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ABSTRACT

This study attempts to assess the effects of high school consolidation on the achievement, aspirations, and adjustment of students by following one cohort through a newly-consolidated school in a southern Appalachian county beginning in 1968. The study compares the consolidated students with students in a nearby nonconsolidated school during the first three years following consolidation. Questionnaires, interviews and school records provide information on within-school variations in the consolidated school over four years. The findings suggest that few, if any, major differences exist between the two schools on the achievement, aspirations, and adjustment measures available. Moreover, the results suggest that initial inequalities existing within the consolidated school typically remained by the end of the 12th grade. No group became more "advantaged" across the board on the success indicators, but lower status, lower IQ, lower modernism females in the consolidated high school did show increasingly poorer adjustment patterns, while lower status, lower IQ, lower modernism males showed improvement on some adjustment indicators. (Author)

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CONSOLIDATION: THE IMPACT OF A NEW HIGH SCHOOL ON THE ACHIEVEMENT, ASPIRATIONS, AND ADJUSTMENT OF STUDENTS IN AN APPALACHIAN COUNTY

October, 1973

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U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

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ABSTRACT

This study attempts to assess the effects of high school consolidation on the achievement, aspirations, and adjustment of students by following one cohort through a newly-consolidated school in a Southern Appalachian county, beginning in 1968. For the first three years the consolidated students are compared with students in a nearby nonconsolidated school. Within-school variations in achievement, aspirations, and adjustment were studied in the consolidated school over four years. Questionnaires administered in 1968, 1971 and 1972 were supplemented with interviews and school records data.

The findings suggest that few if any major differences exist between the two schools on the achievement, aspirations, and adjustment measures available. Moreover, the results suggest that initial inequalities existing within the consolidated school typically remained by the end of the 12th grade.

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Were it not for my wife, Jane Ellen, who attended one of the preconsolidation schools, the project would not have been undertaken. Thanks are due her for continuing encouragement and insights.

Sincere appreciation is also due the students, county leaders, and the school officials in the two schools studied.

CONTENTS

LIST OF TABLES

CHAPTER I

CONSOLIDATION: A STUDY OF THE IMPACT OF A NEW HIGH SCHOOL ON THE ACHIEVEMENT, ASPIRATIONS, AND ADJUSTMENT OF STUDENTS IN AN APPALACHIAN COUNTY

Problem Statement and Background

The focus of this research is on the effects of high school consolidation on the achievement levels, aspirations, and adjustment of students in a Southern Appalachian county. Although it is a case study, limited in design and sample size, the study holds potential significance for the fields of educational planning, school district organization, and developmental change. It is an attempt to determine the extent to which a large, new, well-equipped, complex and variegated educational system can have impact on students in a rural setting, beyond what might be expected from a smaller neighborhood school. Moreover, it is an attempt to determine the extent to which such a school brings about equality of total school success (academic and nonacademic) among students of varying abilities, status backgrounds, and outlooks.

The study is of particular importance for those interested in bringing about constructive social change through the medium of education, a strategy frequently advocated for developing areas. One often hears that change in attitudes (including receptivity to change itself) can be accomplished most effectively with the young, and that with this group the most effective influence is exerted outside the family context. The school thus becomes the logical place to promote change, by inspiring upcoming generations to join modernity, by raising the aspirations of youth, by encouraging them to apply themselves with industry so that eventually they can become fully functioning participants in American and world society. Partly as a consequence of such reasoning we find huge efforts concentrated on school improvement in many places, the logic being that if we improve our schools we will improve our children.[1]

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[1]Inside the front cover of the January 18, 1969, Saturday Review a picture of a pitiful, tow-headed (presumably Appalachian) waif is accompanied by a text which says, among other things, that "Good schools with good teachers and good facilities build good citizens." Around the same time, the College Press Service released a story titled "Education is Answer to Appalachian Poverty," which reports that a conference of the National Education Association on equality of educational opportunity for children

Many educators and citizens regard school consolidation one of the most effective means of modernizing educational systems.[2] Indeed, studies of school consolidation do show that through this pooling of resources the curriculum becomes richer, the faculty more efficiently used, transportation services improved, the physical plant made more attractive, audio-visual and science equipment updated: in short, more efficient use of better facilities is achieved through bureaucratic living.[3] The Encyclopedia of Educational Research, reporting on the results of school district reorganization, states that:

> The quality and scope of the educational program improves with school district reorganization. A survey in Michigan of one hundred school districts formed through reorganization since 1940 showed such improvements as lower pupil-teacher ratios, increased holding power, more use of outside consultants in program planning and evaluation, more and better pupil transportation service . . . introduction of speech correction services, the accreditation of high schools that had not formerly met accreditation standards, and the addition of courses to the high school curriculum.[4]

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of Appalachia was told by the chairman of the President's Commission on Rural Poverty that "unless a demand for quality education is created, Appalachian children of today may become second class citizens in the complex world of tomorrow." (The Kentucky Kernel, January 17, 1969.) Also see, The People Left Behind, a report by the President's Commission on Rural Poverty, Washington: GPO, 1967, Chapter 5.

[2] For example, see J. G. Schultz, "Fewer, Bigger, Better," National Education Association Journal, 48 (November, 1959), 10-3, and T. G. O'Keefe, "Increasing Efficiency Through School Consolidation," Ohio Schools, 35 (December, 1957), 12-3. Perhaps the greatest encouragement for consolidation came from James B. Conant in his The American High School Today, New York: McGraw-Hill, 1959.

[3] In addition to Schultz and O'Keefe, see C. J. Martin, "Consolidation in Southern Mountain County," School Executive, 79 (December, 1959), 32-3; G. L. Bunnell, "Fruits of Consolidation," Ohio Schools, 37 (November, 1959), 16-7; B. W. Kreitlow, "Reorganization Makes a Difference," National Education Association Journal, 50 (March, 1961), 55; Norman A. Deeb, "A Procedure for Determining the Changes in the Instructional Program Resulting from Consolidation," unpublished doctoral dissertation, University of Kentucky, 1965.

The virtues of avoiding wasteful duplication, of planning, and of rational organization are self-evident. From the results of most of the studies of which this investigator is aware, it appears that education, like any business, can be improved by making it bigger, better, and more efficient. But questions may be raised on this point. Businesses can agree on relatively concrete and obvious indices by which to measure improvement in quality: productivity and profit are two such indicators frequently used. How does one measure "quality education"? In education, unlike business, it appears that we concentrate on studying the means of production rather than the product itself in determining whether a given change has had the desired results. The school is the object of study, not the student, in a large number of cases. An illustrative case is Faber's measure of school district quality, which utilizes:

> intermediate criteria, which do not provide measurements of actual educational achievement but provide measurement of conditions which, through experience and research, have come to be associated with a high degree of educational achievement.[5]

Perhaps because of the journalistic nature of the article, Faber cites no experience or research which shows a relationship between achievement (or any other student-related attribute) and any of the fifteen measures which he says "have some inferential relationship to school district quality."[6]

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[4] Shirley Cooper, Howard A. Dawson, and Robert M. Isenberg, "School District Reorganization," Encyclopedia of Educational Research, New York: Macmillan, 1960, 1197.

[5] Charles F. Faber, "Measuring School District Quality," American School Board Journal, 149 (October, 1964), 11.

[6] Ibid. My underline. The fifteen measures were related to the three factors of curriculum breadth, teacher qualification, and the district's financial resources.

Thus, it is assumed that school consolidation will prepare students more adequately for participation in urban, industrial American society. But are students better adapted to the social and economic structures of society as a consequence of pulling small schools together into big ones? In the Appalachian region specifically, does the consolidated school bridge the gap between traditional mountain society and the larger society any better than did the old, non-consolidated schools? Do students aspire higher and perform better? Do they adjust easily to the more bureaucratized system of education? The answers are anything but clear.

On the one hand it would appear that consolidation leading to education in an environment where there are superior facilities would lead, ipso facto, to superior performance. The evidence bearing directly on this question, however, is limited and inconsistent.[7] Kreitlow's controlled longitudinal study of reorganized and non-reorganized Wisconsin school districts is one of the best of the few which can be cited. The final report of his long-term study, which began in 1949 and was based on comparisons of five reorganized with five non-reorganized school districts, offers the following conclusions:

> "(1) Reorganized school districts provided more learning opportunities, the students had consistently higher achievement scores, and they completed high school with a 6- and a 13-month advantage in mental maturity for boys and girls respectively; (2) the reorganized school district leads to a higher matriculation in college after high school; (3) boys from nonreorganized districts scored higher on measures of social adjustment than those in reorganized districts. . . ."[8]

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[7]The studies discussed below are usually relevant only to the question of educational achievement. The investigator has been unable to uncover any research evidence bearing on the matter of the effects of consolidation on educational and occupational aspirations and only one (Kreitlow) on the matter of adjustment of students to consolidation. The need for such research appears to this writer to be demonstrated by its absence in the literature.

[8]Burton N. Kreitlow, "Long-term Study of Educational Effectiveness of Newly Formed Centralized School Districts in Rural Areas." ERIC No. ED 049 884, pub. date, April, 1971, abstract.

The implication is that students perform better, increase their aspirations for education, but, at least in the case of males, suffer in adjustment as a part of the personal cost. But Kreitlow is careful to say in his report that what appear to be advantages of reorganization may in fact be attributable to other factors, "hidden variables, such as parents' socioeconomic status, level of education (neither of which were controlled in his study--JBS), . . . innovations in the curriculum, and a general upturn in the values society places on education."[9] He concludes that "the results of this study strongly suggest that significant differences found in favor of a reorganized sample should not be attributed to reorganization alone."[10]

In short, one of the key studies supporting the conclusion that district consolidation leads to improved student outcomes is hedged with rather important qualifications.

A study of consolidation in New Zealand by Parkyn showed little difference in achievement among elementary students in consolidated and nonconsolidated schools, but he recommends consolidation for children at intermediate and secondary levels.[11]

Barker and Gump raise some serious questions about the consequences of school size for active, responsible, widespread participation by students in a large number of out-of-class behavior settings. In their opinion, the large school sacrifices "versatility of experience" for "opportunity for specialization."[12] Campbell, in an

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[9] Ibid., p. 40.

[10] Ibid., p. 41.

[11] G. W. Parkyn, The Consolidation of Rural Schools, Christchurch, New Zealand: Whitcomb and Tombs, Ltd., 1952. The problem of the comparability of studies of consolidation is illustrated by this research, not only because of possible differences in the cultural and societal setting, but because of the definition of consolidation as schools with three or more teachers. As the Kreitlow research suggests, the sizes of the consolidated and nonconsolidated schools may make a difference and should be controlled.

[12] R. G. Barker and P. V. Gump, Big School, Small School, High School Size and Student Behavior, Stanford: Stanford University Press (1964).

appendix to the major study, looks specifically at the effects of high school consolidation in this respect, and comes to the conclusion that "the current assumption of consolidated school superiority is, in at least some aspects, like the first report of Mark Twain's death--exaggerated."[13] The study concludes with the observation that a school should be "sufficiently small that all of its students are needed for its enterprises." It should be "small enough that its students are not redundant."[14]

In a review of studies of the effects of school district reorganization on academic achievement, Hamilton and Rowe conclude that "greater academic achievement is more likely to take place in the larger and/or reorganized schools."[15] The credibility of this conclusion is weakened somewhat by the fact that some of the studies reviewed were published thirty years previous, and by the fact that differences between elementary and secondary schools and differences in size were not taken into account.

In an article cited by Hamilton and Rowe, Harmon shows that the rate of production of science doctorates is highly associated with high school size, a finding which he interprets as supporting Conant's position favoring larger schools.[16] However, in a letter published later in the same journal, Bunce points out that the relationship may be spurious, since size may be related to population density, to the economic status and cultural backgrounds of families served by schools, and to region of the country,

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[13] W. J. Campbell, "Some Effects of High School Consolidation," pp. 139-153 in Barker and Gump, op. cit.

[14] Barker and Gump, op. cit., p. 202.

[15] DeForest Hamilton and Robert N. Rowe, "Academic Achievement of Students in Reorganized and Non-reorganized Districts," Phi Delta Kappan, 43 (June, 1962), 403.

[16] Lindsey R. Harmon, "High School Backgrounds of Science Doctorates," Science, 133 (1961), 679-88.

which could in turn cause differences in rates of production of doctorates.[17] Harmon, in a rejoinder in the same issue of the journal, seems to agree with Bunce's conclusion (and my own) that:

> Conant and others have argued on logical grounds that adequate size is a major requirement if a high school is to offer a good program. This is certainly confirmed by the experience of those who have tried to provide an enriched program in a small high school. But the statistics which support this conclusion must be analyzed and interpreted with care, lest the problem of providing a good education appear simpler than it really is.

The questions raised by Bunce, a chemist, anticipate the conclusions reported by the sociologists in Equality of Educational Opportunity by about five years. In this now-famous and controversial report, Coleman and his associates show, on the basis of extensive and careful research, that once student background factors (such as social class of family and classmates) are controlled, there is little or no relationship between quality of school facilities and student performance on achievement tests. In the words of the report:

> Differences in school facilities and curriculum, which are the major variables by which attempts are made to improve schools, are so little related to differences in achievement levels of students that, with few exceptions, their effects fail to appear even in a survey of this magnitude.[18]

The reviews of the Coleman study by Mosteller, Moynihan, and others concur with this conclusion.[19] Likewise, Jencks' study of inequality, involving 5000 students in 91 schools tested in 1960 and 1963, shows that "changes between 9th and 12th grade have almost nothing to do with the

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[17] Stanley C. Bunce, letter to editor entitled "Size and Productivity," Science, 133 (1961), 1656. See Harmon's rejoinder on ibid., 1657.

[18] James S. Coleman, et al., Equality of Educational Opportunity, Washington: GPO, 1966, 316. A methodological criticism of the Coleman report is found in Samuel Bowles and Henry M. Levin, "The Determinants of Scholastic Achievement, An Appraisal of Some Recent Evidence," The Journal of Human Resources, III (Winter, 1968), 3-24. Also see Henry M. Levin, "What Differences do Schools Make?" Saturday Review, January 20, 1968, 57-8 and 66-7.

school a student is in."[20] Jencks also reports that ". . . it is very difficult to identify specific characteristics of schools that influence student achievement."[21] His conclusion appears almost identical to that of Coleman: "Equalizing the quality of high schools would reduce cognitive inequality by 1 percent or less."[22]

Husén's conclusion is also quite similar, and takes on additional significance because it is based on reviews of studies and evidence from England, Scotland, Sweden, and Germany, as well as the United States. He observes:

> Recent large-scale research has accumulated an overwhelming body of evidence to show that both between-student and between-school differences in achievements have to be accounted for by factors which characterize the overall socio-economic structure of society. Thus, in trying to evaluate what is achieved by individual students, schools, or school systems, one consistently finds that the major portion of these differences are attributable to non-school factors.[23]

Obviously, these scholars have raised serious questions which throw throw in doubt uninformed commonsense assumptions about "the fruits of consolidation"; the simple formula, "Fewer, Bigger, Better" appears incomplete. We

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[19] F. Mosteller and D. P. Moynihan, eds., On Equality of Educational Opportunity. New York: Random House Vintage Books, 1972. Esp. see pp. 15-16.

[20] C. Jencks, et al., Inequality: A Reassessment of the Effects of Family and Schooling in America. New York: Basic Books, 1972, p. 90.

[21] Ibid., p. 93.

[22] Ibid., p. 109.

[23] Torsten Husén, "Policies for Educational Equality," OECD Observer, October, 1972, pp. 9-12.

are on even less solid ground when we add to the inconclusive evidence regarding achievement the apparent total lack of evidence regarding the effects of consolidation on student aspirations and student adjustment. Further research seems justified.

Still another question arises for which there appears to be no answer in the research literature: Are there important differences within student bodies in the effects of consolidation?[24] Advocates of consolidation, and our own common sense, would lead us to conclude that exposure to better teachers and a more rational, specialized, and efficient system of organizing teaching, learning, and disciplining would be associated with raised aspirations and better performance. But such a foregone conclusion may turn out to be true, if at all, for only part of the student population; namely, that part which has, through non-school experiences, already been made receptive to rational, "scientific," modern, and pragmatic values. It may well be that a portion of the student population steeped in traditional thoughtways is either unwilling or ill-equipped to deal with the mysteries and frustrations of bureaucratic living. Perhaps, as Perley Ayer once said, "for them it would be like going to the moon." It is at least an open question whether the modernized, consolidated school bridges the gap between the entire local mountain society and the larger society, or whether it merely serves as a preliminary sorting machine for that larger society, slotting certain students for higher achievement and fuller participation as adults and dropping other students through the reject chute with greater dispatch than the old schools would have done.

There is, of course, the additional question whether the long-range effects of school consolidation are different from short-term effects. If drop-out rates climb at the outset, isn't it likely that they will return to normal after a period of adjustment? If there are no striking accomplishments in terms of student achievement in the short run, doesn't it take time to fully develop the curriculum, train and/or replace teachers, and create a school environment which is reasonably comfortable for all students but at the same time encourages excellence in teaching and learning?

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[24]The Coleman report suggests that there might be more variation within than between schools, at least in the area of achievement. See Coleman, et al., op. cit., 296: ". . . only about 10 to 20 percent of the total variation in achievement for the groups that are numerically most important lies between different schools."

Such questions about the long range are not answered, or even asked, by this study, which looks at changes in the achievement, aspirations, and adjustment patterns of students over no more than four years (and for part of the analysis, only three).[25] The importance of "the long run" cannot be minimized, however, and for this reason the reader is urged to regard the findings of this study in the nature of "early returns."

To summarize, the research questions to which this study is addressed are as follows:

/ Does school consolidation result in raising levels of academic performance, above levels achieved by students in a nonconsolidated school?

/ Does school consolidation result in higher occupational and educational aspirations of students than is the case in a nonconsolidated school?

/ Does school consolidation result in higher or lower patterns of adaptive success on the part of students than would be the case in a nonconsolidated school?

/ Using these same three broad areas to define total school success, do students with different abilities, status backgrounds, and outlooks (modern versus traditional) show different patterns of success in a consolidated school?

/ Last, does school consolidation lead to a reduction of inequality in any of these areas of school success, when students are grouped by ability, status background, and outlook?

While this case study makes no claim to definitive answers to these questions, its findings do at least allow more informed speculation.

In the next section the research setting and the plan of the study are described. Variables included in the study are listed and their operational indicators are also discussed.

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[25] This report focuses on the four-year study of the Class of 1972, which was the first class to have spent four full years in the new school. Data were collected from the Class of 1970 as well. This class had spent two years in preconsolidation schools and their last two years in the new school. An analysis of selected variables from the Class of 1970 was the subject of an M. A. thesis article, the manuscript of which is appended to this report.

CHAPTER II

THE SETTING AND PLAN FOR THE STUDY

The Initial Design

This study was initially prompted by the imminent consolidation of three high schools in the study county, the potential importance of which was brought home to the investigator in the summer of 1968 when he was taken on a guided tour of the new facility. Having known of the physical condition of the existing schools, which were built in the 1920's, and having heard endless tales of inefficiency, laxness, poor instruction, and the difficulties facing graduates from those schools, one could well understand the high hopes which county citizens--especially the leaders--held for the new school. Would it work out as well as expected? Could it be demonstrated that the new school would serve its students better than the old school had, or any school like the old ones? (A description of the county environment, the consolidation movement, and a four-year followup on attitudes is attached in the Appendix.)

Because the old schools were not in operation after Spring, 1968, it seemed important to locate a comparable school to use as a yardstick for assessing the impact of the new school on its students. Such a school was found forty miles distant, with what appeared to be a roughly comparable student population and school organization (including size) to the three preconsolidation schools. (See Appendix B for further notes on comparability of school populations.) Interest was solicited from both school systems in a comparative, longitudinal study of changes occurring among members of the Classes of 1970 and 1972, a study from which one might infer whether one type of school was associated with changes not occurring in the other.

The measurement schedule may be expressed graphically as follows:

School	Time 1: Fall, '68	Time 2: Spring, '71	Time 3: Spring, '72
Consolidated (CHS)	Measurements of Class of '72 as Freshmen	Measurements of Class of '72 as Juniors	Measurements of Class of '72 as Seniors
Nonconsolidated (NCHS)	Same as above	Same as above	(No measurements--school too disturbed by imminent consolidation)

In addition to the between-school comparison, from which it was hoped some inference could be made about the relative impact of two different types of school, an additional strategy was conceived for investigating in more detail the differential impact on students within just the consolidated school. These within-school comparisons were aimed at answering the question whether any particular subgroup of students was noticeably "advantaged" or "disadvantaged" by the school experience by comparing directions and degrees of change over the four-year period. (Internal comparisons over a two-year period, using the Class of 1970, were also made, and are reported in a section of the Appendix.) As the study progressed, and because of compromises necessitated in design and analysis, this additional strategy grew in importance as a means of assessing impact and answering the general question of cui bono?

The Samples

Of the 214 CHS freshman in the potential graduating class of 1972, 155 actually graduated. (Fifty-five dropped out, and another 30 transferred to other schools during the four years. See Appendix for further comments on attrition and holding power of the consolidated school.) The remaining 129 students constitute the sample of CHS students for which data are available from questionnaires and records in 1968 and 1972, and it is this sample which is the subject of Chapter IV.*

Questionnaire and records data were available for 95 CHS students for the years 1968 and 1971, and it is this sample (which appears to be representative of the larger sample of 129) which constitutes the CHS group analyzed in Chapter III.

Sixty students began and graduated from the NCHS in its Class of 1972. Of these, complete data were obtained from 47 in both 1968 and 1971. This group of 47 is the NCHS sample analyzed in Chapter III.

Compromises with Reality

The critical comparisons were to be made between similar categories of students in the two schools for both Phase I (Class of 1970) and Phase II (Class of 1972), on the range of variables described below in this chapter.

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*Data were collected in early September, 1968, within two weeks of the beginning of the term. Although not a true "Before" measure, it seems early enough to justify considering it such. The data collection instrument, which varied only slightly from one application to another may be found in the Appendix.

As history unfolded, however, not all these comparisons were possible. A major compromise had to be made when it was learned that the comparison school was to be consolidated into a single county high school. Although discussion of this possibility was in the air at the time the design was drafted, a similar proposal had been defeated in the recent past, and it was predicted that it would fail again. It did not. Plans were drawn up to build and move into the new school by Fall, 1971.

These events led the investigator back to the field in the Spring of 1971 for a final "reading" on the Classes of 1972 in both schools. (As it turned out, the new school in the control county was not ready for the move until Fall, 1972, but the environment of the old control school was so disturbed by events--two changes of administration in one year, for example--that it could not be regarded as a "typical" nonconsolidated high school.)

Consequently, the Phase II portion of the study, which makes up Chapter III of this report, marks change o over a three-year period, from 1968 to 1971, in comparing the consolidated with the nonconsolidated high school.

Equally important, additional compromises with the analysis plan were forced by the small size of samples. Comparisons of subgroups of students cross-tabulated by more than one, or possibly two variables, strains the credulity of even the most naive reader. The data are analyzed using simple, if not abbreviated, techniques. The presentations of data are therefore also simple but unabbreviated, usually involving percentages. Most variables are dichotomized in order to conserve numbers.

The result is obviously less than ideal: crude measures, rather nonsensitive classifications, unstable percentages, and doubtful conclusions when reached from any single finding. Elaborate statistical models in such situations have a certain likeness to castles on sand: dazzling, misleading, insubstantial. Those choices are not attractive ones, but the decision was reached, nonetheless, to proceed with the cruder, more simplistic analysis and presentation, with the hope that the findings might suggest a believable story in the aggregate which they could not really substantiate singly. The reader is hereby warned, and will be warned from time to time again, to look at the numbers making up percentage bases and means where they are used. (As a rule of thumb, where, in categories of 20 to 30 students, percentage differences are not as much as 10-to-15%, they have not been regarded as especially noteworthy. Even in this case, bear in mind that we are talking about a shift of only 2, 3, or 4 students.)

Variables and Operationalized Indicators

Consolidation. "Consolidation" is broadly conceived in this study as the major independent variable, but it does not bear close scrutiny as a single variable. It is a category or type of school which we assume means the same to everyone, but in fact, on any of a number of dimensions of school organization, consolidated schools can vary greatly. Moreover, many of the phenomena which accompanied consolidation in the present instance could be construed as accidental properties rather than as defining characteristics. Additionally, this school was not unaffected by certain local and national events and trends which occurred during the study period, some of which had nothing to do with consolidation. The student protest movement and the trend toward greater student freedom in curriculum are but two examples of national occurrences, and the sudden boom in the county economy is an instance of a local, non-school-related factor likely to affect students.

In general, one thinks of school consolidation resulting in increased size, more bureaucratic organization, and therefore greater impersonality and judgment by abstract standards. It usually involves greater variety in curriculum because it can afford more opportunities for students with varying abilities and aspirations. The level of instruction is often upgraded, as faculty are more likely to teach in their fields of preparation, and as facilities such as laboratories are likely to be improved. Consolidation also encourages a shift of loyalties from the neighborhood or section of the county to a larger geographic unit. It also means a move from the small to the large pond, with consequences for changes in self-concept on the part of fish of varying sizes.

If these factors characterize the typical instance of consolidation, then the present case qualifies as typical. (For additional notes on the new school and the county setting, see Appendix A.) The new school, at 900 students, was about three times the size of its predecessors. While interpersonal relations among students were not described by student in interviews as impersonal, the atmosphere of the new school was recognizably more bureaucratic. Favoritism was replaced by stringent, universalistic discipline, with new rules on absenteeism, use of automobiles, campus demeanor, and, for a time at least, dress. The curriculum did become more varied, with gradual implementation of vocational tracks in the manual arts for males. Not a single teacher was teaching out of field in the new school, and although at first the teaching staff was composed of the same teachers as populated the earlier schools (a fact which provoked one student to remark sourly that the new school was merely "a new dog house with the same old dogs"), over

the four years there was a steady increase in the proportion of new teachers, non-native teachers, teachers with more recent preparation in their subject fields. The required shift in loyalties and self-concept took place with apparent ease, although no one has forgotten what the old schools were like, and they are still used as referents.

The consolidated school, in short, was bigger, more complex and varied, and more efficient, and in these ways was representative of most such reorganization.

Achievement, Aspirations, and Adjustment

The potential areas of impact of the school system on students were conceived under the three broad clusters listed above. Where possible, more than one indicator for each was constructed or found, to enhance the validity of any conclusions. Data sources for the more quantifiable indicators were questionnaires and school records. Interviews were conducted among members of the faculty, students in the Classes of 1970 and 1972, dropouts and transfers to other schools, county leaders, some parents, and some graduates from the preconsolidation schools. (Information and points of view from interview sources are used primarily to interpret findings, although much of the material from these sources awaits fuller use in subsequent work.)

Achievement

Grades. Grades earned in courses have been abstracted from school records and averaged year by year on a four-point scale familiar to most educators. Actual GPA's in these samples ranged from 0.5 to 3.5, with a mean of 2.2. Grades are only one measure of achievement, but an important one--the "coin of the realm," as T. Patricia Cross refers to them. The extent to which they predict later success in life is a topic of current debate, but there is no argument with the fact that they are taken by students, parents, and teachers, as well as colleges, as signs of success in school, whatever it is that grades measure.

Reading Achievement. The initial plan called for heavy reliance on the variable of reading achievement. Among other things, precedent for its use as a measure of successful academic outcomes lies in the work of James Coleman and associates (Equality of Educational Opportunity). In addition, unlike grades, reading achievement is measured by nationally normed instruments and thus allows a different and important kind of comparison, from the standpoint of seeing how well students are prepared to cope in systems larger than the local one.

Despite energetic efforts to obtain reading achievement scores which would allow for comparison between the two schools at two points in time, such comparability was not achieved, so that only internal comparisons are possible within the consolidated school (CHS), and we are given no data from which to infer comparable trends in the nonconsolidated school (NCHS). The Stanford Achievement Test (Reading Subtest) was used in the CHS. (See E. F. Gardner, J. C. Merwin, R. Callis, and R. Madden, Stanford Achievement Test, High School Battery, New York: Harcourt Brace, and World, 1965.)

Need Achievement. While not a direct measure of achievement, Need Achievement, as McClelland and others have devised and employed it, is a personality variable potentially susceptible to social environmental factors. Since, in theory at least, it is a way of assessing motivation to achieve academically as well as generally, its place in this study is justifiable. A twenty-item battery previously used with school populations was therefore employed as part of the standard questionnaire. Scores were derived after "purification" of the battery by item analysis reduced the scale to 17 items. The maximum range was 0 to 34. (See questionnaire in Appendix for original items.)

Self-Assessed Academic Ability

Obviously not a direct or valid measure of achievement, one's own rating of his scholastic ability could be an important element in self-concept leading to motivation to excel. On the other hand, inflated notions of ability could later lead to deflated self-concepts. As will be seen subsequently, self-ratings seem to bear little relationship to reality. Students were asked to rate themselves on a five-category scale.[26]

Aspirations

Occupational Aspirations. Students were asked what jobs they would like to have after finishing schooling. Jobs were coded by occupational prestige ratings devised by Duncan and found in Appendix B of A. J. Reiss, et al., Occupations and Social Status, New York: Free Press (1961), These NORC ratings range from a possible 22 to 93. Many students were apparently unable to state a specific job aspiration, especially in 1968, and, consequently, job indecision itself was recognized as a variable.

