Cubberley gives, Boy and Girl Scouts, Junior Red Cross, School Orchestra, sewing and cooking clubs, Camp Fire Girls and school entertainments. (5: Chap. 16.)

The committee finds very little work of this nature being done in the Alachua school. Athletics in the form of basketball and soccer football are given a place and will be discussed in another part of this report. A literary society does not exist, but the principal informs us that the high school English classes have debates occasionally on Friday afternoons, besides these, none of the above forms of group activities exist.

### 3. Provisions for Exceptional Children

There is no provision for exceptional children in this school. After a close study of the great number of retarded pupils, the committee believes that there should be an extra teacher employed to take care of the backward pupils. Her room might well be called an "opportunity room." Such provision would eliminate a great deal of trouble. Usually no grade can progress faster than the speed of the most backward pupil in the grade. Where an extra teacher is employed to take care of the slower pupils the brighter pupils can go ahead with their work much faster.

### 4. Movements of Pupils—Chapel—Lunch

There seems to be a current opinion among many educators that unless pupils in their movements to and from

classes, and into and out of the building, are kept in a sort of a militaristic line much trouble will result, such as kicking, pinching, slugging, tripping, etc. This assumption is doubtless true to a certain extent in many schools where the children are allowed but few liberties.

Whatever may be the nature of the situation in the Alachua school, all movements are in lines. The pupils line up to march into the building. If a pupil happens to be in the building studying when the bell rings he must go out and line up, and march in. They are required to march out of the building to and from classes and to and from chapel. No talking is allowed in the lines.

General chapel is held in this school three times each week. No definite program is carried out in these assemblies. The principal usually leads with a Scripture reading, followed by the Lord's prayer and a song or two.

As has been stated elsewhere, there is no lunch provision in this school, yet more than half of the pupils bring their dinner. This situation seems to be a serious mistake. As soon as the signal is given for lunch, a certain type of pupil may be seen running across the grounds with a sandwich in one hand and a ball bat in the other. A lunch eaten in such a hurried manner does but little good. It seems that at least twenty minutes should be required for the lunch period.

##### 5. SCHOOL SPIRIT

"School spirit," says Cubberley, "is a certain subtle something which motivates and gives purpose and life to the work of the school. Using a term made common in the World War, it might well be described as school morale." (5:303.) It is a development of a desire to work, to bring up the tone of the school and to have the work done willingly. A school with a strong school spirit usually presents no serious matters of discipline, because the pupils are interested in their work and in their school.

The committee finds that the problem of discipline in the Alachua school is not a serious one, but whether or not this is due to the existing school spirit, we cannot say. It is very difficult for one not daily connected with the school to get a definite idea of its morale, yet the attitude

of the children at work and on the playground, the care they take of their buildings and grounds and the general interest displayed in every phase of their school life will give one some idea of the spirit existing therein.

## 6. RECOMMENDATIONS

It is recommended:

a. That the playground be more adequately provided with such equipment as giant strides, volley ball and tennis paraphernalia, slides and swings.

b. That the play periods be organized in such a way that the first three grade teachers may have direct supervision over their pupils in a definite section of the grounds, and that the next three grade teachers divide their pupils into two groups—boys and girls, and that each group should have a teacher in charge, also in a definite portion of the grounds; and that the remaining teachers divide the remaining pupils into two groups—boys and girls, so that a teacher or teachers may be in charge of each group. It is further recommended in this connection that a man be in charge of the boys and a woman in charge of the girls.

c. That the playground be kept open an hour or so before and after school, and that a schedule be arranged so that a teacher may be in charge at all times.

d. That a great variety of inter-scholastic and inter-class games be provided.

e. That a sufficient number of literary societies be organized to absorb the entire pupil enrollment of the high school, and that these societies meet at least once each week.

f. That troops of Boy and Girl Scouts be organized within the school.

g. That provision be made in the form of opportunity rooms to take care of exceptional children.

h. That the pupils who bring their lunches be grouped, and placed under the supervision of a teacher or teachers at least twenty minutes of the noon hour.

i. That there be one general chapel weekly in the auditorium, and that a different grade lead each time.

j. That the first five grades meet together for chapel

once a week to be entertained by a general speaker chosen for their interests; and that the remaining pupils also meet once a week to be entertained by a prominent speaker.

