# A STUDY OF THE EFFECT OF CONSOLIDATION UPON A RURAL ELEMENTARY SCHOOL

by

# John Alby Rutherford

Thesis submitted to the Graduate Faculty of the Virginia Polytechnic Institute in candidacy for the degree of

MASTER OF SCIENCE

in

EDUCATION

August, 1960 Radford, Virginia

# TABLE OF CONTENTS

Chapter		Page
I.	INTRODUCTION	5
11.	SURVEY OF THE LITERATURE	10
111.	DESCRIPTION OF THE SITUATION	29
IV.	PRESENTATION OF THE DATA	36
V.	SUMMARY, INTERPRETATIONS, AND RECOMMENDATIONS	54
VI.	BIBLIOGRAPHY	57
VII.	ACKNOWLEDGEMENTS	60
VIII.	APPENDIX	62
IX.	VITA	66

### LIST OF TABLES

Table I.

A DISTRIBUTION OF SCORES OF FOURTH GRADE PUPILS FROM THREE SMALL RURAL ELEMENTARY SCHOOLS, COMPARING READING ACHIEVEMENT TO THE NORM IN TERMS OF GRADE LEVEL; BASED UPON ONE ADMINIS-TRATION OF THE READING SECTION OF THE METROPOLITAN ACHIEVEMENT TEST, ELEMENTARY BATTERY, FORM T....

Table II.

A DISTRIBUTION OF SCORES COMPARING THE READING ACHIEVEMENT OF SEVENTH GRADE PUPILS FROM THE SNOWVILLE, VIRGINIA, ELEMENTARY SCHOOL TO THE NORM IN TERMS OF GRADE LEVEL; BASED UPON THE IOWA SILENT READING TEST...

Table III.

A DISTRIBUTION OF SCORES SHOWING THE PROGRESS MADE BY STUDENTS OF THE SNOWVILLE, VIRGINIA, ELEMENTARY SCHOOL WITHIN A PERIOD OF 3.6 YEARS; BASED UPON ONE ADMINISTRATION OF THE READING SECTION OF THE METROPOLITAN ACHIEVEMENT TEST AND ONE ADMINISTRA-TION OF THE IOWA SILENT READING TEST.

Table IV.

A COMPARISON OF SCORES FROM TWO ADMINISTRATIONS OF THE IOWA SILENT READING TEST SHOWING THE PROGRESS IN TERMS OF GRADE LEVEL MADE IN READING WITHIN ONE YEAR..... 42

Page

43

44

# Page

Table	<b>v.</b>	PERCENTAGE OF ATTENDANCE FOR FOURTH GRADE PUPILS OF THE SNOWVILLE, VIRGINIA, ELEMENTARY SCHOOL BEFORE CONSOLIDATION; BASED UPON THE VIRGINIA TEACHER'S REGISTER FOR THE SCHOOL YEAR OF 1950-1951	48
Table	VI.	PERCENTAGE OF ATTENDANCE OF SEVENTH GRADE PUPILS OF THE SNOWVILLE, VIRGINIA, ELEMENTARY SCHOOL AFTER CONSOLIDATION; BASED UPON THE VIRGINIA TEACHER'S REGISTER FOR THE SCHOOL YEAR OF 1953-1954	49
Table	VII.	A COMPARISON OF DAYS ATTENDANCE OF A SELECTED GROUP OF STUDENTS BEFORE AND AFTER CONSOLIDATION; BASED UPON THE VIRGINIA TEACHER'S REGISTERS FOR THE SCHOOL YEARS OF (1950-1951) AND (1953-1954), SNOWVILLE, VIRGINIA, ELEMENTARY SCHOOL.	50

### CHAPTER I

#### INTRODUCTION

At the time this study was begun much had been written about consolidation of school districts and high school consolidation in general, however little had been written about the consolidation of elementary schools in rural Virginia. Having been a rural elementary school principal and teacher in a school which had been consolidated for a period of some years, the study of the effect of such a consolidation seemed to be a likely topic for investigation. This topic was chosen, therefore, both for its interest to the writer and, also, due to the fact that the school position held was directly influenced by the effect of the consolidation.

The purpose of this study was to observe the manner in which a certain small rural elementary school was being affected by its being consolidated with several small one or two-room schools to form a single consolidated unit for a given school district.

The Snowville Elementary School was consolidated from several small one and two-room schools. In 1947 a three-room school at Snowville, a two-room school at

Cecil's Chapel and one-room school at Simpkinstown were reorganized into a seven-room school near the village of Snowville, Virginia. Previously, in 1939, another consolidation had taken place in which six small one-room schools had been reorganized into the three above named.<sup>1</sup>

The direction of the study will be focused upon three areas. First, the study will have particular regard for the comparison of the academic achievement of students before and after consolidation. Secondly, the study will compare the effect of consolidation upon attendance. Thirdly, an attempt will be made to show any opinions concerning the relationship of the consolidated school to children and parents from various sections of the school district.

In respect to the first area, achievement of the children, the grade level of achievement for the same group of children, both before and after consolidation, will be compared. An attempt to show a relation between any change and consolidation will be made.

Concerning the second area of attendance, the attendance, before and after, will be compared to

<sup>1</sup> Conversation with Mr. Frank J. Critzer, Superintendent of Schools, Pulaski, Virginia, December 2, 1959.

determine any changes. An effort will be made to show a relation between consolidation and any changes.

The third area of opinions, concerning the effect of the school upon the various sections of the school community, will be developed by means of a questionnaire sent to the parents of the children used in the study as a sample.

In regard to the procedure, first, the study will be focused upon the Snowville, Virginia, Elementary School as the subject of this investigation. Then, the principal source of data will become records in the Pulaski County, Virginia, School Board Office, the Dublin, Virginia, High School, and the Snowville, Virginia, Elementary School; also, from interviews held with the Superintendent of Schools and the guidance personnel of the high school in order to determine what trends the consolidation of the elementary school has developed within the school district; in addition, data will be gathered from a questionnaire submitted to the parents of the children under study to elicit statements from them concerning the consolidation and its effect upon the various sections of the community served by the school.

The data from the school records will be treated in a simple manner. Trends indicated by the

questionnaire and interviews will be treated in a similar manner. Such interpretations and inferences as seem warranted will be drawn.

After the data have been gathered and interpreted the entire study will be reviewed in terms of the areas under study and such effects as seem to be attributed to consolidation will be listed. Furthermore, recommendations for future action will be made, if any such appear to stem from the findings.

Upon the completion of this study it is hoped that the results will be of use to the Pulaski County, Virginia, Schools in studying the effect of consolidation throughout the county on an elementary level. Also, it is hoped that further study will be made upon a higher level of administration to determine the effect of consolidation upon the elementary schools within the county.

\* \* \* \*

In order to present the results determined by the study, Chapter II concerns itself with a survey of current literature describing the consolidation of elementary schools; Chapter III gives a description of the situation in which the study has been made;

Chapter IV presents and interprets the data of the study; and Chapter V contains a brief summary of the investigation, together with the recommendations which seem to stem from its findings.

#### CHAPTER II

#### SURVEY OF THE LITERATURE

At the time of this writing much had been written concerning consolidation or reorganization as it is The topic was to be found in current sometimes named. periodicals, as well as in almost every book written concerning the subject of administration of public schools. Furthermore, various reports upon a national level had taken up the subject in great detail.<sup>1</sup> However, the topic of consolidation of elementary schools had not been discussed nearly as much as the topics of secondary school reorganization and school district reorganization. Most of the information was either very general in nature or had to do particularly with both secondary school and district consolidation. Therefore, the discussion of consolidation in this chapter was necessarily general, rather than specifically concerning the consolidation of a rural elementary school.