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[26]Specifically, students were asked: "How would you estimate your scholastic ability (grades) last year?

____ 1. I was probably among the top 10% in my classes
____ 2. I was probably among the top 25% in my classes
____ 3. I was probably a little above average
____ 4. I was probably about average
____ 5. I was below average

Occupational Expectations. Because aspirations and expectations are not always identical, students were also asked what jobs they thought they would have after they finished their schooling. Jobs were coded in the same way as for aspirations.

Educational Aspirations. Students were given a checklist of categories of educational attainment and asked what they would like to achieve.[27] Proportion aspiring to college (in any amount) is used as one indicator. Proportion aspiring to any form of schooling beyond high school (here called "postsecondary aspirations") would include not only the college-oriented, but those hoping to go to trade or professional schools as well, and is used as a second indicator.

Educational Expectations. Coded in the same way as educational aspirations, above, but based on a question which asks what level of attainment the student actually thinks he will achieve.

Preferred Place of Residence. Choice of eventual place of residence, or migration plans, are usually not studied as aspirations, but they are an important component of the dreams and plans of individuals, especially adolescents. Students were asked in the questionnaire where they would like to live when they finished their schooling. The responses to this open-ended question were recoded into "home county," "nearby but not home county," and "outside the nearby area." Conventional wisdom concerning the youth of Appalachia maintains that all or most wish to leave home, draining the region of its best human resources. The question to be raised in this study is whether experience in the new school resulted in changes in students' preferences about places of residence.

Adjustment

"Adjustment" is used as an omnibus term to include a variety of indicators of nonacademic success, as perceived

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[27] The question read as follows: "How far would you like to go in school, if you had the money and the opportunity to choose any level you wanted?

____ 1. finish junior year (Only used
____ 2. finish junior year and go to trade at Time 1.)
or professional school
____ 3. finish high school
____ 4. finish high school and go to trade or professional school
____ 5. 1, 2, or 3 years of college
____ 6. finish college
____ 7. beyond college."

by the student, as judged by others, or as inferred from behavior (as in the case of absenteeism). There is no assumption of intercorrelation, although it is probably the case that some of these phenomena are causally linked in some complex fashion.

Athletic Participation

Participation in athletic activities was treated separately from participation in extracurricular activities in general. It is presumed that participation in school activities (including athletics) provides one means of student identification and "fit" with the school. Students were asked to rank themselves on a five-category scale, from "outstanding" to "did nothing."[28]

Extracurricular Activities (ECA). Participation in ECA, as one might suspect, has been found associated with self-concept, in school studies, particularly as reported in Barker and Gump, Big School, Small School, where it was shown that opportunities for participation were more limited in the larger school. Students in the present study were asked to rate the degree of their own activity in ECA on a scale with five categories.[29] This item was highly correlated with the number of school organizations and the total number of organizations, school and nonschool, in which the student reported membership. The last named were dropped from subsequent analysis for that reason.

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[28]Students were given the following question: "How would you rank yourself in school athletic activities last year outside of physical education classes (including cheerleading or square dancing or drill teams if your school sponsors teams)?

____ 1. I was outstanding in athletics
____ 2. I was very good in athletics but not outstanding
____ 3. I had some athletic achievement
____ 4. I had little athletic achievement
____ 5. I did nothing in athletics."

[29]Students were asked: "How would you rate yourself in extracurricular school activities (activities outside of classroom hours) last year?

____ 1. I was active and was an officer in one or more school organizations
____ 2. I was very active but was not an officer in school organizations
____ 3. I was somewhat active in school organizations
____ 4. I was not very active in school organizations
____ 5. I was not at all active in school organizations."

Popularity. Students were asked to rate their perceived popularity by responding to a five-category scale.[30] With respect to this and the preceding indicator (ECA), it should be noted that because students were asked to report on "last year" in 1968, their reports are for the 8th and not the 9th grade. Hence, in comparing the 9th grade report (of the 8th grade) with the 12th grade report (of the 12th grade), we are to some extent looking at the shift from small to large pond.

"Getting Along" in School. Students were asked how they "got along" with teachers and other students as a means of learning how much harmony the student felt existed between himself and the school as a whole. The five categories to which the student was asked to respond went from "better than most people" through "fairly well" to "I did not get along well at all."

Anomia. The five-item Srole scale was included in the standard questionnaire. "Anomic" responses to the items were summed to arrive at the anomia score. Srole's scale taps elements of pessimism, powerlessness, feelings of unpredictability, lack of trust, and the like. While it does not measure feelings toward or derived from any specific organization, such as school, it should theoretically be found higher among students who generally feel a lack of "fit" between themselves and the school, all other things being equal. (See questionnaire in Appendix F for Srole items.)

Health Opinion Survey (HOS). The Health Opinion Survey was designed by Dorothea and Alexander Leighton and their associates, on the basis of experience with the Cornell Medical Index, to use reports of psychophysiological symptoms as an index of psychological malfunctioning. It has been used among peoples of widely varying cultures and consistently found to prove valid when placed against detailed psychiatric assessments. The present version was adapted by

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[30] Specifically, students were asked: "How would you estimate your popularity among students last year?

____ 1. I was among the most popular
____ 2. I was very popular but not the most popular
____ 3. I was somewhat popular
____ 4. I was not very popular
____ 5. I was somewhat unpopular."

Dr. Katherine Nuckolls, Yale University School of Nursing, from the battery applied in the Leightons' Stirling County, Nova Scotia study, reported in Dorothea Leighton, et al., The Character of Danger, Appendix E, New York: Basic Books (1963). Although the Nuckolls version is adapted for use with adolescents, experience with it is limited. The scale allows a possible range of 0 to 20. (See items in Appendix F.)

Personal and Social Assets (PSA). A fuller description of the PSA ratings is found in the chapter dealing with within-school comparisons, as this indicator was not available for students in the NCHS. In essence, PSA ratings are teacher judgments on a range of "student-citizenship" factors, and may be used to infer teachers' opinions about such elements of nonacademic success in school.

Absences. Absence from school can hardly be treated as a direct measure of adjustment, since any given absence can result from reasons having nothing to do with the desire to avoid school. If we can assume that absences from other causes are more or less randomly distributed among subcategories of students, then it makes some sense to look at differences in rates as resulting in part from adjustment factors. Absence rates are thus, in part, a reflection of the degree to which an individual wishes to avoid the school setting, presumably because it is an unrewarding experience to him. Whether used as an indicator of adjustment or motivation, absenteeism is employed here in the same way it might be used in industrial studies of worker satisfaction.

Absence figures were abstracted from student records and computed on a yearly basis; these figures are the basis of findings presented in succeeding chapters. Individual rates ranged from 0 to 44 days, with a mean of 8 days.

Classifying Variables

The study focuses on the question whether students with differing abilities, status backgrounds, and value clusters show different patterns of change as a result of consolidation. To this end, students were classified using the indicators of sex, IQ, father's education, and modernism. (The analysis in Chapter III uses only sex and father's education.)

IQ. Standard IQ measures were used in both the CHS and the NCHS at at least two times each, beginning in the 9th grade. (The Otis Quick-Scoring test was used in the CHS, and the California Test of Mental Maturity in the NCHS.) The 9th grade IQ score was used as a measure of presumably antecedent ability in the NCHS; the earliest IQ measure available for the CHS was from the 10th grade.

Problems of precise comparability of scores on the two tests was obviated by simply dichotomizing the scores and dealing with relatively higher and lower categories at each school.

Father's Education. Father's education was used in place of an earlier attempted three-factor index of SES based on father's education, father's occupation (Duncan rating), and major sources of family income. The major arguments for this substitution were twofold: (1) The Duncan prestige ratings did not work so well in this basically rural Appalachian setting, especially given the degree of ignorance students showed regarding parental employment, but also because the Duncan system appears to be an urban, industrial job classification; (2) Educational achievement appeared to be the best single indicator of status background available, the only other choice being source of income, the categories for which were too broad to be very useful.

Father's education is dichotomized throughout into less than high school, and high school or more. The terms "father's education" and "status" will be used more or less interchangeably for the remainder of this paper.

Modernism. As used here, modernism refers to a cluster of attitudes and values presumed to characterize persons who are regarded as modern, or, conversely, non-traditional, by local standards. This particular set of items was developed from a study of an adult Appalachian population about 35 miles distant (see John B. Stephenson, "Is Everyone Going Modern?", American Journal of Sociology, 74 (1968), 265), and has been used to differentiate value clusters among parents in a school study in Eastern Kentucky. It has not been used with an adolescent population until this time.

The items used in this scale may be inspected in the questionnaire contained in Appendix F. They include such content areas as deferred gratification, attitude toward work, attitude toward neighborhood and consolidated schools, feelings about sex roles, religion, kin loyalties, and time orientation. To arrive at scores, "modern" responses were simply summed, after the set of items was "purified" by item analysis.

(Some question exists in the mind of the investigator whether this scale should not be regarded as sex-specific. It is not clear that male and female students understood or responded to certain items in the same way. This possibly must be ignored for the present because the data necessary to determine the degree of sex-specificity

are not available. The possibility should be borne in mind, however, when findings are being interpreted.)

Sex. It is almost axiomatic that study populations be classified by sex; this study is no exception. As will be seen, many patterns are specified by sex, and it is virtually impossible to generalize to the entire student population for this reason.

Concerning the remainder of this report, Chapter III reports the results of a comparison of change among students over a three-year period from 1968 to 1971 at the CHS and the NCHS. Chapter IV reports the results of further analysis of internal comparisons within the CHS over the four years from 1968 to 1972. A concluding chapter summarizes the findings, compares them to findings from other studies, and offers a brief comment on policy implications. Additional related material appended to the report includes dropout statistics from the county of the consolidated school from 1962 to 1972; a separate report concentrating on selected variables and their inter-relationship based on data collected on the class of 1970 and compiled by the project research assistant in connection with his thesis requirement; and extended discussion of methodological and background matters judged to be only of secondary importance to the main text.

CHAPTER III

RESULTS: ACHIEVEMENT, ASPIRATIONS, AND ADJUSTMENT AMONG CONSOLIDATED AND NONCONSOLIDATED HIGH SCHOOL STUDENTS IN THE CLASS OF 1972, BY SEX AND FATHER'S EDUCATION

As noted in the preceding chapter, the between-school comparisons cover a three-year period, from 1968 to 1971, because plans to consolidate the control school made its inclusion in the study in 1972 unwise if not impossible. In essence, the question we raise in this section is whether any notable school differences appear in what happens to students during that three-year period, on a range of variables having to do with success in school. In the absence of data from the fourth year of the control school, if one wishes to speculate on what would have been revealed, he may want to simply make linear projections from the three-year trends. The hazards are obvious, and such projections will not be made in this analysis. (Data from the fourth year of the consolidated school are presented in the course of analysis of internal comparisons, presented in Chapter IV.)

All data in this and the following chapters are on 1972 graduates. Of the 155 CHS graduates in 1972, complete data from 1968 and 1971 are available on 95. This subsample appears to be representative of the total graduating class with regard to sex composition and father's education. The NCHS sample is also quite small ($n = 44$), but again it appears to be representative of the total group of graduates. Absence from school at one or the other times of measurement accounts for sample attrition in both schools.

Although there appears to be no major source of bias in these subsamples, the opportunity for simultaneous cross-tabulation is obviously limited. In this chapter, where it is desirable to look at differences in patterns of change among subgroups classified by sex and father's education, it is only possible to classify on these variables one at a time. Combined or interaction effects will have to be inferred from the sequential analysis. (For those who, despite the small numbers, might wish to see data involving simultaneous categorization of students by sex and father's education, the appropriate tables are included in Appendix E.)

The data from the between-school comparisons are presented in the following order:

Achievement:
- Grade Point Average (GPA)
- Need Achievement
- Self-rating of Ability

Aspirations:
- Occupational Aspirations
- Occupational Expectations
- Job Plan Indecision
- Educational Aspirations
- Educational Expectations

Adjustment:
- Participation in Athletics
- Extra-Curricular Activities (ECA)
- Popularity
- "Getting Along" in School
- Anomia
- Health Opinion Survey (HOS) Scores
- Absences

Achievement

Grade Point Average (GPA)

Mean GPA's for the three years are presented for both schools in Table III-1. No major school differences appear in this table. In both the CHS and the NCHS, grades for males tended to decline over the three years, while those for females were stable. As a consequence, the grade gap between males and females tended to widen over time.

(Table III-1 about here)

Table III-2 shows GPA's for the three years in question by father's occupation. None of the differences appear really remarkable, except the possible tendency at the CHS for higher status students to maintain slightly higher grades at all times. At both schools and among both status levels, grades show a tendency to decline.

(Table III-2 about here)

(Grades showed a tendency to "rebound" at the CHS in the senior year. It is not know whether this would have happened in the NCHS, or what experience from other schools shows.)

It would appear, by inference, that changes in GPA are more closely associated with sex than father's education, although they are not shown to be highly related to either here.

In summary, there appear to be no school differences in patterns of achievement as measured by GPA.

Need Achievement

Need Achievement is not viewed as a direct measure of achievement but rather a psychological or motivational state presumed to influence academic achievement (as well as success generally). Tables III-3 and III-4 present data on percentages of students scoring relatively high (above the approximate midpoint of the total distribution of scores) on the scale, by sex and father's education respectively.

(Tables III-3 and III-4 about here)

Patterns of change in Need Achievement appear more similar than different between the two schools, whether the categorizing variable is sex or father's education, although the shifts may be more pronounced in the CHS.

The proportion of males scoring high on the scale increases between the 9th and 11th grades in both schools, whereas it drops for females in both schools. Likewise, the proportion of high scorers increases among higher status students but decreases among lower status students, again in both schools.

(One might infer from the two tables that higher status males are most likely to increase and lower status females more likely to decrease in proportion scoring high on Need Achievement, in both schools. The simultaneous cross-tabulation of students by sex and father's education --see table in Appendix--is consistent with this inference.)

To summarize, no school differences appear in these data on changing patterns of Need Achievement.

Self- Self-Rating of Academic Ability

Students in both schools showed a surprising capacity for over-estimating their own scholastic ability when they were asked to rate themselves. Inflation is especially apparent in the 9th grade, where students are reporting on their experience from the previous year where, at least in the case of CHS students, they were attending small, separate elementary schools as 8th graders. Tables III-5 and III-6 show the percentages of students, by sex and father's education respectively, who rated themselves in the "top 10%."

(Tables III-5 and III-6 about here)

It is clear that more realistic self-assessments were made by all categories of students by the 11th grade. Once again there appear to be no notable school differences.

It is difficult to interpret these self-ratings of academic achievement, at least in the sense of placing value on what happened. There may be a "golden mean" in the appraisal of one's own abilities, an estimate which is neither too inflated or deflated. What proportion in the "top 10%" is just right? These are matters partly for personal judgment, but it is the opinion of this writer that much more healthy realism was expressed by students in the 11th than in the 9th grade, at the price only of some exaggerated self-esteem.

No major school differences appear in these data. One might infer (with support from cross-tabulations found in the Appendix) that higher status females at the CHS were "brought to earth" somewhat more sharply than their NCHS counterparts; in fact, not one of them rated herself in the "top 10%" in the 11th grade.

Aspirations

Occupational Aspirations

In the accompanying tables (Tables III-7 and III-8) "low" job ratings are those with Duncan scores of 60 or lower, while "high" job ratings are scored 80 or higher. One question to ask of these data is whether aspirations went up, down, or maintained their initial levels for various categories of students at both schools.

(Tables III-7 and III-8 about here)

It appears from Table III-7 that CHS males were stable in their job aspirations between the 9th and 11th grades. This was not the case among males at the NCHS, whose aspirations lowered somewhat. Females were fairly stable at both schools, although there was a slight tendency for CHS females to "disperse from the middle," both raising and lowering job desires somewhat.

From the data presented in Table III-8, it appears that whereas the job aspirations of higher status students remained at about the same levels, those for lower status students declined slightly. The decline among NCHS lower status students was similar, but more pronounced. Aspirations of higher status NCHS students shifted only slightly, in a lower direction.

To summarize, one notable school difference in changes in occupational aspirations exists: males at the NCHS are more likely to lower aspirations between the 9th

and 11th grades than CHS males. No major school differences appear when students are categorized by father's education.

Occupational Expectations

As expected, Tables III-9 and III-10 show that job expectations are generally somewhat lower than job aspirations. (As an aside, this phenomenon of "deflection" of aspirations seems to increase more among CHS females and decrease more among CHS males, when compared with their NCHS counterparts. It also seems to increase somewhat among lower status CHS students compared to NCHS students.)

(Tables III-9 and III-10 about here)

As in the case of aspirations, job expectations are fairly stable for CHS males, while they decline among NCHS males. NCHS females were stable in their expectations, and CHS females showed only a slight tendency to lower their job plans.

The pattern for lower status students (Table III-10) was the same for both schools, while among higher status students, those at the CHS showed less likelihood of lowering their expectations than their NCHS counterparts.

In short, NCHS males are more likely than CHS males to lower occupational expectations over the three years. Another school difference appears in the greater likelihood of higher status NCHS students lowering job expectations than higher status CHS students.

Job Plan Indecision

A sizeable number of students were unable or unwilling to name a specific job in response to the question about occupational expectations. As might be expected, the "Don't Know's" were particularly frequent in the 9th grade.

As Tables III-11 and III-12 show, CHS students were considerably more undecided about job plans than NCHS students, regardless of sex or father's education. In both schools, indecision was reduced by the 11th grade. Although levels of indecision were still larger at CHS than the NCHS by the 11th grade, they were in fact reduced more at the former school.

(Tables III-11 and III-12 about here)

However, given the higher initial level of indecision at the CHS, and given comparable directions of change over the three years, one would be hard-pressed to conclude that a difference exists in the impact of the schools on reducing job plan indecision.

Educational Aspirations

In this and the following section (educational expectations), data are presented both on hopes for college attendance and hopes for continuation of schooling in any form, including college, trade, or professional school. The latter is given the broader term, "post-secondary education."

One is impressed by the generally high level of educational aspirations expressed by students in both schools, in both the 9th and 11th grades. Table III-13 shows that these aspirations remain stable for almost all students. There is however, a considerable drop in college aspirations among CHS females (which does not occur among NCHS females).

(Tables III-13 and III-14 about here)

Likewise, Table III-14 shows that there is considerable stability of aspirations within status categories. The exceptions are the same category--college expectations among lower status students--for both schools, where a noticeable decline occurs. (The simultaneous cross-tabulations presented in Appendix E confirms the expectation that lower status CHS females are especially likely to lower college aspirations.)

Because the figures for postsecondary aspirations are fairly stable, the downward shift in college aspirations which occurs among lower status students at both schools and females at the CHS means that (1) some earlier college aspirants are probably shifting their aim to non-college institutions, and (2) some students no longer aspire to continue their schooling beyond high school at all.

To summarize, only one major school difference appears in these data: CHS females are much more likely to reduce their college aspirations than NCHS females. On the whole, the school patterns are more similar than different.

Educational Expectations

As might be expected, similar patterns are found regarding educational expectations as with educational aspirations, except that the proportions planning to continue their educations are generally lower than the proportion desiring to continue. (Again as an aside, patterns of increase and decrease in deflection of educational aspirations between the schools were similar, except for the greater reduction of deflection among CHS females aspiring to college.)

As seen in Table III-15, educational plans were generally stable from 9th to 11th grade in both schools. CHS females, however, showed a strong drop in proportion planning to attend college, and were the only category to drop in postsecondary plans. Males at both the CHS and NCHS showed some tendency to drop college plans.

(Tables III-15 and III-16 about here)

Table III-16 reveals that there was a greater tendency for lower than higher status students to change college expectations. This was the case in both schools.

In summary, once again, the school patterns are more similar than different. As in the case of educational aspirations, the major school difference in educational expectations is the greater likelihood that CHS females will lower their expectations, compared to NCHS females.

Preferred Residence

Place of residence, frequently ignored in studies of aspirations, are very much a part of young persons' dreaming and planning for the future. Tables III-17 and III-18 present data by sex and father's education, respectively, on the percentage of students wanting eventually to settle in their home county.

(Tables III-17 and III-18 about here)

It is clear that a majority of students would like eventually to live outside the home county, both as freshmen and juniors. (Data from CHS seniors show that the proportion wishing to remain in the home county increased that year to about 43%, which is an appreciable increase over the 11th grade figure, but which is still less than half.) These tables also reveal interesting between- and within-school differences.

Males in both schools increased somewhat in the proportion wanting to settle in their home counties. But whereas females at the CHS showed a sharp increase in this regard, their NCHS counterparts decreased almost as much (see Table III-17).

This means that when males and females are combined, as in Table III-18, there is no change over time in the status aggregates in the NCHS, while in the CHS both lower and higher status categories increase in the proportion wishing to live in the home county.

To summarize the most important school difference, CHS females (regardless of status background) are much more likely than are NCHS females to change their preferred place of residence to the home county between 9th and 11th grades. Whether this should be attributed to the new school or other factors such as the then-current economic boom is an open question.

Adjustment

Athletic Participation

From student responses to a question asking them to rate their (organized) athletic participation on a five-category scale, percentages rating themselves relatively "high" in participation were calculated and are presented in Tables III-19 and III-20, by sex and father's education respectively.

(Tables III-19 and III-20 about here)

It should be recalled that 9th grade reports are actually reports on the previous year, a year in which sports would probably be less competitive. In any case, as Table III-19 shows, athletic participation declined among males and females in both schools, though it appears to have declined more for males in the NCHS but more for females in the CHS. The overall trend is the same in both schools, however.

Nor do school differences appear when status background is used as the classifying variable. Participation declines in both categories in both schools, and in both cases higher status student participate somewhat more fully in the 11th grade than lower status students.

In short, there appear to be no striking school differences in trends in athletic participation over the three years.

Participation in Extracurricular Activities (ECA)

Regarding self-ratings of participation in ECA, Tables III-21 and III-22 present data on percentages of students who reported themselves either "very active and an officer in one or more activities" or "very active but not an officer."

(Tables III-21 and III-22 about here)

The general tendency for both sexes in both schools, as Table III-21 shows, is a decrease in high activity. The decrease may have been somewhat less for males at the CHS than males at the NCHS, while it may have been slightly greater for CHS females than NCHS females.

Regarding school differences in changes in participation by status categories, NCHS lower status students were more likely to decline in activity than their CHS counterparts, while the reverse was true of NCHS higher status students. Once again, however, the trends are all in the same direction, and the differences just described may be relatively minor. Note that there are differences in both schools at both times in participation on the part of lower and higher status students, always favoring higher status students.

In short, changes in participation in ECA over the three years shows generally the same trend in both schools. There was some tendency for the NCHS [illegible]ation to favor higher status and female students more [illegible]an did the CHS, while the CHS tended somewhat to favor lower status and male students, in that the decline was less for them.

Popularity

Tables III-23 and III-24 report the proportions of students, by sex and father's education, rating themselves in the top two categories of perceived popularity in the 9th and 11th grades.

(Tables III-23 and III-24 about here)

Both tables show a general decline in perceived popularity, regardless of sex or status background. CHS females were somewhat more likely to decline than NCHS females, whereas the reverse was true for CHS males, but these differences are not large enough to inspire great confidence. With regard to status, the patterns were essentially the same for both schools.

In short, no outstanding school differences appear in the data on self-ratings of popularity. NCHS females may be favored slightly, as may be CHS males.

"Getting Along" in School

This questionnaire item, as discussed earlier, was included as a measure of generalized, self-perceived adjustment to the total school situation, academic and nonacademic. Tables III-25 and III-26 present data on the proportion of students rating themselves in the topmost category of this five-category scale.

(Tables III-25 and III-26 about here)

Table III-25 shows a similar decline among both CHS and NCHS males (although the CHS males show a higher initial proportion responding that they "got along better than most"). But CHS females show a slight decline

while NCHS females do not. NCHS females appear slightly favored in this comparison, but probably only because of their very low initial percentage.

When status backgrounds are compared, the greatest decline in percentage reporting "getting along" occurs among higher status CHS students. Lower status CHS students are stable, while both status levels of NCHS students decline only slightly.

By inference, it is the higher status females at the NCHS who appear best able to maintain their initial level of adjustment, but only because it was low to begin with. (Indeed, the simultaneous cross-tabulations reported in the Appendix confirm this inference, and also confirm that higher status students of both sexes at the CHS were most likely to report lowered levels of "getting along" in the 11th grade.)

Anomia

Students responding to the Srole scale "anomically" to three or more items were regarded as "high" in anomia. Percentages of students by sex and father's education so responding are shown in Tables III-27 and III-28.

(Tables III-27 and III-28 about here)

It appears from Table III-27 that the general trend for males and females in both schools was toward a reduction in anomia. In both cases, moreover, sex differences in anomia are reduced over the three years. The largest drop occurs among NCHS males, almost three-fourths of whom were "high" in anomia in the 9th grade. By the 11th grade, the proportions "high" in anomia were fairly close for both sexes in both schools.

Regarding changes in anomia among students with different status backgrounds, there was a general decline, except among lower status NCHS students, who remained stable at around 54%. In the NCHS, the most striking decline occurred among higher status students, whereas in the CHS it was among lower. By the 11th grade, in both schools lower status students were more likely to be high in anomia than higher status students.

On balance, it appears that a general decline in anomia occurred among students at both schools over the three years. The exception here was lower status students (both males and females, according to cross-tabulations presented in Appendix E) at the NCHS, who remained at precisely their initial level. This finding suggests that something was working more positively at the CHS than the

NCHS to alleviate feelings of powerlessness, lack of trust, pessimism, and the like among lower status students. (An alternative interpretation has been suggested that because the new school was so oppressive and demanding to such students they were forced to engage in denial in order to convince themselves they could not really be as unhappy as they really were.)

Health Opinion Survey (HOS)

HOS scores reflect the extent of psychophysiological symptoms of stress and are used as an indicator of psychological maladjustment. A score of 10 or higher, of a maximum possible of 20, was regarded as "high." Tables III-29 and III-30 show data on percentages of students scoring high in HOS in the 9th and 11th grades in the two schools, by sex and father's education.

(Tables III-29 and III-30 about here)

Table III-29 shows that the percentage of high HOS scorers among CHS males was stable from the 9th to the 11th grade. This was not the case for NCHS males, who evidence a decline. CHS females, on the other hand, show something of an increase in high HOS scorers, while NCHS females are relatively stable. Thus, while the extent of symptoms of stress declined or stabilized among NCHS students, they either remained the same or increased for the same groups of CHS students.

Table III-30 suggests that the tendency to increase in "high" symptoms among CHS students was not specific to one status level. Likewise, the decline in symptoms among NCHS students occurred at both higher and lower status levels.

From the two tables together it might be inferred that CHS females of both higher and lower status were much more susceptible to increases in HOS scores. Simultaneous cross-tabulations presented in the Appendix support this inference.

To summarize school differences on changes in patterns of HOS scores: (1) Whereas initial proportions of high scorers were comparable across sex and status categories, by the 11th grade CHS students had appreciably higher proportions of high scorers than their NCHS counterparts, again in both sex and status categories; (2) CHS females of both status levels were especially likely to suffer increases in symptoms of stress as measured by the HOS. (Recall Kreitlow's finding of better adjustment among males in his nonreorganized sample.)

Absenteeism

While absenteeism cannot be viewed as a direct measure of adjustment, if one assumes that causes such as real illness, family travel, and the like are randomly distributed among sex and status categories of students, then it should make sense to look at any differences in group rates as attributable to the simple desire to avoid school. Tables III-31 and III-32 present data on percentages of students absent for 7 or more days of the school year.

(Tables III-31 and III-32 about here)

Both male and female students at the CHS tended to increase in absences between the 9th and 11th grades, but only females appear to increase at the NCHS, according to the data in Table III-31.

From Table III-32 it seems that the trend toward increasing absenteeism is specified by status level in both schools: lower status students increase while higher status students are stable in absenteeism.

Thus the only school difference lies in the fact that NCHS males as a whole show no tendency to increase in absences, in contrast to CHS males. The overall patterns appear more similar than different. (Note 11th grade figures, which show that in both schools females and lower status students are more likely to have relatively high absences.)

Summary of Between-Schools Comparisons

The general conclusion to be drawn from findings presented in this chapter is that the changes occurring among students in the two schools are more similar than they are different. The degree of change varies slightly in some cases, but the direction is most frequently the same. Moreover, in those few instances where different patterns appear, it is not clear that school organization, or "structural effects," played a primary role in accounting for the difference.

Thus it appears from these data that, insofar as school itself accounts for changes noted, the impacts of the two schools were not strikingly different on students of different sex and status backgrounds. An attempt to summarize the findings may be found in Table III-33.

(Table III-33 about here)

There are exceptions to the broad conclusion of "no difference." CHS males are more likely to maintain their job aspirations and job plans than NCHS males. Higher status CHS students are also more likely to maintain occupational expectations than higher status NCHS students. CHS females are more likely than NCHS females to reduce educational aspirations and expectations. CHS females are also more likely than NCHS females shift to "home county" as an eventual place of residence.

Regarding adjustment indicators, a minor exception to the conclusion of "no difference" exists in response to the "getting along" item, which showed lower status CHS students maintaining a reported higher level than NCHS students. Lower status CHS students were also likely to report lower anomia by the 11th grade, compared to NCHS students. Symptoms of stress, however, were more likely to increase among CHS students, especially females, when compared to NCHS students. And last, absenteeism tended to increase among CHS males but not NCHS males.