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## APPENDIX A

## SAMPLE EXERCISES USED IN HISTORY TEST

(SEE TABLES XVIII AND XIX, PAGE 84.)

**Exercise II**

Below is a list of terms used in American History. Give a particular example of each, such as: Battle—Bunker Hill.

- |                       |                                |
|-----------------------|--------------------------------|
| 1. colony .....       | 7. territorial expansion ..... |
| 2. pioneer .....      | .....                          |
| 3. treaty .....       | 8. compromise .....            |
| 4. explorer .....     | 9. decisive battle.....        |
| 5. proclamation ..... | 10. admiral .....              |
| 6. general .....      | .....                          |

**Exercise III**

Name the events which make the following places historically significant:

1. Valley Forge .....
2. Gettysburg, Pa. ....
3. Mt. Vernon, Va. ....
4. Lake Erie .....
5. Rio Grande River.....

**Exercise VI**

Give the year in which the following events occurred:

1. Discovery of America.....
2. Signing of the Declaration of Independence.....
3. Settlement of Jamestown, Va. ....
4. Settlement of Plymouth Colony .....
5. First battle of American Revolution.....

**Exercise X**

Below is stated a list of causes. State one very important immediate historical result of each.

1. Dred Scott decision .....
2. The Embargo Act of 1807.....
3. Daniel Boone's journey in Kentucky, 1768.....
4. The "Spoils System".....
5. Lewis and Clark expedition.....

## APPENDIX B

## SAMPLES OF COMPOSITIONS

## Grade IV—One of the Poorest—Score, 1.20

“The most excided Ride I every had.”

One thim thire was a locs of girdl came to see. me. We went to ride we hade the best thime we went to Jacksvill And pick a locs of flowers and violets And we had a picknic Then we had our picture taking We sure did have a good time We rode and rode that was the best ime I ever had We stay off all day The next morning we all was sick. Thay all stays all nigh which me that night.

## Grade IV—The Best—Score, 3.30

(Alachua Median, 2.00; Standard Median, 2.98.)

The most excit ride I ever had

On a Battleship

When I was seven years old I steam out the ship yard at Norfolk on S. S. Louisiana. My father was a Engineer of the battle ship I had a good time with the mascot of the ship which was a billy-goat He was a beauty, he was black and white. I would stand for hours with the goat by my side and watch the waves beat against the side of the boat. In this two years I have been in Africa, Europe, Australia, Alaska, through the pama Canel in Alaska I saw the iceberg that sunk the Tiantic the Pacific Ocean was as peaceful as Massacoit and the Priglims. In England I saw the Castle, in Switcheerland I saw the Alps with there snow peaks and the little Swic boys and girls. After a few days we sail for America And it rained for a few days sow the goat an I had to stay in the Cabin. Now my father is working in Jacksonville at the A. C. L. Shops We are going to Jacksonville as soon as school is out.

## Grade V—The Poorest—Score, 1.60

The Most Excitng Ride I Ever Had

once we went a riding one evening and we went about 25 miles and we came to a holl and we got stuck and when we got out it was about five oclock and we went down and run overa peace of glass and had a blought out and we fixed the tire in about an our and it was dark then and we was one a one seated ford and there was about 8 of us. . . . (And so on for a full page; not a capital, not one punctuation mark.)

## Grade V—The Best—Score, 4.20

(Alachua Median, 2.30; Standard Median, 3.60.)

The Most Exciting Ride I ever Had

One time I was in a car we were going out towards Hague. When we got to the lake a car with some negroes in it was coming towards us. I think they we drunk because when we had got off the road when the negroes turned and ran right into us. It broke our wheels all up except one which was up by the fence and cut ones lip and hurt the ones in the front seat but it did not hurt the ones in the back seat any at all hardly. The negroes were hurt pretty bad but time the had got the car stoped they jumped out and ran into the woods bleeding as they went. It tore the negroes car up pretty bad and they had the gas, and spark pulled down as far as it would go. They caught the negroes and made them stay in jail a long time. We stayed in bed a long time because we were hurt pretty bad and it took us a good time to get the wounds healed up but were glad when we did get up. And hope we will not get into another one.

