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> Case Studies of Reorganized Districts Since 1968

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DEPARTMENT OF PUBLIC INSTRUCTION
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CASE STUDIES OF REORGANIZED DISTRICTS SINCE 1968

Voluntary reorganization has occurred in twelve Iowa school districts between 1968 and 1977. These twelve school districts have reorganized to form six districts. To examine what has transpired within these reorganized districts, six separate case studies are presented.

(In addition to the reorganized districts, comparison districts were selected to evaluate the changes which occurred in a district not reorganized.) These comparison districts were selected to match the reorganized districts in the year prior to reorganization. The comparison districts do not reflect a perfect match; however, they were selected based upon their similarity with the reorganized district in terms of average daily membership, assessed valuation per pupil and the communities involved.

The comparison districts were selected to observe what the reorganized districts would have been like today had they not reorganized. It was assumed that if a district did not reorganize it would have followed a pattern similar to the selected comparison district. Thus, the effects of the reorganization can be measured against the comparison district. The limitations of this approach are basically in the dissimilarity of the reorganized district with its selected comparison, but nevertheless, the comparison districts do provide a bench mark of what might have happened if the districts had not reorganized.

The districts which have reorganized since 1968 are listed in Table A.

Table A
Reorganized Districts and
Corresponding Comparison Districts

No.	en de la companya de		Assessed Valuation	Community
District	Year	ADM	Per Pupil	Population
Vinton	1969-70	1,759.1	\$ 9,582	4,962
Audubon	1505 70	1,700.5	12,343	2,907
Garrison		214.6	19,580	383
Rembrandt		212.7	15,458	250
Roland	1969-70	342.2	11,950	803
Russell		332.7	. 10,977	591
Story City		710.6	10,362	2,104
Rock Valley		706.9	17,273	2,410
Stuart	1971-72	675.3	9,704	1,354
Parkersburg		649.9	12,934	1,631
Menlo	MAG R	263.2	15,259	264
Ledyard		249.7	22,096	240
Clarence	1973-74	383.8	17,601	915
Pomeroy		401.5	22,012	765
Lowden		256.5	20,604	667
Collins		246.0	19,083	404
Miles	1974-75	412.1	15,618	409
Sentral '		408.0	31,715	403
Sabula		354.6	7,204	845
Colo		337.9	24,630	606
Laurens	1976-77	594.8	20,733	1,792
Avoha		601.9	17,754	1,535
Marathon		184.4	23,624	447
Diagonal		188.2	18,555	327

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INTRODUCTION

For each of the case studies, four areas have been included for comparison purposes. These include school quality indicators, district characteristics, transportation and non-instructional expenditures. In each of the areas, a number of variables were examined and comparisons were made between the reorganized districts and their comparison districts, and within reorganized districts across the time periods for which data were compared.

I. School Quality Indicators

As measures or indicators of school quality, seven areas were examined:
1) dropout status, 2) pupil-teacher ratios, 3) instructional expenditures,
4) teacher characteristics, 5) professional support staff, 6) curriculum offerings and 7) graduate follow-up status.

A. Dropout Status

Although it has been firmly established in the literature that dropout status is highly correlated with socio-economic characteristics, dropout status is recognized as an output measure, and to some degree a school's holding power; reflected in the dropout statistics is an indicator associated with school quality. From this standpoint, dropout statistics will be reviewed, although conclusions as to one district being of higher or lower quality, based upon dropout status, will not be drawn nor should they be.

B. Pupil-Teacher Ratios

Pupil-teacher ratios are suggested in the literature as a measure or indicator of school quality and can also be used at some points to judge efficiency. Four separate pupil-teacher ratios were examined in the case studies. These included ratios for grades k-6, 7-9, 10-12 and overall k-12 pupil-teacher ratios.

C. Instructional Expenditures

Two variables with respect to instruction were examined: the percent of general fund budgets allocated to instruction and per pupil expenditures for instruction. The assumption was that districts which spend more proportionately on instruction have more potential to provide a quality educational program.