These data are anything but clear in giving the advantage to one or the other schools in terms of their impact on students. It is possible to attribute the lesser likelihood of reduced job aspirations among CHS males to school efforts in the areas of job counseling and vocational curriculum development. The presence of vocational curricula may also have helped lower status students at the CHS find a place in the school, so that they were more likely than their controls to report lower anomia and maintenance of "getting along."

On the other hand, increased HOS scores suggest that adjustment to the new school may have been made at some psychological cost. Absenteeism among CHS males may suggest that the school situation was still not highly rewarding.

All such interpretations are highly speculative. Moreover, these school differences are deviations from the overall pattern of similarity.

Perhaps the passage of more time, which would bring the fuller development of the curriculum, new school policies aimed at "fitting" the school better to students needs, improved counseling services, and increased quality of instruction, would show greater differences in the impact of the new school on its students. Three years is, after all, a short period of time in which to look for change. Nevertheless, if we are to judge from these limited data, the new school shows little demonstrable short-run impact on its students.

Table III-1. Grade Point Average by Sex, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, 9th - 11th Grades (Grade Point Average is on 4-Point Scale).

Grade	Consolidated High School		Non-Consolidated High School	
	Male	Female	Male	Female
9th	2.1	2.1	1.8	2.2
10th	1.8	1.9	1.2	2.3
11th	1.5	2.0	1.0	2.2
(n)	43	52	22	22

Table III-2. Grade Point Average by Father's Education, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, 9th - 11th Grades (Grade Point Average is on 4-Point Scale).

Grade	Consolidated High School		Non-Consolidated High School	
	Father's Education		Father's Education	
	Low	High	Low	High
9th	1.9	2.4	2.0	2.0
10th	1.7	2.1	1.8	1.7
11th	1.7	2.0	1.7	1.5
(n)	54	41	24	20

Table III-3. Need Achievement by Sex, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, Class of 1972, 9th and 11th Grades, In % "High."

	Grade	Consolidated High School		Non-Consolidated High School	
		Male	Female	Male	Female
% "High" In Need Achieve-ment	9th	38.6	47.1	36.4	63.6
	11th	53.5	36.5	50.0	54.5
	(n)	44	52	22	22

Table III-4. Need Achievement by Father's Education, Consolidated (CHS) and Non-Consolidated High Schools, Class of 1972, 9th and 11th Grades, In % "High."

	Grade	Consolidated High School		Non-Consolidated High School	
		Father's Education		Father's Education	
		Low	High	Low	High
% "High" In Need Achieve-ment	9th	38.9	48.8	58.3	40.0
	11th	24.1	70.7	50.0	55.0
	(n)	54	41	24	20

Table III-5. Self Estimate of Academic Ability, Consolidated and Non-Consolidated High Schools, Class of 1972, 9th and 11th Grades, by Sex, In % Placing Selves Among "Top 10 Percent."

% Reporting Selves in Top 10% in Academic Ability	Grade	Consolidated High School		Non-Consolidated High School	
		Male	Female	Male	Female
	9th	39.5	31.4	23.8	42.9
	11th	11.9	9.6	13.6	22.7
	(n)	43	52	22	22

Table III-6. Self Estimate of Academic Ability, Consolidated and Non-Consolidated High School, Class of 1972, 9th and 11th Grades, by Father's Education, In % Placing Selves Among "Top 10 Percent."

% Reporting Selves in Top 10% in Academic Ability	Grade	Consolidated High School		Non-Consolidated High School	
		Father's Education		Father's Education	
		Low	High	Low	High
	9th	24.5	48.8	27.3	40.0
	11th	9.3	12.5	16.7	20.0
	(n)	54	41	24	20

Table III-7. Occupational Aspirations, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, Class of 1972, 9th and 11th Grades, by Sex, In % Aspiring to Jobs Rated "Low" and "High" on Duncan Scale.

Grade	Consolidated High School				Non-Consolidated High School			
	Sex				Sex			
	Male		Female		Male		Female	
	% Low	% High	% Low	% High	% Low	% High	% Low	% High
9th	15.8	42.1	4.1	10.2	5.0	45.0	9.1	13.6
11th	15.0	40.0	16.3	14.3	22.7	22.7	10.0	10.0
(n)	40	40	49	49	22	22	22	22

Table III-8. Occupational Aspirations, Consolidated (CHS) and Non-Consolidated High Schools (NCHS), Class of 1972, 9th and 11th Grades, by Father's Occupation In Aspiring to Jobs Rated "Low" and "High" on Duncan Scale.

Grade	Consolidated High School				Non-Consolidated High School			
	Father's Education				Father's Education			
	Low		High		Low		High	
	% Low	% High	% Low	% High	% Low	% High	% Low	% High
9th	9.6	15.4	8.6	37.1	12.5	29.2	0.0	27.8
11th	23.5	13.7	5.3	42.1	27.3	13.6	5.0	20.0
(n)	52	52	38	38	24	24	20	20

Table III-9. Occupational Expectations, Consolidated (CHS) and Non-Consolidated (NCHS) High School, Class of 1972, 9th and 11th Grades, by Sex In % Expecting Jobs Rated "Low" and "High" on Duncan Scale.

Grade	Consolidated High School				Non-Consolidated High School			
	Sex				Sex			
	Male		Female		Male		Female	
	% Low	% High	% Low	% High	% Low	% High	% Low	% High
9th	25.8	29.0	24.1	10.3	16.7	50.0	11.1	5.6
11th	21.2	33.3	28.2	2.6	36.8	21.0	10.5	5.3
(n)	33	33	39	39	19	19	19	19

Table III-10. Occupational Expectations, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, Class of 1972, 9th and 11th Grades, by Father's Occupation In % Expecting Jobs Rated "Low" and "High" on Duncan Scale.

Grade	Consolidated High School				Non-Consolidated High School			
	Father's Education				Father's Education			
	Low		High		Low		High	
	% Low	% High	% Low	% High	% Low	% High	% Low	% High
9th	37.5	12.5	10.7	28.6	21.0	26.3	5.9	29.4
11th	35.9	5.1	15.1	30.3	25.0	10.0	22.2	16.7
(n)	39	39	33	33	20	20	18	18

Table III-11. Job Plan Indecision by Sex, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, Class of 1972, 9th and 11th Grades in Per Cent "Don't Know."

	Grade	Consolidated High School		Non-Consolidated High School	
		Sex		Sex	
		Male	Female	Male	Female
% "Don't Know" About Job	9th	38.7	43.1	18.2	18.2
	11th	23.3	25.0	13.6	13.6
	(n)	43	52	22	22

Table III-12. Job Plan Indecision by Father's Education, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, Class of 1972, 9th and 11th Grades in Per Cent "Don't Know."

	Grade	Consolidated High School		Non-Consolidated High School	
		Father's Education		Father's Education	
		Low	High	Low	High
% "Don't Know" About Job	9th	43.1	38.7	20.8	15.0
	11th	27.8	19.5	16.7	10.0
	(n)	54	41	24	20

Table III-13. Educational Aspirations, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, Class of 1972, 9th and 11th Grades, by Sex, In % Aspiring to Post-Secondary Education and % Aspiring to College.

Grade	Consolidated High School				Non-Consolidated High School			
	Sex				Sex			
	Male		Female		Male		Female	
	% Post Secondary	% College	% Post Secondary	% College	% Post Secondary	% College	% Post Secondary	% College
9th	90.7	81.4	88.2	80.4	72.7	63.7	90.9	72.7
11th	90.7	79.1	82.7	46.1	86.4	59.1	86.4	68.2
(n)	43	43	52	52	22	22	22	22

Table III-14. Educational Aspirations, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, Class of 1972, 9th and 11th Grades, by Father's Occupation, In % Aspiring to Post-Secondary Education and % Aspiring to College.

Grade	Consolidated High School				Non-Consolidated High School			
	Father's Education				Father's Education			
	Low		High		Low		High	
	% Post Secondary	% College	% Post Secondary	% College	% Post Secondary	% College	% Post Secondary	% College
9th	83.3	70.4	97.5	95.0	83.3	70.8	80.0	65.0
11th	75.9	40.7	100.0	87.8	83.3	54.2	90.0	75.0
(n)	54	54	41	41	24	24	20	20

Table III-15. Educational Expectations, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, Class of 1972, 9th and 11th Grades, by Sex, In % Expecting Post-Secondary Education and % Expecting College.

Grade	Consolidated High School				Non-Consolidated High School			
	Sex				Sex			
	Male		Female		Male		Female	
	% Post Secondary	% College	% Post Secondary	% College	% Post Secondary	% College	% Post Secondary	% College
9th	81.4	74.4	70.6	62.7	63.6	54.6	81.8	63.6
11th	81.4	67.4	65.4	42.3	68.2	40.9	86.4	63.6
(n)	43	43	52	52	22	22	22	22

Table III-16. Educational Expectations, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, Class of 1972, 9th and 11th Grades, by Father's Occupation, In % Expecting Post-Secondary Education and % Expecting College.

Grade	Consolidated High School				Non-Consolidated High School			
	Father's Education				Father's Education			
	Low		High		Low		High	
	% Post Secondary	% College	% Post Secondary	% College	% Post Secondary	% College	% Post Secondary	% College
9th	60.4	49.1	95.1	92.7	40.8	54.2	75.0	65.0
11th	57.4	29.6	92.7	85.4	79.2	37.5	75.0	70.0
(n)	54	54	41	41	24	24	20	20

Table III-17. Preferred Residence by Sex, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, 9th and 11th Grades, In % "Home County."

Grade	Consolidated High School		Non-Consolidated High School	
	Male	Female	Male	Female
9th	22.7	5.9	33.3	18.2
11th	30.2	23.1	45.5	4.5
(n)	44	52	22	22

Table III-18. Preferred Residence by Father's Education, Consolidated (CHS) and Non-Consolidated High Schools, 9th and 11th Grades, In % "Home County."

Grade	Consolidated High School		Non-Consolidated High School	
	Father's Education		Father's Education	
	Low	High	Low	High
9th	9.2	15.7	20.8	31.2
11th	20.4	27.5	20.8	30.0
(n)	54	51	24	20

Table III-19. Athletic Participation by Sex, Class of 1972, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, 9th and 11th Grades, In % "High" in Participation.

	Grade	Consolidated High School		Non-Consolidated High School	
		Male	Female	Male	Female
% "High" In Athletic Participation	9th	44.2	43.1	50.0	36.8
	11th	21.0	11.5	4.5	22.7
	(n)	43	52	22	22

Table III-20. Athletic Participation by Father's Education, Class of 1972, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, 9th and 11th Grades, In % 1 and 2.

	Grade	Consolidated High School		Non-Consolidated High School	
		Father's Education		Father's Education	
		Low	High	Low	High
% "High" In Athletic Participation	9th	41.5	46.3	34.8	55.5
	11th	11.1	22.0	4.2	25.0
	(n)	54	41	24	20

Table III-21. Extra-Curricular Activities by Sex, Class of 1972, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, 9th and 11th Grades, In % "High in Activity."

Grade	Consolidated High School		Non-Consolidated High School	
	Male	Female	Male	Female
9th	30.2	39.2	40.9	40.9
11th	23.2	26.9	18.2	36.4
(n)	43	52	22	22

Table III-22. Extra-Curricular Activities by Father's Education, Class of 1972, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, 9th and 11th Grades, In % "High in Activity."

Grade	Consolidated High School		Non-Consolidated High School	
	Father's Education		Father's Education	
	Low	High	Low	High
9th	28.3	43.9	37.5	45.0
11th	20.4	31.7	16.7	40.0
(n)	54	41	24	20

Table III-23. Popularity by Sex, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, 9th and 11th Grades, In % Reporting Selves "High" in Popularity.

	Grade	Consolidated High School		Non-Consolidated High School	
		Male	Female	Male	Female
% "High" In Popularity	9th	29.3	43.1	31.8	22.7
	11th	20.9	26.9	18.2	13.6
	(n)	43	52	22	22

Table III-24. Popularity by Father's Education, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, 9th and 11th Grades, In % Reporting Selves "High" in Popularity.

	Grade	Consolidated High School		Non-Consolidated High School	
		Father's Education		Father's Education	
		Low	High	Low	High
% "High" In Popularity	9th	31.5	44.7	16.7	40.0
	11th	22.2	26.9	12.5	20.0
	(n)	54	41	24	20

Table III-25. "Getting Along" in School by Sex, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, Class of 1972, 9th and 11th Grades, In % Responding "Better than Most."

Grade	Consolidated High School		Non-Consolidated High School	
	Sex		Sex	
	Male	Female	Male	Female
9th	39.5	37.2	27.3	22.7
11th	25.6	28.8	13.6	22.7
(n)	43	52	22	22

Table III-26. "Getting Along" in School by Father's Education, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, Class of 1972, 9th and 11th Grades, In % Responding "Better than Most."

Grade	Consolidated High School		Non-Consolidated High School	
	Father's Education		Father's Education	
	Low	High	Low	High
9th	30.2	48.8	25.0	25.0
11th	30.2	24.4	16.7	20.0
(n)	54	41	24	20

Table III-27. Anomia by Sex, Class of 1972, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, 9th and 11th Grades, by % "High."

	Grade	Consolidated High School		Non-Consolidated High School	
		Sex		Sex	
		Male	Female	Male	Female
% "High" In Anomia	9th	47.7	64.7	72.7	50.0
	11th	41.9	50.0	50.0	40.9
	(n)	44	52	22	22

Table III-28. Anomia by Father's Education, Class of 1972, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, 9th and 11th Grades, by % "High."

	Grade	Consolidated High School		Non-Consolidated High School	
		Father's Education		Father's Education	
		Low	High	Low	High
% "High" In Anomia	9th	66.7	43.9	54.2	70.0
	11th	53.7	36.6	54.2	35.0
	(n)	54	41	24	20

Table III-29. Health Opinion Survey (HOS) By Sex, Consolidated High School (CHS) and Non-Consolidated High School (NCHS), Class of 1972, 9th and 11th Grades, In % "High" in Symptoms.

	Grade	Consolidated High School		Non-Consolidated High School	
		Sex		Sex	
		Male	Female	Male	Female
% "High" In Symptoms	9th	29.5	41.2	36.4	40.9
	11th	30.2	59.6	9.1	36.4
	(n)	44	52	22	22

Table III-30. Health Opinion Survey (HOS) By Father's Education, Consolidated High School (CHS) and Non-Consolidated High School (NCHS), Class of 1972, 9th and 11th Grades, In % "High" in Symptoms.

	Grade	Consolidated High School		Non-Consolidated High School	
		Father's Education		Father's Education	
		Low	High	Low	High
% "High" In Symptoms	9th	38.9	31.7	45.8	30.0
	11th	50.0	40.5	25.0	20.0
	(n)	54	42	24	20

Table III-31. Absenteeism by Sex, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, 9th - 11th Grades, In % Absent 7 or More Days During the School Year.

	Grade	Consolidated High School		Non-Consolidated High School	
		Sex		Sex	
		Male	Female	Male	Female
% Absent 7 or More Days	9th	25.0	43.7	45.4	45.4
	10th	27.9	47.1	45.4	59.1
	11th	38.5	50.0	45.4	59.1
	(n)	39	52	22	22

Table III-32. Absenteeism by Father's Education, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, 9th Through 11th Grades, In % Absent 7 or More Days During the School Year.

	Grade	Consolidated High School		Non-Consolidated High School	
		Father's Education		Father's Education	
		Low	High	Low	High
% Absent 7 or More Days	9th	37.5	33.3	50.0	40.0
	10th	39.6	36.6	58.3	45.0
	11th	53.8	33.3	66.7	35.0
	(n)	52	39	24	20

Table III-33. Summary of Findings from Between-School Comparisons, 1968 to 1971, on Achievement, Aspirations, and Adjustment Variables, with Students Categorized by Sex and Father's Education.

Variable	School Difference, or No School Difference in Patterns of Change?	Nature of Difference, if Any
Achievement		
GPA	No difference	
Need Achievement	No difference	
Self-rating of ability	No major difference	
Aspirations		
Occupational Aspirations	Some differences	CHS males less likely to drop in aspirations CHS females more likely to drop in aspirations
Occupational Expectations	Some differences	CHS males less likely to drop in expectations CHS higher status students less likely to drop in expectations
Job Plan Indecision	No major difference	
Educational Aspirations	Minor difference	CHS females more likely to drop in college aspirations
Educational Expectations	Minor difference	CHS females more likely to drop in expectations
Preferred Residence	Difference	CHS females much more likely to shift to "home county"

(continued)

Table III-33 (continued)

Variable	School Difference, or No School Difference in Patterns of Change?	Nature of Difference, if any
Adjustment		
Athletic Participation	No difference	
ECA	No major difference	
Popularity	No major difference	
"Getting Along"	Some difference	CHS lower status students more likely to maintain higher level
Anomia	Some difference	CHS lower status students more likely than NCHS to decline in anomia
HOS	Difference	CHS students, especially females, somewhat more likely to increase HOS scores
Absences	Some difference	CHS males more likely to increase absences than NCHS males

CHAPTER IV

RESULTS: ACHIEVEMENT, EXPECTATIONS, AND ADJUSTMENT OF 1972 GRADUATES OF THE CONSOLIDATED HIGH SCHOOL, BY SEX, IQ, FATHER'S EDUCATION, AND MODERNISM

In the preceding section we compared indicators of student outcomes in the consolidated and the nonconsolidated school over a three-year period to see what generalizations could be made about the impact of consolidation. The intent of the present section is to focus on differential impacts of the new school on subcategories of students within it. Stated succinctly the question is this: When students are classified by sex, ability, father's education, and modernism, are there any noteworthy differences in the way they change over a four-year period in the new school, given a range of variables relating to adjustment, achievement, and expectations?

Ideally, one would hope that any disadvantage attributable to (for example) status differences in 1968 would have been reduced by four years later. Certainly, one of the hopes of the supporters of school consolidation is that it will have an equalizing effect by providing more educational options for more types of students. At the least, one would hope to find that whatever gaps existed in 1968 were no greater in 1972, because if they were, one would have to conclude that the new school was not only not providing equality of educational outcomes, but actually contributing to further inequality.

For purposes of exploring this issue of differential impact within the school, the four classifying variables of sex, IQ, father's education, and modernism are used to compare four-year changes on the following variables:

Achievement:
- GPA
- Direction of change in GPA
- Reading Achievement
- Need Achievement

Expectations:
- Occupational Expectations
- Educational Expectations

Adjustment:
- Participation in ECA
- Self-reported Popularity
- Anomia
- Health Opinion Survey (HOS)
- Personal and Social Assets Ratings by Teachers
- Absenteeism

The sample consists of the 129 graduates in the class of 1972 for whom data were available in 1968 and 1972.

One initial question which arises concerns the extent of the interrelationship among the four classifying variables. This information, which may be useful to the reader in interpreting the findings to be presented, is given in summary form in Table IV-1.

(Table IV-1 about here)

The table shows that:

1. The association between IQ and father's education is moderately strong, as would be expected.

2. The relationship between IQ and modernism is specified by sex, such that for girls the higher the IQ the higher the modernism score, but not for boys.

3. The same is true to a lesser extent in the case of father's education and modernism (which could explain part of the association between IQ and modernism among girls).

4. There is no association between sex and IQ.

5. There is a weak-to-moderate relationship between sex and father's education such that girls are more likely than boys to have fathers with less than high school education. (This may be caused by a possible greater likelihood for lower status boys to drop out of school than lower status girls, resulting in a different status composition in the two sex categories among the students who eventually graduated in 1972.)

6. There is little or no association between sex and modernism.

While these data do not permit the construction of a causal model, they do make certain assumptions plausible. For example, the link between father's education and IQ suggests that ability is class-linked, but that the cluster of values and attitudes we have referred to as modernism is not, except for girls. The link between IQ and modernism among girls further suggests that a different dynamic operates among girls than among boys, in a way that sees class background factors influencing ability directly and perhaps indirectly through attitudes which are class-linked.

The remainder of this chapter looks at changes among CHS students over the four-year period, taking one dependent variable at a time. These dependent variables are grouped into the three subheadings of achievement, expectations, and adjustment.

Achievement

GPA

Tables IV-2 through IV-4 report 9th and 12th grade GPA's by IQ, father's education, and modernism, respectively.

(Tables IV-2 through IV-4 about here)

Table IV-2 shows only one instance in which there was as much as half a letter grade change between the 9th and 12th grades--that of the lower IQ girls. Thus, while there was not much change among students generally, lower IQ girls did appear to be relatively advantaged and on their way to achieving equity with higher IQ girls and boys.

In terms of father's education (Table IV-3), the only instance of upward change in GPA was among girls whose fathers had less than a high school education. And again, the largest change shown in Table IV-4 occurs among girls low in modernism. In short, girls who were low in IQ, father's education, and modernism appeared to profit more from the four years--at least from the standpoint of grades--than any other subgroup. While none of the other subgroups rose in GPA appreciably, none appeared to suffer greatly either, with the possible exception of high IQ boys, who dropped about one-third of a letter grade.

Direction of Change in GPA

Another way to analyze changes in grades earned is simply to record the direction of change for each student between the 9th and 12th grades, and then to see what proportion of each subgroup changed in what directions. Tables IV-5 through IV-8 present these data.

(Tables IV-5 through IV-8 about here)

Almost exactly half the total sample experienced an increase in GPA between the 9th and 12th grades, but almost twice the proportion of females as males went up in grades. In the case of both males and females, lower IQ students were somewhat more likely to increase in GPA than higher IQ students (Table IV-6). Likewise, the grades of both male and female students whose fathers had less than a high school education were somewhat more likely

to increase than those of other students. And students, both male and female, who were lower in modernism were more likely to experience change in an upward direction.

In short, it appears from this indicator that lower SES, lower ability, more tradition-oriented students, especially females, were closing the gap on other students, and that they were anything but further disadvantaged by the new school.

Reading Achievement

Data were available in the consolidated school from applications of the Stanford Achievement Test (High School Battery) in the 9th and 12th grades. The reading subtest was selected as constituting a measure of achievement in a skill area regarded as fundamental to others and as the key to most forms of academic success. In this sample, test scores ranged from 25 to 74. National norms for this subtest indicate that a score of 55 is the median for all 12th grade students. This score was chosen arbitrarily as the cutting point in dichotomizing the variables of reading achievement, so that "low," or "-" represents a score of 54 or less, and "high," or "+" represents a score of 55 or higher. Data on changes in reading achievement among the various categories of students are presented in Tables IV-9 through IV-11.

(Tables IV-9 through IV-11 a[illegible]t here)

Table IV-9 shows, as one might expect, that IQ and reading ability are related. Not only is reading ability itself related to IQ, but increase in reading ability also appears to be a function of IQ, among both boys and girls. While the proportion of "High" scorers among higher IQ students increased from about 20% to 79%, the increase among lower IQ students was from about 5% to 27%. In terms of the means of the IQ categories, the difference between 9th and 12th grade for higher IQ students was about 8 points, while that for lower IQ students was about 6 points. This suggests that the former group did not change so much more than the latter, but was simply closer to the cutting point of 55 to begin with, so that more of them "crossed over" during the four years. In sum, higher IQ students had an initial edge in reading ability, and they maintained it, even increasing their lead slightly. (Incidentally, note that the mean scores for all subgroups puts them near or beyond the national median for the 12th grade.)

Table IV-10 reveals a similar pattern between father's education and reading achievement, as would be predicted from the association between IQ and father's

education, but the relationship appears to be somewhat weaker than that between IQ and reading achievement. Again, the magnitude of the difference in the changes in means between higher and lower father's education is small.

The relationship between modernism and reading achievement (Table IV-11) appears still weaker than the two preceding, but the pattern is still the same: the higher the modernism, for both sexes, the higher the reading achievement score and the greater the likelihood and magnitude of upward change in score over the four years.

The impact of these three variables jointly can be illustrated, as in Table IV-12, by contrasting the means and percentage "High" on reading achievement at the two points in time of those individuals who were high on all the classifying variables and those who were low on all three.

(Table IV-12 about here)

Note that while the "High's" gained about 8 points, the "Low's" gained less than 5, with the result that the gap which already existed in the 9th grade (about 12 points) was increased slightly to about 15 points by the end of the senior year.

These findings regarding reading achievement stand in contrast to those regarding grades earned (or given), where it was apparent that the initial gaps in the 9th grade were closing, especially for girls. Without assuming that reading achievement is a "better" measure of achievement, one can nonetheless understand it as probably more stable and less subjective than grades in courses, and it certainly is different in that it is nationally normed. What we may be witnessing is a contrast between local and national judgments of achievement. Grades (local) involve probably more than just an estimate of academic achievement, and whatever those additional factors are, they favor slightly the lower ability, lower SES, more traditionalist students, especially female students. The result is that while by local norms there is a strain toward equality of achievement, by national norms inequality increases slightly.

Need Achievement

The question to be raised in the present context is whether Need Achievement, viewed generally as the desire to succeed, changes among the subgroups within the consolidated school in the same directions and to the same

extent. The data regarding Need Achievement are presented in Tables IV-13 through IV-15.

(Tables IV-13 through IV-15 about here)

It is clear from all these tables that Need Achievement changes in different directions for male and female students. The sex variable appears to be more important, in fact, than IQ or father's education, which make virtually no difference in changes in need achievement. In the case of modernism, this variable made a difference only among males, where high modernism males were more likely to increase in need achievement than low modernism males.

In short, all males, and especially those high in modernism, were more likely to increase in need achievement, while females were somewhat more likely to decrease. (The three-year comparison with the NCHS shows the same sex pattern, which allows the tentative conclusion that this phenomenon is not specific to the new school. It is tempting to speculate that this is a widespread societal occurrence among adolescents accompanying the acquisition of adult sex roles, which would place value on competitive attitudes for males but constrain females to suppress their importance.) At any rate, insofar as Need Achievement has any bearing on present or future levels of achievement, the consolidated school does not seem to have had much effect in reducing the Nach gap between the sexes, which in fact increased.

Note also that initial gaps between subgroups aligned by IQ, father's education, and modernism continued to exist at about the same levels four years later. The school was apparently unable to exert much influence which would have resulted in smaller differences in motivational systems among IQ, father's education, and modernism categories.

(In addition to percentages of students scoring "high" on the need achievement scale, these tables report percentage of individuals changing in an upward and downward direction. These figures are intended to supplement, and are usually quite consistent with, the percentages which precede them.)

Expectations

Occupational Expectations

In this section we look at several aspects of occupational expectations, omitting the variables of aspirations from the analysis, as it is less close to reality both in terms of the thinking of the student and

in terms of the probability of actual later outcomes. The average level of job expectations in the 9th as compared with the 12th grade will be looked at for the subcategories of students, as will the percentage of students whose occupational expectations rose during the four years. As will be seen, not everyone held expectations for specific jobs in 1968 or 1972; this becomes an interesting variable in itself, as amount of job indecision varies from one group to another and one time to another.

Looking first at sex differences only (Table IV-16), it is apparent that very little difference exists between male and female students, either as freshmen or as seniors. Neither sex changed appreciably over the four years, at least in mean score. Measured strictly in terms of the proportion who raised their job expectations at all, more females changed their plans upward than males. It is also apparent from this table that job uncertainty was initially much greater for girls than boys, and that because of the greater reduction of uncertainty among them, girls almost reached the same low 12th grade level of job uncertainty as boys. If anything can be said about the fate of occupational plans in the CHS from these data, it is that girls were somewhat more likely to raise their expectations than boys, maintained more than parity in their job-related SES expectations, and reduced their uncertainty or indecision to the level of male students during the four years.

(Table IV-16 about here)

When students are classified by sex and IQ, the data on occupational expectations are as presented in Table IV-17. As can be seen, the mean level of expectation is not terribly different from 9th to 12th grade for either males or females. For males, in fact, there is not much difference by IQ on any of the measures. For females, the only difference is the higher percentage of lower IQ students who raised their expectations, but these increases must have been quite small and were outweighed by the decreases, judging from the slight reduction in mean level of expectation. In short, neither IQ category was "advantaged" or "disadvantaged" by the four years experience in the school in the specific area of job plans.

(Tables IV-17 through IV-19 about here)

Just as the initial gap in job expectations between IQ groups remained more or less intact over the four years, so did they between status groups as

measured by father's education. In fact, the gap among girls may have increased slightly (see Table IV-18). The proportion of students who changed upward was about the same for both status categories of males, but somewhat larger for lower status females. (Again, these changes were small and were outweighed by those who changed downwards.) In terms of job indecision, there was a reduction to much lower levels of indecision among students of both sexes whose fathers had more education.

Table IV-19 shows an increasing gap in job plans between males with high and low modernism, but a decreasing gap among females. A look at the proportion of students who changed upward shows that the percentages are consistent with the finding that low-modernism males and high-modernism females are more likely to lower their expectations, while high-modern males and low-modern females were more likely to raise theirs. This pattern may be caused by the sex-specific nature of the modernism scale, which may mean one thing to girls and another to boys, as discussed elsewhere.

Educational Expectations

Two aspects of plans for further schooling are looked at in this section: the expectation that the student will attend college (for anywhere from one year to graduate work), and the expectation that he will continue beyond secondary school with any form of formal education. Additionally, the percentages of students changing their expectations for further education upward and downward are indicated.

It is not surprising to note differences by IQ level in both college and postsecondary expectations. These differences exist in the 9th grade and persist four years later (see Table IV-20). In the case of expectations for attending college, there was a drop among all males, but only among lower IQ females. In other words, higher IQ females tended to maintain their expectations more than other categories of students.