## Grade VI—The Poorest—Score, 1.80

## The most Exciting Ride I ever had.

wonce a pone a time I started for a wride and I went out and got my car and got in it and went and got my friend and we left it was on a Sunday evening and we rode down the road and we came to a child by the side of the road and we picked him up and went on an we came to a wriver an we was going purtty fast an the whel run of an the car ran in the river and we feell in but all got out allocake. an we got back in a mans car an he was going to carie us back an when we came to a little place we stopped an got a bit to eat an . . . (Three pages without a punctuation mark or a capital.)

## Grade VI—The Best—Score, 5.00

(Alachua Median, 2.60; Standard Median, 4.15.)

## The Most Exciting Ride I Ever Had.

One day as I was going from Atlanta Georgia to Jacksonville Florida I saw a man coming toward the car that I was in. This man seemed to be insane, because when he walked he would go from one side of the road to the other, al.o he was crying and making a noise which I had never heard before. We went by this man at a very high rate of speed and just as we passed the man, another automobile came toward us and just as this car was passing us the driver ran into the car we were in and threw my sister and I into the ditch, killing my sister and the occupants of the other car and breaking both of my legs, and injuring my back. This man who was walking the road came toward me calling my name. I was in so much pain until, when he began calling my name and acting so funny, I fainted. When I awoke I was in a hospital in Atlanta and my mother, father and both of my brothers were standing over me. My father said this man was insane and he was on his way to Chattanooga to the insane asylum. I finally recovered from my hurt and went to see this man but the people of the hospital said he died about two or three days after he got there.

## Grade VII—The Poorest—Score, 2.00

## The most exciting ride I ever had

The most exciting ride I ever had was one after noon in the summer time a car came along and pike us up the man was put in jail and we got filiece in the came alon and a drun man run in to us and tore our car up and the side tore the finder and the runne borde of and thru us out of the car and the was fore more besides myself three of us us was thredun out and the other just about but he was her so bad got up and about that time a car came along and pike us up the man was put in jail and we got all righ.

## Grade VII—The Best—Score, 5.50

(Alachua Median, 2.75; Standard Median, 4.71.)

## The Most Exciting Ride I Ever Had.

Once, when were living in Georgia, I had a very exciting ride on the back of a two year old yearling. All of we children wanted to ride him so I got on his back and my brother twisted his tail, he jumped from under me and nearly knocked my breath out of me I hit so hard on the ground. But I tried again and this time I caught hold of the halter he had on and hung too him. He went to running through the field, through beans, corn and sand spurs. Through a little branch under over hanging limbs. and believe me I sure was some scared for I was shaking like a leaf. Finally I got too tired to hold on so I turned lose and let him go. When I got home my clothes were torn and I was all covered from head

too foot in mud, weeds and sand spurs. I sure was scratched up. Every body was laughing at me so I felt so peeved till I just have never gotten on a yearling since and never expect too if the rest are like that one I sure will stay shy.

Grade VIII—The Poorest—Score, —

The Most Exciting Ride I ever had

One time we went to ride in a wagon. We had gone about a mile and a half from home, when the wagon wheel came off, and the Horse ran away but nobody got hurt so we went on and had a good time that evening we started home about Five O'clock when we got nearly home the horse became scared of a Cow that was on the side of the road we had to get out and lead her by the Cow because she might have ran away.

Grade VIII—The Best—Score, 6.00

(Alachua Median, 400; Standard Median, 5.26.)

The Most Exciting Rid I ever had

The most exciting rid I can remember, was when I was about ten years old. We were going from South Dak. to Missouri. There had been a lot of snow during the winter. After we had started out we went through a snow tunnel that seemed to never end. I had about got over that when we came to the Mo. river. The conductor told us that the ice had started to thaw and the bridge was about to go out. But he was sure we would get across safe. When the train struck the bridge it begin to shake no one can imagine my feelings. I was sure we were going into the river but if Im not mistaken I was'ent the only one. When we got out about the middle the train stoped so as to stop the sway of the bridge at last we got across it seemed like houres to me although I know it was but a few minuts.