Howard A. Dawson, Floyd W. Reeves, et al., Your School District, the Report of the National Commission on School District Reorganization (Washington: Department of Rural Education, National Education Association, 1948).

In order to set a frame of reference for the discussion of consolidation it was necessary to define certain terms used within the discussion. First, school consolidation was defined as "the merging of two or more school attendance areas to form a larger school."<sup>1</sup> Reorganization was used as a synonym for consolidation. Secondly, the term rural school referred to a class of school including many types. Hilton stated the following concerning the rural school:

However, the term "rural school" included a good many different kinds of schools; opencountry one-teacher and two-teacher schools; consolidated, graded schools both in the open country and in villages and towns; small-town schools to which few, if any, farm children go; schools offering six, eight, twelve, or more years of education. Together, these are the "rural schools".<sup>2</sup>

Thirdly, the term administrative unit was defined by Hilton as: "The administrative unit is the territory or area under the administration."<sup>3</sup> For example, in Virginia all the schools within one county are under the administration of one County School Board.

<sup>1</sup> C. O. Fitzwater, <u>Educational Change in Reorganized</u> <u>School Districts</u>, U. S. Dept. of Health, Education and Welfare Bulletin No. 4 (Washington: U. S. Government Printing Office, 1953), p. 4.

<sup>2</sup> Ernest Hilton, <u>Rural School Management</u> (New York: American Book Company, 1949), p. 7.

<sup>3</sup> Ibid., p. 7.

The attendance unit was described as "the territory or area from which children attend one school."<sup>1</sup> Therefore it was necessary to distinguish between the two terms in order to retain clearness as to which level this study was concerned.

Lastly, the term "community school" was interpreted as "a school that is intimately connected with the life of the community, serving as center for many community activities, and utilizing community resources in improving the education program."<sup>2</sup> Other definitions of a community school were:

A school that has two distinctive emphases; (a) service to the community, not merely to children of school age and (b) discovery and use of resources of the community, as part of the educational facilities of the school.<sup>3</sup>

also,

Any school is a community school to the extent that it seeks to realize some such objectives as the following:

- Educates youth by and for participation in the full range of basic life activities (human needs, areas of living, persistent problems, etc.);
- <sup>1</sup> Ernest Hilton, <u>Rural School Management</u> (New York: American Book Company, 1949), p. 7.
- <sup>2</sup> Good, Carter D. (ed.), <u>Dictionary of Education</u> (New York: McGraw-Hill Book Company, <u>Inc.</u>, 1945), p. 87.
- <sup>3</sup> Seay, Maurice F. "The Community-School Emphasis-Postwar Education," American Education in the Postwar Period: Curriculum Reconstruction, Forty-Fourth Yearbook, Part I, National Society for the Study of Education (Chicago: University of Chicago, 1945), p. 209.

- 2. Seeks increasingly to democratize life in school and outside;
- 3. Uses community resources in all aspects of its program;
- Actively cooperates with other social agencies and groups in improving community life;
- 5. Functions as a service center for youth and adult groups.<sup>1</sup>

With these definitions in mind it was possible to turn to reasons for considering consolidation.

\* \* \* \* \*

Since World War II school consolidation had been growing rapidly, especially in rural areas where there had been many small school districts and schools. According to Reeder:

School consolidation and pupil transportation have grown rapidly and at about the same rate, the chief factors contributing to their growth being the following:

- 1. The accumulating evidence that consolidated schools provide better and cheaper educational opportunities than one-teacher schools.
- 2. The widespread migration of people from the rural districts to the cities, leaving thousands of rural

<sup>&</sup>lt;sup>1</sup> Lloyd Allen Cook, "School and Community," <u>Encyclopedia of Educational Research</u>, ed. Walter S. <u>Monroe, Volume I</u>, (University of Illinois: The Macmillan Company, 1941), p. 1002.

schools with such small pupil-teacher ratios that it has been deemed advisable to close them and to transport the pupils to other schools.

- 3. The enlarging of school districts, thus making easier the consolidation of schools. Thousands of school districts have been merged in recent years.
- 4. The advent of the automobile and good highways, thus making it possible to bring pupils together quickly and safely over a distance of several miles.
- 5. The enactment of state laws which permit or require school consolidation and pupil transportation and which sometimes give state aid for them.<sup>1</sup>

One of the reasons for the huge number of school consolidations in rural areas was the fact that more than one-half of our school age children in the United States lived in rural areas or in schools in accordance with the definition of a rural school. Therefore, since rural schools had such a large share in the work of public education it was necessary that the total effect of rural education be thought of as of primary importance to the United States.<sup>2</sup> Both Hunt and Pierce agreed with Reeder and Hilton in their description of

<sup>1</sup> Ward G. Reeder, <u>The Fundamentals of Public School</u> <u>Administration</u> (New York: The Macmillan Company, <u>1951)</u>, pp. 399-401.

<sup>2</sup> Hilton, (op. cit.), p. 7.

the trend toward consolidation: "In rural and village areas there is a rapidly growing trend in favor of a school district large enough to support a school with modern buildings and educational equipment...."<sup>1</sup> Proceeding even further, they stated that:

The most important trend affecting rural educational administration has been reorganization of school districts to provide sufficient pupil population, staff efficiency, and financial resources to insure a recognized standard of educational opportunity."<sup>2</sup>

In looking at the background of the consolidation trend in rural education it was necessary to turn to the arguments in favor of reorganization. The old type of school district which had served American education for many years was out of date. Several basic resources for a sound modern school program were lacking: equipment, personnel and financial power. The disadvantages of small rural schools in providing limited educational opportunity caused many children to drop out of school long before they should have. There was little provision for children in the areas of

<sup>1</sup> Harold C. Hunt and Paul R. Pierce, <u>The Practice of</u> <u>School Administration</u> (Boston: Houghton Mifflin <u>Company</u>, 1958), p. 146.

<sup>2</sup> Ibid., p. 346.

art, music, dramatics, or science. Therefore, it was not unusual that, lacking the basic ingredients of a good elementary school program, many children received highly limited basic elementary education.<sup>1</sup>

According to a report to the President of the United States in 1956 small school districts had certain deficiencies:

- 1. They offered narrow curriculums.
- 2. They had unusual difficulty in getting good teachers.
- 3. They cost too much per pupil.
- 4. They made it practically impossible to tax local resources fairly for school purposes.
- 5. They made it difficult to locate school buildings in relation to centers of wealth and children living areas.
- 6. They impeded economical and efficient transportation of pupils.<sup>2</sup>

Thus, it seemed evident that a set of criteria should have been developed as standards by which to judge the need of any reorganization within or among

<sup>1</sup> Dawson, Reeves, et al., (<u>op. cit.</u>), pp. 16-17.