D. Teacher Characteristics

Teacher characteristics examined included: average teacher expenditures, which serves as a proxy measure for average teacher salaries, and degree status. Assumptions involved in the use of these measures also related to established practices found throughout educational research literature. It is generally assumed that districts providing higher salary schedules have a greater potential to attract and to maintain more highly qualified and experienced teachers than districts with lower salary schedules.

E. Professional Support Staff

Professional support staff included such specialists as: school psychologists, librarians, guidance and counseling personnel, media personnel and health personnel. The assumption in this instance was that the number of professional support staff personnel a district employs increases the potential of the district to provide highly specialized services to both students and staff.

F. Curriculum Offerings

Curriculum offerings expressed in terms of Carnegie Units represent a measure of opportunity for learning within a given school district. The scope and depth of the curricular offerings is represented through the curriculum data collected from each district and presented in terms of 16 curriculum categories and in terms of total units offered. The assumption here is a comprehensive curriculum, which is sufficient in depth, increases a student's opportunity to learn and at the same time expands his awareness of the various knowledge areas.

G. Graduate Follow-Up Status

The status of graduates one year after graduation is collected through the Guidance Services Section of the DPI. This information, among other things, reflects the number and percentages of graduates who have pursued post-secondary vocational or non-vocational education one year after graduation. These statistics have been interpreted to serve as indicators of school quality, since few would argue that continued learning through some type of formal education, whether vocational or academic in nature, is a universal goal for public schools. Again, as for dropout status, the pursuits of students following graduation has, in many cases, been found to be related to socio-economic status and therefore, these statistics must be interpreted with that in mind.

II. District Characteristics

Among the variables examined with respect to the district characteristics were: average daily membership, assessed valuation, general fund millage rates, general fund expenditures and sales tax receipts. Certain comments relative to the use and interpretation of three of the above mentioned variables are in order.

General fund expenditures are indicative of the school district's financial effort to educate its students and, to some degree at least, can be used to infer how much financial effort is being put forth to educate each student. It should be noted, however, that the budget freeze in 1970-71 has influenced district spending as has the controlled growth amount which has been in affect since that time, so that general

fund expenditures per pupil have changed independent of reorganization and dependent upon the present school law.

Sales tax receipts have been used to suggest to some extent what the impact of school reorganization might have been on communities which have lost one or a number of their schools as a result of the reorganization. One hypothesis stated by opponents of reorganization is that the loss of a school or schools through school district reorganization may result in economic deterioration of the communities businesses. Therefore, the use of sales tax receipts as an indicator of economic impact has been included in the case studies. Sales tax receipts, however, should by no means be interpreted in a cause and effect framework in terms of supporting or refuting this hypothesis, but should only be viewed as one of a number of variables contributing to the economic circumstances of a community.

The use of general fund millage rates is intended to serve as an indicator of local tax effort. In this manner, it is possible with some qualifications, to suggest whether a district might be in a better position with respect to taxes, given certain school district organization circumstances. These qualifications earlier refer to assessed valuation, their rates of increase, the uniformity of their appraisals and the change from 2.7 percent to 100 percent assessed valuations between the 1975-76 and 1976-77 school years.

III. Transportation

Many variables were examined in the transportation area. These included both expenditure and cost variables. The major difference between the two being bus depreciation. This is included in the cost data while it is not included in the expenditure information.

Although comparisons were made between districts with respect to transportation, some reservation regarding conclusions is in order, since selection of comparison districts and their counterpart, reorganized districts, was made on the basis of average daily membership, assessed valuation and certain community characteristic variables. Therefore, some districts may have initially been quite different with respect to such transportation—related variables as average number of pupils transported, number of buses in operation and total miles traveled per day; thus conclusions with respect to some aspects of transportation may be more tentative than others.