When the back of the train went off the bridge The bridge gave away and went on down the river.

Grade IX—The Poorest—Score, —

The most exiting ride I ever had

One time I was rding in a buick car from High Springs to Alachua. My brother was driving about sixty miles per hour. The roads were wet and the car skid off of the road on the side and went nearly into the ditch and just then a cow went in front of the car and he had to go clear in the ditch to keep from hiting her.

After we got to Alachua we could we could not get what we wanted so we had to go on to Gainesville and on the way back we were going around a curve and skid into the ditch again.

Grade IX—The Best—Score, 6.40

(Alachua Median, 4.60; Standard Median, 5.22.)

The Most Exciting Ride I Ever Had.

The most exciting ride I ever had was last summer when I rode on a sea-plane.

It was about four o'clock one afternoon, the wind was blowing and a friend and a friend and I decided to take a ride on the sea plane.

When we got in the operator gave us large goggles to put on and a cap with tabs to go over our ears, then we started.

At first we rode swiftly over the water, the wind beat against our faces and it was great, then we gradually started up in the air, we both had a very peculiar feeling and as we got higher we could see tiny objects below—people that we knew were our friends.

As we sailed higher and higher we couldn't talk to each other because

the wind was blowing over our faces hard and when I looked at the objects below, oh! they were so far from me and so small.

I looked at my friend, How pale and afraid we both were, I thought, then suddenly all my fear seemed to fly from me and I began to realize how much I really was enjoying this wonderful ride so far up in the air.

A bird came near us and I was glad to see another living creature, beside's my friend, the pilot and I, but the roar of our machine seemed to frighten the bird and it flew far away from us.

My friend touched me and pointed downward and I saw a large boat floating peacefully over the blue waters, it looked so small.

At last the tiny objects I had been watching grew larger and larger, I was glad because I knew I was going to reach the earth soon.

I looked at my friend and we both smiled and I took my friends hand in mine and wondered what would have happened to us if the plane had fallen.

Suddenly I seemed to awake from a wonderful dream for I found myself once more and the ground with my friends all standing around me asking me about my ride which I'll never forget.

#### Grade X—The Poorest—Score, 4.50.

##### The most exciting ride I ever had.

The most exciting ride I ever had was one aftering two girls and myself went horse backing riding.

We run several horse races to see which horse could run the fastest the girl riding the gray horse won every time.

Late in the afternoon we went and drove the cows home, two of the cows left the bunch and we have to chase them all over the woods and when we got home it was dark.

#### Grade X—The Best—Score, 6.20

(Alachua Median, 5.10; Standard Median, 5.87.)

##### The most Exciting Ride I ever had.

One bright summer afternoon, my sister and I went over to High Springs to purchase some dry goods. We reached there and purchased the goods as we had expected, and decided to drive around over the town for a few minutes before returning.

We drove around to the depot and on turning the corner to return to the Dixie Highway, we heard a man yell out "help." My sister who was driving stopped immediately. To the left was a man who had run into a brick store and had turned his car over on himself. He had just regained consciousness as we got there, and the merchant hollowed for us to come to help him soon as we got even with them. I walked slowly up to where they were. The man who was wounded was struggling and it excited us to the utmost. The merchant asked us to go in and phone for the doctor. My sister ran into the store and phoned for a doctor. In about ten minutes the doctor arrived and took the wounded man into the store and gave him a few drops of medicine. After about an hour the man was spitting up blood. He suffered on for about an hour and a half, then seemed to be better. The doctor carried him to the Hospital, but he died on the third day.

This was the most excitement I ever had on a ride, for I had never seen an accident of any kind or a seriously wounded person.