(Table IV-20 about here)

In the case of expectations for postsecondary education, there were no sizeable drops, which suggests that many students over the four years had changed their plans to attend college and were instead intending to go to trade or professional schools. To what extent this reflects the national trend in the same direction, and to what extent this shift resulted from the fact of consolidation and the concomitant emphasis on vocational training cannot be determined, but it is obvious that the two factors would be mutually reinforcing.

When students are classified by level of father's education, the results for "college expectation" are similar to those for IQ: expectations for college drop for all males and for females whose fathers have less education (see Table IV-21). However, postsecondary expectations dropped for higher SES boys and lower SES girls, and rose for higher SES girls and lower SES boys. Fully nine out of ten higher status girls expected to continue with some form of further schooling by the end of the 12th grade. This means that the "status gap" among girls increased over the four years, whereas for boys it decreased because of movement toward the middle by both higher and lower status groups.

(Table IV-21 about here)

When level of modernism is varied, it can be seen (Table IV-22) that there is not much difference among males in either the direction or amount of change between 9th and 12th grades. For girls, on the other hand, there does appear to be some difference by modernism level, such that girls with lower modernism scores were more likely to drop in their expectations for further schooling. Here again we may have a situation in which modernism itself means something different for females than for males.

(Table IV-22 about here)

To summarize the data regarding educational expectations:

Higher IQ and higher status females are more likely to maintain plans for attending college.

Higher status females and lower status males are more likely to increase their expectations of continuing with some type of postsecondary education.

Lower-modernism females are more likely to drop in educational expectations.

By inference from the data presented tables, almost all categories of students were more likely to aspire to some form of postsecondary education other than college in 1972 than in 1968. As stated earlier, this fact is no doubt as much a result of national as local forces, but consolidation is probably a contributing factor nonetheless.

Adjustment

Participation in Extra-Curricular Activities (ECA)

(In looking at the results in this section it must be kept in mind that while students were asked about ECA in the 9th grade, they were asked about the preceding year, or the last year in elementary school.)

In terms of the percentage of students reporting themselves "high" in participation in ECA, Table IV-23 shows that only high-IQ males increased. The initial high-IQ/low-IQ differences remained in the 12th grade among both males and females, but it became more pronounced among males as a consequence of this increase (see Table IV-23).

(Tables IV-23 through IV-25 about here)

This pattern also holds for categories of father's education: higher-status males were the only category to increase in participation in ECA, with the result that the gap among males increased (see Table IV-24).

When students are classified by modernism levels, the only striking change in ECA participation rate occurs among low-modernism females who drop (see Table IV-25).

If one considers ECA participation as an indicator of the degree to which students participate in the total life of the school and are not alienated from it, then it appears that low-modernism females became most "left out" and higher status, higher-IQ males became higher participators. As with many other findings in the study, the overwhelming fact here is that the apparent initial status and ability differences in ECA persist or increase through the 12th grade, for both sexes.

Popularity

Self-ratings of popularity did not change dramatically for any category of student over the four years from 1968 to 1972, as can be seen in Tables IV-26 through IV-28.

Girls were somewhat more likely to rate themselves as high in popularity at both points in time, regardless of IQ, father's education, or modernism. In general, those who were higher IQ, higher in status, and more modern were more likely to rate themselves high in popularity at both times.

To the extent that there was any change in self-ratings of popularity over time, it was in the slight increase in high ratings. The exceptions to this pattern

were the higher status, higher IQ, and lower modernism females.

In general, then, what status and IQ and modernism differences existed in feelings of popularity before the consolidation experience by and large persisted through four years later. The gaps may have lessened slightly among girls.

(Tables IV-26 through IV-28 about here)

Anomia

As can be seen in Tables IV-29 through IV-31, in general the change in anomia is in the direction of an increase in the proportion of students with "low" scores. At both points, however, differences exist between status, IQ, and modernism levels, as well as between males and females.

The exceptions to the generally upward change in low scorers are the low modernism females, and the lower status and lower IQ females, who did not really increase appreciably.

Among females, in short, the gap in anomia levels widened over time, and among males it remained about the same, even though the general trend was decreased anomia for most students.

(Tables IV-29 through IV-31 about here)

Health Opinion Survey (HOS)

As described elsewhere, the HOS is an instrument devised to assess psychophysiological symptoms of stress from which psychological malfunctioning or maladjustment can be inferred. Tables IV-32 through IV-34 present HOS data for subcategories of the CHS student population at 9th and 12th grade levels.

(Tables IV-32 through IV-34 about here)

A look at these three tables permits the conclusion that HOS scores were generally higher for females in the 12th grade than for males, which was not the case in the 9th grade. Thus, a gap in symptom level by sex occurred during the four years. This appears to be because males generally declined, while females were either stable or increased slightly in the percentage of high scorers.

Table IV-32 shows that 9th grades differences in HOS by IQ level tended to be slightly reduced over time. Note that the only category actually to rise was higher

IQ females. Low IQ females were highest to begin with and retained that dubious distinction in the 12th grade.

When status background categories are compared in Table IV-33, the male-females difference in direction of change, and the resultant gap, are again in evidence. Lower status males dropped more than any other category. There is not much initial or subsequent differences in HOS level by father's education alone. Even the sizeable decrease in proportion of high scorers on the part of lower status males may have occurred because of their higher initial percentage.

Table IV-34 shows a rather large drop in HOS for lower modernism males. All other categories of students are fairly stable over time, although lower modernism females show a slight tendency to decline. There is no real gap in HOS levels initially by modernism; the difference in levels for males in the 12th grade is because of the abnormally low figure for lower modernism males.

To summarize, males decrease in HOS levels while females are stable or show a slight increase overall. The initial gap in HOS by IQ remains but is narrowed slightly. Differences by father's education and modernism are insubstantial at both times, except that low modernism males dropped considerably by the 12th grade. Lower status males also showed a sizeable drop. By inference, low status, low IQ, low modernism males showed the greatest improvement, while high status, high IQ, high modernism females were the most likely to increase in symptoms of stress.

"Personal and Social Assets" (PSA)

PSA scores are ratings of student "citizenship" qualities made by teachers yearly and entered on the students' permanent folders. It is possible to view this rating as the teacher's judgment about how well a given student fits the pattern of the "ideal student citizen" and thereby appears "adjusted" from the teacher's point of view. As the teacher is an important purveyor of rewards and punishments (including grades) in the school, the teacher's opinion of the student's appearance and behavior should not be underestimated in assessing overall student success.

The PSA ratings cover the following factors: cooperation, courtesy, dependability, industriousness, initiative, leadership, maturity, personal appearance, and self-control. Every student was rated on each factor using a five-point scale, with "1" representing

"superior." In the accompanying tables (IV-35 through IV-37), the category of "High PSA" includes mean ratings of 2.0 or lower. In addition to presenting data on percentages of students with "High" ratings, data on percentages of students changing upward and changing downward in PSA over the four years is offered.

(Tables IV-35 through IV-37 about here)

The general trend shown in these tables is a tendency toward less likelihood of high PSA ratings in the 12th as compared with the 9th grade. Subcategories which constitute exceptions to this trend will be noted. On the sex variable alone, females appear more likely to win high PSA ratings than males in the 9th grade, but not necessarily in the 12th, as females were somewhat more likely to receive lower ratings in the 12th than the 9th grade, as contrasted with males.

Table IV-35 shows some difference by sex in the relationship between PSA and IQ. What seems particularly striking is that where lower IQ males are somewhat more likely to be higher in PSA by the 12th grade, lower IQ females are considerably more likely to be rated lower. Also note that while the gap for males is reduced by the passage of time, it increases rather sharply for females of differing IQ levels.

Table IV-36 suggests that the male-female difference in PSA changes, while not strong, is a bit stronger than the status difference. In other words, being female is more likely to result in decreased PSA ratings than being lower status alone. Note, however, that PSA gaps by status exist for both sexes at both points in time.

Table IV-37 again shows some interesting patterns in PSA ratings which vary by sex and modernism. Unlike girls, lower modernism boys are more likely to receive higher PSA ratings, at both times. Also note that lower modernism girls are the only category which show a substantial decrease in the proportion with high PSA ratings. In the case of both males and females, the gap in PSA ratings by modernism level increased, but it increased much more for girls.

The PSA gap among boys lessened by IQ levels, whereas it increased for girls. And the gap lessened for both boys and girls of different status levels. In all cases, some considerable gap remained, even where it decreased.

In short, in terms of teacher ratings in the range of factors constituting PSA, almost all categories of females, but especially low modernism and low IQ females were more likely than other categories of students to earn lower ratings in the 12th than in the 9th grade. (This pattern is an interesting parallel to changes in GPA noted earlier.)

Absences

For purposes of presentation in this section, we look at the percentage of students within specified categories who missed more than a school week (5 days) in a given year.

As can be seen from Table IV-38, there are no notable differences in absence rates by sex alone except possibly for the 11th grade. Moreover, there are no important trends within or between sexes over the four years: absences do not appear to increase or decrease significantly over time. (This is also the case when data are calculated in means.)

(Table IV-38 about here)

Table IV-39 presents absence data by sex and IQ. Among males, the trend is toward reduction of the gap between higher and lower IQ groups as higher IQ males increase somewhat and lower IQ males decrease in absences. Among females, on the other hand, higher IQ females do not change appreciably over the four years, while lower IQ females increase absenteeism somewhat, with the result that a gap is created, favoring the higher IQ girls.

(Table IV-39 about here)

Table IV-40 shows absences by sex and father's education. Again in the case of males, as with IQ, the initial gap is reduced because of opposite trends among the two status categories. Among females, the pattern noted with IQ in the previous table is stronger: a gap is created or even reversed over time, as low status females increase and high status females decrease absences.

(Table IV-40 about here)

Absenteeism by sex and modernism are shown in Table IV-41. Among males the gap is again reduced over time because of reverse trends among the higher and lower modernism groups. Among females there is little shift in the rate among higher modernism, but an

increase among lower modernism girls, resulting in an increase in the difference between the rates of the two groups by the 12th grade.

(Table IV-41 about here)

To summarize, these data suggest noticeable increases in absenteeism for lower IQ, lower status, lower modernism females, and they show increases in the gaps between themselves and higher status, higher IQ, higher modernism females. Among males, the initial gap was reduced, whether we look at IQ, status, or modernism. Apparently, this is the case more because males on the lower end of these indicators decreased their absences than because the "high" males increased, though the latter trend was present. Note also that the clearest case of decreasing absences was among these "low" males. One might hazard a guess that these were students more likely than any others, male or female, to be attracted to the growing vocational curriculum, and that the vocational courses made going to school a positive experience for them. If this is the case, and since a decrease in absences did not happen among the "low" females--who in fact increased the most--it suggests the need for increasing vocational training opportunities equally attractive to females.

Adjustment Variables: Summary

Several points may be made in summarizing this section on the adjustment of subcategories of students during the first four years of the new school.

1. As should be expected, identical patterns of subgroup differences did not emerge across all indicators included under the label of "adjustment." These measures were used not because they all tapped the same dimension, but precisely because they appeared to be indicators of different aspects of the extent to which students succeeded in the nonacademic life of the school system. Moreover, while certain of these variables could be considered causative or mediating (for example, ECA participation and self-ratings of popularity), others might be regarded as primary, secondary, or even more indirect consequences (HOS scores and absences, for instance). While this is not an attempt to construct, let alone document, a model of causation, it serves to illustrate why one need not expect high intercorrelation among all the adjustment variables, or the same relationship between each of them and the sex, IQ, status, and modernism variables.

We should expect, on the other hand, that some generalizations could be drawn using all or most adjustment indicators, or else we must call into question their

validity, or the value of the construct of adjustment. A review of the findings just presented reveals some such generalizations, limited though they may be by sample size and the crudeness of measures.

2. One such generalization has to do with the apparent fact that, by and large, differences in levels of adjustment which existed early in the students school experience tended to persist or become larger by the end of the 12th grade. Whatever "handicaps" existed for students of lower ability, status background, and modernism--as well as sex--were not for the most part removed. In this sense, what might have been an idealistic hope for the new school--that of providing equality in the total school experience--was not achieved. (See Table IV-42 for summary.)

3. Were any subcategories of students especially "advantaged" or "disadvantaged" in terms of these adjustment variables during their high school careers? The data are not unequivocal on this point, but if any generalization can be abstracted from the findings on these six variables, it is that low IQ, low status, and low modernism females are more likely to show deteriorating patterns of adjustment than other categories. There are exceptions, on the other hand. No subgroup appears to become especially worse off with regard to self-assessed popularity. It is the high modernism, high IQ, high status females who, if anyone, show increases in HOS scores. There was a general improvement among all females on PSA ratings. Nevertheless, the low IQ, low status, and low modernism females appear most frequently in the ranks of those who are increasingly less successful at fitting into the non-academic life of the school[31] (see Table IV-42).

On the other hand, no subcategories appear to have been uniformly advantaged, judging from these findings except possibly the "low males" who improved on several adjustment indicators. Higher IQ and higher status males seemed to increase in ECA participation, while "low" males decreased in absences. Low modernism, low IQ, and low status males may have shown slight improvement on HOS scores, and most categories showed decreases in anomia. Never, however, do low IQ, low status, low modernism females appear in the "advantaged" list except in PSA (see Table IV-42).

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[31]Kreitlow, on the other hand found adjustment lower among <u>males</u> in reorganized school districts.

Summary: Within-School Differences among Subgroups of CHS Students Over Time

An attempt to summarize the findings of this segment of the study may be found in Table IV-42.

(Table IV-42 about here)

As can be seen from this table, and as has been stressed throughout the presentation of findings, the most striking pattern is in the continuation of gaps in achievement, expectations, and adjustment between subgroups of students classified by sex, ability, status, and modernism from the 9th through the 12th grade.

The most notable exception to this persistence of differences is the narrowing gap in grades earned, especially among females. While the importance of grades should not be downplayed, the discrepancy between changes in GPA and changes in reading achievement have already been pointed out, and one is faced with the task of reconciling the difference between achievement as judged by national standards and local norms. One might also speculate that the grades earned by lower IQ, lower status, lower modernism females are a reflection of the kinds of courses taken by them in the upper years, courses which may have been somewhat more technical and vocational in nature than based on reading and comprehension skills. (This explanation would not, of course, encompass the apparent decline in grades experienced by higher IQ, higher status, higher modernism males.)

It is interesting to note as well that this improvement in grades among lower IQ, lower status, lower modernism females was not matched by improvement in adjustment (where, in fact, they were the categories most likely to decline on most measures except PSA ratings), nor by increases in occupational and educational plans.

If we may use the word "success" to generalize about the performance of students on the total cluster of variables studied, then it appears that for the most part those students who were most successful at the outset of their experience in the new school were likely to be the most successful at the conclusion of it. Some groups of students found increasing success on the various dimensions, but it does not seem possible to identify categories of students who increased their advantage on all variables across the board, with the possible exception of the "low males," who improved on two of the adjustment indicators. On the other hand, the "low females" can be identified as a set of students more likely than others to lose ground on most dimensions of success, with the exception of grades and PSA ratings.

It is tempting to make too much out of the patterns found in these data, but the small numbers of students we are dealing with serve as a reminder to be cautious in drawing conclusions. The consistency of certain patterns across several variables provides a bit more confidence than would otherwise be the case, but, even with that source of support, the reader is cautioned again that the conclusions tentatively drawn from this study require confirming data from additional sources.

Table IV-1. Associations (in Gamma) Between Sex, IQ, Father's Education, and Modernism, for Both Sexes, Males Only, and Females Only.

Association Between:	Gamma		
	Both Sexes	Males Only	Females Only
1. IQ and Father's Education	.502	.612	.432
2. IQ and Modernism	.154	.072	.510
3. Father's Education and Modernism	.275	.226	.407
4. Sex and IQ	-.029		
5. Sex and Father's Education	.370		
6. Sex and Modernism	.121		
(n)	124	56	68

Table IV-2. GPA, 9th and 12th Grades, Class of 1972, CHS, By Sex and IQ.

		I. Q.	
		Low	High
Males GPA	9th Grade	1.6	2.5
	12th Grade	1.7	2.2
	(n)	27	27
Females GPA	9th Grade	1.8	2.6
	12th Grade	2.3	2.6
	(n)	34	35
Both Sexes GPA	9th Grade	1.7	2.6
	12th Grade	2.0	2.4
	(n)	61	62

Table IV-3. GPA, 9th and 12th Grades, Class of 1972, CHS, By Sex and Father's Education.

		Father's Education	
		Low	High
Males			
GPA	9th Grade	1.7	2.2
	12th Grade	1.7	2.1
	(n)	23	31
Females			
GPA	9th Grade	2.1	2.6
	12th Grade	2.4	2.6
	(n)	43	26
Both Sexes			
GPA	9th Grade	2.0	2.4
	12th Grade	2.2	2.3
	(n)	66	57

Table IV-4. GPA, 9th and 12th Grades, Class of 1972, CHS, By Sex and Modernism.

		Modernism	
		Low	High
Males			
GPA	9th Grade	1.9	2.1
	12th Grade	2.0	1.9
	(n)	23	31
Females			
GPA	9th Grade	2.0	2.4
	12th Grade	2.3	2.5
	(n)	25	44
Both Sexes			
GPA	9th Grade	1.9	2.3
	12th Grade	2.2	2.3
	(n)	48	75

Table IV-5. Direction of Change in GPA from 9th to 12th Grades, CHS Class of 1972, by Sex.

		Sex		
		Male	Female	Total
Direction of Change	+	32.7%	62.3%	49.2%
	= or -	67.3	37.7	50.8
	(n)	55	69	124

Table IV-6. Direction of Change in GPA from 9th to 12th Grades, CHS Class of 1972, by IQ and Sex.

		Sex					
		Male		Female		Both Sexes	
		IQ		IQ		IQ	
		High	Low	High	Low	High	Low
Direction of Change	+	28.6%	37.0%	57.1%	67.6%	44.4%	50.8%
	= or -	71.4	63.0	42.9	32.4	55.6	49.2
	(n)	28	27	35	34	63	65

Table IV-7. Direction of Change in GPA from 9th to 12th Grades, CHS Class of 1972, by Father's Education and Sex.

		Sex					
		Male		Female		Both Sexes	
		Father's Education		Father's Education		Father's Education	
		High	Low	High	Low	High	Low
Direction of Change	+	28.1%	39.1%	32.6%	46.1%	30.7%	42.9%
	= or -	71.9	60.9	67.4	53.8	69.3	57.1
	(n)	32	23	43	26	75	49

Table IV-8. Direction of Change In GPA from 9th to 12th Grades, CHS Class of 1972, by Modernism and Sex.

		Sex					
		Male		Female		Both Sexes	
		Modernism		Modernism		Modernism	
		High	Low	High	Low	High	Low
Direction of Change	+	38.9%	64.9%	53.7%	77.8%	49.1%	70.3%
	= or -	61.1	35.1	46.3	22.2	50.8	29.7
	(n)	18	37	41	27	59	64

Table IV-9. Reading Achievement, 9th and 12th Grades, CHS Class of 1972, in Mean Score and Percent Scoring 55 or Higher, by IQ and Sex.

	Male				Female				Total			
	IQ				IQ				IQ			
	High		Low		High		Low		High		Low	
	x̄	% High	x̄	% High	x̄	% High	x̄	% High	x̄	% High	x̄	% High
9th Grade	47.8	11.5%	40.3	4.0%	50.7	25.7%	43.3	6.4%	49.8	19.7%	42.7	5.4%
12th Grade	57.0	76.9	46.7	20.0	58.7	80.0	49.7	32.3	57.9	78.7	48.3	26.8
(n)	26		25		35		31		61		56	

Table IV-10. Reading Achievement, 9th and 12th Grades, CHS Class of 1972, in Mean Score and Percent Scoring 55 or Higher, by Father's Education and Sex.

	Male								Total			
	Father's Education								Father's Education			
	High		Low		High		Low		High		Low	
	$\bar{x}$	% High	$\bar{x}$	% High	$\bar{x}$	% High	$\bar{x}$	% High	$\bar{x}$	% High	$\bar{x}$	% High
9th Grade	45.5	6.7%	42.7	[illegible]%	49.9	[illegible]%	45.6	7.5%	47.5	17.9%	44.6	8.2%
12th Grade	53.4	63.3	49.8	33.3	57.6	70.2	52.4	47.5	55.4	66.1	51.5	42.6
(n)	30		21		26		[illegible]		[illegible]		51	

Table IV-11. Reading Achievement, 9th and 12th Grades, CHS Class of 1972, in Mean Score and Percent Scoring 55 or Higher, by Modernism and Sex.

	Sex											
	Male				Female				Total			
	Modernism				Modernism				Modernism			
	High		Low		High		Low		High		Low	
	$\bar{x}$	% High	$\bar{x}$	% High	$\bar{x}$	% High	$\bar{x}$	% High	$\bar{x}$	% High	$\bar{x}$	% High
9th Grade	45.9	9.7%	42.1	4.8%	48.6	23.8%	44.9	4.2%	47.4	17.8%	43.6	4.4%
12th Grade	54.4	51.6	48.4	42.6	55.8	66.7	52.2	41.7	55.2	60.3	50.4	42.2
(n)	31		21		42		24		73		45	

Table IV-12. Reading Achievement, 9th and 12th Grades, Both Sexes, CHS Class of 1972, for Students High vs. Students Low on IQ, Father's Education, and Modernism, in Mean Score.

	IQ, Father's Education, and Modernism	
	"High"	"Low"
9th Grade	51.7	39.9
12th Grade	59.6	44.4
(n)	27	17

Table IV-13. Need Achievement, 9th and 12th Grades, CHS Class of 1972, by Sex and IQ, in % Scoring "High," % Changing Upward, and % Changing Downward.

	Male		Female		Total	
	IQ		IQ		IQ	
	High	Low	High	Low	High	Low
9th Grade	46.4%	33.3%	57.1%	36.4%	52.4%	35.0%
12th Grade	57.1	40.7	45.7	33.3	50.8	36.7
Changed Upward	28.6	40.7	20.0	15.1	23.8	26.7
Changed Downward	21.4	18.5	34.3	15.1	28.6	16.7
(n)	28	27	35	33	63	60

Table IV-14. Need Achievement, 9th and 12th Grades, CHS Class of 1972, by Sex and Father's Education, in % Scoring "High," % Changing Upward, and % Changing Downward.

	Male		Female		Total	
	Father's Education		Father's Education		Father's Education	
	High	Low	High	Low	High	Low
9th Grade	51.6%	25.0%	50.0%	45.2%	50.9%	37.9%
12th Grade	61.3	33.3	42.3	38.1	52.6	36.4
Changed Upward	12.9	33.3	11.5	21.4	12.3	25.8
Changed Downward	9.7	8.3	34.6	19.0	21.0	15.1
(n)	31	24	26	42	57	66

Table IV-15. Need Achievement, 9th and 12th Grades, CHS Class of 1972, by Sex and Modernism, in % Scoring "High," % Changing Upward, and % Changing Downward.

	Male		Female		Total	
	Modernism		Modernism		Modernism	
	High	Low	High	Low	High	Low
9th Grade	41.9%	37.5%	51.2%	40.0%	47.3%	38.8%
12th Grade	58.1	37.5	46.5	28.0	51.3	32.6
Changed Upward	35.5	33.3	16.3	20.0	24.3	26.5
Changed Downward	12.9	29.2	23.3	28.0	18.9	28.6
(n)	31	24	43	25	74	49

Table IV.16. Mean Occupational Expectations by Sex, Change in Occupational Expectations, 9th and 12th Grades, Class of 1972, and % "No Response" (NR), 9th and 12th Grades.

		Sex	
		Male	Female
Occupational Expectations (Duncan Ratings)	9th Grade	69	71
	12th Grade	67	70
	Change (% +)	32.4%	45.9%
	(n)	37	37
	"No Response" 9th Grade	23.6	40.8
	"No Response" 12th Grade	10.9	14.1
	(n)	55	71

Table IV-17. Occupational Expectations by Sex, IQ, in 9th and 12th Grades, Class of 1972, in Consolidated School, Mean % Change +, and % "No Response," from 9th and 12th Grades.

		IQ	
		High	Low
Males	9th Grade	74	64
Occupational Expectations	12th Grade	72	61
	Change +	30.0%	35.3%
	(n)	20	17
	"No Response" 9th Grade	18.5	29.6
	"No Response" 12th Grade	11.1	11.1
	(n)	27	227
Females	9th Grade	75	67
Occupational Expectations	12th Grade	75	65
	Change +	31.6%	61.1%
	(n)	19	18
	"No Response" 9th Grade	42.3	38.9
	"No Response" 12th Grade	11.4	16.7
	(n)	35	36
Both Sexes	9th Grade	75	65
Occupational Expectations	12th Grade	73	63
	Change +	30.7%	48.6%
	(n)	39	35
	"No Response" 9th Grade	32.2	34.9
	"No Response" 12th Grade	11.3	14.3
	(n)	62	63

Table IV-18. Occupational Expectations by Sex, Father's Occupation, in 9th and 12th Grades, Class of 1972, in Consolidated High School, Mean % Change +, and "No Response" from 9th and 12th Grades.

		Father's Education	
		Low	High
Males	9th Grade	64	74
	12th Grade	61	72
	Change +	35.3%	30.0%
	(n)	17	20
	"No Response" 9th Grade	13.0	32.3
	"No Response" 12th Grade	17.4	6.5
	(n)	23	31
Females	9th Grade	68	74
	12th Grade	65	75
	Change +	55.5%	36.8%
	(n)	18	19
	"No Response" 9th Grade	48.9	26.9
	"No Response" 12th Grade	22.2	00.0
	(n)	45	26
Both Sexes	9th Grade	66	74
	12th Grade	63	73
	Change +	45.7%	33.3%
	(n)	35	39
	"No Response" 9th Grade	36.8	29.8
	"No Response" 12th Grade	20.6	3.5
	(n)	68	57

Table IV-19. Occupational Expectations by Sex, Modernism, in 9th and 12th Grades, Class of 1972, in Consolidated High School, Mean % Change + and "No Response" from 9th and 12th Grades.

		Modernism	
		Low	High
Males	9th Grade	69	70
	12th Grade	63	70
	Change +	23.5%	40.0%
	(n)	17	20
	"No Response" 9th Grade	17.4	29.0
	"No Response" 12th Grade	13.0	9.6
	(n)	23	31
Females	9th Grade	65	75
	12th Grade	68	71
	Change +	57.1%	39.7%
	(n)	14	23
	"No Response" 9th Grade	39.3%	41.9%
	"No Response" 12th Grade	14.3	13.9
	(n)	28	43
Both Sexes	9th Grade	67	72
	12th Grade	65	71
	Change +	38.7%	39.5%
	(n)	31	43
	"No Response" 9th Grade	29.4%	36.5%
	"No Response" 12th Grade	13.7	12.2
	(n)	51	74

Table IV-20. Educational Expectations by Sex and I. Q., Consolidated High School, 9th and 12th Grades, Class of 1972, In % Expecting to Attempt College, % Expecting to Attempt Post-Secondary Education, and Change of Expectations Regarding Post-Secondary Education from 9th - 12th Grades.

			I. Q. +	I. Q. -
Males				
Educational Expectations	College	9th Grade	80.8%	50.0%
		12th Grade	61.5	26.9
	Post-Secondary	9th Grade	88.5	57.7
		12th Grade	88.5	53.8
		Change +	7.7	11.5
		Change -	7.7	15.4
		(n)	26	26
Females				
Educational Expectations	College	9th Grade	71.4%	47.2%
		12th Grade	68.6	30.5
	Post-Secondary	9th Grade	82.9	52.8
		12th Grade	77.1	52.8
		Change +	5.7	5.5
		Change -	11.4	5.5
		(n)	35	36
Both Sexes				
Educational Expectations	College	9th Grade	75.4%	48.4%
		12th Grade	65.6	29.0
	Post-Secondary	9th Grade	85.2	54.8
		12th Grade	82.0	53.2
		Change +	6.6	8.1
		Change -	9.8	9.7
		(n)	61	62

Table IV-21. Educational Expectations by Sex and Father's Education, Consolidated High School, 9th and 12th Grades, Class of 1972, In % Expectating to Attempt College, % Expecting to Attempt Post-Secondary Education, and Change of Expectations Regarding Post-Secondary Education, from 9th Through 12th Grades.

			Father's Education	
			Low	High
Males				
Educational Expectations	College	9th Grade	31.8%	90.0%
		12th Grade	18.2	63.3
	Post-Secondary	9th Grade	40.9	96.7
		12th Grade	59.1	80.0
		Change +	22.7	0.0
		Change -	4.5	16.7
		(n)	22	30
Females				
Educational Expectations	College	9th Grade	46.7%	80.8%
		12th Grade	31.1	80.8
	Post-Secondary	9th Grade	57.8	84.6
		12th Grade	48.9	92.3
		Change +	2.2	11.5
		Change -	11.1	3.8
		(n)	45	26
Both Sexes				
Educational Expectations	College	9th Grade	41.8%	85.7%
		12th Grade	26.9	71.4
	Post-Secondary	9th Grade	52.2	91.1
		12th Grade	52.2	85.7
		Change +	8.9	5.3
		Change -	8.9	10.7
		(n)	8.9	10.7

Table IV-22. Educational Expectations by Sex and Modernism, Consolidated High School, 9th and 12th Grades, Class of 1972, In % Expecting to Attempt College, % Expecting to Attempt Post-Secondary Education, and Change of Expectations Regarding Post-Secondary Education, from 9th Through 12th Grades.