<sup>2</sup> Committee for the White House Conference on Education, <u>A Report to the President (Washington: U. S. Govern-</u> <u>ment Printing Office, 1956)</u>, pp. 15-16.

school districts. Certain standards were suggested for the use of local groups in determining their need for consolidation. The Committee on Program and Policy for the Department of Rural Education, a branch of the National Education Association, suggested the following criteria:

- 1. The elementary school attendance unit should have enough children attending a single elementary school to justify at least one teacher per grade, with a ratio of about 30 pupils per teacher.
- 2. In general, children should not have to walk more than one and one-half or two miles to or from school, or spend more than one hour enroute to or from school if transportation is provided. Nor should children be transported over roads that present extreme hazards.
- 3. There are two limitations upon these criteria:
  - (a) One is the distance children live from the school;
  - (b) Another is the necessity of preserving the integrity of real sociological communities.<sup>1</sup>

These general criteria should be regarded as criteria for reorganization only.

In addition to the criteria for reorganization in general, certain standards should be determined for the administrative unit that is to administer the

<sup>1</sup> Hilton, (<u>op</u>. <u>cit</u>.), p. 35.

consolidation of schools. Since we live in a democratic nation it is necessary for our criteria of control through administration to be in accordance with the principles of democracy. Hilton averred that:

Every administrative unit, however, should be adequate to guarantee these characteristics of democratic education:

- 1. Adequate wealth to provide acceptable educational opportunity for all children and youth of elementary and high school age, and for the possible extension of new educational opportunity to preschool children, older youth and adults.
- 2. Competent administration and supervision by professionally trained personnel to include instructional leadership and effective business management.
- 3. The extension of school services to include health and dental services, library services, parent education, recreational programs, and psychological and psychiatric services -- either by the local unit or by effective cooperation of it with other units and agencies.
- 4. Control of the schools by the people they serve, through elected lay boards of education.1

Another group of criteria were developed by the Department of Rural Education, a branch of the National Education Association for the reorganization of school districts. These criteria were "criteria of

<sup>1</sup> Hilton, (<u>op</u>. <u>cit</u>.), p. 230.

excellence" rather than standards that would apply to any given situation. They were:

- 1. Educational program and services;
- 2. Financial efficiency to eliminate unnecessary smallness;
- 3. The natural cohesion of people in neighborhoods and communities -- the social community the basic unit;
- 4. Intermediate units for specialized education experiences and services.<sup>1</sup>

A third set of criteria for a properly organized school district was agreed upon by the Council of State Governments. According to them a properly organized school district:

- Contains at least one well-defined community or a number of interrelated communities;
- 2. Has the pupils and resources to offer a comprehensive program of education from the kindergarten through the high school, and to make provision for post-high school and adult education at reasonable unit cost;
- 3. Is able to procure capable educational leadership;
- 4. Is able to maintain a competent, wellbalanced staff of teachers, supervisors and specialists;

Rural Education - A Forward Look, Yearbook of the Department of Rural Education, National Education Association (Washington: Department of Rural Education, National Education Association, 1955), pp. 121-125.

- 5. Can finance its school program without unduly burdensome taxes;
- 6. Locates its schools with due regard for:
  a) bringing together enough children of each age group to make good instruction possible at reasonable cost while,
  b) placing schools in neighborhoods or community centers, and c) holding the time spent in transportation to a maximum of one hour each way for high school children and less for younger children;
- 7. Is of such size and so organized that all the people of the district can exercise a voice in: a) choosing the school board,
  b) developing programs for all age groups, and c) other phases of planning and policy making.<sup>1</sup>

Finally, four general benefits were listed by

the United States Department of Health, Education and

Welfare. They were:

- 1. Improvement of educational opportunity;
- 2. Elimination of dual elementary and high school district structures;
- 3. Local control may be greatly increased in situations where parents formerly sent their children on a tuition basis to schools over which they had no control;
- 4. Local tax burdens may have been equalized within the larger unit.<sup>2</sup>
- <sup>1</sup> The Council of State Governments, <u>The Forty-Eight</u> <u>State School Systems</u> (Chicago: The Council of State <u>Governments</u>, <u>1949</u>), pp. 51-52.

<sup>2</sup> Fitzwater, (<u>op</u>. <u>cit</u>.), p. 1.

As was evident, then, there was great breadth in the scope of the various criteria for school district reorganization.

In studying the lower level, the level of a single school reorganization, again many various sets of criteria were encountered. According to the Commission on School District Reorganization:

In any elementary school there should be a teacher at every grade level for each group of 25 pupils... The quality of the program is quite likely to be much better if the elementary school has an enrollment of 300 pupils and at least 12 full-time teachers.<sup>1</sup>

In addition they were agreed that:

The first responsibility of the school district is the provision of an elementary school which will meet the educational needs of children from kindergarten level through grade 6. Such a school will have:

- 1. Good teachers who understand children and can guide their growth;
- 2. A building well-adapted to the kind of educational opportunities that children need;
- 3. Attractive school grounds that provide ample playground space;
- 4. The services of a school nurse and a school physician;
- 5. A school lunch program organized and financed in a manner which permits every child to have a well-balanced noon meal;

<sup>1</sup> Dawson, Reeves, et al., (<u>op. cit</u>), p. 23.

- 6. Textbooks and other instructional materials furnished to all children without cost;
- 7. A library of well selected books accessible to the children at all times under the direction of a librarian teacher;
- 8. Auditory and visual aids to be used in connection with the instructional program;
- 9. General supervisory assistance and the help of such special teachers as are needed to provide good programs of art and of vocal and instrumental music.1

These criteria, as standards of a good elementary school, both general and specific, might be used as guides to study the effect of reorganization upon an elementary school, however, before setting up standards for this study, perhaps, it would be pertinent to discuss the arguments against consolidation.

\* \* \* \* \*

Many criticisms of reorganization had been raised, by opponents of the practice, especially by the rural lay people themselves. They feared the results of large consolidated schools which would destroy their feeling of community cohesion. Woodring listed

Dawson, Reeves, et al., (op. cit.), pp. 74-75.

several faults of consolidation of school

districts:

This school district probably needed to be consolidated, but in the consolidation several mistakes were made - mistakes which are being made all over the country. The first mistake was in locating the new school in town instead of in the country... Another error was in thinking that a teacher who handles only one grade can adequately supervise the work of 35 or 40 children. At the little country school the teacher had 8 grades in one room, but she had only 14 children in all, so Bill got more individual attention than he gets this year....

But another mistake was made - the most serious of all. When the country school and city school were combined, the curriculum or program - including the after-school activities - became those of a city school with no allowance being made for the fact that farm children have chores to do at home and most of them go home on the bus which leaves right after school.

None of these mistakes were an inevitable result of consolidation. A country school, whether it has one room or fifty, ought to be planned with the special needs, the special problems, and the special knowledge and ability of farm children in mind.<sup>1</sup>

Huggett pinpointed one of the greatest fears of consolidation in saying that it "will bring about increased school costs with a resultant raise in taxes...."<sup>2</sup> He further stated that "the only thing

<sup>&</sup>lt;sup>1</sup> Paul Woodring, "Are Consolidated Schools Short-Changing the Country Child?" <u>Country Gentleman</u>, September, 1954, pp. 5-7.