#### Grade XI—The Poorest—Score, 4.80

##### The most exciting ride I ever had.

Last summer a crowd of other girls and my self decided we would spend the day in the woods, hunting wild flowers and then later going

to the spring and take a dip. We all packed in the Ford, along with the things we would need to spend the day outing, and left home about nine o'clock. When we were about a mile from town we discovered that a tire had gone flat, we decided to fix it our selves and save time sending for a garage man. In about an hour we were ready to continue our journey. We were riding along nicely, all chattering like monkeys, I was driving and of course was'ent pay much attention to my business when the next thing we knew, I had let the car steer over on the wrong side of the highway and collided with another Ford. We were all frightened to death but fortunately no one was hurt. Both cars were damaged quite a bit and most especially ours. The fault being mine I had to pay the bill for the other car to be repaired. our day was spoiled so we returned home very nervous and tired after our ride.

### Grade XI—The Best—Score, 6.00

(Alachua Median, 5.10; Standard Median, 6.33.)

#### The Most Exciting Ride I Ever Had.

One day three of us girls were invited to take part in an airplane demonstration. We were to leave one point at a certain time, fly to the next town and back in 20 minutes.

We started. It was a bright, sunshiny day in May. We reached the other point and just as we were about to do the loop-the-loop and a few other stunts a cloud blew up and it started to rain. We found ourselves in a mass of gray clouds without anything to guide us.

We flew here and yonder, dipping and swerving, trying to find some mark by which to guide us. But it was in vain. Not a sign did we see.

About four hours later the sun came out and we found ourselves directly above the City Hall. How glad we were! We descended immediately and went to our respective homes for we knew our mothers would be worried about us.

The next time we go we will carry a compass.

### Grade XII—The Poorest—Score, 5.00

#### The most Exciting Ride I Ever Had

One day a crowd of we girls were Out riding and a car came up beside us with another crowd of girls they said let's go for a race, we started off to gather for a good piece we both kept right up together but their car so got ahead, so we put more gas to the car and we come up with them and got ahead, but Only for a few minute's for they were soon up with us again and passed, it seemed that we could never catch them, every time we got any where near them they began to go faster, After awhile we come up with them and we kept up with each Other for quite awhile then we got ahead of them, we stayed ahead of them the rest of the time they never got ahead of us again they would nearly catch us but never did talking about be excited I certainly was from the beginning to the ending. When we came to the appointed place where we were to stop we put On brakes but slid a good piece fater and when we got Out we did not see the Other car car in sight, we got back in the car and went to look for them, we found them a peice down the road they had given Out of gasoline we won the race but it was not Altogether a fair victory.

### Grade XII—The Best—Score, 6.60

(Alachua Median, 5.70; Standard Median, 6.68.)

#### The Most Exciting Ride I Ever Had

The most exciting ride I ever had was when I was about six years old. I lived about seventeen miles up the Manatee river from Bradentown. My father drove in town one day for suplies, and caried me

with him. He was driving a very large fine horse hitched to a wagon. This horse had some very good qualities and traits, and also some bad ones. So after we had gotten to town and had the wagon loaded up with various things from straight pins to victrolas including groceries, stock feeds, farm impliments, we had to cross the river. So while driving about midway the bridge and river a small launch came thru under the bridge. The horse not liking this began to back as this was one of his bad traits. My father to stop him but failed so we backed the wagon up against the railing which was wood and rotten at that. So of course I fell off and my father jumped after me so as to get me out from the way of the wagon. Then the wagon went in upside down, as it happened the water wasn't very deep and by the aid of some of the men on the bridge they cut the harness and saived the horse

## APPENDIX C

## USES OF INTELLIGENT AND ACHIEVEMENT TESTS IN 215 CITIES OF THE UNITED STATES

The data for the following tables were secured by the Bureau of Education, Washington, D. C., through questionnaires sent to all superintendents of schools in cities of 10,000 or more population. The tables give the data thus obtained from 35 cities of 100,000 or more population, 65 cities between 30,000 and 100,000 and 115 cities between 10,000 and 30,000.

The facts just stated, and the tables given below are taken from City School Leaflet, No. 20, March, 1925, published by the Bureau of Education. The leaflet was prepared by W. S. Deffenbaugh, chief of the City School Division, Bureau of Education.

TABLE 1.—Purposes for which group intelligence tests are used in elementary, junior high, and high schools in cities having a population of 10,000 and more—215 cities reporting.