IV. Non-Instructional Expenditures

Four variables in the area of non-instructional expenditures were considered in the case studies. These included fixed costs, operation and maintenance, administrator expenditures and total administrative expenditures. These variables were considered to be cost efficiency measures or indicators and were viewed in terms of a percentage of the general fund. The assumption

underlying these variables and inferences made through analysis involving these variables were that a more cost efficient school district would spend a lesser proportion of its budget on non-instructional costs thus leaving a greater percentage of the budget for instruction.

ROLAND-STORY CITY CASE STUDY

In order to simulate the status of both the Roland and Story City Community School District, had they not reorganized in 1969-70, the two districts were matched with comparable comparison districts. Russell served as a comparison district for Roland, while Rock Valley was the comparison district for Story City. The comparison districts were selected on the basis of their approximation to Roland and Story City school district status in 1968-69 (the year prior to reorganization) in terms of enrollment, wealth, geographic circumstances and community characteristics.

Four basic areas were then studied to determine differences and similarities between the reorganized Roland-Story district and the comparison districts. The areas in which comparisons were made included: 1) school quality; 2) district wealth and population; 3) transportation and 4) non-instructional expenditures.

In the analysis which follows, Russell will first be examined and viewed as simulating the present-day status of Roland. In this manner, advantages and disadvantages of the reorganization from Roland's standpoint can be determined. This comparison will be followed by the Rock Valley-Story City comparison, which as earlier mentioned, will be less extensive since Roland would be expected to have more to gain from the reorganization than Story City.

Russell-Roland Comparison

I. School Quality Indicators (Tables 1-4)

A. Dropout Status (Table 1)

Since dropout status has been shown to be closely related to socioeconomic characteristics of communities, it should be noted that comparisons between districts must be made with the assumption that such district characteristics are indeed similar.

Prior to the 1969-70 reorganization, the dropout ratios of Roland and its comparison district, Russell, were both 0.6 percent. The dropout rates in 1976-77 were 1.4 and 4.1, respectively, for the reorganized district and Russell, with Roland losing seven students and its comparison district losing six students. As far as dropout rates are concerned, it does not appear there is any practical advantage or disadvantage for the reorganized district.

B. Pupil-Teacher Ratios (Table 1)

In 1968-69, Roland had an overall pupil-teacher ratio of 16:1, a k-6 ratio of 21:1 and a 10-12 ratio of 13:1, while its comparison district had pupil-teacher ratios of 18:1, 22:1 and 15:1, respectively. In 1976-77, Roland's overall pupil-teacher ratio had increased slightly to 17:1, the k-6 ratio had decreased slightly to 19:1 and the 10-12 ratio had increased slightly to 14:1. The comparison district, simulating Roland's 1976-77

status, had decreased to 15:1 in overall pupil-teacher ratio and decreased its k-6 ratio to 17:1, while the 10-12 ratio had fallen to 10:1.

Although the overall, k-6 and 7-9 pupil-teacher ratios for Roland and its comparison district are somewhat similar, the 10-12 pupil-teacher ratio is considerably lower for Russell, the comparison district. It would appear that the extremely low and costly 10-12 pupil-teacher ratio and its probable continuous decrease placed Roland in a much more desirable situation due to reorganization than it might have been otherwise.

C. Instructional Expenditures (Table 1)

Instructional expenditures were viewed in terms of expenditures on a per pupil basis and as a percentage of the total general fund.

The year prior to reorganization (1968-69), Roland was spending 58.4 percent of its budget for instruction, while Russell was spending 60.7 percent. In terms of expenditures per pupil, Roland spent \$519, while Russell spent \$382, a considerably lesser amount. From the first year of reorganization, Roland's percentage of general fund expenditures for instruction gradually increased to a high of 65.1 percent in 1972-73. During the period from 1973-74, this percentage gradually decreased to 60.2 percent in 1976-77. In the same time period, Russell's percentage of general fund expenditures for instruction gradually decreased from a high of 65.8 percent in 1969-70 to 56.3 percent in 1976-77. It would appear that Roland, had it not reorganized with Story City, would have been spending about 4 percent less on instruction in 1976-77 than it presently does. In terms of per pupil expenditures, Roland, the reorganized district, had a \$166 per pupil advantage over its comparison district in 1976-77. However, it should be noted that per pupil expenditures in Roland prior to reorganization exceeded the Russell comparison district by \$137; therefore, the advantage of the reorganized district does not appear to be as considerable as the 1976-77 per pupil expenditures suggest.