<sup>&</sup>lt;sup>2</sup> Albert J. Huggett, <u>Practical</u> <u>School</u> <u>Administration</u>, (Champaign: The Garrad Press, 1950), p. 246.

that will lead country people to vote for consolidation is the hope that their children may be benefited enough to warrant the extra taxes."<sup>1</sup>

Hilton, also, reported certain arguments against consolidation. He stated:

Many farm people feel that the local school gives a kind of unity and identity to the community. Not all are agreed on the desirability of having children ride school buses, which may involve waiting by the road in good weather and bad. Finally, in many sparcely populated areas, school consolidation would involve transporting pupils over long distances.<sup>2</sup>

According to the Report of the National Commission on School District Reorganization, people who opposed school reorganization feared certain problems:

- 1. The length of time spent by pupils on the bus;
- 2. The effect of removing the local school;
- 3. The lack of supervision during lunch periods.
- 4. Possible failure of distant pupils to participate in the total program.<sup>3</sup>

Chase and Baker stated that the "redistricting programs often threaten the close relationship which

- <sup>1</sup> Albert J. Huggett, <u>Practical School Administration</u>, (Champaign: The Garrad Press, 1950), p. 247.
- <sup>2</sup> Hilton, (op. cit.), p. 232.
- <sup>3</sup> Dawson, Reeves, et al., (<u>op</u>. <u>cit</u>.), pp. 15-24.

the average man can have with his school, and to many rural people this appears as an exchange of known ways in small schools to the unknown in large ones."<sup>1</sup> The Department of Rural Education seemed to agree with Baker and Chase when it summed up the feelings of rural people toward reorganization:

The strong feelings of association which rural people had toward their small schools have frequently been responsible for their resistance to efforts which they believed aimed at "closing the school".<sup>2</sup>

\* \* \* \*

In summary it would seem that both the arguments for and against consolidation had their strong points. However, the arguments in favor of consolidation appeared to outweigh the arguments against it, especially as the complexity of life increased and the necessity for each individual to become qualified as a useful citizen deepened.

<sup>&</sup>lt;sup>1</sup> John E. Barker and Francis S. Chase, "Rural Education Today," <u>Education in Rural Communities</u>, Fifty-first Yearbook of the National Society for the Study of Education, Part II, (Chicago: University of Chicago Press, 1952), p. 175.

<sup>&</sup>lt;sup>2</sup> Isenberg, Robert M. (ed.), <u>The Community School and</u> <u>the Intermediate Unit</u>, Yearbook of the Department of <u>Rural Education</u>, National Education Association, (Washington: Department of Rural Education, National Education Association, 1954), p. 29.

Hilton pointed out both the advantages and disadvantages of rural schools as an overall guide to help us see the entire scope of consolidation as a solution to rural educational problems. The advantages of rural schools were:

1. The rural environment itself is richly educative through both nature and farm work.

2. Much of rural community life is simple and understandable.

3. The schools are important in rural community life.

4. Rural schools are small with less regimentation and more democracy by close association between teachers and children.

5. Rural family life generally is favorable to child development because the large rural family is the basic social unit.

6. Many rural children have desirable work experiences.<sup>1</sup>

The disadvantages of rural schools were:

1. The administrative structure of rural education is weak due to the lack of financial support.

<sup>1</sup> Hilton, (<u>op</u>. <u>cit</u>.), pp. 7-10.

2. The lack of financial support is due to a tax system that is outdated and due to the rising birth rate.

3. Many rural schools are small and have limited curriculums therefore.

4. Rural schools do not attract and hold the best teachers due to four factors:a) salary; b) working conditions; c) living conditions; d) lack of tenure protection.

5. Rural schools lack adequate supervision
because: a) teachers teach all subjects;
b) children of different ages and grades are
lumped together; c) administrators are elected
popularly.

6. In some states the education of isolated children is difficult resulting in education through correspondence courses.<sup>1</sup>

Therefore, it would seem that the best type of school for rural communities would be a type which could capitalize upon the advantages of the small rural school, while, at the same time, doing away with the disadvantages of the rural school. The type

<sup>1</sup> Hilton, (<u>op</u>. <u>cit</u>.), pp. 10-14.

 $\mathbf{27}$ 

of school which has evolved from this process has come to be known as the "community school". The community school was large enough to provide the services and facilities necessary for a good modern education, but still retained a feeling of the small school.

On the elementary level the community school was the compromise between the one-room schoolhouse and the large consolidated school.

Seay averred that:

Because I believe so strongly that America needs community schools I urge that all school consolidation be evaluated by this criterion: attendance units should be consolidated only when the enlarged district does not become a barrier to the development of community schools.<sup>1</sup>

Bartky agreed when he said that "the only apparent solution is to make the district large enough for overall administrative efficiency, and at the same time give the individual school considerable autonomy."<sup>2</sup>

<sup>1</sup> Maurice F. Seay, "Consolidation: Barrier to the Development of Community Schools," <u>Educational</u> <u>Leadership</u>, X, May, 1953, p. 486.

<sup>2</sup> John A. Bartky, <u>Administration As Educational</u> <u>Leadership</u> (Stanford: Stanford University Press, <u>1956)</u>, p. 203.

### CHAPTER III

#### DESCRIPTION OF THE SITUATION

According to Jordan the description of Pulaski County was as follows:

Situated on the banks of New River and between the Blue Ridge and Allegheny mountains in the Valley of Virginia is the County of Pulaski. From east to west, it is traversed by the Lee Highway (U. S. 11), and, from north to south by the so-called Coal-to-Cotton Highway (Virginia Route Numbered 100). Its land area is approximately 327 square miles. Its temperature ranges in January from 24°F. to 38°F.; in July from 71°F. to 85°F. Inclusive of winter snow, the County has, on the average, 40 inches of precipitation a year.

The first permanent settlers of Pulaski County were the Scotch Irish who came in 1757 in search of desirable homes. As the years went on, a number of small communities were formed, among them a tiny settlement known as Martin's Tank, a name derived from that of a prominent local family....

Ninety per cent of the people living in Pulaski County were Caucasians. Although the region in which Pulaski was found had formerly been devoted primarily to agriculture, it had, by the time of this writing, become a manufacturing center which gave employment to more people than did agriculture....

In 1953-1954, there were twenty-six school plants in Pulaski County, housing schools in which approximately 200 teachers taught some 6,600 children.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Isabel R. Jordan, "A Study of English Usage on the Part of Twelfth-Year Pupils in a Virginia High School" (Unpublished Master's Thesis, Department of Education, Virginia Polytechnic Institute, 1955), pp. 25-7.

The Snowville Elementary School was located in the Hiwasse School District of Pulaski County. The Hiwasse School District was located in the southeastern corner of the County, bordered by Montgomery, Floyd and Carroll Counties. The Snowville Elementary School served the eastern half of the Hiwasse District.

Before the consolidation this portion of the school district was served by three small elementary They were the old-fashioned rural one and schools. two-room schools so well known to this part of the The three small schools were the Snowville state. School, the Cecil's Chapel School, and the Simpkinstown School. Included in the Snowville School were grades one through seven under three teachers. The Cecil's Chapel School contained grades one through seven under two teachers while the Simpkinstown School contained grades one through five under one teacher. Each small school served a portion of the area that is now served by the consolidated elementary school.<sup>1</sup>

The old Snowville School was the largest of the three schools. It had three rooms with teachers for each. The first, second and part of the third grade

<sup>&</sup>lt;sup>1</sup> <u>Virginia Teachers' Registers</u>, 1950-1951 Edition for the Snowville, Virginia, School, the Cecil's Chapel School and the Simpkinstown School, p. 8.

were in one room. The fourth, fifth and the rest of the third grades were in the second room. In the last room were housed the sixth and seventh grades. Water was piped in from a nearby spring, however there were Heat was furnished by stoves. no restrooms. There was electrical lighting. Transportation was furnished by bus and truck for those children who came from the area formerly served by the Riverlawn Elementary School across the New River and by the Green Hill School which was closed during the previous consolida-The rest of the children walked to tion in 1939. school, except for the six and seventh graders from the other two schools who were transported by bus. The other two schools were similar to the Snowville School except that they were somewhat smaller.