			Modernism	
			Low	High
Males				
Educational Expectations	College	9th Grade	60.9%	69.0%
		12th Grade	34.8	51.7
	Post-Secondary	9th Grade	69.6	75.9
		12th Grade	69.6	72.4
		Change +	13.0	6.9
		Change -	13.0	10.3
		(n)	23	29
Females				
Educational Expectations	College	9th Grade	42.9%	69.8%
		12th Grade	21.4	67.4
	Post-Secondary	9th Grade	60.7	72.1
		12th Grade	42.9	79.1
		Change +	3.8	7.0
		Change -	21.4	0.0
		(n)	28	43
Both Sexes				
Educational Expectations	College	9th Grade	51.0%	69.4%
		12th Grade	27.4	61.1
	Post-Secondary	9th Grade	64.7	73.6
		12th Grade	54.9	76.4
		Change +	7.8	6.9
		Change -	17.6	4.2
		(n)	51	72

Table IV-23. Extra Curricular Activities, 9th and 12th Grades, Class of 1972, Consolidated High School, by Sex and I. Q., In % "High" Participation.

			I. Q.	
			Low	High
Males				
"Extra-Curricular Activities"	% "High"	9th Grade	23.1%	33.3%
		12th Grade	15.4	48.1
		Change (% +)	11.5	48.1
		Change (% + or)	65.4	77.8
		(n)	26	27
Females				
"Extra-Curricular Activities"	% "High"	9th Grade	30.3%	57.1%
		12th Grade	15.5	42.9
		Change (% +)	18.2	25.7
		Change (% + or)	48.5	48.6
		(n)	33	35
Both Sexes				
"Extra-Curricular Activities"	% "High"	9th Grade	27.1%	46.7%
		12th Grade	15.2	45.2
		Change (% +)	15.2	35.5
		Change (% + or)	55.9	61.3
		(n)	59	62

Table IV-24. Extra-Curricular Activities, 9th and 12th Grades, Class of 1972, Consolidated High School, by Sex and Father's Education, In % "High" Participation.

			Father's Education	
			Low	High
Males				
"Extra-Curricular Activities"	% "High"	9th Grade	9.0%	41.9%
		12th Grade	4.5	51.6
		Change (% +)	13.6	41.9
		Change (% + or)	68.2	77.4
		(n)	81	22
Females				
"Extra-Curricular Activities"	% "High"	9th Grade	33.3%	61.5%
		12th Grade	14.3	53.8
		Change (% +)	19.0	26.9
		Change (% + or)	47.6	50.0
		(n)	42	26
Both Sexes				
"Extra-Curricular Activities"	% "High"	9th Grade	25.0%	50.9%
		12th Grade	10.9	52.6
		Change (% +)	17.2	35.1
		Change (% + or)	54.7	64.9
		(n)	64	57

Table IV-25. Extra-Curricular Activities, 9th and 12th Grades, Class of 1972, Consolidated High School, by Sex and Modernism, In % "High" Participation.

			Modernism	
			Low	High
Males				
"Extra-Curricular Activities"	% "High"	9th Grade	9.5%	40.6%
		12th Grade	14.3	43.7
		Change (% +)	28.6	31.2
		Change (% + or)	66.7	75.0
		(n)	21	32
Females				
"Extra-Curricular Activities"	% "High"	9th Grade	45.8%	43.2%
		12th Grade	8.3	40.9
		Change (% +)	8.3	29.5
		Change (% + or)	33.3	56.8
		(n)	24	44
Both Sexes				
"Extra-Curricular Activities"	% "High"	9th Grade	28.9%	42.1%
		12th Grade	11.1	42.1
		Change (% +)	17.8	30.3
		Change (% + or)	48.9	64.5
		(n)	45	76

Table IV-26. % "High" in Popularity, by Sex and I. Q., 9th and 12th Grades, Class of 1972, Consolidated High School, and Change (% + and % -).

		I. Q.	
		Low	High
Males			
"High" Popularity	9th Grade	22.2%	37.0%
	12th Grade	29.6	44.4
	Change +	40.7	29.6
	Change -	18.5	22.2
	(n)	27	27
Females			
"High" Popularity	9th Grade	33.3%	50.0%
	12th Grade	36.4	44.1
	Change +	15.1	20.6
	Change -	15.1	35.3
	(n)	33	34
Both Sexes			
"High" Popularity	9th Grade	28.3%	44.3%
	12th Grade	33.3	44.3
	Change +	26.7	24.6
	Change -	16.7	29.5
	(n)	60	61

Table IV-27. % "High" in Popularity, by Sex and Father's Education, 9th and 12th Grades, Class of 1972, Consolidated High School, and Change (% + and % -).

		Father's Education	
		Low	High
Males			
"High" Popularity	9th Grade	20.8%	36.7%
	12th Grade	29.2	43.3
	Change +	33.3	36.7
	Change -	8.3	30.0
	(n)	29	30
Females			
"High" Popularity	9th Grade	33.3%	56.0%
	12th Grade	35.7	48.0
	Change +	21.4	12.0
	Change -	19.0	36.0
	(n)	42	25
Both Sexes			
"High" Popularity	9th Grade	28.8%	45.4%
	12th Grade	33.3	45.4
	Change +	25.8	25.4
	Change -	15.1	32.7
	(n)	66	55

Table IV-28. % "High" in Popularity, by Sex and Modernism, 9th and 12th Grades, Class of 1972, Consolidated High School, and Change 9 - 12 (% + and % -).

		Modernism	
		Low	High
Males			
"High" Popularity	9th Grade	30.4%	29.0%
	12th Grade	30.4	41.9
	Change +	34.8	35.5
	Change -	30.4	12.9
	(n)	23	31
Females			
"High" Popularity	9th Grade	40.0%	42.9%
	12th Grade	32.0	45.2
	Change +	20.0	16.7
	Change -	28.0	23.8
	(n)	25	42
Both Sexes			
"High" Popularity	9th Grade	35.4%	37.0%
	12th Grade	31.2	43.8
	Change +	21.1	24.7
	Change -	29.2	19.2
	(n)	48	73

Table IV-29. Anomia, 9th and 12th Grades, Class of 1972, Consolidated High School, by Sex and I. Q., In % Low and % Changing Upward (+).

		I. Q.	
		Low	High
Males			
"Anomia" % "Low"	9th Grade	30.0%	57.1%
	12th Grade	48.1	75.0
	Change (% +)	30.8	29.6
	(n)	27	28
Females			
"Anomia" % "Low"	9th Grade	33.3%	48.6%
	12th Grade	36.4	62.9
	Change (% +)	21.2	25.7
	(n)	33	35
Both Sexes			
"Anomia" % "Low"	9th Grade	35.6%	52.4%
	12th Grade	42.4	68.2
	Change (% +)	25.4	27.0
	(n)	60	63

Table IV-30. Anomia, 9th and 12th Grades, Class of 1972, Consolidated High School, by Sex and Father's Education, In % Low and % Changing Upward (+).

		Father's Education	
Males		Low	High
"Anomia" % "Low"	9th Grade	41.7%	51.6%
	12th Grade	58.3	64.5
	Change (% +)	33.3	25.8
	(n)	24	31
Females			
"Anomia" % "Low"	9th Grade	30.9%	57.7%
	12th Grade	35.7	73.1
	Change (% +)	21.4	26.9
	(n)	±2	26
Both Sexes			
"Anomia" % "Low"	9th Grade	34.8%	54.4%
	12th Grade	43.9	68.4
	Change (% +)	25.7	26.3
	(n)	66	57

Table IV-31. Anomia, 9th and 12th Grades, Class of 1972, Consolidated High School, by Sex and Modernism, In % Low and % Changing Upward (+).

		Modernism	
		Low	High
Males			
"Anomia"	% "Low"		
	9th Grade	33.3%	58.1%
	12th Grade	58.3	64.5
	Change (% +)	58.3	32.3
	(n)	24	31
Females			
"Anomia"	% "Low"		
	9th Grade	38.5%	42.9%
	12th Grade	34.6	59.5
	Change (% +)	30.8	19.0
	(n)	26	42
Both Sexes			
"Anomia"	% "Low"		
	9th Grade	36.0%	49.3%
	12th Grade	46.0	61.6
	Change (% +)	44.0	24.7
	(n)	50	73

Table IV-32. Health Opinion Survey (HOS), 9th and 12th Grades, CHS, by Sex and IQ, in % "High" and % Changing Upward.

		IQ	
		Low	High
Males	9th Grade	51.8%	42.9%
% High HOS	12th Grade	40.7	35.7
	% Changing Upward	44.4	50.0
	(n)	27	28
Females	9th Grade	56.2%	34.3%
% High HOS	12th Grade	56.2	46.9
	% Changing Upward	40.6	48.6
Both Sexes	9th Grade	54.2%	38.1%
% High HOS	12th Grade	49.1	39.7
	% Changing Upward	42.4	49.2
	(n)	59	63

Table IV-33. Health Opinion Survey (HOS), 9th and 12th Grades, CHS, by Sex and Father's Occupation, in % "High" and % Changing Upward.

		Father's Education	
		Low	High
Males			
% High HOS	9th Grade	54.2%	41.9%
	12th Grade	37.5	38.7
	% Changing Upward	41.7	51.6
	(n)	24	31
Females			
% High HOS	9th Grade	48.8%	50.0%
	12th Grade	51.2	57.7
	% Changing Upward	41.5	50.0
	(n)	41	26
Both Sexes			
% High HOS	9th Grade	50.8%	45.6%
	12th Grade	46.1	47.4
	% Changing Upward	41.5	50.9
	(n)	65	57

Table IV-34. Health Opinion Survey (HOS), 9th and 12th Grades, CHS, by Sex and Modernism, in % "High" and % Changing Upward.

		Modernism	
		Low	High
Males	9th Grade	50.0%	45.2%
% High HOS	12th Grade	25.0	48.4
	% Changed Upward	33.3	58.1
	(n)	24	31
Females	9th Grade	56.0%	45.2%
% High HOS	12th Grade	52.0	54.8
	% Changed Upward	32.0	48.9
	(n)	25	42
Both Sexes	9th Grade	53.1%	45.2%
% High HOS	12th Grade	38.8	52.0
	% Changed Upward	32.6	54.8
	(n)	49	73

Table VI-35. "Personal and Social Assets" by Sex and I.Q., 9th and 12th Grades, Class of 1972, Consolidated High School, In % "High," and in Change Upward (+) and Downward (-).

		I.Q.	
		Low	High
Males			
"Personal and Social Assets"	9th Grade	18.2%	65.2%
	12th Grade	27.3	56.5
	Change +	59.1	34.8
	Change -	40.9	47.8
	(n)	22	23
Females			
"Personal and Social Assets"	9th Grade	48.4%	60.7%
	12th Grade	19.3	64.3
	Change +	25.8	46.4
	Change -	67.7	32.1
	(n)	31	28
Both Sexes			
"Personal and Social Assets"	9th Grade	35.8%	62.7%
	12th Grade	22.6	60.8
	Change +	39.6	41.2
	Change -	56.6	39.2
	(n)	53	51

Table VI-36. "Personal and Social Assets" by Sex and Father's Education, 9th and 12th Grades, Class of 1972, Consolidated High School, In % "High" and in Change Upward (+) and Downward (-).

		Father's Education	
		Low	High
Males			
"Personal and Social Assets"	9th Grade	30.0%	52.0%
	12th Grade	35.0	48.0
	Change +	55.0	40.0
	Change -	45.0	36.0
	(n)	20	25
Females			
"Personal and Social Assets"	9th Grade	40.5%	77.3%
	12th Grade	32.4	54.5
	Change +	32.4	40.9
	Change -	56.8	40.9
	(n)	37	22
Both Sexes			
"Personal and Social Assets"	9th Grade	36.8%	63.8%
	12th Grade	33.3	51.1
	Change +	40.3	40.4
	Change -	52.6	38.3
	(n)	57	47

Table VI-37. "Personal and Social Assets" by Sex and Modernism, 9th and 12th Grades, Class of 1972, Consolidated High School, In % "High," and in Change Upward (+) and Downward (-).

		Modernism	
		Low	High
Males			
"Personal and Social Assets"	9th Grade	47.1%	39.3%
	12th Grade	52.9	35.7
	Change +	64.7	35.7
	Change -	35.3	42.9
	(n)	17	28
Females			
"Personal and Social Assets"	9th Grade	52.2%	55.5%
	12th Grade	21.7	52.8
	Change +	39.1	33.3
	Change -	56.5	47.2
	(n)	23	36
Both Sexes			
"Personal and Social Assets"	9th Grade	50.0%	48.4%
	12th Grade	35.0	45.3
	Change +	50.0	34.4
	Change -	47.5	45.3
	(n)	40	64

Table IV-38. Absences, Class of 1972, CHS, 9th Through 12th Grades, by Sex, in % Absent More than Five Days.

		Sex		
		Males	Females	Both Sexes
Absences	9th Grade	48.1%	47.8%	48.0%
	10th Grade	46.3	52.2	49.6
	11th Grade	42.6	56.5	50.4
	12th Grade	48.1	50.7	49.6
	(n)	54	69	123

Table IV-39. Absences, Class of 1972, CHS, 9th Through 12th Grades, by Sex and IQ, in % Absent More than Five Days.

		IQ	
		Low	High
Males			
Absences	9th Grade	63.0%	33.3%
	10th Grade	55.5	33.3
	11th Grade	63.0	37.0
	12th Grade	51.8	44.4
	(n)	27	27
Females			
Absences	9th Grade	44.8%	50.0%
	10th Grade	48.3	55.0
	11th Grade	62.1	52.5
	12th Grade	58.6	47.5
	(n)	29	40
Both Sexes			
Absences	9th Grade	53.6%	43.3%
	10th Grade	51.8	46.3
	11th Grade	62.5	46.3
	12th Grade	55.3	46.3
	(n)	56	67

Table IV-40. Absences, Class of 1972, CHS, 9th Through 12th Grades, by Sex and Father's Education, in % Absent More than Five Days.

		Father's Education	
		Low	High
Males	9th Grade	60.9%	38.7%
Absences	10th Grade	56.5	38.7
	11th Grade	43.5	41.9
	12th Grade	52.2	45.2
	(n)	23	31
Females	9th Grade	44.2%	53.8%
Absences	10th Grade	53.5	50.0
	11th Grade	62.8	46.1
	12th Grade	60.5	34.6
	(n)	43	26
Both Sexes	9th Grade	50.0%	45.6%
Absences	10th Grade	54.5	43.8
	11th Grade	56.1	43.8
	12th Grade	57.8	40.3
	(n)	66	57

Table IV-41. Absences, Class of 1972, CHS, 9th Through 12th Grades, by Sex and Modernism, in % Absent More than Five Days.

		Modernism	
		Low	High
Males	9th Grade	56.5%	41.9%
Absences	10th Grade	52.2	41.9
	11th Grade	43.5	54.8
	12th Grade	47.8	48.4
	(n)	23	31
Females	9th Grade	57.7%	41.9%
Absences	10th Grade	69.2	39.5
	11th Grade	69.2	48.8
	12th Grade	73.1	39.5
	(n)	26	43
Both Sexes	9th Grade	57.1%	41.9%
Absences	10th Grade	61.2	40.5
	11th Grade	57.1	51.3
	12th Grade	61.2	43.2
	(n)	49	74

Table IV-42. Summary of Findings on Within-School Differences Among Subgroups Categorized by Sex, IQ, Father's Education, and Modernism, on Variables of Achievement, Expectations, and Adjustment.

Variable	Persistence of, or Change in Initial Subgroup Differences	"Advantaged" Categories	"Disadvantaged" Categories
Achievement			
GPA and Direction or Change	Persistence of differences for males by IQ and status (no gap by modernism). Narrowing of gap among females by IQ, status, and modernism.	Females, especially low IQ, low status, low modernism	Males, especially high IQ, high status, high modernism
Reaching Achievement	Persistence or widening of differences for males and females by IQ, status, and modernism.	Male and female high IQ, high status, high modernism	None actually decreased
Need Achievement	Persistence or widening of some gaps by IQ, status, and modernism for males and females.	Males, especially high modernism	Females generally
Expectations			
Occupational	Persistence of differences for all students by IQ and status. Widening among males by modernism. Narrowing among females by modernism.	Indecision reduced more among high status males and females	Low modernism males. High modernism females
Educational	Persistence or widening of differences for all students by IQ, status, and modernism.	High IQ, high status females, Re: college plans. Low status males, Re: postsecondary plans.	College expectations drop among all males and low females, by IQ and status. Also low modernism females. Postsecondary expectations drop for low status females and high status males.

Table IV-42. Continued

Variable	Persistence of, or Change in Initial Subgroup Differences	"Advantaged" Categories	"Disadvantaged" Categories
Adjustment			
ECA	Persistence or widening of differences for all students by IQ, status, modernism.	High IQ, high status males	Low modernism females
Popularity	Persistence or widening by IQ and status. No initial or later gap by modernism.	Non apparent.	None apparent
Anomia	Persistence or widening of differences by IQ, status, and modernism.	Most students decreased in anomia	Low IQ, low status, low modernism females
HOS	Widening gap by sex. Gap by IQ remains but narrower.	Low status, IQ, modern females	High status, IQ, modern males
PSA	Widening of differences for females by IQ. Narrowing for males by IQ. Persistence for both sexes by status. Persistence or widening for both sexes by modernism.	Low IQ females	All males especially low IQ and low modernism
Absences	Persistence or widening of differences for females by IQ, status, and modernism. Narrowing of gap for males, by IQ, status, modernism.	Low IQ, low status low modernism females	Low IQ, low status, low modernism males

CHAPTER V

CONCLUSIONS

Consolidation: Does Bigger Mean Better?

In this chapter we return to the questions which prompted the study initially. To begin with: Does school consolidation result in increased levels of academic performance and higher occupational and educational aspirations than would be the case in a nonconsolidated school?

Insofar as we are able to bring data to bear on this question, the answer is "No." At the risk of ignoring the exceptions pointed out in Chapter III, students at the CHS do not generally show higher increases in achievement, job aspirations and expectations, or educational aspirations and expectations than students at the NCHS. This conclusion must be hedged with a number of qualifications, of course. The absence of comparable reading achievement scores is disappointing, especially in view of the finding in Chapter IV which shows that the pattern of change in reading achievement in the CHS is different from that for GPA. In short, it is lamentable that we may not have been able to use the best, and certainly not the only, measure of achievement.

Moreover, as already pointed out, we are looking at three-year trends, beginning with the opening year of the CHS. It is quite possible that this school will have a different kind of impact in the future, when its program and staff are more fully developed, than it had in its early years.

The conclusion that the CHS did not perform as might have been desired also needs to be qualified by calling to mind once again the small sample sizes. Together with measurement error--concerning which no estimate has even been attempted--the small sample sizes leave a great deal of room for random fluctuation, and it is possible that a larger sample or repeated small samples would not show the same patterns reported here.

With all these qualifications, however, the answer still seems to be that the new school shows no outstanding advantage over the nonconsolidated school.

Does school consolidation result in higher or lower patterns of adaptive success than would be the case in a nonconsolidated school? Again, with some of the same qualifications already stated, the answer appears to be "No." The new school appears to be neither strikingly

better or worse than the nonconsolidated school from the standpoint of creating major adjustment problems or providing a "good fit" for students. Lower status students may be somewhat advantaged by the new school in this regard, because they did show better signs of successful adaptation on two indicators than their NCHS counterparts. On the other hand, other CHS students showed up relatively poorly on two other indicators of adjustment, so that the overall answer seems to be that there was no major difference in adaptive success.

(It was true that dropouts were more likely to occur --as well as transfers--in the CHS. To the extent that this can be read as a sign of adaptive failure, it is a mark against the new school. See comments in Appendix D on attrition and holding power.)

Dropout rate aside, perhaps the finding of no appreciable difference in adaptive failure and success could be regarded as a plus for the new school. This is true at least from the standpoint that students were no worse off for the difference.

Does school consolidation reduce, maintain, or increase inequality in the attainment of school success? The findings in Chapter IV, again with the usual qualifications, are consistent with the findings of Coleman, Jencks, and others. By and large, extra-school influences appear to be at work in ways which overshadow school factors. In most cases, where initial differences existed between students of different abilities, status background, and outlooks, they were maintained four years later. The new school seemed to do very little to reduce inequality of school success, whether the success had to do with achievement, aspirations, or adaptation. The exception, as pointed out in Chapter IV, is grades, where gaps between subgroups of students tended to narrow over time. But the issue is clouded by the finding that this narrowing did not occur in the case of reading achievement.

In short, the new school appears from these findings to be relatively powerless to overcome the influence of such factors as ability, status, and commitment to certain values.

Are students with particular levels of ability, status backgrounds, and outlooks especially advantaged or disadvantaged in the attainment of success in the three areas of achievement, aspirations, and adjustment? Judging from the data presented in Chapter IV, what were there termed the "low females" seem especially

disadvantaged compared to other students on several of the adjustment variables. On the other hand, this was the same category which was especially advantaged regarding GPA. They were, in sum, making higher grades but enjoying school less.

No other category of students--at least as classified for this study--seemed particularly advantaged or disadvantaged on more than one or two of the success variables. The possible exception to this conclusion is the "low males," who showed improvement in HOS, absences, and PSA ratings. But if anyone had expected that lower status sutdents generally would be advantaged by the new school, relative to their higher status peers, he would be disappointed by this finding. Likewise if anyone had expected higher IQ students, or students more modern in outlook, to be especially advantaged, he would not find strong confirmation in these data.

One is driven to the rather fatalistic conclusion that it does not really matter what takes place within the walls of the school, and that it matters even less whether the walls themselves are old or new, small or large. The life chances of students do not seem much under the control of the schools, which constitute one more complex sorting machine in a world full of sorting machines. In the words of Peter Rossi:

> By and large, no clear picture emerges from the research to indicate that a particular type of school, pursuing a particular type of educational policy, has a higher record of student achievement than other kinds of schools pursuing different educational policies.[32]

With all the limitations of the study, and with the qualifications we have repeatedly placed on the findings, the results of this case study in consolidation are consistent with Rossi's observation.

Should we then, as a matter of informed policy, recommend uniformly against consolidation? There is some irony in the fact that now, when findings seem to pour in concerning the lack of effect of school factors on educational outcomes, the consolidation and reorganization

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[32] Peter Rossi, "Social Factors in Academic Achievement: A Brief Review," in A. H. Halsey, J. Floud, and C. A. Anderson, eds., Education, Economy, and Society, New York: Free Press (1961), p. 271.

movement is so well established that it is well-nigh unstoppable--if, indeed, it is viewed as desirable to stop it. The number of school districts continues to decline yearly and no one projects any significant slackening.

A blanket condemnation of school consolidation is certainly not in order. No one would suggest, for example, that the people of the county in which this study took place would be just as well off with their former schools.[33]

There may be many reasons, aside from the kinds of educational outcomes which have been the focus of studies to date, why consolidation is justified. In the minds of promoters of consolidation it may be that these educational outcomes are not even primary. In the case of the study county, leaders who organized the push for consolidation saw it as a means of unifying the county, of breaking down the narrow sectionalism which the old schools had helped to promote. They also used the new school as a means of maintaining the impetus toward economic development, by showing prospective industries that the county was committed to improving education. Moreover, the old schools were in bad physical condition, even to the point of being unsafe. Something had to be done. Why not consolidate?

And as other studies have reported, there are certain economies and efficiencies in the use of resources which consolidation allows.

Many such claims for consolidation may be justified, and therefore, for reasons having nothing to do with the effect on the products of the educational process, consolidation is likely to continue. But from the findings of studies to date, including this one, promoters will find difficulty in justifying such reorganization in terms of improving outcomes for students.

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[33] Because the design of the study was not a "before-after" model, it would be a serious mistake to infer that the general conclusion of little or no difference refers to pre- and post-consolidation comparisons.

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APPENDIX A

BACKGROUND OF THE STUDY COUNTY, THE CONSOLIDATION MOVEMENT, AND FOUR-YEAR FOLLOWUP OF ACTIVITIES TOWARD CONSOLIDATION

In developing the story of consolidation in the study county, it is important to place it in a context of the recent history and concurrent developments taking place in the county. In the early 1960's this county was representative of many similar counties in the south central Appalachian region. While not as depressed economically as the coal-bearing sections of the mountain region slightly to the north, this area of Appalachia was known for its extensive poverty, unemployment, and gradual emergence from a long period of relative isolation. The pattern commonly referred to in those days was one in which by almost all social indicators, the southeastern region of the United States lagged behind the rest of the country and the Appalachian portion of the south lagged behind the south as a whole. By the mid-60's in this particular county, however, a coalition of progressive bi-partisan leaders had developed with the aim of spurring economic growth. With the county chamber of commerce as the front organization, this group did indeed manage to take advantage of a number of favorable circumstances, including the upward re-evaluation of the county tax base, in moving the county away from its agricultural subsistence base toward a thriving economy based on tourism and light manufacturing.

Many of these county leaders recognized that as part of this total development effort, attention needed to be given to the local school system, which was viewed by many of them as an embarrassing anarchronism. As a part of the present study, most of these leaders were interviewed regarding the aims they had in mind at the time decisions were being made and a campaign being developed to bring about school consolidation. Most of them were able to re-construct the events and the initial motives candidly and clearly.

"At the Crossroads," is an editorial ghost-written by a county leader to help create a climate of receptivity to consolidation in 1965. Here is the way the writer of that editorial describes it:

> "We talked in this about how certain events have a greater and more lasting effect on the developing quality of life of a people than others. And we remind people of the invention of the wheel, the birth of Christ, the invention

of the steam engine, the light bulb, the discovery of America, and so on. And then we ask that the reader think about other events aside from these things of general historical significance, events that have been of special significance in the development of this country. We mention the absence of waterways and the presence of immense mountain barriers to early highway and railway construction, having been profound in their effect upon the people of the area, and of the predominance in the minds of the early settlers of the necessity of wringing a livelihood from the small fields and the valleys and steep rocky mountainsides reducing to relative unimportance education in the sense of school education.

"Then we talk about the things that began to break down our isolation, but say that none of these events are a drop in the bucket beside the effect of public schools. (Quoting) 'The early consolidation of our one-room, one-teacher schools into reasonably good elementary schools and three high schools for the county was a tremendous stride forward in the 1920's. But that was about a half-century ago. It has been estimated that the sum of man's knowledge has increased by more than tenfold during that span of time. Now, without drastic and spectacular improvement, the average local boy or girl has about as much chance to compete for a living in the world of today as a snowball has for survival in the heart of a nuclear furnace. There is a single decision facing residents of this county that will be a landmark of most tremendous importance in the immediate and distant future of its people. The decision is what to do with the $299,000 that this county will receive from the recently approved statewide bond issue for capital improvement of public schools. This represents an opportunity that may not pass this way again during the lifetimes of people now living. We can piddle the money away in repairing and trying to make do with present high school buildings and accomplish exactly nothing for the quality of education. Or we can--and God grant that we do--apply the money to a top-notch, modern, well-equipped single high school for all the youth of the county, and approve a bond issue within the county for any difference in cost. Upon our decision rests the judgment of history.'

"That was the sort of thinking that went on at the time. In my thinking we had come to regard ourselves as inferior. We poor-mouthed ourselves. We even capitalized on our poverty. But it was my opinion that boys and girls of this county were the equal of any, and that they were entitled to equal opportunity and equal advantage, and that they would not get it unless and until such time as they stood up like men and were able to make their fair contribution."

What this coalition of school personnel, politicians, and local businessmen hoped to achieve through the consolidated school were: increased unification of the county, which had been divided for almost 60 years by local traditions of rivalry as well as by topography; the replacement of embarrassingly run-down and backward appearing school facilities which were felt to be a hindrance in the attraction of industry to the county; the eventual creation of an improved school system with new programs and personnel, but beginning with new physical facilities; the replacement of a school system which had served as a handicap to the young people of the area who eventually had to compete in larger social and economic systems, with a multi-faceted educational system with which would equip them for success in the outside world.

Thus the new school came into being as a result of the active and conscious engineering of a cadre of county leaders who in the early-to-middle 1960's had devoted themselves to total economic and social development of the county. As can be seen from the comparison of 1960 to 1970 census figures in the accompanying table (see table 1), significant change did take place in the study county, at least part of which must be attributed to the efforts of this group.

(The changes reflected in this table must be considered along with consolidation, and events and trends occurring nationally, as factors having impact on young people in the study county during the study period from 1968-72. For example, as reported elsewhere, one of the more notable shifts among the Class of 1972 concerned preferred place of residence; specifically, there was a wholesale turnaround in the proportion who wished to remain in their home county on completion of schooling. This shift did not occur among students in the nonconsolidated school. The explanation lies less in the fact of consolidation than it does in the economic boom occurring in the study county which reduced the necessity for outmigration.)

Approval of the bond issue required for financing the new school was not accomplished as easily as may appear from this narrative. A great deal of resistance was encountered in certain geographic sections of the county, where people resented the loss of community institutions and feared great inconvenience in transportation. Moreover, many citizens felt that the single-school concept would not work in a county with such intense inter-school rivalries. (In short, the same resistances were encountered here with which anyone is familiar who has ever followed the history of an attempted consolidation.)