Purposes for which tests are used	Elementary schools		Junior high schools		High Schools	
	Per cent of cities	Rank of purpose	Per cent of cities	Rank of purpose	Per cent of cities	Rank of purpose
Supplementing teachers' estimates of pupils' ability	62	2	44	2	33	2
Diagnosis of cause of failure	46	3	29	3	24	3
Establishment of classes for subnormal children	43	4	14	10	7	13
Extra promotions	40	5	21	4	8	11
Comparison with other school systems	26	6	18	7	13	7
Admission to first grade of elementary school	25	7	0	21	0	21
Placement of new pupils from other schools	23	8	19	6	10	10
Regular promotion of pupils	22	9	15	9	6	15
Determining comparative efficiency of teachers	20	10	11	13	10	9
Establishment of classes for supernormal children	20	11	6	17	2	20
Diagnosis of cause of success	19	12	16	8	12	8
Demotions	17	13	8	16	7	12
Determining changes in method of presentation of lessons	14	14	13	11	6	15
Determining changes in subject matter of courses of study	11	15	9	14	7	14
Determining class marks	10	166	7	19	4	18
Establishing special supervised study groups	8	17	6	17	3	19
Vocational guidance	0	....	13	12	17	6
Determining number of courses to be carried at one time by high school pupils	0	....	9	14	21	5
Guidance in the selection of high school course	0	....	19	5	24	4
Admission to organized school activities	0	....	3	20	5	17

TABLE 2.—Purposes for which individual intelligence tests are used in elementary, junior high, and high schools in cities having a population of 10,000 and more—215 cities reporting.

Purposes for which tests are used	Elementary schools		Junior high schools		High Schools	
	Per cent of cities	Rank of purpose	Per cent of cities	Rank of purpose	Per cent of cities	Rank of purpose
Establishment of classes for subnormal children.....	67	1	18	3	8	7
Classification of pupils into homogeneous groups.....	40	2	22	2	14	3
Supplementing teachers' estimates of pupils' ability.....	38	3	24	1	14	3
Diagnosis of cause of failure.....	37	4	23	4	25	1
Extra promotions .....	33	5	16	5	7	10
Demotions .....	25	6	9	7	4	16
Placement of new pupils from other schools.....	23	7	9	8	5	12
Diagnosis of cause of success.....	16	8	12	6	11	4
Regular promotion of pupils.....	13	9	7	10	2	19
Establishment of classes for supernormal children.....	13	10	8	9	5	15
Admission to first grade of elementary school.....	12	11	.....	.....	.....	.....
Determining comparative efficiency of teachers.....	9	12	6	13	7	8
Comparison with other school systems.....	8	13	5	14	7	9
Determining changes in method of presentation of lessons .....	8	14	5	15	5	13
Determining changes in subject matter of courses of study .....	7	15	4	17	5	14
Establishing special supervised study groups.....	5	16	4	16	1	20
Determining class marks .....	4	17	3	19	3	17
Vocational guidance .....	.....	.....	7	11	10	6
Guidance in selection of high-school course.....	.....	.....	7	12	10	5
Admission to organized school activities.....	.....	.....	2	20	3	18
Determining number of courses to be carried at one time by high-school pupils.....	.....	.....	4	18	7	11

TABLE 3.—Purposes for which standardized educational tests are used in elementary, junior high, and high schools in cities having a population of 10,000 and more—215 cities reporting.

Purposes for which tests are used	Elementary schools		Junior high schools		High Schools	
	Per cent of cities	Rank of purpose	Per cent of cities	Rank of purpose	Per cent of cities	Rank of purpose
Supplementing teachers' estimates of pupils' ability....	61	1	41	1	27	1
Comparison with other school systems.....	57	2	34	3	16	3
Classification of pupils into homogeneous groups.....	54	3	35	2	20	2
Diagnosis of cause of failure .....	44	4	28	4	14	5
Extra promotions .....	41	5	26	5	9	8
Determining comparative efficiency of teachers.....	38	6	18	7	15	4
Regular promotion of pupils .....	32	7	21	6	7	11
Placement of new pupils from other schools.....	27	8	15	9	6	16
Establishment of classes for subnormal children.....	25	9	9	15	2	18
Determining changes in method of presentation of lessons .....	20	10	15	8	8	10
Determining changes in subject matter of courses of study .....	20	11	14	11	7	12
Demotions .....	19	12	8	16	3	17
Diagnosis of cause of success.....	18	13	15	10	6	15
Determining class marks .....	14	14	10	14	6	14
Establishment of classes for supernormal children.....	11	15	6	17	1	20
Establishing special supervised study groups.....	10	16	5	18	2	18
Guidance in the selection of high-school course.....	.....	.....	12	12	10	6
Vocational guidance .....	.....	.....	11	13	9	7
Admission to organized school activities .....	.....	.....	3	20	7	11
Determining number of courses to be carried at one time by high-school pupils.....	.....	.....	4	19	9	7