The teachers before the consolidation were required to teach several levels of grades usually. Most of them lived within the community where they taught. In general, they were not graduates of a four year college. Therefore, most had very little formal education beyond high school.

\* \* \* \* \*

After the consolidation the physical plant of the Snowville School was expanded greatly. Seven

classrooms were constructed upon the recommended state plan, restrooms were included in the three primary grades, two other restrooms were set off the corridor for the other four grades, a suite of rooms, including a principal's office, an anteroom, and a clinic were added on one end. The following year a cafeteria plus a multipurpose room was added to the original plant. This room was to be used alternately as a cafeteria daily, an indoor gym and an auditorium when needed. A school store was set up to provide school supplies for the children since there were no facilities nearby. In later years a small library was set up in a storage room which had previously housed the audio-visual equipment. The school was located upon approximately 5 acres of shaded grassland. A permanent baseball backstop and field were leveled. The other facilities included a football field without goal posts, a volleyball area, a clay basketball court with two goal posts and various other grassy play areas for the younger children. An outside water fountain plus a sidewalk the entire length of the front of the school where the children could safely load and unload the school busses made up the main part of the remaining outside facilities.

Heat was provided by a central furnace with radiators in each room. Water came from a large pump and a large septic tank took care of the wastes.

A part-time custodian was furnished to look after the facility. Two ladies operated the cafeteria providing hot lunches daily under the auspices of the National Hot Lunch Program of which the school was a member, receiving aid to provide free and low cost meals to school children. Three busses and three drivers furnished the transportation necessary to carry children to and from school.

Seven teachers were provided, one for each grade level, to educate the student body of approximately 200 children. The seventh grade teacher also served as the principal of the school. A part-time secretary assisted the principal in his administrative duties. Four of the teachers had Collegiate Professional Certificates and three had Collegiate Normal Certificates.

Textbooks were provided through a County Book Rental System whereby students could rent books at a reasonable fee for the year. Free books were provided for needy children. Room supplies were provided as a part of the book rental system.

As an extra service piano lessons by a privately paid teacher were offered on school time. Band lessons

by the high school band teacher were offered to interested students. A choral group of students was developed by one of the full time elementary school teachers under the guidance of a county supervisor. The Four-H Club was organized and monthly meetings were held by county representatives. A Parent-Teachers Organization was developed. Immediately the group set about helping the school in raising funds for needed equipment such as a freezer for the cafeteria, a piano for the auditorium and stage curtains for the auditorium. Lastly, a baseball team for the school was formed to provide an extracurricular athletic activity for the students and games within a small elementary school league were organized. During the summer vacation the recreational facilities were used by the community as a playground for adults and children alike.

Thus the reorganized rural school served many purposes. In addition to the educational facility it served as a recreational center both during the school year and during school vacation.

However, not everything was gained by consolidation. There were some losses. The larger size of the school prevented the close association the students felt in the small schools. Some of the teachers in the larger

school did not live in the community and, therefore, were not a part of the total community life. A longer time was required to travel to and from school, resulting in more student fatigue. These and other losses had to be balanced against the good features of consolidation. The following chapters were written in an attempt to balance the negative versus the positive factors involved in consolidating a small rural elementary school.

#### CHAPTER IV

#### PRESENTATION OF THE DATA

In a preceding chapter a general statement of the procedure for the study was given. This chapter will describe the way in which the study was carried out. First, the records of the Snowville, Virginia, Elementary School, the Dublin, Virginia, High School and the Pulaski County, Virginia, School Board were surveyed to determine what data were available for the The survey revealed that records were complete study. only as far back as the date of consolidation, the school term of 1953-1954. The testing which was done previously was not part of a complete testing program, Therefore, the statistical neither state or local. analysis of the academic achievement was not considered by the writer to be particularly valid in light of the lack of complete records and a consistent testing program.<sup>1</sup>

For the study a group of fifteen children was selected by a process of elimination, due to the fact

<sup>&</sup>lt;sup>1</sup> This situation was improved when the state testing program went into effect in 1953-1954.

that the testing program was not consistent. Out of a group of thirty-three students in the three small rural schools before the consolidation only fifteen were found to have been tested in both the fourth and seventh grades. Since there was little testing before 1953-1954 only one class was found to have been tested under the two situations, before and after consolidation.

The selected group of students was found to have been tested in the fourth grade with the <u>Metropolitan</u> <u>Achievement Test</u>, Elementary Battery, Form T. In the <u>seventh grade the same students were administered the</u> <u>Iowa Silent Reading Test</u> and the <u>California Test of</u> <u>Mental Maturity</u>. Since no tests had been given either before or after the fourth grade test, until the seventh, it was impossible to determine progress for a year in achievement. Therefore, the comparison of achievement was, necessarily, based upon the difference between the students' scores and the norms, both before and after consolidation.

Before turning to the results of the various tests, it was necessary to describe the tests used as instruments of measurement in reading achievement. <u>The Metropolitan Achievement Test</u> was a comprehensive series of achievement tests, covering the subjects

taught in all grades from one through eight. According to the <u>World Book Catalogue</u> for 1957 the <u>Metropolitan Achievement Tests</u> were given to more than 500,000 pupils in every state in the country for the purpose of establishing norms. The Elementary Battery, which was administered to the students under study, contained tests in reading, vocabulary, arithmetic fundamentals and problems, language usage, and spelling. As the only other test, given to these same students, was the <u>Iowa Silent Reading Test</u>, the only results used for comparison were the reading and vocabulary sections.

The <u>Iowa Silent Reading Test</u> was administered as part of the state testing program in the seventh grade. According to the Third Mental Measurements Yearbook:

A conscientious effort had been made to measure the skills in reading considered most important, and the reviewer is inclined to believe that the total score is as valid a measure of the workstudy type of reading ability as most reading tests are.<sup>1</sup>

The authors of the test described it as follows:

The Iowa Silent Reading Test is designed to provide the teacher with a rather exact estimate of the level of development of a number of important elements of silent reading

<sup>&</sup>lt;sup>1</sup> Oscar K. Buros, Editor, <u>Third Mental Measurements</u> <u>Yearbook</u>, (New Brunswick: Rutgers University Press, <u>1949</u>), p. 489.

abilities in the class, as well as with specific information in certain important skill areas concerning the limitations of individuals comprising the class. By comparing the results obtained from a class with the norms, a clear idea of the general ability of the class in silent reading of the work-study type can be obtained. By analyzing the scores made by individual pupils on various parts of the tests, certain specific weaknesses or strengths of individual members may be discovered.<sup>1</sup>

Norms for the entire country were set up by the authors of both tests used as instruments of measurement in this study. As previously stated, the lack of a consistent testing program required that the tests be compared to the norms rather than in terms of progress. Therefore, in order to compare the achievement of these same students, both in the fourth and seventh grades, it was deemed advisable to compare the differences between the scores and the norms, both before and after consolidation.

In turning to the area of achievement, first, a comparison of achievement in the fourth and seventh grades was made. Tables I and II showed the differences between the norms and the students for the two respective test results. Table III showed the progress made from 4.2 grades to 7.8 grades in the area of reading.