Success was achieved through organization, the ability to take advantage of coinciding circumstances (such as the establishment of a county newspaper which was friendly to the project), the involvement of top-level leadership, the careful staging and phasing of events, the bi-partisan makeup of the working group, and the light turnout of voters (afterwards referred to as a "rainy Tuesday election"). According to two members of this leadership group, more than one citizen was persuaded to vote for the bonds solely on the hope that the new school would bring an improved athletic program to the county.

In short, it may not be the case that the issue was resolved successfully because the majority of the county's citizens shared aspirations for educational excellence and equality with the county leadership. In all probability, they did not, but the situation was engineered in such a way that, for whatever reasons, the majority of those who voted cast their ballot for consolidation.

Followup Four Years Later

Interviews were conducted with school personnel, students, parents, and county leaders in 1972 partly for the purpose of assessing the degree to which consolidation was felt, on a very subjective level, to be a success. By and large, the change was viewed as a success by everyone. The few dissenters were at no loss for words, but they were less numerous than four years earlier.

The students, interestingly, were able to identify with the old school districts even though they had not attended the old schools. Most had older siblings who had gone to one of the old schools, or learned from their parents what the "old days" were like. But, although they could and did think of themselves as people who

would have gone to one of the three old schools, there was no evidence of real rivalry in the new school. In fact, with very few exceptions, students reported that while they had anticipated problems growing out of conflicts of loyalty, they had witnessed or participated in none, from the very first day the new school opened. They were surprised, but pleased, and in fact enjoyed the extended comradeship for the most part. Most did not complain about size or strangeness after the first week or so. Transportation was for the most part no more a problem than it had been.

Most student complaints centered on the stricter discipline encountered in the new school. Policies on automobiles and absences seemed particularly troublesome. The character of the complaints was subtly different in 1972, however. No one referred to the principal as "the Commandant of Stalag 13" as they had in the first two years. It was more a matter of helping school officials arrive at a sensible set of policies which recognized the rights of students as people.

Parents could still be found in 1972 who did not like the new school, thought it a bad idea, considered it mismanaged, and branded it a product of "politics." But parental resistance seemed largely to have subsided as the new school became a fact of everyday life. The new school had not, however, gained much in the way of participation by parents in school programs such as the PTA, and there was no real sense of pride, loyalty, and identification with the school such as had existed in the case of the preconsolidation schools.

The teachers for the most part felt consolidation had been a success. The only exceptions were some who had been teachers in one of the preconsolidation schools. This school had had a reputation as the most academically sound of the three, and some of the faculty felt that they really could see no gains in academic quality by the change. However, most faculty felt the new facilities made for better instruction, and appreciated the greater variety of programs.

The principal, other school officials, and county leaders had little but praise for the accomplishments of the new school, expressing the view that although the job was not complete yet, the changeover had occurred with greater smoothness than anticipated, and that they could already see the consequences of improvement (though most were vague when pressed on what these visible consequences were).

Teachers were asked in interviews what changes, if any, they or any of their colleagues underwent, in the process of consolidation (by far the majority of faculty were the same as had taught in the old schools, a fact which led one waggish student to observe that it was "a brand new doghouse with the same old dogs"). Most denied that they had changed at all, but continued to teach and keep discipline in the same ways as before. Some admitted, on the other hand, that they sensed an expectation that academic standards would be higher, and that discipline standards would be stricter. It was also pointed out that those teachers who did not make the transition might have been among the less capable, if not more lax, faculty members in the old schools.

Whatever was the case in actuality, the students clearly perceived a change in the faculty. Members of the Class of 1970, who "made the trip" with the faculty to the new school, were interviewed on this subject among others, and reported that in many cases teachers were harder and acted differently in the new school. One student suggested the plausible interpretation that these teachers were being thrown into competition with faculty from other schools who were unknown and possibly threatening to self-confidence. Others suggested that faculty were "job-scared" and wanted to prove to the new principal that their standards were high.

By 1972, of course, the students had no comparison group with which to contrast the faculty, and there was no great feeling expressed that faculty were bearing down on them because of the change.

In short, it appears that consolidation is now an enduring fact in the county, and that if a few don't like it, they are learning to live with it. Most seem to like it, and many see it as a tremendous accomplishment. If the athletic teams aren't yet what was hoped for, maybe in a few years things will shape up. If we still have many of the "same old dogs" teaching, we are nevertheless recruiting new young capable teachers at an encouraging pace. If the curriculum isn't providing the "something for everyone" that had been envisioned earlier, it is becoming gradually more flexible, and our vocational training opportunities are expanding. The fact remains that, in the view of most, the county would be a lot worse off had it kept those three antiquated, 1920's monuments to backwardness.

Table A-1. Selected Economic and Social Indicators, Study County, 1960 and 1970 (Source: U. S. Census).

	1960	1970
Total population	12,009	12,655
Born in state of residence	10,472	10,497
Education		
Years school completed		
Males	7.8	8.9
Females	8.6	9.7
Proportion high school graduates of persons 25 years of age or older	23.8%	31.4%
Employment and income		
Unemployed, as % of labor force:		
Males	12.7	3.9
Females	7.4	3.1
Median family income	$2,569	$5,526
Families with income		
Under $4,000	72.3%	34.5%
$8,000 and over	5.1	30.4
$10,000 and over	2.7	19.5

APPENDIX B

NOTES ON THE COMPARABILITY OF THE CHS AND NCHS FRESHMAN CLASSES

The comparative aspect of the study is predicated on the assumption that the NCHS is roughly the same kind of school as the pre-consolidation schools in the study county. From general knowledge of the counties and the schools in 1968, this assumption appeared warranted. From the standpoint of size, apparent general SES level, rurality, and the like, the NCHS appeared comparable to the pre-consolidation schools. It was suspected that students might be somewhat more exposed to "modernizing" influences at the NCHS, that the entire county school system, including the NCHS, might be "better," and that, in general, those factors which might conspire to push up our "success indicators" were probably somewhat stronger than in the study county. If so, lack of comparability is not bothersome, given the direction of the difference and the assumed influence of the difference, because the comparison between the schools would be stacked in a conservative direction, i.e., against and not in favor of the hypothesis of greater movement upward on the "success indicators" in the consolidated school.

Once the survey and records data were in, assumptions about the comparability of the schools could be investigated more closely. In general, from looking at the data from 1968 freshman at the two schools, the original expectations concerning comparability and direction of difference were for the most part confirmed. Let us look, for example, at sex composition, SES distribution, modernism, job expectations, educational expectations, participation in school organizations, popularity, anomia, GPA, IQ, and absenteeism (see Table B-1).

(Table B-1 about here)

The sex composition in the two situations was not identical, as can be seen from the slightly higher proportion of females at PG. (For this reason and because several important sex-linked attributes were identified early in the analysis, controls on sex was introduced wherever possible in between-schools comparisons.)

Regarding SES levels of families sending individuals to the two schools, there are some differences, but they do not appear overwhelming. The apparent discrepancy in the fourth and fifth deciles of Duncan ratings of father's occupation is largely explained by the greater

number of factory jobs held by NCHS countians (see item 5, Table B-1, "Source of income"). Their counterparts in CHS county were in all likelihood rated somewhat higher (for example, as self-employed carpenters and semi-skilled workers) but in fact would be regarded as comparable in prestige level locally. It is probably more realistic to lump the fourth and fifth deciles together, in which case the difference is minimized.

The comparison of father's education shows a slight edge for PG, and the comparison of mother's education shows a clear edge for PG. Based on these three criteria, our impression is that the SES level of PG families is somewhat, but not strikingly, higher than that of ACHS families. What difference exists probably exerts an influence on PG students in the direction of higher achievement, increased aspirations and expectations in job and schooling, and better adjustment to the school.

In comparing expectations concerning job and further schooling expressed by the two groups of students in 1968, it is clear that PG students expect higher-status jobs and expect to continue further in school than ACHS students on the whole (the one exception is the higher proportion of ACHS students expecting to continue beyond college). In the case of job expectations, it is also the case that PG students are more likely to have a definite expectation than CHS students. In terms of measuring change in these variables over time, it will be important to take into account this difference in initial levels. Theoretically at least, the higher initial level means that it cannot show as much change as ACHS since it is closer to the top of the thermometer to begin with.

Regarding participation in extracurricular school activities, CHS students belonged to more school organizations in their last year in elementary school, but this does not mean that they felt more active than NCHS students, as indicated by the self-rating item. Likewise, in terms of self-ratings on popularity, the two groups of students were comparable. Scale scores on anomia also showed a similar pattern between the two groups.

With regard to modernism, it is difficult to find a pattern. Among the five items selected from the total battery as representing the most valid individual indicators, CHS students were noticeably less modern on two of them ("old ways" and "kinship versus the law"), more modern than PG on two of them ("old Bible" and "job versus family and friends"), and the same on the remaining one ("women voting"). There seems to be no reason to conclude that either group of students is more "modern" or "traditional"

than the other, for whatever influence this cluster of attitudes and values may have on the dependent variables to be studied.

A comparison of the intelligence levels (IQ) of the two groups of students in 1968 shows an apparent IQ advantage of CHS over NCHS students. This difference is probably illusory. For one thing, the test date at the CHS was one year after that at the NCHS, and the population does not include some relatively low-ability students who did not return to school for the sophomore year. Second, two different tests were used, and it is possible if not likely that the Otis Quick-Scoring test used at the CHS yielded higher IQ scores than the California Test of Mental Maturity (used at the NCHS) would have. There is the possibility, nevertheless, that the NCHS population contained more students at the lower range of IQ than did the NCHS. There were no dropouts from the NCHS Class of 1972 during the three years they were studied, which means that the NCHS is able to retain lower-ability students in a way that the CHS does not.

To the extent that these figures reflect a real difference in the ability levels of the two populations, the CHS students should be expected to show greater gains in achievement, and probably in educational aspirations and plans (although they do not appear to higher initially).

In short, it appears that the students at the NCHS and the students arriving at the CHS from the catchment areas normally covered by the three pre-consolidation schools are roughly but not precisely comparable. The SES background of NCHS students is slightly higher, and NCHS students have higher and more definite job expectations, and higher educational expectations. The two groups are more comparable on ECA, self-ratings of popularity, anomia, and overall modernism. Comparison of IQ shows the NCHS with somewhat more students in the lower range.

Insofar as any school system advantages higher SES students, NCHS students should, in the aggregate, show greater increases in the criterion variables over time, with the possible exception of achievement. On the other hand, given their more definite and somewhat higher job and schooling expectations in 1968, there is less potential distance for NCHS students to travel up on these particular measures. These facts must be borne in mind in making subsequent between-school comparisons.

Table B-1. Comparison of CHS and NCHS Freshmen in Fall, 1968, Selected Criteria (in %).

		CHS (n=214)	NCHS (n=60)
1. Sex			
Male		50.0	46.7
Female		50.0	53.3
2. Duncan rating of Father's Occupation:			
Decile:	30-39	2.3	3.3
	40-49	10.7	33.3
	50-59	34.6	15.0
	60-69	17.8	21.7
	70-79	13.1	11.7
	80-89	2.8	1.7
	no job/DK	18.7	13.3
3. Father's education:			
1-8 years		38.8	36.6
1 year high school thru finished high school, incl. some high school plus trade or prof. school		43.0	48.3
1 year college through finished college		7.5	13.4
Beyond college		2.8	1.7
4. Mother's education:			
1-8 years		28.6	15.0
1 year high school thru finished high school, incl. some high school plus trade or prof. school		54.2	70.0
1 year college thru finished college		9.8	13.4
Beyond college		1.8	1.7

Table B-1. Continued

		CHS (n=214)	NCHS (n=60)
5.	Source of income		
	1. Inherited wealth, profits from business ownership, etc.	10.3	13.3
	2. Salary	32.2	26.7
	3. Wages	37.9	51.7
	4. Income from odd-jobs	4.7	0.0
	5. Public assistance	9.3	6.7
	6. Other	1.9	0.0
6.	Duncan rating of Job expectations:		
	Decile: 20-49	8.4	6.7
	50-59	14.0	5.0
	60-69	5.6	10.0
	70-79	24.8	33.3
	80-99	11.2	18.3
	DK/NA	36.0	26.7
7.	Educational expectations:		
	Finish high school	43.9	33.3
	Go to trade or prof school	7.5	15.0
	1, 2, or 3 years college	12.6	15.0
	Finish college	27.6	33.3
	Beyond college	6.1	1.7
	DK/NA	0.5	0.0
8.	Number of memberships in school organizations:		
	0	64.0	86.7
	1	22.9	10.0
	2	8.9	1.7
	3	2.8	1.7
	4 or more	1.4	0.0
9.	Self-rating of extra-curricular activities in preceding year:		
	Active and an officer, and very active but not an officer	32.1	35.0
	Somewhat active in school organizations	31.3	33.3
	Not very active	23.8	23.3
	Not at all active	11.2	8.3

Table B-1. Continued

	CHS (n=214)		NCHS (n=60)	
10. Self-ratings of popularity preceding year among most popular	10.7		10.0	
Very popular but not most popular	19.6		21.7	
Somewhat popular	43.0		48.3	
Not very popular and somewhat unpopular	24.7		20.0	
11. Anomia (summated Srole scale scores):				
0	4.7		1.7	
1 least anomic	9.8	14.5	11.7	13.4
2	27.6		21.7	
3 moderately anomic	22.9	50.5	28.3	50.0
4	21.0		28.3	
5 most anomic	14.0	35.0	8.3	36.6
12. Modernism items:				
"I think the old ways are mostly for me"				
Disagree strongly/somewhat	59.3		78.4	
"The old Bible (K.J. version) is the only true word of God"				
Disagree strongly/somewhat	60.3		46.7	
"If a woman votes, she should probably vote the same way as her husband"				
Disagree strongly/somewhat	74.7		75.0	
"A person's job is so important that sometimes he has to turn his back on his family and friends"				
Agree strongly/somewhat	24.3		16.7	
"A person should stand up for his kin even when the law says they are in the wrong"				
Disagree strongly/somewhat	51.1		70.0	

Table B-1. Continued

	CHS (n=214)	NCHS (n=60)
13. IQ (test data Spring, 1969 for CHS; Spring, 1968 for NCHS)		
60- 89	9.2	21.2
90- 99	18.4	21.3
100-109	38.3	31.9
110-119	24.8	19.1
120 and higher	9.2	6.4

APPENDIX C

M.A. Thesis Manuscript: James E. Rivers
"The Effects of High School Consolidation on Lower Class Students' Achievement and Aspirations: An Appalachian Case Study"*

A case study was conducted in a newly-consolidated high school in south-central Appalachia from 1968 to 1972. This paper reports the results of the first phase of the study, a comparison of the grades, occupational and educational aspirations of students who spent two-years in both the nonconsolidated and consolidated milieu. The hypothesis that lower socioeconomic status male students would be the recipients of greatest benefit from consolidation is examined and rejected. Suggestions are offered concerning the reasons for their continued low levels of school success.

The persistence of Appalachian poverty has often been explained in terms of self-perpetuating cultural attitudes.[1] The indigenous educational system, for a variety of reasons, has often been indicted as inadequate and ineffective as a force to counter these poverty-inspired and poverty-breeding attitudes. As agents of change, the local schools have largely failed in their efforts "to change the orientation, values and behavior of students."[2]

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[1]The concept of a "culture of poverty" has been given much attention in the literature on the region. Thomas Ford, for one, has posited a reverse ordering for the usual causal explanation: "The economic development of the region is not so much dependent upon their cultural integration as their cultural integration is dependent upon economic development," p. 34, "The Passing of Provincialism" in The Southern Appalachian Region, A Survey, Thomas R. Ford (ed.), Lexington, University of Kentucky Press, 1962.

[2]The importance of the educational institution in this region as a link with the larger culture is emphasized by Harry K. Schwarzweller and J. S. Brown in "Education as

Among the several reasons given for their shortcomings, program limitations imposed by inadequate numbers of students in individual schools is frequently noted. To efficiently and economically implement compensatory and vocational programs, fewer and larger attendance centers have been recommended.[3] Remedial efforts and vocational information and training are seen as especially important for lower socioeconomic (SES) males in the attempt to break the "cycle of poverty."[4]

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a Cultural Bridge between Eastern Kentucky and the Great Society," Rural Sociology, 27 (December 1962), 357-373.

[3]One of the most influential spokesmen for the consolidation movement was James B. Conant in The American High School Today, New York: Random House, 1959. Orin B. Graff, drawing upon data from the Ford survey (n. 1), states, "A rather heavy influence (on the high school curriculum) seems to be the Conant Report, The American High School Today. At least one copy was found in 90 percent of the offices visited, and 6t percent indicated that the report had been used in some ways in their programs," in "The Needs of Education," pp. 195-196.

Graff further reports that "the school programs will need to be made sufficiently comprehensive to hold the non-college bound pupils and to offer vocational training programs to equip youth and adults for an industrialized society. This will require consolidation of high schools to meet Dr. Conant's criterion. . . ." "It is of interest to note that only a small percentage of participants in the attitude survey thought the school too far away from home (despite an average roundtrip distance of 32 miles). Consolidation seems to be becoming acceptable to Southern Appalachian parents."

See also Alex P. Mercure, "Special Problems of Rural Minority Youth," Speech to National Outlook Conference on Rural Youth, October 1967; D. E. Lindstrom, "Educational Needs of Rural Youth," Journal of Cooperative Extension, 3 (Spring 1965), pp. 33-41.

[4]See Irwin V. Sperry, et al., "Educational and Vocational Goals of Rural Youth in the South," Bulletin 107, Southern Cooperative Series, Raleigh, North Carolina State University, 1965; Earl E. Baughman and W. Grant Dahlstrom, Negro and White Children, A Psychological Study in the Rural South, New York: Academic Press, 1968; Jack E. Weller, Yesterday's People, Life in Contemporary Appalachia, Lexington, University of Kentucky Press, 1966, pp. 109-110.

These considerations, among others, have figured prominently in the strong and steady consolidation movement nationwide in the past few decades.[5] Appalachia, like other sparsely populated rural areas, has seen a large reduction in the numbers of small community high schools. However, many small schools still exist in the mountainous regions, primarily because of the difficulties of bus transportation in this terrain.

Despite the magnitude and the significance of the claimed advantages of rural high school consolidation, empirical research in the area has been limited. Reported benefits have usually been in terms of economy, efficiency of personnel utilization, numbers of courses offered, etc. To date, little empirical research into the actual impact of rural consolidation on students has been conducted.

This paper reports one phase of such a study. Between the fall of 1968 and the summer of 1972, a case-study of a newly-consolidated high school in south-central Appalachia was conducted. The first phase of this study dealt with the graduating class of 1970, a group which had attended three smaller schools as freshmen and sophomores.

Measures of this group's grades, educational and occupational aspirations were obtained at two points, before consolidation and after two years in the new school. Comparisons are made and changes interpreted in this paper with special emphasis being given to lower SES males.

To confidently conclude that the observed changes were directly caused by consolidation, it would be necessary to compare a group of similar students who did not enter a consolidated school. Such data were collected as a part of the larger study design, but, unfortunately, were so limited that their use was precluded in this phase of the study.[6]

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[5]The number of school districts in the U. S. has diminished from over 127,000 in 1930 to fewer than 17,000 in 1973. The bulk of this reduction has occurred in sparsely populated rural areas.

[6]Data from a nearby non-consolidated school were collected, but the class size was so small that subgroup comparisons, i.e., by sex/SES, would be meaningless.

Consequently, this report is largely descriptive and exploratory rather than verificational. Generalizations are difficult and interpretations of the data are admittedly tenuous and inferential. A larger-scale study, surveying several consolidating schools and including non-consolidated comparison groups is needed to substantiate the reported findings and the interpretations offered. It is hoped that this paper will act as a stimulus for such research. Despite its limitations, it is hoped that this research will show the need for a greater sociological, psychological and educational understanding of the premises, processes and long-range impacts of rural school consolidation on students.

Research Strategy

Longitudinal data were obtained from the school records and questionnaire responses of 152 graduating students in a newly consolidated high school. Earlier pre-consolidation measures are compared with measures obtained after two years experience in the new school. Students with paired data are grouped by sex and socio-economic status (SES), and changes in the measured variables are examined. An analysis of differential change is reported with respect to the possible influence of consolidation.

The primary focus of this analysis is the category of lower SES male students. Changes in their data are compared to those of other students, especially higher SES males. The results of the analysis allow informed speculation regarding which category of students probably benefitted most from consolidation.

The Study

This phase of the larger research study (another four-year phase studied the first freshman class in the consolidated school) was conducted in a south-central Appalachian county between 1968 and 1970. Questionnaires were administered to all junior students in their English classes on a single day during the first week of classes in the consolidated school. (It is assumed that the impact of consolidation on the measured variables was insignificant at that point.) The second questionnaire administration by the researchers followed the same procedures and was conducted in the final week of the senior year.

During the summer months of 1970, data were extracted from school records (e.g., grades, post-secondary school applications, etc.). Interviews with a portion of the students, parents and teachers, and school administrators were also conducted during this period.

These interviews plus other questionnaire data and information from the principal's files are incorporated into the interpretation of the major findings presented in this paper.

The Variables

The grouping variables of sex and SES were obtained or derived from questionnaires. Students checked one of ten categories provided asking for the level of their fathers' education. These were dichotomized into those whose father had less than a high school education (lower SES) and father's with at least a high school education (higher SES).

The basic unit of grades in this study was the semester average (mean). Multi-semester averages as well as the various category averages are means based on the aggregation of these semester means.

Educational aspirations are considered on three levels: (a) level desired assuming that money and opportunity were unlimited (ASP); (b) level expected, considered in this analysis as aspirations tempered by the students' perspectives and perceptions of what for them is realistic (EXP); and, (c) level planned, indicated by records of post-secondary school applications and interpreted as being firm and serious aspirations (APPLIED).

Occupational aspirations are the jobs students would like to have following their formal schooling. These choices were coded using prestige rankings.[7] (Information on expected jobs was also requested of students but the data were flawed by non-responses and generally un-codable responses and are therefore not presented.)

Individual courses were not formally organized into tracks or groupings such as 'commercial,' 'general,' 'college perparatory' or 'vocational.' In an effort to make some assessment of the impact of vocational courses, a post hoc decision was made to categorize students by club memberships in the senior year. Certain clubs are exclusively for those taking vocational classes, e.g., Vocational and Industrial Clubs of America for building trades and mechanics students. These students were classified as 'vocational' and the remainder were labeled 'general.'

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[7] Occupations were ranked according to "Socioeconomic Index for Occupations in the Detailed Classification of the Bureau of the Census: 1950," Appendix B, pp. 263-275, in

The Setting

Immediately preceding and during the study period, the economy of the county was blossoming. Tourism, retirement and vacation home construction, and recreational developments were providing new jobs and income. Successful recruitment of new industries and business was hindered, however, by a public school system that was dilapidated in the appearance of its buildings and antiquated in its curriculum.

Increased revenues from property taxes made it possible to repair the existing facilities, but this would not improve the curriculum. Consolidation was suggested as a possible answer. Additional funds could be obtained from the state for this purpose out of recently approved appropriations for new school construction. Sentiment became divided: Consolidate into one school! Consolidate into two schools! Repair the existing schools!

Opposition to consolidation followed three general themes: political, geographical and sentimental. The hiring and firing of teachers has political patronage overtones in rural areas. There were questions of who would be retained as teachers in a new school which were motivated by kinship, also. (Many of the teachers were indigenous to the county.) School boards are nominally non-political but questions of their dissolution and merger certainly generated heated political arguments.

Site selection of a possible consolidated school also involved controversy. There were charges that civic leaders in the county seat were favoring themselves by proposing that the school be located nearby. There were compromise suggestions that two new schools be built to serve both ends of the county. This was often the position of outlying residents who objected to possible longer bus rides over often dangerous roads. A centrally located school also meant earlier departures for and arrivals from school for the students who lived in outlying areas.

The existing community schools each had traditions that were sources of local pride and loyalty. They served as community centers and fielded sports teams which commanded followings from residents otherwise unassociated with the schools. Intra-county rivalries were strong.

Occupations and Social Status, Albert J. Reiss, Jr., New York: The Free Press of Glencoe, 1961.

These and related arguments against consolidation may well have prevailed were it not for the efforts of a small but industrious cadre of influential county leaders. Through ghost-written newspaper editorials, intensive and selective voter solicitation, effective but low-keyed planning and a carefully orchestrated campaign, the solidation question was brought to a referendum and passed by the voters. In less than two years, the consolidated school was a reality.

Within a short time, the earlier opposition had subsided and resentment was subdued. The new school building was modern, impressive and quickly became a source of county pride. Contrary to expectations, few difficulties arose out of former rivalries. An exceptionally successful basketball team helped to mollify many of the sports-minded opponents of consolidation. All teachers from the old schools were offered positions in the new school, all but two accepted and this dispelled many objections. A new principal was hired from outside the county, neutralizing another potential source of contention.

In summary, within two years most residents were satisfied that the new school was superior to the old community schools. There was residual dissatisfaction over bussing distances, new procedures, etc. But there was overwhelming consensus that the consolidated school provided a better education and improved opportunities for the youth of the county than had the old community schools.

Findings

A preliminary precautionary note is offered concerning the analytical strategy and the interpretation of the data. It should be immediately obvious that the small number of students involved in this study imposes several limitations on the statistical analysis of the data. The absolutely essential controls on sex and SES alone reduce some categories of data to very small values. Additional simultaneous controls would yield means and percentages unacceptably susceptible to variation, resulting in changes and differences that could be misleading.

Therefore, in this paper simultaneous controlling on a third variable has been held to a minimum and is limited even then to lower SES students where the N's are larger. In spite of these precautions, it was necessary to make some interpretations on the basis of small changes and differences in the data.

It may be argued that excessive importance has been attached to some of the differences and changes observed in the data. In defense of these seeming shortcomings, it is noted that longitudinal data frequently shows less variation than comparative data. Also, where seemingly minor differences and changes are interpreted, it should be remembered that collateral evidence from this study as well as the findings of previous research have been employed in making these interpretations.

Grades

The grades of all 152 students were averaged for the two-year period prior to consolidation. Using a four-point grade scheme, it will be noted in Table C-1 that there was not a great difference among the students' grades in the four SES-sex categories. The difference between the highest and lowest average is only 12 percent (2.37 and 2.08). There was an overall tendency for females to have higher grades than males and for higher SES students to have higher average grades than their same-sex counterparts.

First-Year Impact. Grades for each category of students were lower in the first year in the consolidated school than was the case prior to consolidation. As shown in Table C-1, females had grades only slightly lower than before but males--especially lower SES males --had a considerable drop in grades. Compared to their pre-consolidation benchmark, lower SES males had average grades which were 22 percent lower in their junior year. This was more than double the percentage drop of higher SES males.

Senior-Year 'Rebound'. The second year of consolidation saw a general improvement in grades over the previous year. Females, especially lower SES females and most notably those taking vocational courses, had the highest grades of their four years. Higher SES males virtually regained their pre-consolidation grade levels. But lower SES males regained less than the other groups. Even those who took supposedly more congenial vocational courses rebounded no more than those who did not.

(Table C-1 about here)

SES Comparisons. In both of the two years in the old schools, lower SES students had average grades within 10 percent of the levels of their same-sex higher SES peers. This was again the case among females in the first year of consolidation. And the lower SES females actually surpassed their higher SES counterparts in grades in the senior year (see Table C-2).

(Table C-2 about here)

The first year of consolidation found lower SES males, however, with considerably lower grades than their higher SES peers. Their average was approximately 19 percent lower in the junior year and the difference was 14 percent in the senior year. Unlike the lower SES females whose post-consolidation grades reached parity with higher SES females, lower SES males had 17 percent lower grades than higher SES males after consolidation compared to a 7 percent deficit in the old schools.

In short, there was a greater parity between the grades of higher and lower SES females following consolidation, but a greater disparity between the grades of higher and lower SES males.

Educational Plans

Post-secondary educational plans are divided into three categories or levels in this analysis: aspirations, expectations and applications for admission. Post-secondary is also divided into two categories or levels: trade school and college (which includes 1-3 years attendance, graduate from a 4-year school and post-graduate).

The first part of this section deals with the change within each SES-sex category in the percentages who aspired and expected to attend post-secondary school at the two post-secondary levels. Most (85 percent) of the 152 students had paired data for 1968 and 1970 and these 129 students are the group included in this and the following sections.

Educational Aspirations. As shown in Table C-3, post-secondary aspirations increased across the board. The increase shows up as greater among lower SES students, but it should be noted that the higher SES students had little room for increase. Virtually all students aspired to attend post-secondary schools in 1970.

(Table C-3 about here)

College Aspirations. Except for lower SES females, college aspirations decreased among these students between 1968 and 1970. The group with the greatest change in percentage is higher SES females but the small number of students in this category makes this an inflated change. The more significant change is in the lower SES male category where the low 1968 percentage dropped even lower in 1970.

Trade School Aspirations. Almost all the post-secondary aspirations increase resulted from increases in trade school aspirations. Each category shown in Table C-3 increased percentages in the trade school aspirations. The most significant increase again was among the lower SES males. They had a greater percentage who aspired to attend trade school in 1968 than any other group and their increase in this category was greatest in 1970.

Educational Expectations. Expectations for post-secondary school, as shown in Table C-3, likewise increased for each SES-sex category of students. Despite these increases in expectations, for each group except higher SES males expectations for post-secondary schools still did not equal aspirations. Again, the greater increases among the lower SES students is partly because higher SES students had less room for increases.