## APPENDIX D

PUBLISHERS AND DISTRIBUTORS OF TESTS AND SCALES USED IN  
THIS STUDY, AND OF OTHER STANDARD TESTS  
AND MEASUREMENTS

- Bureau of Cooperative Research, Indiana University, Bloomington, Indiana.  
 Bureau of Cooperative Research, University of Minnesota, Minneapolis, Minn.  
 Bureau of Educational Measurements, Kansas State Normal School, Emporia, Kan.  
 Bureau of Educational Research, University of Illinois, Urbana, Ill.  
 Bureau of Publications, Teachers College, New York, N. Y.  
 Strayer-Engelhardt Score Card for City School Buildings  
 Educational Extension Service, University of Iowa, Iowa City, Iowa.  
 Public School Publishing Company, Bloomington, Ill.  
 Ayers Handwriting Scale, Gettysburg Edition.  
 Buckingham Extension of the Ayre Spelling Scale.  
 Harlan Test for Information in American History.  
 World Book Company, Yonkers-on-Hudson, N. Y.  
 Hudelson English Composition Scale.  
 Otis Group Intelligence Scale.

## APPENDIX E

BIBLIOGRAPHY USED BY STUDENTS IN EDUCATION III*b*, AND EDUCATION 111*b*. THE BOOKS MARKED WITH AN ASTERISK (\*) WERE ESPECIALLY HELPFUL IN THIS STUDY; THOSE MARKED WITH A DAGGER (†) ARE FOR ADVANCED STUDENTS; AND THOSE MARKED WITH A DOUBLE DAGGER (††) ARE RECENT BOOKS NOT AVAILABLE FOR CLASS USE WHEN THIS STUDY WAS MADE.

## I. Names and Addresses of Publishers

The names and addresses of publishers of books, pamphlets and periodicals in this bibliography are given below, preceded by abbreviations used in the list that follows:

- A. B. Co. American Book Company, New York.  
 Appleton. D. Appleton & Co., New York.  
 Bruce. Bruce Publishing Company, Milwaukee, Wis.  
 Bu. of Educ. Bureau of Education, Washington, D. C.  
 Century. Century Company, New York.  
 Character. Character Education Company, Washington, D. C.  
 Dutton. E. P. Dutton & Co., New York.  
 Funk & Wagnalls Company, New York.  
 Harcourt. Harcourt, Brace & Co., New York.  
 Heath. D. C. Heath & Co., New York.  
 H. M. Co. Houghton Mifflin Company, Boston.  
 Harper. The Harper Press, Philadelphia.  
 Holt. Henry Holt & Co., New York.  
 Johnson Publishing Company, Richmond, Va.  
 Lipp. J. B. Lippincott & Co., Philadelphia.  
 Macm. Macmillan Company, New York.  
 Merrill. Charles E. Merrill Company, New York.  
 N. E. A. National Education Association, Washington, D. C.  
 Princeton. Princeton University Press.  
 Pub. Sch. Pub. Co. Public School Publishing Company, Bloomington, Illinois.  
 Scribners. Charles Scribner's Sons, New York.

S. B. & Co. Silver, Burdett & Co., Chicago.  
 Teach. Col. Teachers College, University of Florida, Gainesville.  
 Viewpoint. American Viewpoint Society, New York.  
 Warwick. Warwick & York, Baltimore, Md.  
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