1 H. A. Green and V. H. Kelley, <u>Iowa Silent Reading</u> <u>Test</u>, (New York: World Book Company, 1943), p. 2. When the data had been organized, as shown by tables, a mean was computed to show the progress of the students in 3.6 years. In 3.6 years the mean progress was 2.7 years. Of this 3.6 years only .8 years was under the consolidated school situation, while 2.6 years was under the unconsolidated situation. The mean progress of 2.7 was tested against a true mean of 3.6 in order to determine the Standard Error of the Mean. The Standard Error of the Mean was computed as .5 according to Garrett:<sup>1</sup>

$$SE_{om} = \frac{O}{\sqrt{N}}$$

After the Standard Error of the Mean had been computed, "t" was computed and was tested for significance by using a table given by Garrett,<sup>2</sup> entitled "Table of t":

$$t = \frac{M - tm}{SE}$$

In doing so, the table was entered in the column headed "Degrees of Freedom (N-1)", by substituting

<sup>1</sup> Henry E. Garrett, <u>Statistics in Education and</u> <u>Psychology (New York: Longman's, Green and</u> <u>Company, 1951)</u>, p. 184.

<sup>2</sup> <u>Ibid.</u>, pp. 190, 114, 467.

the size of the sample for N. Thus, it was found that a result of 1.8, rounded off to tenths, was significant at the .10 level. Therefore, the progress of the students from the fourth to seventh grades, which was mostly before the consolidation, was somewhat significant.

\* \*

## TABLE I

## A DISTRIBUTION OF SCORES OF FOURTH GRADE PUPILS FROM THREE SMALL RURAL ELEMENTARY SCHOOLS, COMPARING READING ACHIEVEMENT TO THE NORM IN TERMS OF GRADE LEVEL; BASED UPON ONE ADMINISTRATION OF THE READING SECTION OF THE METROPOLITAN ACHIEVEMENT TEST, ELEMENTARY BATTERY, FORM T<sup>1</sup>

Student	Norm	Metropolitan Achievement Test	Difference
1	4.2	4.1	-0.1
2	4.2	3.6	-0.6
3	4.2	3.5	-0.7
4	4.2	4.6	0.4
5	4.2	6.3	2.1
6	4.2	6.2	2.0
7	4.2	3.5	-0.7
8	4.2	3.8	-0.4
9	4.2	6.6	2.4
10	4.2	6.0	1.8
11	4.2	4.8	0.6
12	4.2	4.0	-0.2
13	4.2	3.6	-0.6
14	4.2	3.9	-0.3
15	4.2	3.4	-0.8

<sup>1</sup> <u>Metropolitan Achievement Test Results for</u> <u>Pulaski County Schools, 1950-1951.</u>

## TABLE II

## A DISTRIBUTION OF SCORES COMPARING THE READING ACHIEVEMENT OF SEVENTH GRADE PUPILS FROM THE SNOWVILLE, VIRGINIA, ELEMENTARY SCHOOL TO THE NORM IN TERMS OF GRADE LEVEL; BASED UPON THE IOWA SILENT READING TEST<sup>1</sup>

Student	Norm	lowa Silent Reading Test	Difference
1	7.8	6.2	-1.6
2	7.8	5.5	-2.3
3	7.8	4.5	-3.3
4	7.8	6.4	-1.4
5	7.8	7.7	-0.1
6	7.8	9.6	1.8
7	7.8	4.7	-3.1
8	7.8	7.5	-0.3
9	7.8	14.8	7.0
10	7.8	10.0	2.2
11	7.8	7.2	-0.6
12	7.8	8.0	0.2
13	7.8	5.4	-2.4
14	7.8	5.6	-2.2
15	7.8	5.7	-2.1

<sup>1</sup> Virginia Teacher's Register, 1953 Edition, Snowville Elementary School, Snowville, Virginia.

## TABLE III

A DISTRIBUTION OF SCORES SHOWING THE PROGRESS MADE BY STUDENTS OF THE SNOWVILLE, VIRGINIA, ELEMENTARY SCHOOL WITHIN A PERIOD OF 3.6 YEARS; BASED UPON ONE ADMINISTRATION OF THE READING SECTION OF THE METROPOLITAN ACHIEVEMENT TEST AND ONE ADMINISTRATION OF THE IOWA SILENT READING TEST

Student	Metropolitan Achievement Test (1950-1951) <sup>1</sup>	Iowa Silent Reading Test (1953-1954) <sup>2</sup>	Progress (3.6 Years)
1	4.1	6.2	2.1
2	3.6	5.5	1.9
3	3.5	4.5	1.0
4	4.6	6.4	1.8
5	6.3	7.7	1.4
6	6.2	9.6	3.4
7	3.5	4.7	1.2
8	3.8	7.5	3.7
9	6.6	14.8	8.2
10	6.0	10.0	4.0
11	4.8	7.2	2.4
12	4.0	8.0	4.0
13	3.6	5.4	1.8
14	3.9	5.6	1.7
15	3.4	5.7	2.3
Mean		8 - 9 - 9 - 9 - 9 - 9 - 9 - 9 - 9 - 9 -	2.7

<sup>1</sup> Test Results for Pulaski County Schools, 1950-1951.
 <sup>2</sup> Test Results for Pulaski County Schools, 1953-1954.

In order to compare the achievement after consolidation Table IV was designed. Test results from two administrations of the <u>Iowa Silent Reading</u> <u>Test</u>, separated by a year, were organized to show the progress of the students for a period of one year after consolidation.

When the data had been organized a mean of the column headed "Progress" was computed. It was found to be 2.0, rounded off to tenths. Because of the small size of the sample, the mean was tested for Standard Error by the means previously stated, against a true mean of 1.0. The Standard Error of the Mean was computed to be .4. The "t" was computed and, then, tested for significance using the "Table of t". Thus, the result of "t" at 2.5 was found to be significant at the .05 level.

\*

ĸ

TABLE	IV
-------	----

A COMPARIS	ON OF SCORES	FROM TWO	ADMINISTI	RATIONS OF
THE IOWA S	ILENT READING	TEST SHO	DWING THE	PROGRESS
IN TERMS OF	F GRADE LEVEL	MADE IN	READING V	VITHIN ONE
		YEAR		

Student	Iowa Silent Reading Test (1953-1954) <sup>1</sup>	lowa Silent Reading Test (1954–1955) <sup>2</sup>	Progress
1	6.2	6.5	0.3
2	5.5	6.1	0.6
3	4.5	6.7	2.2
4	6.4	9.0	2.6
5	7.7	10.8	3.1
6	9.6	13.1	3.5
7	4.7	5.1	0.4
8	7.5	8.5	1.0
9	14.8	16.3	1.5
10	10.0	14.8	4.8
11	7.2	11.9	4.7
12	8.0	8.2	0.2
13	5.4	5.7	0.3
14	5.6	8.7	3.1
15	5.7	7.9	2.2
lean			2.0

<sup>1</sup> <u>Iowa Silent Reading Test Results for the school term</u> of 1953-1954, Pulaski County, Virginia.

<sup>2</sup> <u>Iowa Silent Reading Test</u> Results for the school term of 1954-1955, Pulaski County, Virginia.

The second area under study was the area of attendance. Data were gathered and organized, as shown by Tables V, VI and VII.

After the data were organized, a mean was computed for the difference in attendance, according to Table VII. The mean was computed to be 8.1 days better attendance. This mean was tested against a true mean of zero to determine the Standard Error of the Mean by means of the method previously mentioned. The Standard Error of the Mean was determined to be 4.628. In turn, "t" was computed and tested for significance by using Garrett's table.<sup>1</sup> The "t" of 1.8 was found to be significant at the .10 level, showing that the improvement of the attendance from 90.6% to 95.3% was slightly significant.