College Expectations. Lower SES students had no change in the percentages who expected to attend college. As Table C-3 shows, college expectations for each SES-sex group were less changed than were aspirations. Except for lower SES females, the greater changes in aspirations meant less disparity between aspirations and expectations in 1970 than in 1968.

Trade School Expectations. Each category of students in Table C-3 had substantial increases in the percentages who expected to attend trade schools. As there were fewer higher SES students who expected college and no change in the number of lower SES students who expected college, the entire increase in post-secondary expectations was in the trade school category. For the lower SES students, these increases resulted entirely from students who had no post-secondary school expectations in 1968, but who chose trade schools in 1970. Over one-third of the lower SES males and over one-quarter of the lower SES females could be described by the latter situation.

(Table C-4 about here)

SES Comparisons. This section involves the same data as presented in Table C-3 but with the emphasis placed on SES differences in educational aspirations and expectations. Another set of data has been added concerning the percentages of students who actually applied to the post-secondary schools for which they had stated expectations.

Differences in Aspirations. As seen in Table C-4, the disparity between post-secondary aspirations of lower and higher SES students was virtually nil in 1970, a considerable change from 1968. The convergence was almost entirely due to raised post-secondary aspirations among lower SES students.

Differences in College Aspirations. Lower SES females had only slightly lower college aspirations than higher SES females in 1970, the increase in parity resulting primarily from a lowering of college aspirations among higher SES females. The disparity between the college aspirations of lower and higher SES males remained as large in 1970 as in 1968, however. Both groups had about ten percent drops in college aspirations.

Differences in Trade School Aspirations. The higher SES females who abandoned college aspirations in 1970 changed to trade school aspirations. The lower SES females who had no post-secondary school aspirations in 1968 chose trade school in 1970. The resulting percentages in the trade school category found little difference between higher and lower SES females in 1970. Contrarily, higher and lower SES males were more dissimilar in the percentages who chose trade school as their educational goal in 1970 than in 1968. The difference between the higher and lower SES proportions who chose trade schools doubled in 1970 compared to 1968.

Differences in Expectations. As seen in Table C-4, the change in the differences between higher and lower SES students in post-secondary school expectations was somewhat greater in magnitude than was the case of aspirations.

Differences in College Expectations. There was very little lessening of the disparity between students of higher and lower SES in the percentages who expected to attend college. The convergence that is evident in Table C-4 can be seen to result from lowered expectations among higher SES students rather than raised expectations among lower SES students. The difference in college expectations continued to be much greater between males of different SES than between females.

Differences in Trade School Expectations. The increase in trade school expectations was much greater among lower than higher SES males with the result that there was a larger difference between them in this category of educational expectations in 1970 than in 1968. Higher SES females had a substantial percentage who expected to attend trade school even in 1968. Therefore, the doubling of the percentage of lower SES females who

expected to attend trade school combined with a near-doubling of the percentage among higher SES females made the expectations between the two groups not much different than in 1968.

Applications for Admission to Post-Secondary Schools. Transcripts of grades submitted in application to post-secondary schools were paired with the students' stated educational expectations. Table C-4 presents the differences between males and females of higher and lower SES in the percentages who applied to post-secondary schools and further presents differences in college and trade school applications.

Differences in Post-Secondary Applications. Females of both higher and lower SES had about the same percentage who applied to post-secondary schools. Likewise, the difference between post-secondary expectations and applications was similar for both groups. However, there were proportionately many more higher SES males who applied to post-secondary schools than there were lower SES males. Concomitantly, there was a much greater gap between post-secondary expectations and applications in the lower SES male group than in the higher SES male category.

Differences in College Applications. Lower and higher SES females were not dissimilar in the percentages who applied to college. (Note in Table C-4 that a higher percentage of lower SES females applied to college than actually expected to attend.) The proportion of higher SES males who applied to college was more than three times greater than the proportion of lower SES males. This is very similar to the percentages shown for college expectations. The difference between these two groups of males in college aspirations, expectations and applications remained substantially unchanged from 1968 to 1970.

Differences in Trade School Applications. So few students (a total of 17) constitute this category that an analysis of changes in percentages is almost meaningless. The differences between SES groups is far overshadowed by the fact that such large differences between expectations and applications exist among each category of SES-sex.

Summary. Post-secondary aspirations and expectations increased for most students in the consolidated school. The increase in the trade school category contrasted with a decrease in college aspirations and expectations. Despire these large increases among lower SES students in post-secondary school plans, there remained

a large difference between lower and higher SES males in the percentages who had made firm plans to act on their stated aspirations and expectations.

Occupational Aspirations

Low occupational aspirations among rural students have been often blamed on lack of knowledge of the range of jobs available in the larger society. Consolidation has sometimes been recommended to aid in providing the information thought necessary to raise the level of occupational aspirations among the lower SES rural students.

The students in this study were asked "If you could choose any job you wanted, what would you like to be when you finish your schooling?" The responses were then coded for occupational prestige. The responses from 1968 were then compared with those given in 1970.

Of the 129 students who responded to both questionnaires, 117 gave codable responses to the above question. The average (mean) ranking of occupational aspirations should be higher in 1970 than in 1968 if the consolidated school were to be considered successful in raising the occupational aspirations of students.

The mean prestige ranking of jobs listed as occupational aspirations was virtually the same in 1970 as in 1968 (72.1 and 71.5, respectively). As shown in Table C-5, there was very little change within any of the four SES-sex categories. Compared by SES, females aspired at virtually the same levels at both times. Lower SES males, on the other hand, aspired at a lower average level than their higher SES counterparts in 1968 and the gap widened slightly in 1970.

(Table C-5 about here)

Cumulative Proportions at Given Aspiration Levels. Occupations ranked in the 80's include the top professions such as physicians, engineers and university professors. The lower-range professions such as high school teachers and social workers are included in the 75-79 category. White-collar jobs such as secretary and office worker fall into the next lower category from 70-74. Skilled and semi-skilled occupations such as auto mechanics and factory foremen are coded in the 60-69 category. Below 60 lie unskilled labor and those who could not name or describe the job they would like to have following their formal schooling.

When these occupational choices of all 129 students with paired questionnaires are arranged by SES-

sex and compared in 1968 and 1970 (Table C-6), it is further shown that higher SES students increased their proportions in the top two categories (professions) while lower SES students had a decreased proportion in these categories. Among males, the gap widened in 1970 in each of the four occupational categories presented. Additionally, approximately one-quarter of the lower SES males either listed unskilled labor or nothing as their occupational aspiration.

(Table C-6 about here)

Variety of Occupational Aspirations. As is shown above, the level of prestige did not increase in the occupations to which students aspired. Another consideration is the variety of occupations chosen by students. Job information is thought to be important in increasing the diversity of occupational aspirations. If the consolidated school were to be considered more successful in this respect, there would be a greater number of job titles among the listed occupational aspirations in 1970 than in 1968.

There were 67 different job titles given as occupational aspirations in 1968 compared to 55 in 1970 among the 129 students with paired questionnaires. As shown in Table C-7, the diversity decreased in each SES-sex category except higher SES females where the small number of students limits the importance of changes. Among males, the higher SES students continued to have a greater variety of occupational choices. Nevertheless, the lower SES males had a greater variety of occupational aspirations than did their female counterparts.

(Table C-7 about here)

Most Popular Occupational Aspirations. In 1970, over one-half of the males had occupational aspirations that could be grouped into four categories: auto mechanic, building trade (carpentry and brick laying), engineer and teacher. Over one-half of the females had job choices in three categories: secretary, nurse and teacher. As shown in Table C-8, lower SES males increased their proportions most in the auto mechanic and building trade categories while the higher SES males increasingly chose the professions of engineering and teaching. The percentage change among higher SES females resulted from three girls changing their aspirations from one of the three jobs listed to social worker.

In summary, the average prestige of occupations to which students aspired did not change appreciably. Lower

SES students tended to increasingly choose the lower-prestige unskilled or blue collar jobs while higher SES students increased in their choice of professional occupations. The variety of occupational aspirations decreased and seemed to focus on a very few extremely popular occupations possibly related to the vocational courses taught in the new school.

Discussion

The data presented in this paper lead to a conclusion that lower SES males did not substantially benefit from consolidation, i.e., did not have higher grades and aspirations after consolidation than before. Of course, it could be argued that their grades and aspirations might have been even lower in 1970 had not consolidation occurred. (It could also be argued that some would not even have completed school had the programs provided by consolidation not been available. But it is likewise possible--as some students stated of themselves and their friends--that some students dropped out before graduation because of consolidation.) Eschewing speculation for the moment, the data boil down to this: the grades, educational and occupational aspirations of lower SES males were not higher in 1970 than in 1968 and there was not a greater parity between higher and lower SES males in the variables examined.

Given the optimistic expectations, the question becomes: Why not? Additional related survey data provide some clues. When these are combined with and integrated into accounts given by interviewees, it is possible to offer speculative but probable explanations of why lower SES males did not seem to be particularly benefited by consolidation.

The interpretation of the data from this case study will be augmented by references to pertinent research and literature. In conclusion, we will comment on the findings in the context of school reform in general.

The value of education seemed to be realized by most of the lower SES parents interviewed in this study.[8]

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[8]Ford, op. cit., p. 17, also found that mountain parents valued education for their children. "Three out of four said they would like for a son to complete college and two out of three expressed a similar hope for their daughters. . . . It would be a mistake to dismiss (these responses) as nothing more than the pathetic attempts of the respondents to win the approval of their interviewers.

However, certain ideas and attitudes persist, unaffected by school consolidation, that serve to dampen the enthusiasm of lower SES males for academic and occupational striving.

There is the largely unspoken but prevalent expectation among lower SES parents that their male children will not excel academically. There often is a disinterest in the academic progress of these males on the part of parents. The result frequently is a low academic and total self-concept which contributes to a sort of 'self fulfilling prophecy.'[9]

Lower SES parents of this region seem to harbor a distrust of efforts to surpass one's neighbors. This is transferred to their children who translate the attitude into reduced academic striving. There exists the general feeling that educated people are 'uppity' and 'snobbish.'[10]

Related to this distrust of 'one-upmanship' on one's neighbors is the desire not to make one's close relatives look bad by accentuating their lack of education. Familial ties inhibit educational aspirations among the lower SES males in this region in another way; the pursuit of higher education almost inevitably means that the child will have to leave home and the region on a permanent basis. The college trained rarely return except to teach in the same high school from which they graduated.

More likely, the responses indicate that Appalachian residents view higher education in much the same way as do people in other parts of the country, and are cognizant of its value in an industrial society."

[9]See "Self Concept, Its Role in Breaking the Poverty Cycle," Sarah M. Shoffner, in Agricultural Science Review, 7:3, 1969, pp. 23-29.

[10]See Elmora Messer Matthews, Neighbor and Kin, Life in a Tennessee Ridge Community, Nashville, Vanderbilt University Press, 1965. She describes a mountain attitude she calls "So-So." Those who fit the community ideal of So-So are neither higher nor lower than those around him . . . "he works at being ordinary," p. xxi. Also, see Weller, op. cit., p. 109.

To an even greater extent than attitudes, school consolidation had little impact on the lower SES students' family economic situation or the economic structure of the region in general. Probably in the majority of cases, the lower SES male needed to make an immediate contribution to the income of his family. The possibility of his family being able to support his post-secondary education is usually remote. The realization that further formal education is improbable comes early for the lower SES male and the denial of such aspirations can be a useful compensatory mechanism in this regard.

The economy of the region does not require many employees with post-secondary education, anyway. Textile mills, construction and common labor are the main sources of employment. In any case, the luxury of deferred gratification is seldom at the disposal of the lower SES males as he is generally expected to at least make a contribution to his own support if not to the family as soon as he has completed high school.

In addition to the environmental and cultural influences that often truncated academic striving and occupational aspirations among lower SES males, there were elements of constraint intrinsic to the consolidated school situation.

The general atmosphere in the new school was one of discipline, especially compared to the reported situations in the old schools. There probably would have been an increase in the number of rules and the vigor of their enforcement in the new school simply by virtue of the necessities of a larger, more bureaucratic and complex organization. The emphasis on discipline was accentuated, however, by the mandate given the new principal by the school board.

Lower SES males seem to have been most affected by this "crack-down." This group had almost three times the rate of the rest of the students in the letters of discipline sent to to their parents. It is not difficult to draw correlations between 'discipline problems,' teachers' opinions, self-concepts, and grades.

One of the innovations of the new school was the addition of several vocational courses in carpentry, bricklaying, auto mechanics, etc. Ostensibly, these courses were provided to be more compatible with the interests of the non-college bound. But there was complaint from some sources that these classes were primarily

'custodial,' with a large portion of students being counseled into them because they had acquired the label of 'troublemaker.'[11]

Though speculative, it is not difficult to imagine that the admittedly 'insulted' vocational instructors, reacting to the apparent low valuation of their courses, reacted with a harsher grading criterion than is usually credited to vocational courses. Even those not in vocational courses because of their 'discipline problems' would have been affected by this, not only in lower grades than would be expected, but also in damaged self-concept by a sort of guilt by association.

An important part of high school life, especially for lower SES males in the region, is participation in varisty athletics. These males often find in athletically representing their school a source of self-esteem equal or surpassing academic success. This forum gives them a chance to excel and often is the inspiration to continue and do well in school in order to remain eligible to participate. Over all, consolidation of schools had an adverse effect on lower SES males' participation in athletics.

First of all, there was an arithmetic reduction in the number of varsity positions with consolidation. That is, three football teams were reduced to one.[12] Secondly, after-school practices became more of a problem

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[11] See Stinchcombe, Rebellion in a High School, Chicago, Quadrangle, 1964. "The school puts all who can do algebra into a class in algebra, but those who can do automobile mechanics are put into that class only if they cannot do algebra. Thus the school defines talent at algebra as success, talent at auto mechanics as failure." Also, see Kitsuse and Cicourel, The Educational Decision Makers, Indianapolis, Bobbs Merrill, 1963. They report that high school counselors often influence a student to enter a particular curriculum on criteria other than the student's ability (social class, personal presentation, "right attitudes," etc.), pp. 134-138.

[12] See Norman Deeb, Social Consolidation: A Case Study, Lexington, Bureau of School Service, 1967; also, Roger Barker and P. V. Gump, Big School, Small School, Stanford University Press, 1964.

for lower SES males than before consolidation. They typically lived farther from school than before; transportation and post-school work time presented additional problems. Thirdly, strong attachments to former school teammates, anticipatory anxiety and lack of self-confidence inhibited several potential athletes from attempting to make the team in the new school.

Taken as a whole, lower SES males seem to have been the group of students who suffered the most and gained the least from consolidation. The potential benefit from enriched programs and improved physical facilities seem to have been largely negated by psychological and sociological factors in the case of lower SES males. And despite the greater amounts of occupational information and training, the hard realities of their non-school environment probably overshadowed the attempts to convince them of the jobs that were really possible for them.

Limited exposure, it could be argued, prevented the new programs from having significant impact. The potential benefits, it could further be argued, were countered by the shock of transition. The second phase of this study should shed some light on these suggestions.

It is also possible that the remedy for social inequalities is being sought in the wrong or at least in too narrowly focused a place. Recent studies have suggested that the school may not be the critical institution it was supposed to be as the agency to break the cycle of poverty.[13]

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[13]See Christopher Jencks, et al., Inequality: A Reassessment of the Effect of Family and Schooling in America, New York: Basic Books, 1972. George Bonham, in an editorial review of the above, stated "Mr. Jencks in our view is quite right in spelling out the inability of our schools and colleges to substantially affect the social outcomes of American society. But these are not necessarily failures of the institutions, but a failure of society to seek amelioration in the right places. Social consequences of schooling should never have been claimed for them in the first place." Editorial, "Inequity and Educational Policies," Change magazine, November, 1972, pp. 15-16.

If it is indeed the case that life chances are very little affected by school factors, then schools, rural and urban, are freed of many of the program restraints imposed by preparation of students for occupations. Instead of economy and efficiency of specialized programs, dependent upon large enrollments, schools can concentrate upon other important but often neglected aspects of education. In short, the 'liberalizing' education can be started at the high school level.[14]

We are not here suggesting that this extremely limited study serves as a springboard for broad generalizations concerning school reform. Its findings do, however, harmonize with the findings of diverse previous studies that suggest a need for a re-examination of many of the basic promises underlying present educational policy. This study does not on its own merits warrant such an examination. Merely, it is hoped that it will serve as another stimulus that prompts others to seek further answers to the questions concerning the impacts of schools on students.

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[14]See especially Amitai Etzioni, Toward Higher Education in an Active Society: Three Policy Guidelines, New York: Center for Policy Research, 1970.

Table C-1. Post-Consolidation GPA's as a Proportion of Pre-Consolidation GPA's by Sex and SES and by Courses Taken Senior Year for Lower SES.

Sex:	Males				Females			
SES:	Higher	Lower	Lower	Lower	Higher	Lower	Lower	Lower
Courses:			Voc	Gen			Voc	Gen
Pre GPA:	(2.22)	(2.08)	(1.98)	(2.21)	(2.37)	(2.24)	(2.04)	(2.48)
Junior	.90	.78	.72	.86	.98	.96	.96	.96
Senior	.98	.90	.90	.90	1.06	1.16	1.23	1.10
Post-Consolidated	.94	.84	.81	.88	1.02	1.07	1.10	1.03
N =	(34)	(47)	(28)	(19)	(26)	(45)	(25)	(20)

Table C-2. Yearly GPA By Sex and SES and With Lower SES GPA Expressed as a Proportion of Higher SES GPA.

Sex:	Males			Females		
SES:	High-er	Low-er	% H/L	High-er	Low-er	% H/L
Fros	2.28	2.10	.92	2.28	2.22	..97
Soph	2.16	2.06	.95	2.46	2.26	.91
Junior	2.00	1.61	.81	2.31	2.16	.93
Senior	2.18	1.87	.86	2.50	2.60	1.04
Before	2.22	2.08	.93	2.37	2.24	.94
After	2.09	1.74	.83	2.41	2.40	1.00
N =	(34)	(47)		(26)	(45)	

Table C-3. Change in Post-Secondary Aspirations and Expectations by SES and Sex (in Percent).

Sex:	Males						Females					
SES:	Higher			Lower			Higher			Lower		
	1963	1970	Change	1963	1970	Change	1963	1970	Change	1963	1970	Change
Trade School	6	16	+10	29	63	+34	6	39	+33	24	44	+20
College	88	78	-10	45	34	-11	83	61	-22	51	54	+ 3
Totals	94	94	0	74	97	+23	89	100	+11	75	99	+23
Trade School	3	22	+19	26	63	+37	22	39	+17	24	51	+27
College	81	72	- 9	26	26	0	50	44	- 6	29	29	0
Totals	84	94	+10	52	89	+37	72	83	+11	53	80	+27
N =	(32)			(38)			(18)			(41)		

Table C-4. Difference Between Higher and Lower SES Educational Aspirations and Expectations in 1968 and 1970 and Post-Secondary Applications in 1970, by Sex (in Percent).

Educational Aspirations	Males						Females					
	1968			1970			1968			1970		
	Higher	Lower	Diff.	Higher	Lower	Diff.	Higher	Lower	Diff.	Higher	Lower	Diff.
Trade School	6	29	+23	16	63	+47	6	24	+18	39	44	+ 5
College	88	45	-43	78	34	-44	83	51	-32	61	54	- 7
Totals	94	74	-20	94	97	+ 3	89	75	-14	100	98	- 2
Educational Expectations												
Trade School	3	26	+23	22	63	+41	22	24	+ 2	39	51	+12
College	81	26	-55	72	26	-46	50	29	-21	44	29	-15
Totals	84	52	-32	94	89	- 5	72	53	-19	83	80	- 3
Applied												
Trade School				3	18	+15				6	10	+ 4
College				66	21	-45				44	37	- 7
Totals				69	39	-30				50	47	- 3

Table C-5. Mean Prestige of Occupational Aspirations for Students Having Codable Paired Responses, by Sex and SES, Lower SES Mean is also Presented as a Proportion of the Higher SES Mean.

SES	Males			Females		
	Higher	Lower	L/H	Higher	Lower	L/H
1968	74.9	67.6	.90	73.2	71.6	.98
1970	76.6	66.0	.86	73.5	73.6	1.00
'70/'68	1.02	.98		1.00	1.03	
N =	(27)	(33)		(17)	(40)	

Table C-6. Cumulative Percentages Aspiring to Jobs of Given Prestige in 1968 and 1970, by Sex and SES, Lower SES Percentage is also Presented as a Proportion of the Higher SES Percentage.

Level of Prestige	Males					
	1968			1970		
	Higher	Lower	L/H	Higher	Lower	L/H
80+	34	11	.32	44	11	.25
75+	47	24	.51	66	21	.32
70+	69	45	.65	75	34	.45
60+	81	76	.93	81	71	.88
N =	(32)	(38)		(32)	(38)	
	Females					
80+	6	7	1.17	11	5	.45
75+	17	39	2.24	28	24	.86
70+	89	73	.82	83	76	.92
60+	94	85	.90	94	93	.99
N =	(18)	(41)		(18)	(41)	

Table C-7. Job Titles Listed as Occupational Aspirations in 1968 and 1970, by Sex and SES, in Numbers and as Proportions of Titles to Students.

Sex:		Males		Females	
SES:		Higher	Lower	Higher	Lower
Number of Titles	1968	23	22	7	15
	1970	18	16	8	13
Proportion of Titles to Students	1968	.72	.58	.39	.37
	1970	.56	.42	.44	.32
N =		(32)	(38)	(18)	(41)

Table C-8. Most Popular Occupational Aspirations in 1968 and 1970 by Sex and SES (in Percent).

Occupa-Occupational Aspirations	All Males		SES Higher		Lower	
	1968	1970	1968	1970	1968	1970
Auto mechanic	13	14	6	3	18	26
Building trade	6	13	3	6	8	18
Engineer	4	13	6	19	3	8
Teacher	4	11	3	13	5	11
Total Choosing Above Occ.	27	51	18	41	34	61
N =	(7)		(32)		(38)	

Occupational Aspirations	All Females		Higher		Lower	
	1968	1970	1968	1970	1968	1970
Secretary	32	31	44	39	27	27
Nurse	15	9	22	6	12	10
Teacher	12	15	6	11	15	17
Total Choosing Above Occ.	59	55	72	56	54	54
N =	(59)		(18)		(41)	

APPENDIX D

ATTRITION AND HOLDING POWER OF THE CONSOLIDATED SCHOOL

> "A county not far from here has a magnificent county consolidated school with a bus system, and a bus goes right by the end of a little hollow. In that hollow there used to be a little one-room school full of kids. They don't have the one-room school in the hollow anymore, but neither do any of these kids go to the consolidated school. It's outside their world; money-wise, dress-wise, and otherwise--for them it would be like going to the moon.
>
> "I oversimplify these things, but every now and then I wonder if it's better to have a better school to which kids don't go, or to have a poor school to which they do go. That sounds like a stupid question, but what we are interested in is educating kids."
>
> Perley Ayer,
> former Executive Director,
> Council of the Southern Mountains

One of the hoped-for outcomes of consolidation was the provision of a wider range of secondary-level educational opportunities which would attract and hold students from varying backgrounds, ability levels, and aptitudes. The findings of this study, which are, it must be stressed again, based on only four years experience of the new school, suggest that this hope was not realized, at least in these early years, and that in fact there was an immediate negative impact.

The accompanying table (see Table D-1) presents data on attrition between 9th and 12th grades beginning in 1964-65 (four years prior to consolidation). Each grade level Average Daily Membership (ADM) beyond the 9th grade is presented as a percentage of the ADM for the 9th grade. ADM's for the three pre-consolidation schools are thrown together into a single, county-wide pre-consolidation figure.

(Table D-1 about here)

As can be seen, the proportion which the 12th grade ADM was of the 9th grade ADM averaged .73 for the four years preceding consolidation. For the four years

after consolidation, the comparable figure is .58. In other words, whereas prior to consolidation the senior class was about 73 percent, the size of the freshman class, after consolidation the senior class was about 58 percent the size of the freshman class. (The situation had not changed by the fifth year after consolidation. The ADM for the 9th grade was 272. The 10th grade ADM was 86 percent, this size, the 11th grade 66 percent, and the 12th grade 51 percent, which is a figure lower than three of the four preceding years.)

(It is possible that the immediate impact of consolidation on attrition is waning, however. The principal of the school recently reported that the dropouts as a proportion of total school enrollment declined abruptly in 1972-73, as indicated in the following illustration:

Year	Total Enrollment	Dropouts	Proportion Dropouts
1970-71	912	66	7.2%
1971-72	933	90	9.6
1972-73	926	35	3.8

The principal ascribes this drop to the increase in the popularity and use of "mini-courses" in mathematics, English, and other subjects; to the increasing popularity of vocational courses; and to the institution this past year of a program of cooperative education. The last named could well serve to hold students in school who would otherwise become dropouts, since it allows them to hold jobs while attending school part-time, thereby eliminating the hard choice between the two alternatives of going to school and establishing a non-school-related identity in the "real" world of work, earnings, cars, and adult status.

On the other hand, it is too early to tell whether this year's experience is a new trend, or whether it represents an anomaly. The 1971-72 figure is almost 50% higher than that for the preceding year. The lower figure for 1972-73 may simply mean that for some reason that year's dropouts had already dropped out in the preceding year.)

If the "holding power" of the new school was less than that of the preconsolidation schools, did it affect all categories of students alike, or did it hold some better than others? A review of school records on dropouts and interviews with dropouts and transfers from the Class of 1970 and the Class of 1972 showed that the profile of the dropout from the new school contained no surprises. They were mostly from lower SES backgrounds. More males

than females dropped out. Their grades were lower, their absences prior to dropping out were higher. The shock of consolidation showed up in the fact that by far the largest number of dropouts occurred during the first year of consolidation (for example, 20 of the 27 dropouts from the Class of 1970, 33 of 38 in the Class of 1971, and 23 of 40 in the Class of 1972--see Table C-2).

(Table D-2 about here)

Interestingly, most of the dropouts from the Class of 1970 had spent their first two years at the one of the preconsolidation schools which had the poorest academic reputation. On the one hand this suggests that the school in question was indeed giving its students poor preparation. On the other hand, it may suggest that this school was holding students who under other circumstances (say, had they been at one of the other schools) might have already dropped out. These students were, on the whole lower SES, male, and with poor academic records. The school generally drew students from poorer sections of the county. It may have "held" these potential dropouts only because of the laxness of academic and disciplinary standards which it was widely reputed for, and because it allowed opportunities for athletic participation not available in the other two preconsolidation schools or to so great an extent in the consolidated school.

While the inference can be drawn that dropping out was for many students connected in some way with the coming of the new school, additional confirmation was sought through interviews with a sample of those who were still in the vicinity, and who were suggested by school personnel and fellow-students as representative, articulate, and accessible. These interviews, conducted in 1970 and 1972, show that many, and probably most, of the students who left school attributed their leaving to some feature of the new school which they either did not like or thought they would not like. Strict enforcement of school rules was cited by a large number. Low academic achievement was mentioned by some. Lack of opportunity to participate in athletics was given as a reason by some. A number (but not as many as anticipated) cited the factor of bigness and strangeness. Quite a few said that their dropping out was occasioned by a particular incident involving unfair treatment by school personnel.

It is very likely the case that many of these students would have quit school regardless of consolidation. School faculty and administration, as well as school friends of these dropouts, suggested that the fact of the new

school merely provided a convenient excuse for many students who would have stopped anyway. Nevertheless, it seems to be the case that more students dropped out than would have without consolidation, and that this increase can be attributed to real or imagined strengthening of both academic and disciplinary standards in the new school. Testimony to this proposition exists not only in the interviews, but clearly in the fact that most dropouts occurred among students who had come (or would have come, in the case of the Class of 1972) from the preconsolidation school with the reputation for greatly relaxed academic and disciplinary systems.

The consolidated school is quite new, of course, and the assessment of holding power, like the assessment of the impact of the school of students in other ways, cannot be judged fairly in the short space of four years. Thus, while it is fairly clear that holding power was anything but increased during the early experience of the new school, it may indeed be the case that, as school officials hope, the addition of new and flexible programs and opportunities (such as cooperative education, more phase-elective courses, and expanded vocational tracks), and the gradual retraining of faculty for new educational concepts, will vastly improve the new school's ability to attract, hold, and serve useful educational functions for more students. For the present, from the point of view of attrition and holding power, it would have to be concluded that the new school is doing a somewhat worse--and certainly no better--job at holding lower-income, less academically inclined and capable students than its predecessors.

Table D-1. Rate of Attrition, 9th Through 12th Grades, 1964-65 Through 1971-72, In % of 9th Grade Average Daily Membership (ADM).

Year	Grade Level			
	9th	10th	11th	12th
1964-65	100% (n=268)*	84%	84%	76%
1965-66	100 (n=260)	90	73	77
1966-67	100 (n=263)	80	77	67
1967-68	100 (n=239)	99	76	71
		Consolidation		
1968-69	100 (n=259)	76	75	61
1969-70	100 (n=253)	88	60	69
1970-71	100 (n=287)	66	68	45
1971-72	100 (n=273)	86	72	57
4-year pre-consolidated average	100 (n=1030)	88	77	73
4-year post-consolidated average	100 (n=1072)	79	69	58

*Composite figure for the three preconsolidated schools.

Table D-2. Number of Dropouts from the Classes of 1970, 1971, and 1972 Occurring Through Spring, 1970, by Last Semester Completed.