Based upon the comparison of instructional expenditures, it can be said that Roland gained some advantage through reorganization and probably would have spent less per pupil on instruction and have spent a smaller percentage of its total budget on instruction had they not reorganized.

D. Teacher Characteristics (Table 2)

The teacher characteristic information is composed of average expenditure per teacher and degree status. Teacher expenditure information was compared across the nine-year period from 1968-69 to 1976-77. Prior to reorganization, Roland had an average expenditure per teacher advantage over Russell, its comparison district, of \$541. Through reorganization, this advantage increased to \$1,857.

Degree status comparison data were not available prior to 1972-73; therefore, no comparisons can be made prior to Roland's reorganization with Story City. In terms of types of degrees, Roland, in 1976-77, had

eliminated all of the 7.1 percent of non-degree teaching staff it had in 1972-73. Its comparison district, on the other hand, had reduced its 1972-73 non-degree teaching staff from 26.3 percent or five non-degree teachers to 5.3 percent or one non-degree teacher in 1976-77. In 1976-77, 26.8 percent of Roland's teachers held advanced degrees, while only 5.3 percent of its comparison district held advanced degrees.

From the standpoint of having the potential to better attract teachers, due to the higher average expenditure per teacher and the advantage of having a considerably higher percentage of advanced degree teachers, Roland appears to have acquired a distinct advantage through reorganization.

E. Professional Support Staff (Table 2)

Professional support staff was defined as non-teaching staff including guidance counselors, health personnel, librarians, psychologists, media specialists and instructional television personnel. Since data were only available beginning in 1970-71, no comparisons prior to reorganization could be made. Russell, the comparison district, had no professional support staff until 1973-74, at which time they acquired two. These two were maintained until 1976-77 when the count was reduced to one. Roland, on the other hand, in its reorganized status, maintained a support count of six until it was reduced to five in 1976-77.

From the standpoint of professional support staff, it would appear that Roland gained a considerable advantage through its reorganization with Story City, based upon the status of the comparison district. The additional support staff in all probability increased the potential to provide specialized educational services to both students and teachers.

F. Curriculum Offerings (Table 3)

Curriculum offerings are shown in terms of total Carnegie Unit offerings as well as by the 16 Basic Education Data System (BEDS) course categories. Data for curriculum unit offerings were not available prior to the reorganization, but only from 1970-71 through 1976-77. In 1970-71, an advantage of 20 units was held by the reorganized Roland district over Russell; however, by 1976-77 the advantage was only 12 units.

Russell, the comparison district, offered no units in agricultural education or in industrial arts for the seven-year period, while Roland students had, for the most part, 4 units of agricultural education and 1.5 units of industrial arts offered each of the seven years. The reorganized district also had a two to one advantage in units offered in homemaking and in music. Neither the reorganized district nor the comparison district offered distributive education.

With respect to scope of curriculum and the units offered within specific course categories, Roland clearly is in a better position now than it would have been had it not reorganized.

G. Graduate Follow-Up Status (Table 4)

Over the nine-year period, the reorganized Roland district consistently had more graduates pursue post-secondary education than did Russell, the comparison district. In this respect, it would appear that reorganization of the Roland district was advantageous.

II. District Characteristics (Tables 5-6)

A. Assessed Valuation (Table 5)

Prior to reorganization, the wealth behind each pupil for both Roland and Russell was quite similar, \$11,950 and \$10,977, respectively. In 1976-77, the eighth year of the Roland-Story reorganization, a considerable difference with respect to per pupil wealth was evident. The reorganized district had a per pupil wealth of \$90,059, while Russell's per pupil wealth was \$74,987, a difference in per pupil wealth of about \$15,000. The tax impact of this wealth difference can be seen in the earlier discussion of general fund millage rates.