\* \* \* \*

<sup>1</sup> Garrett, (<u>op. cit</u>.), pp. 190, 114, 467.

# TABLE V

PERCENTAGE C	OF ATTENDANCE	FOR FOURTH GRAI	DE PUPILS OF
THE SNOWVII	LLE, VIRGINIA,	ELEMENTARY SCI	HOOL BEFORE
CONSOLIDATI	ION; BASED UPC	ON THE VIRGINIA	TEACHER'S
REGISTER	R FOR THE SCHO	OOL YEAR OF 1950	0-1951
101010111	i i on i mi bone		-1001

Student	Days Membership	Days Attendance	<b>P</b> er cent of Attendance
1	161	151	93.7
2	180	131	72.7
3	180	180	100.0
4	180	180	100.0
5	180	180	100.0
6	180	162	90.0
7	180	166	92.2
8	180	150	83.3
9	180	167	92.7
10	180	178	98.8
11	180	131	72.7
12	180	165	91.6
13	180	163	90.5
14	180	148	82.2
15	170	169	99.4
Total	2671	2421	1359.8

## TABLE VI

## PERCENTAGE OF ATTENDANCE OF SEVENTH GRADE PUPILS OF THE SNOWVILLE, VIRGINIA, ELEMENTARY SCHOOL AFTER CONSOLIDATION; BASED UPON THE VIRGINIA TEACHER'S REGISTER FOR THE SCHOOL YEAR OF 1953-1954

Student	Days Membership	Days Attendance	Per Cent of Attendance
1	180	171	95.0
2	180	172	95.5
3	180	177	98.3
4	180	178.5	99.1
5	180	180	100.0
6	180	174	96.6
7	180	147	81.6
8	180	179	99.4
9	180	179.5	99.7
10	180	179.5	99.7
11	180	168.5	93.6
12	180	161	89.4
13	180	170	94.4
14	180	158	87.7
15	180	180	100.0
Total	2700.0	2575.0	1430.0

## TABLE VII

## A COMPARISON OF DAYS ATTENDANCE OF A SELECTED GROUP OF STUDENTS BEFORE AND AFTER CONSOLIDATION; BASED UPON THE VIRGINIA TEACHER'S REGISTERS FOR THE SCHOOL YEARS OF (1950-1951) AND (1953-1954), SNOWVILLE, VIRGINIA, ELEMENTARY SCHOOL

Student	Days Attendance (1950–1951)	Days Attendance (1953-1954)	Difference
1	169*	171.0	-2.0
2	131	172.0	41.0
3	180	177.0	-3.0
4	180	178.5	-1.5
5	180	180.0	0.0
6	162	174.0	12.0
7	166	147.0	-19.0
8	150	179.0	29.0
9	167	179.5	12.5
10	178	179.5	1.5
11	131	168.5	37.5
12	165	161.0	-4.0
13	163	170.0	7.0
14	148	158.0	10.0
15	179*	180.0	1.0

Weighted Days Attendance based upon Days Membership of 180 days. The third area of the study was the effect of the consolidated elementary school upon the community. In order to study this area a questionnaire was framed to elicit opinions from the parents of the children under study. No statistical analysis was made concerning the opinions voiced, but the results of the questionnaire were presented subjectively for the purpose of observing the opinion of these parents concerning the effect of the elementary school upon their community.

First, a questionnaire was framed and submitted to a jury of educators.<sup>1</sup> The jury members were asked to criticize it in terms of its probable utility as an instrument for gathering information concerning the opinion of parents as to the effect of the consolidated elementary school upon their community.

After the questionnaire had been refined in the light of criticisms offered by the jury, it was sent to the parents of the students under study. A copy of this instrument appears in this writing as Appendix "A".

The next step was to tabulate the results obtained from the questionnaire. Approximately 60% of the

<sup>&</sup>lt;sup>1</sup> Thomas R. Trahin, Associate Professor of Education, Radford College, Radford, Virginia, and Blanche W. Daniel, Director of McGuffey Training School and Assistant Professor of Education, Radford College, Radford, Virginia.

questionnaires were returned with responses to all twelve items included within the instrument.

In general, the responses tended to indicate that the parents who responded were pleased with the overall effects of the consolidation of their elementary schools. The majority of these parents said that the thing which pleased them beyond other things was the improvement of physical facilities, such as the cafeteria, the water system and separate classrooms for each grade level. The other area, mentioned by a large number of respondents as a bestliked feature, was the improvement of the curriculum and teaching. The third reason, given by some of these parents, was that in the larger consolidated school there was more opportunity for their children to associate with children from all over the school district.

The best-liked single facility or service was the hot lunch program offered by the consolidated elementary school.

The questionnaire revealed little criticism of the school by these parents. Only one critical response was made on the returns of the questionnaire. One parent said that the new school was farther from his home than the small rural school had been. Later,

this same parent felt that it was easier for his children to attend school since the consolidation, due, in part, perhaps, to the bus transportation system.

In terms of preparation for high school, all of the responses indicated that these parents felt that consolidated school was doing a better job than the small rural schools had done. Also, all of the respondents said that they believed it was easier for them to attend school programs at the new school. Likewise, all of these parents stated that they thought school programs had been more interesting since the consolidated school had been built.

Finally, all of the parents who responded stated that it was easier for their children to attend school now than it had been previously before consolidation.

All in all, the responses to the questionnaire would seem to indicate that the parents of the consolidated elementary school were highly pleased with their new school.

### CHAPTER V

### SUMMARY, INTERPRETATIONS, AND RECOMMENDATIONS

In order to conclude this study the following summary was deemed appropriate:

The data revealed, first of all, that there was significant change in the area of achievement. A comparison of the two administrations of reading tests would show a small improvement in the means computed. In addition, when tested for significance, the results from both tests showed significance at the .10 level. The mean, computed from the first test was significant, at the .10 level of confidence. The second mean computed from the <u>lowa Silent Reading Test</u>, was significant at the .05 level of confidence.

Thus, it appeared that, in this case, consolidation had brought some improvement in the area of reading achievement.

Secondly, in the area of pupil attendance, the comparison of attendance, before and after consolidation, showed a mean improvement of approximately 4.7%. When the improvement of attendance was tested for significance a level of confidence of .10 resulted.

Therefore, it would appear, from the findings, that there was a slight improvement in school attendance. This may, perhaps, have been the result of the transportation system, which implemented the consolidation of the elementary schools.

Finally, concerning the opinions of parents about their consolidated school, the questionnaire produced information which could lead one to believe, based upon the responses of these parents, that they were highly pleased with the work of their new school.

In retrospect, then, it would appear that consolidation of small rural schools of the type described in this study could result in improvement of attendance. Also this study found that in the area of reading achievement there was a higher level of significance than before consolidation. However, this study was limited in its scope to reading achievement and pupil attendance. There well may have been significant improvement in other areas of achievement as a result of consolidation, as well as improvement in other areas not studied in this report.

Therefore, it might be deemed appropriate for further study of elementary consolidation in terms of these other areas. For example, each subject area

might be studied to see what improvement in achievement would result from consolidation. Many other studies of this nature would have been necessary in order to give a broader picture of the effect of consolidation upon a community.