Last Semester Completed	Class of 1970	1971	1972	Total
Before Fall, 1968	3	0	0	3
Fall, 1968	13	18	8	39
Spring, 1969	7	15	15	37
Fall, 1969	4	3	15	22
Spring, 1970	0	0	2	2

APPENDIX E

SUPPLEMENTARY TABLES FOR CHAPTER III: SIMULTANEOUS CROSS-TABULATIONS BY SEX AND FATHER'S EDUCATION

Table E-1. Grade Point Average by Sex and Father's Education, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, 9th - 11th Grades (Grade Point Average is on 4-Point Scale).

Grade	Consolidated High School				Non-Consolidated High School			
	Male		Female		Male		Female	
	Father's Education				Father's Education			
	Low	High	Low	High	Low	High	Low	High
9th	1.6	2.4	2.0	2.4	1.7	1.9	2.2	2.3
10th	1.5	2.0	1.8	2.2	1.0	1.4	2.3	2.4
11th	1.0	1.8	1.9	2.3	.9	1.1	2.2	2.2
(n)	17	26	37	15	9	13	15	7

Table E-2. Need Achievement, by Sex and Father's Education, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, Class of 1972, 9th and 11th Grades, In % "High."

	Grade	Consolidated High Schools				Non-Consolidated High Schools			
		Sex				Sex			
		Male		Female		Male		Female	
		Father's Education				Father's Education			
		Low	High	Low	High	Low	High	Low	High
% "High In Need Achievement	9th	23.5	48.1	45.9	50.0	44.4	30.8	66.7	57.1
	11th	17.6	76.9	27.0	60.0	55.6	46.2	46.7	71.4
	(n)	17	27	37	15	9	13	15	7

Table E-3. Self Estimate of Academic Ability, Consolidated and Non-Consolidated High School, Class of 1972, 9th and 11th Grades, by Sex and Father's Education, In % Placing Selves Among "Top 10 Percent."

	Grade	Consolidated High School				Non-Consolidated High School			
		Sex				Sex			
		Male		Female		Male		Female	
		Father's Education				Father's Education			
% Reporting Selves in Top 10% in Academic Ability		Low	High	Low	High	Low	High	Low	High
	9th	18.8	51.9	27.0	42.9	25.0	23.1	28.6	71.4
	11th	0.0	20.0	13.5	0.0	11.1	15.4	20.0	28.6
	(n)	17	25	37	15	9	13	15	7

Table E-4. Occupational Aspirations, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, Class of 1972, 9th and 11th Grades, by Sex and Father's Education, In % Aspiring to Jobs with Duncan Ratings of 60 or Less, and Jobs with Ratings of 80 or Higher.

Grade	Consolidated High School								Non-Consolidated High School							
	Male				Female				Male				Female			
	Father's Education				Father's Education				Father's Education				Father's Education			
	Low		High		Low		High		Low		High		Low		High	
	% 60 or Less	% 80 or Less	% 60 or Less	% 80 or Less	% 60 or Less	% 80 or Less	% 60 or Less	% 80 or Less	% 60 or Less	% 80 or Less	% 60 or Less	% 80 or Less	% 60 or Less	% 80 or Less	% 60 or Less	% 80 or Less
9th	18.7	31.2	13.6	50.0	5.6	8.3	0.0	15.4	11.1	44.4	0.0	45.4	13.3	20.0	0.0	0.0
11th	29.4	17.6	4.3	56.5	29.2	11.1	6.7	20.0	57.1	33.3	7.7	15.4	15.4	0.0	0.0	28.6
(n)	17	17	23	23	36	36	15	15	9	9	13	13	15	15	7	7

Table E-5. Occupational Expectations, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, Class of 1972, 9th and 11th Grades, by Sex and Father's Education, In % Expecting Jobs with Duncan Ratings of 60 or Less, and Jobs with Duncan Ratings of 80 or Higher.

Grade	Consolidated High School								Non-Consolidated High School							
	Male				Female				Male				Female			
	Father's Education				Father's Education				Father's Education				Father's Education			
	Low		High		Low		High		Low		High		Low		High	
	% 60 or Less	% 80 or Less	% 60 or Less	% 80 or Less	% 60 or Less	% 80 or Less	% 60 or Less	% 80 or Less	% 60 or Less	% 80 or Less	% 60 or Less	% 80 or Less	% 60 or Less	% 80 or Less	% 60 or Less	% 80 or Less
9th	35.7	21.4	17.6	35.3	38.9	5.6	0.0	18.2	25.0	50.0	10.0	50.0	18.2	9.1	1.0	0.0
11th	23.1	15.4	20.0	45.0	42.3	0.0	7.7	7.7	42.8	28.6	33.3	16.7	15.4	0.0	0.0	16.7
(n)	13	13	20	20	26	26	13	13	7	7	12	12	13	13	6	6

Table E-6. Educational Aspirations, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, Class of 1972, 9th and 11th Grades, by Sex and Father's Education, In % Aspiring to Post-Secondary Education and % Aspiring to College.

Grade	Consolidated High School								Non-Consolidated High School							
	Male				Female				Male				Female			
	Father's Education				Father's Education				Father's Education				Father's Education			
	Low		High		Low		High		Low		High		Low		High	
	% Post Sec-on-dary	% Col-lege	% Post Sec-on-dary	% Col-lege	% Post Sec-on-dary	% Col-lege	% Post Sec-on-dary	% Col-lege	% Post Sec-on-dary	% Col-lege	% Post Sec-on-dary	% Col-lege	% Post Sec-on-dary	% Col-lege	% Post Sec-on-dary	% Col-lege
9th	76.5	58.8	100.0	46.1	86.5	75.7	92.9	92.9	77.8	77.8	69.2	53.8	86.7	66.7	100.0	85.7
11th	76.5	58.8	100.0	92.3	75.7	32.4	100.0	80.0	88.9	55.5	84.6	61.5	80.0	53.3	100.0	100.0
(n)	17	17	26	26	37	37	15	15	9	9	13	13	15	15	7	7

Table E-7. Educational Expectations, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, Class of 1972, 9th and 11th Grades, by Sex and Father's Education, In % Expecting Post-Secondary Education, and % Expecting College.

Grade	Consolidated High School								Non-Consolidated High School							
	Male				Female				Male				Female			
	Father's Education				Father's Education				Father's Education				Father's Education			
	Low		High		Low		High		Low		High		Low		High	
	% Post Secondary	% College	% Post Secondary	% College	% Post Secondary	% College	% Post Secondary	% College	% Post Secondary	% College	% Post Secondary	% College	% Post Secondary	% College	% Post Secondary	% College
9th	50.0	37.5	100.0	96.3	64.9	54.0	85.7	85.7	66.7	55.6	61.5	53.8	73.3	53.3	100.0	85.7
11th	58.8	35.3	96.1	88.5	56.8	27.0	86.7	80.0	77.8	22.2	61.5	53.8	80.0	46.7	100.0	100.0
(n)	17	17	26	26	37	37	15	15	9	9	13	13	15	15	7	7

Table E-8. Deflection of Educational Aspirations, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, Class of 1972, 9th and 11th Grades, by Sex and Father's Education, in % Aspiring to Post-Secondary Education or College Minus % Expecting Post-Secondary Education or College.

Grade	Consolidated High School								Non-Consolidated High School							
	Male				Female				Male				Female			
	Father's Education				Father's Education				Father's Education				Father's Education			
	Low		High		Low		High		Low		High		Low		High	
	% Post Secondary	% College	% Post Secondary	% College	% Post Secondary	% College	% Post Secondary	% College	% Post Secondary	% College	% Post Secondary	% College	% Post Secondary	% College	% Post Secondary	% College
9th	26.5	21.3	0.0	0.0	21.6	23.7	7.2	7.2	11.1	22.2	7.7	0.0	13.4	13.4	0.0	0.0
11th	17.7	23.5	3.9	3.8	18.9	5.4	13.3	0.0	11.1	33.3	23.1	7.7	0.0	6.6	0.0	0.0
(n)	17	17	26	26	37	37	14	14	9	9	13	13	15	15	7	7

Table E-9. Preferred Residence by Sex and Father's Education, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, 9th and 11th Grades, In % "Home County."

Grade	Consolidated High Schools				Non-Consolidated High Schools			
	Male		Female		Male		Female	
	Father's Education				Father's Education			
	Low	High	Low	High	Low	High	Low	High
9th	23.5	22.2	2.7	14.3	22.2	44.4	20.0	14.3
11th	23.5	34.6	18.9	33.3	44.4	46.1	6.7	00.0
(n)	17	27	37	15	9	13	15	7

Table E-10. Preferred Residence by Sex and Father's Education, Consolidated (CHS) and Non-Consolidated High Schools, 9th and 11th Grades, In % "Outside This Area."

Grade	Consolidated High Schools				Non-Consolidated High Schools			
	Male		Female		Male		Female	
	Father's Education				Father's Education			
	Low	High	Low	High	Low	High	Low	High
9th	47.1	51.8	67.6	64.3	77.8	61.5	73.3	71.4
11th	52.9	42.3	51.3	53.3	44.4	46.1	60.0	85.7
(n)	17	27	37	15	9	13	15	7

Table E-11. Athletic Participation by Sex and Father's Education, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, Class of 1972, 9th and 11th Grades, In % "High" in Participation.

	Grade	Consolidated High Schools				Non-Consolidated High Schools			
		Male		Female		Male		Female	
		Father's Education				Father's Education			
		Low	High	Low	High	Low	High	Low	High
% "High In Athletic Participation	9th	37.5	48.1	43.2	42.8	44.4	53.8	28.5	60.0
	11th	11.8	26.9	10.8	13.3	0.0	7.7	6.7	57.2
	(n)	17	24	37	15	9	13	15	7

Table E-12. Extra-Curricular Activities by Sex and Father's Education, Class of 1972, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, 9th and 11th Grades, In % "High" in Activity.

	Grade		Consolidated High Schools				Non-Consolidated High Schools			
			Male		Female		Male		Female	
			Father's Education				Father's Education			
			Low	High	Low	High	Low	High	Low	High
% "High" in Activity	9th	% 1-2	12.5	40.7	35.1	50.0	33.3	46.2	40.0	42.9
	11th	% 1-2	11.8	30.8	24.3	33.4	0.0	30.8	26.6	57.2
	(n)		17	27	37	15	9	13	15	7

Table E-13. Popularity by Sex and Father's Education, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, 9th and 11th Grades, In % Reporting Selves "High" in Popularity.

	Grade		Consolidated High Schools				Non-Consolidated High Schools			
			Male		Female		Male		Female	
			Father's Education				Father's Education			
			Low	High	Low	High	Low	High	Low	High
% "High" In Popularity	9th	% 1-2	23.5	33.4	32.1	64.3	22.2	38.5	13.4	42.9
	11th	% 1-2	11.8	26.9	27.0	26.7	22.2	15.4	6.7	28.6
	(n)		17	26	37	15	9	13	15	7

Table E-14. "Getting Along" in School by Sex and Father's Education, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, Class of 1972, 9th and 11th Grades, In % Reporting Less than "Better than Most."

Grade	Consolidated High Schools				Non-Consolidated High Schools			
	Sex				Sex			
	Male		Female		Male		Female	
	Father's Education				Father's Education			
	Low	High	Low	High	Low	High	Low	High
9th	31.3	11.1	10.8	0.0	22.2	15.4	6.7	14.3
11th	23.5	23.1	18.9	13.3	66.7	46.2	46.6	0.0
(n)	17	26	37	15	9	13	15	7

Table E-15. "Getting Along" in School by Sex and Father's Education, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, Class of 1972, 9th and 11th Grades, In % Reporting "Better than Most."

Grade	Consolidated High Schools				Non-Consolidated High Schools			
	Sex				Sex			
	Male		Female		Male		Female	
	Father's Education				Father's Education			
	Low	High	Low	High	Low	High	Low	High
9th	31.3	44.4	29.7	57.1	22.2	30.8	26.7	14.3
11th	35.3	19.2	27.0	33.3	11.1	15.4	20.0	28.6
(n)	17	26	37	15	9	13	15	7

Table E-16. Anomia by Sex and Father's Education, Class of 1972, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, 9th and 11th Grades, By % "High".

	Grade	Consolidated High School				Non-Consolidated High School			
		Male		Female		Male		Female	
		Father's Education				Father's Education			
		Low	High	Low	High	Low	High	Low	High
% "High" In Anomia	9th	58.8	40.7	70.3	50.0	66.7	76.9	46.7	57.1
	11th	47.1	38.5	56.8	33.3	66.7	38.5	46.7	28.6
	(n)	17	27	37	15	9	13	15	7

Table E-17. Health Opinion Survey (HOS), By Sex and Father's Education, Consolidated High School (CHS) and Non-Consolidated High School (NCHS), Class of 1972, 9th and 11th Grades, In % "High" in Symptoms.

	Grade	Consolidated High School				Non-Consolidated High School			
		Sex				Sex			
		Male		Female		Male		Female	
		Father's Education				Father's Education			
		Low	High	Low	High	Low	High	Low	High
% "High" In Symptoms	9th	29.4	29.6	43.2	35.7	33.3	38.5	53.3	14.3
	11th	29.4	30.7	59.4	60.0	00.0	15.4	40.0	28.6
	(n)	17	27	37	15	9	13	15	7

Table E-18. Absenteeism by Sex and Father's Education, Consolidated (CHS) and Non-Consolidated (NCHS) High Schools, 9th Through 11th Grades, In % Absent 7 or More Days During the School Year.

	Grade	Consolidated High School				Non-Consolidated High School			
		Sex				Sex			
		Male		Female		Male		Female	
		Less Than High School	High School or More	Less Than High School	High School or More	Less Than High School	High School or More	Less Than High School	High School or More
% Absent 7 or More Days of School Year	9th	33.3	20.0	39.1	55.5	44.4	46.1	53.3	28.6
	10th	35.3	23.1	41.7	60.0	55.5	38.5	60.0	57.1
	11th	53.3	29.2	54.0	40.0	55.5	38.5	73.3	28.6
	(n)	15	24	37	15	9	13	15	7

APPENDIX F

QUESTIONNAIRE

HIGH SCHOOL SURVEY

Conducted by Dr. John Stephenson
Department of Sociology
University of Kentucky

We are interested in finding out something about your plans for the future, and how you feel about certain things. This is not a test, and there are no right or wrong answers. Please put down what you really feel and not just what you think others feel. The information you give will become computerized and no one will see your individual questionnaire but the researchers.

Please read each question carefully and check the answer which is closest to your feeling. Make sure that you answer each question.

FIRST, WE WOULD LIKE TO KNOW SOMETHING ABOUT YOU.

3. Your name _____

4. ____ Male
   ____ Female

5. Do you live:
   ____ 1. in town
   ____ 2. on a main road, but not in town
   ____ 3. not in town or on a main road

6. (Pleasant Gardens Students please omit.) What school did you go to four years ago?
   ____ 1. Newland
   ____ 2. Crossnore
   ____ 3. Cranberry
   ____ 4. Other _____

7. (Pleasant Gardens Students please omit.) Where in the county do you live?

   _____

8. What organizations were you a member of during the last school year? (Include school groups, church groups, community organizations such as boy scouts, 4-H, etc.)

   _____

   _____

   _____

NOW, WE WOULD LIKE TO LEARN SOMETHING ABOUT YOUR PLANS FOR THE FUTURE.

9. Have you ever thought about what kind of job you would like to have when you finish your schooling?
   ____ 1. yes, a lot
   ____ 2. yes, a little
   ____ 3. no

10. If you could choose any job you wanted, what would you <u>like</u> to be when you finish your schooling?
   _____

11. What kind of job do you <u>think</u> you will have?
   _____

12. What do you have to do or learn to get that kind of job?
   ____ 1. have some high school
   ____ 2. finish high school
   ____ 3. go to trade school
   ____ 4. go to college
   ____ 5. you don't need special training
   ____ 6. don't know

13. Put a check by the person who has had the most influence on the choice of job you might have when you finish your schooling.
   ____ 1. mother
   ____ 2. father
   ____ 3. teacher
   ____ 4. guidance counselor
   ____ 5. other relatives besides parents
   ____ 6. preacher
   ____ 7. adult friend or neighbor
   ____ 8. other kids
   ____ 9. none
   ____10. other

14. How far would you <u>like</u> to go in school, if you had the money and the opportunity to choose any level you wanted?
   ____ 1. finish junior year
   ____ 2. finish junior year and go to trade or professional school
   ____ 3. finish high school
   ____ 4. finish high school and go to trade or professional school
   ____ 5. 1, 2, or 3 years of college
   ____ 6. finish college
   ____ 7. beyond college

15. How far do you <u>think</u> you will go in school?
   ____ 1. finish junior year
   ____ 2. finish junior year and go to trade or professional school
   ____ 3. finish high school
   ____ 4. finish high school and go to trade or professional school
   ____ 5. 1, 2, or 3 years of college
   ____ 6. finish college
   ____ 7. beyond college

16. Have your parents ever talked with you about how far you should go in school?
    ____ 1. yes, a lot
    ____ 2. yes, a little
    ____ 3. no

17. How do your parents feel about your going to college?
    ____ 1. they insist I go
    ____ 2. prefer me to go, but let me decide
    ____ 3. they don't care
    ____ 4. rather I didn't go, but would let me go
    ____ 5. they won't let me go

18. Have you ever thought about where you will live when you finish your schooling?
    ____ 1. yes, a lot
    ____ 2. yes, a little
    ____ 3. no

19. If you had your choice, where would you like to live when you finish your schooling? (What city or state?)
    _____

20. How do your parents feel about your living there?
    _____

NOW, WE WOULD LIKE TO ASK YOU SOME GENERAL QUESTIONS. READ EACH STATEMENT AND CHECK ONE ANSWER THAT BEST TELLS HOW YOU FEEL.

21. I prefer
    ____ 1. working with others
    ____ 2. working by myself

22. I prefer jobs
    ____ 1. that I might not be able to do
    ____ 2. which I'm sure I can do

23. I would rather learn
    ____ 1. fun games
    ____ 2. games where I would learn something

24. I prefer a game
    ____ 1. where I'm better than anyone else
    ____ 2. where everyone is about the same

25. I would rather
    ____ 1. play a team game
    ____ 2. play against just one other person

26. I would rather
    ____ 1. wait one or two years and have my parents buy me one big present
    ____ 2. have them buy me several smaller presents over the same period of time

27. When I am sick, I would rather
    ____ 1. rest and relax
    ____ 2. try to do my school work

28. I
    ____ 1. like giving reports before the class
    ____ 2. don't like giving reports before the class

29. Before class tests, I am
    ____ 1. often nervous
    ____ 2. hardly ever nervous

30. When I am playing in a game or sport, I am
    ____ 1. more interested in having fun than with winning
    ____ 2. more interested in winning

31. When I am sure I can do a job
    ____ 1. I enjoy doing it more
    ____ 2. I become bored

32. When I play a game
    ____ 1. I hate to lose
    ____ 2. I love to win

33. After summer vacation I am
    ____ 1. glad to get back to school
    ____ 2. not glad to get back to school

34. I talk in class
    ____ 1. less than other students
    ____ 2. more than other students

35. I enjoy sports more when I play against
    ____ 1. one other player
    ____ 2. several other players

36. If I were getting better from a serious illness I would like to
    ____ 1. spend my time learning how to do something
    ____ 2. relax

37. I like playing a game when I am
    ____ 1. as good as my playmate
    ____ 2. much better than my playmate

38. I would prefer classes in which
____ 1. the students were all as good as one another at the work
____ 2. I was better than almost all the others

39. When I do things to help at home, I prefer to
____ 1. do usual things I know I can do
____ 2. do things that are hard and I'm not sure I can do

40. I would choose as work-partners
____ 1. other children who do well in school
____ 2. other children who are friendly

NOW, WE WOULD LIKE FOR YOU TO THINK ABOUT THE FOLLOWING STATEMENTS AND TELL WHETHER YOU PERSONALLY AGREE OR DISAGREE WITH THEM. CHECK THE BOX THAT COMES CLOSEST TO YOUR OWN FEELING.

41. A person should improve his living conditions even if he has to go into debt to do it.

Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly

42. A person should stand up for his kin even when the law says they are in the wrong.

Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly

43. The old, smaller neighborhood school was better than the new consolidated schools.

Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly

44. There is a conflict between religion and science.

Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly

45. You can't make progress without change.

Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly

46. I would rather be a person who tries to make do with what he has; being dissatisfied all the time just leads to problems.

Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly

47. I think the old ways are mostly best for me.

Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly

48. A person really shouldn't have to work any more than he has to to get by.

Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly

49. Consolidating the schools has improved educational opportunities for people like me in almost every way.

Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly

50. A person's job is so important that sometimes he has to turn his back on his family and friends.

Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly

51. The old Bible (the King James version) is the only true word of God.

Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly

52. If a woman votes, she should probably vote the same way as her husband.

Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly

53. Planning a career is as important a responsibility as raising a family.

Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly

54. Women should be allowed to "wear the britches" more (or have more say) than they have in the past.

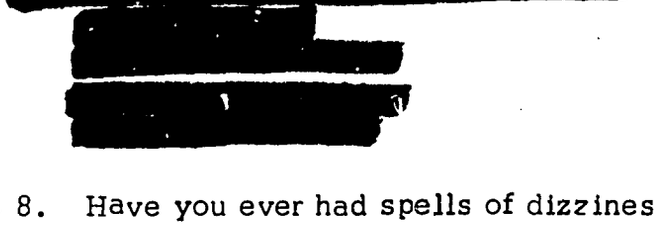
Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly

NEXT, WE WOULD LIKE TO ASK SOME QUESTIONS ABOUT YOUR HEALTH.

4. Do you have any particular physical or health trouble at present?
   ____ 1. yes
   ____ 2. no
   ____ 3. undecided

5. Have you ever felt you were going to lose control of your emotions?
   ____ 1. often
   ____ 2. sometimes
   ____ 3. never

6. Do you smoke?
   ____ 1. a lot
   ____ 2. some
   ____ 3. not at all



8. Have you ever had spells of dizziness?
   ____ 1. often
   ____ 2. sometimes
   ____ 3. never

9. Have you ever been bothered by shortness of breath when you were not exercising or working hard?
   ____ 1. often
   ____ 2. sometimes
   ____ 3. never

10. Do you have many colds?
   ____ 1. hardly ever
   ____ 2. about 3 a year
   ____ 3. frequently

11. Do you have headaches?
   ____ 1. hardly ever
   ____ 2. sometimes
   ____ 3. often

12. How often do you feel tired in the morning?
   ____ 1. hardly ever
   ____ 2. sometimes
   ____ 3. often

13. Do you have trouble getting to sleep at night?
    ____ 1. hardly ever
    ____ 2. sometimes
    ____ 3. often

14. Are you ever bothered by bad dreams?
    ____ 1. hardly ever
    ____ 2. sometimes
    ____ 3. often

15. How often are you sick at your stomach?
    ____ 1. hardly ever
    ____ 2. sometimes
    ____ 3. often

16. Do you ever lose your appetite?
    ____ 1. hardly ever
    ____ 2. sometimes
    ____ 3. often

17. Are you nervous?
    ____ 1. no
    ____ 2. sometimes
    ____ 3. often

18. How often do you cry?
    ____ 1. hardly ever
    ____ 2. sometimes
    ____ 3. often

19. Do you have lots of pep and energy?
    ____ 1. yes
    ____ 2. most of the time
    ____ 3. no

20. Are you happy most of the time?
    ____ 1. almost always
    ____ 2. sometimes
    ____ 3. hardly ever

21. Do you bite your fingernails?
    ____ 1. almost always
    ____ 2. sometimes
    ____ 3. never

22. Do you worry about things?
    ____ 1. hardly ever
    ____ 2. sometimes
    ____ 3. often

23. What things do you worry about? _____

_____

_____

NOW, WE WOULD LIKE TO LEARN SOMETHING ABOUT YOUR EXPERIENCE IN SCHOOL LAST YEAR.

24. How would you estimate your popularity among students last year?
_____ 1. I was among the most popular
_____ 2. I was very popular but not the most popular
_____ 3. I was somewhat popular
_____ 4. I was not very popular
_____ 5. I was somewhat unpopular

25. How would you rank yourself in school athletic activities last year outside of physical education classes (including cheerleading or square dancing or drill teams if your school sponsors teams)?
_____ 1. I was outstanding in athletics
_____ 2. I was very good in athletics but not outstanding
_____ 3. I had some athletic achievement
_____ 4. I had little athletic achievement
_____ 5. I did nothing in athletics

26. How would you rate yourself in extracurricular school activities (activities outside of classroom hours) last year?
_____ 1. I was active and was an officer in one or more school organizations
_____ 2. I was very active but was not an officer in school organizations
_____ 3. I was somewhat active in school organizations
_____ 4. I was not very active in school organizations
_____ 5. I was not at all active in school organizations

27. How would you estimate your scholastic ability (grades) last year?
_____ 1. I was probably among the top 10% in my classes
_____ 2. I was probably among the top 25% in my classes
_____ 3. I was probably a little above average
_____ 4. I was probably about average
_____ 5. I was below average

28. How would you say you "got along" with teachers and other students in school last year (other than scholastically or as far as grades are concerned)?
_____ 1. I feel I got along better than most people
_____ 2. I feel I got along very well, although not as well as some
_____ 3. I feel I got along fairly well
_____ 4. I don't feel I got along very well
_____ 5. I did not get along well at all

29. On the average, about how much money per week would you estimate you spent for dates, recreation, food, and everything during the last school year?
_____ dollars _____ cents

NOW, WE'D LIKE YOUR OPINIONS ON A NUMBER OF DIFFERENT THINGS. SOME PEOPLE AGREE AND SOME PEOPLE DISAGREE WITH EACH OF THE STATEMENTS BELOW. PLEASE TELL WHETHER YOU MORE OR LESS AGREE OR MORE OR LESS DISAGREE WITH EACH OF THE STATEMENTS.

30. Most public officials (people in public office) are not really interested in the problems of the average man. In general, would you agree with that statement or disagree?
    ____ 1. agree
    ____ 2. disagree

31. These days a person doesn't really know whom he can count on.
    ____ 1. agree
    ____ 2. disagree

32. Nowadays, a person has to live pretty much for today and let tomorrow take care of itself.
    ____ 1. agree
    ____ 2. disagree

33. In spite of what some people say, the lot or situation of the average man is getting worse, not better.
    ____ 1. agree
    ____ 2. disagree

34. It's hardly fair to bring a child into the world with the way things look for the future.
    ____ 1. agree
    ____ 2. disagree

NOW, WE WOULD LIKE TO KNOW A LITTLE ABOUT YOUR FAMILY.

35. Are you living with
    ____ 1. both parents
    ____ 2. mother only
    ____ 3. father only
    ____ 4. neither mother nor father

36. How many brothers and sisters live at home with you? ____ ____

37. Does your father have a job?
    ____ 1. yes
    ____ 2. no

38. If yes, what kind of work does your father do (for example, farmer, teacher, truck driver, storeowner, sells evergreens)?

    _____

39. Does your mother have a job other than housewife?
____ 1. yes
____ 2. no

40. If yes, what kind of work does your mother do?
_____

41. As far as you know, what is the major source of income for your family? (Choose one of the following.)
____ 1. inherited wealth, money from investments, profits from owning a business
____ 2. salary (regular income on a monthly or yearly basis)
____ 3. wages or piece-work (pay by the hour, paid every week or two rather than monthly)
____ 4. income from odd jobs, sharecropping, or seasonal work
____ 5. public assistance (welfare, Old Age Assistance, Aid to Dependent Children, etc.)
____ 6. Other (please describe) _____
_____

42. How far did your father go in school?
____ 1. 1-4th grade
____ 2. 5-7th grade
____ 3. 8th grade
____ 4. 1, 2, or 3 years of high school
____ 5. some high school and trade or professional school
____ 6. finished high school
____ 7. 1, 2, or 3 years of college
____ 8. finished junior college
____ 9. finished college
____10. beyond college

43. How far did your mother go in school?
____ 1. 1-4th grade
____ 2. 5-7th grade
____ 3. 8th grade
____ 4. 1, 2, or 3 years of high school
____ 5. some high school and trade or professional school
____ 6. finished high school
____ 7. 1, 2, or 3 years of college
____ 8. finished junior college
____ 9. finished college
____10. beyond college

FOR PLEASANT GARDENS STUDENTS ONLY: LAST, WE WOULD LIKE TO ASK WHAT YOU THINK THE NEW, CONSOLIDATED SCHOOL WILL BE LIKE COMPARED TO YOUR PRESENT SCHOOL.

44. In the consolidated school, I think the teachers will be
____ 1. harder on me
____ 2. about the same
____ 3. easier on me

45. In the consolidated school, I think the rules will be
____ 1. a lot stricter
____ 2. somewhat stricter
____ 3. about as strict as before
____ 4. less strict

46. In the consolidated school, I think I will get
____ 1. more individual attention
____ 2. about the same amount of attention
____ 3. less individual attention

47. In the consolidated school, I think that I will get
____ 1. a much better education
____ 2. a somewhat better education
____ 3. about the same kind of education
____ 4. a worse education

48. In the consolidated school, I will feel
____ 1. more at home with the students and teachers
____ 2. about the same as before
____ 3. less at home with the students and teachers

49. In the consolidated school, I will be
____ 1. much happier than before
____ 2. a little happier than before
____ 3. about the same as before
____ 4. less happy than before