B. General Fund Millage Rate (Table 5)

Prior to reorganization, Roland's general fund millage rate exceeded that of its comparison district by 17.8 mills. The assessed valuations for the matched pair, Roland and Russell, were quite similar. Roland's assessed valuation was \$4,089,568 and Russell's was \$3,652,211; thus, a 1-mill levy for Roland would raise \$1,104 and \$986 for Russell.

A comparison of the 1976-77 millage rate for the two districts, eight years after reorganization, reveals that the millage rates have been considerably reduced for Roland residents from 51.842 mills in 1968-69 to 35.781 mills in 1976-77. The millage rate for Russell increased about $4\frac{1}{2}$ mills over the nine-year period.

C. General Fund Expenditures (Table 5)

General fund expenditures per pupil were \$204 higher for Roland students than for Russell students prior to reorganization. These per pupil expenditures, for both districts, increased over the nine-year period from 1968-69 to 1976-77 to \$1,556 and \$1,431 for Roland and Russell, respectively. Thus, resulting in Roland's maintenance of a \$125 per pupil expenditure advantage.

D. Average Daily Membership (ADM) (Table 5)

Total ADM's for both Roland and the comparison district decreased over the nine-year period. The reorganized district decreased 9 percent overall, while the comparison district decreased 14 percent. The consequences of not reorganizing in 1968-69 can best be seen in the 10-12 pupil-teacher ratio in the comparison district. As earlier pointed out, the ratio was 10:1 for the comparison district, while the 10-12 ratio for the reorganized district was 14:1.

E. Sales Tax Receipts (Table 6)

The purpose of using sales tax receipts data in the case study of reorganized districts is to examine, to some extent, the hypothesis or belief that is prevalent in some of the school reorganization literature that reorganization and the consequences related to the loss of one or more community-based schools results in an economic deterioration of the local community.

The sales tax receipts data by no means should be construed to provide a complete answer to this question since there are far too many uncontrolled economic and social variables which might explain changes or lack of changes resulting over time. The use of sales tax data is intended to provide limited insight into the previously referenced hypothesis.

Prior to reorganization, both Roland and Russell had sales tax receipts in the low \$30,000 range, Russell having about \$1,700 more in sales tax receipts. Roland's receipts increased gradually through 1973-74, then began to decrease gradually in 1974-75 (the first year food and prescription drugs were exempted by law from sales tax) through 1976-77. Russell's receipts, on the other hand, increased \$7,000 from 1968-69 through 1973-74, then also decreased slightly in 1974-75 and increased another \$4,000 by 1976-77. This resulted in a \$14,000 differential between the two districts in 1976-77 in favor of Russell or approximately a \$467,000 difference in retail sales.

III. Transportation (Table 7)

The proportion of expenditures expressed as a percentage of general fund expenditures for both Roland and Russell was almost the same in 1976-77, 4.4 percent and 9.0 percent, respectively, as it was a year prior to Roland's reorganization in 1969-70. Both percentages decreased about 2 percent over the period. Russell, in 1976-77 as in 1968-69, was still spending about twice the percentage of its general fund for transportation as Roland. However, as in 1968-69, Russell continued to transport nearly 17 percent more of its students than Roland.

Roland's per pupil cost for transportation generally increased from \$84 in 1968-69 to a high of \$129 in 1976-77, with the largest increase occurring from 1973-74 to 1974-75. The corresponding gas cost increase for that year was \$1,544 or about a 23 percent increase over the preceding year. The average per pupil cost for transportation for Russell remained fairly constant from 1968-69 through 1972-73, beginning at \$109 in 1968-69 and increasing slightly to \$116 in 1972-73. Average per pupil costs decreased sharply for Russell in 1973-74 to a nine-year low of \$75. The following year, 1974-75, average costs per pupil for Russell more than doubled, while corresponding total transportation costs increased over \$5,600.