### VI. BIBLIOGRAPHY

#### Books:

Bartky, John A. Administration As Educational Leadership. Stanford: Stanford University Press, 1956.

Barker, John E. and Chase, Francis S. Education in <u>Rural Communities</u>. Fifty-first Yearbook of the National Society for the Study of Education, Part II. Chicago: University of Chicago Press, 1952.

Buros, Oscar K. (ed.). Third Mental Measurements Yearbook. New Brunswick: Rutgers University Press, 1949.

Cook, Lloyd A. Encyclopedia of Educational Research. University of Illinois: The Macmillan Co., 1941.

The Council of State Governments. The Forty-Eight State School Systems. Chicago: The Council of State Governments, 1949.

Dawson, Howard A., Reeves, Floyd W., et al. Your <u>School District</u>, The Report of the National <u>Commission on School District Reorganization</u>. **Washington:** Department of Rural Education, National Education Association, 1948.

Garrett, Henry S. <u>Statistics in Psychology and</u> Education. New York: Longman's, Green and Co., 1951.

Good, Carter D. (ed.). Dictionary of Education. New York: McGraw-Hill Book Co., Inc., 1945.

Hilton, Ernest. Rural School Management. New York: American Book Co., 1949.

Huggett, Albert J. <u>Practical</u> <u>School</u> <u>Administration</u>. Champaign: The Garrad Press, <u>1952</u>.

Hunt, Harold C. and Pierce, Paul R. <u>The Practice</u> of <u>School Administration</u>. Boston: Houghton Mifflin Co., 1958. Isenberg, Robert M. (ed.). The Community School and the Intermediate Unit. Yearbook of the Department of Rural Education, National Education Association. Washington: National Education Association, 1954.

Reeder, Ward G. The Fundamentals of Public School Administration. New York: The Macmillan Co., 1951.

Rural Education Department, Rural Education - A Forward Look, Yearbook of the Department of Rural Education, National Education Association. Washington: Department of Rural Education, 1955.

Seay, Maurice F. <u>American Education in the Postwar</u> <u>Period; Curriculum Reconstruction, Forty-fourth</u> Yearbook, Part I, National Society for the Study of Education. Chicago: University of Chicago Press, 1945.

### Bulletins:

Fitzwater, C. O. <u>Educational Change in Reorganized</u> <u>School Districts</u>, U. S. Department of Health, <u>Education and Welfare Bulletin</u>, No. 4. Washington: U. S. Government **P**rinting Office, 1953.

### Magazine Articles:

Seay, Maurice F. "Consolidation: Barrier to the Development of Community Schools", <u>Educational</u> Leadership, X, May, 1953.

Woodring, Paul. "Are Consolidated Schools Short-Changing the Country Child?", <u>Country Gentleman</u>, September, 1954.

### Reports (unpublished):

Virginia Teachers' Register, Snowville, Virginia, Elementary School, Pulaski County, Virginia, Grade Four, 1950-1951.

Virginia Teachers' Register, Simpkinstown, Virginia, School, Pulaski County, Virginia, Grade Four, 1950-1951. Virginia Teachers' Register, Cecil's Chapel, Virginia, School, Pulaski County, Virginia, Grade Four, 1950-1951.

Virginia Teachers' Register, Snowville, Virginia, Elementary School, Pulaski County, Virginia, Grade Seven, 1953-1954.

### Tests:

Greene, H. A. and Kelley. <u>Iowa Silent Reading</u> <u>Test.</u> Yonkers-on-Hudson, New York: World Book <u>Co.</u>, 1943.

Hildreth, Gertrude H. et al. <u>Metropolitan</u> <u>Achievement Test</u>. Yonkers-on-Hudson, New York: <u>World Book Co.</u>, 1947.

### Records:

Pulaski County Test Results for the school year of 1950-1951.

Pulaski County Test Results for the school year of 1953-1954.

Pulaski County Test Results for the school year of 1954-1955.

### VII. ACKNOWLEDGEMENTS

The writer wishes to express his appreciation to the following who have contributed valuable encouragement and assistance in the publication of this thesis. In particular, he expresses appreciation to his advisor for help, patience and guidance:

Thomas R. Trahin, Associate Professor of Education of Radford College;

Also, to:

Robert N. Pendergrass, Professor of Mathematics of Radford College;

Minor Wine Thomas, Professor of Psychology of Radford College;

Blanche W. Daniel, Assistant Professor of Education of Radford College;

Frank J. Critzer, Superintendent of Schools, Pulaski County;

Eva I. Vaughan and Clara E. Scott, Supervisors, Pulaski County;

In addition, to the members of the Graduate Committee for their suggestions in editing the first draft of this manuscript.

Also, to all those, both family and friends, who through encouragement and advice, contributed to the completion of this study.

Finally, to my wife and son, who gave me the endurance to carry out this work.

# VIII. APPENDIX

## APPENDIX "A"

June 17, 1960

Dear Parent,

As you know for two years I was the principal and seventh grade teacher of the Snowville Elementary School. During that time I began working on a research paper in connection with my work toward a graduate degree at V. P. I. I am now completing that research and need your help in answering the following questionnaire.

All replies will be kept in the strictest confidence and nothing you answer will be revealed as no names will be used in my paper.

Enclosed is a stamped, self-addressed envelope. Please mail the questionnaire to me as soon as possible.

Thank you for your help.

Sincerely yours,

/S/ JOHN A. RUTHERFORD
/t/ John A. Rutherford

### QUESTIONNAIRE

I. Do you feel that having a consolidated elementary school, such as Snowville School, has helped your children? Yes No

II. If yes, why?

III. If no, why?

IV. Check the activities in which your children have taken part before and after consolidation:

 A. Before Consolidation
 B. After Consolidation

 1. Four "H"
 1.

 2. Baseball Team
 2.

 3. Hot Lunch
 3.

 4. Choral Club
 4.

 5. Band
 5.

V. What do you like least about having the one big school rather than three small ones?

VI. What do you like least about having the one big school rather than three small ones?

VII. Under which type of school do you feel that your child is best prepared for high school? A. Small rural school

B. Consolidated elementary school

VIII. Does the consolidated elementary school give you a better chance to have your children take part in activities with children from all over the school district?

Yes No

IX. Does the consolidated elementary school give the parents a better chance to work together as one community?

Yes No

X. Is it easier or more difficult for you to attend school programs in the new school? Yes No XI. Are school programs more interesting or less interesting since consolidation? Yes No

XII. Is it easier or more difficult for your child to attend school since consolidation? Yes No

The two page vita has been removed from the scanned document. Page 1 of 2 The two page vita has been removed from the scanned document. Page 2 of 2

## ABSTRACT

The purpose of this study was to observe the manner in which a certain small rural elementary school was affected by being consolidated with several other small rural schools to form a consolidated unit for a given school district.

This study was focused upon three areas. First, the study had particular regard for the comparison of reading achievement for a certain group of students both before and after consolidation. Secondly, there was a comparison of the attendance of the students before and after consolidation. Lastly, the opinion of the parents of these students was surveyed to determine their feelings regarding the consolidation.

The study revealed the following:

The data showed, first of all, that there was significant change in the area of reading achievement. Thus, it appeared that consolidation had brought some improvement in the area of reading achievement.

In the second area of pupil attendance a slight improvement was noted. This may have been, perhaps, the result of the transportation system which implemented the consolidation. Thirdly, concerning the opinions of parents in relation to their consolidated school, the survey produced information which indicated that the parents of the school were happy with the consolidation.