In terms of total miles traveled per day, the comparison district's average total miles remained within a range of 277-382 miles over the nine-year period. The low of 277 occurred in 1975-76 when average pupils transported reached a low for the nine-year period of 166. The high of 382 miles per day was reached in 1969-70 when the average pupils transported reached a near nine-year high of 190.

The total miles traveled per day and the average pupils transported per day demonstrated an expected relationship from the first year of reorganization in 1969-70 through 1971-72. Then in 1972-73, the average pupils transported per day increased by 84 over 1971-72 figures, while the total miles traveled per day was reduced by 50 percent from the previous year. This unusual phenomenon was sustained until 1976-77 when the total miles per day figure increased by 200 over the preceeding year to more closely resemble the pre 1972-73 relationship between average pupils transported and total miles traveled.

The data suggest that most all transportation expenditures are proportionately higher for Russell than for the reorganized district and had Roland not reorganized, it probably would be spending a greater percentage of its budget on transportation than is now spent.

For this study non-instructional expenditures considered have been divided into two major categories: fixed charges and operation and maintenance. The administration expenditures include expenditures for administrators which includes superintendents, assistant superintendents, business managers, principals and supervisors, and total administrative expenditures including not only expenditures for administrators but expenditures for clerical assistance and board of education as well.

A. Fixed Charges and Operation and Maintenance (Table 8)

Non-instructional expenditures for fixed charges and operation and maintenance for Roland and Russell a year prior to Roland's reorganization, were quite similar in terms of the percentage of general fund expenditures for both expenditure categories, with Roland spending a slightly higher percentage on fixed charges and its comparison district spending a slightly higher percentage on operation and maintenance. An examination of 1976-77 data reflect that after eight years of reorganization, very little difference exists between the reorganized district and its comparison district in terms of percentages of the general fund spent for either fixed charges or operation and maintenance. This suggests that Roland neither gained nor lost advantage through reorganization in this respect.

B. Administration (Table 9)

In terms of non-instructional expenditures for administration, Roland was spending nearly twice the percentage of its general fund on total administrative expenditures and on administrator expenditures as was Russell,

its comparison district. Eight years into the reorganization, Roland had reduced total administrative expenditures as a percentage of the general fund by almost 4 percent and administrator expenditures by over 3 percent. In the meantime, its comparison district had increased total administrative expenditures as a percentage of the general fund by almost 4 percent and had increased administrator expenditures over 2 percent. The data clearly demonstrate an advantage gained through Roland's reorganization in terms of non-instructional expenditures for administration.

V. Summary

A. School Quality Indicators

Based upon comparisons with Russell, the district used to simulate Roland's status from 1969-70 through 1976-77, Roland's reorganization in 1969-70 has created a distinct advantage for its students in terms of the variables used to represent school quality. Specifically, advantages included: 1) the ability to spend a higher percentage of its budget for instruction and more dollars per pupil for instruction; 2) a more advantageous position in terms of pupil-teacher ratio efficiency for grades 10-12; 3) a higher average expenditure per teacher as well as a much higher percentage of teaching staff with advanced degrees and no teaching staff without Bachelor's degrees; 4) a greater number of professional support staff to provide specialized assistance to both teachers and students; 5) a greater number of course offerings including course offerings in categories where the comparison district offered none and 6) a greater percentage of students pursuing post-secondary education.

B. District Characteristics

A comparison of Roland, in its reorganized state, with Russell indicates that: 1) both districts declined in enrollment from the initial year of reorganization through 1976-77; however, the degree of decline was less for the reorganized district than for the comparison district and further, did not result in any seriously low pupil-teacher ratios as it has for the comparison district; 2) the reorganization has resulted in lower millage rates for Roland residents and 3) Roland maintained, to some degree, its higher general fund per pupil spending level.

C. Transportation

The data suggest that transportation expenditures would probably have been higher for Roland had reorganization not occurred.

D. Non-Instructional Expenditures

In terms of non-instructional expenditures with respect to fixed charges and operation and maintenance, it appears that little advantage resulted for Roland as a consequence of reorganization. With respect to administrative expenditures, Roland has clearly benefitted through reorganization in that the percentage of general fund expenditures for administration has been considerably reduced, while those of the comparison district have continued to increase.

Story City-Rock Valley Comparison

Since prior to the 1969-70 reorganization, Story City was the larger of the two reorganized districts; it is obvious to expect that benefits, if any, would accrue more to Roland than to Story City. However, a brief review of the reorganization impact on Story City is necessary to examine corresponding consequences.

I. School Quality Indicators (Tables 1-4)

A. Dropout Status (Table 1)

Dropouts have not been a serious problem for either the reorganized district or the comparison district. The average number of dropouts for the reorganized district and the comparison district, over the eight-year period from 1969-70 to 1976-77, was 6.1 and 3.7, respectively. Both dropout ratios were well below state averages for each of the years where comparisons were made.

B. Pupil-Teacher Ratios (Table 1)

Pupil-teacher ratios in 1968-69 for Story City and Rock Valley were fairly similar except for the k-6 ratio which was 25.0 for Story City and 19.4 for Rock Valley. Pupil-teacher ratios in 1976-77, eight years into reorganization, were fairly equal, with an overall ratio for Story City of 16:1 and an overall ratio for Rock Valley of 15:1.

C. Instructional Expenditures (Table 1)

Story City was spending 1.7 percent less of its general fund for instruction than its comparison district, Rock Valley, prior to reorganization, and after eight years of reorganization, Story City students received over 3 percent more of the general fund expenditures for instruction than did Rock Valley students. In terms of dollars per pupil spent for instruction, there was a \$45 per pupil difference in favor of the comparison district in 1968-69 which decreased to a \$35 per pupil difference advantage for the comparison district in 1976-77.

D. Teacher Characteristics (Table 2)

In terms of average expenditures per teacher, Story City, through its reorganization, increased from an average of \$6,192 compared to \$7,051 for Rock Valley in 1968-69, a \$900 per teacher disadvantage to an \$1,800 advantage over its comparison district, Rock Valley, in 1976-77. The average teacher expenditures in 1976-77 for Story City and Rock Valley were \$12,293 and \$10,436, respectively.

Story City as a reorganized district in 1972-73, the first year degree status data were available, had a teaching staff composed of 7.1 percent of non-degree teachers and 21.4 percent of advanced degree teachers, while

Rock Valley had 2.5 percent non-degree teachers and 15 percent advanced degree teachers. In 1976-77, neither the reorganized district nor the comparison district had any non-degree teachers, and the reorganized district had almost twice the percentage of advanced degree teachers as its comparison district.

E. Professional Support Staff (Table 2)

In 1970-71, during the second year of reorganization, Story City, as a reorganized district, had six professional support staff which were maintained until 1976-77 when the number dropped to five. Rock Valley, the comparison district, had four support staff in 1970-71. This number decreased to three in 1972-73 and then to one in 1976-77.

F. Curriculum Offerings (Table 3)

Curriculum data were available from 1970-71 through 1976-77. The total units offered by the reorganized Story City in 1970-71 were 11 more than that offered by Rock Valley. From 1971-72 to 1976-77, however, the 11-unit advantage for the reorganized district decreased to only a two-unit advantage. This overall change represented a two-unit loss for the reorganized district, and a 7.5 unit gain for the comparison district.

Over the seven-year span, the reorganized district held a two to one advantage in the number of homemaking units offered and maintained a four-unit offering in trade and industry over the same period, while Rock Valley offered no trade and industry units. Rock Valley, on the other hand, maintained a two-to one-unit advantage for the period from 1970-71 to 1976-77 in industrial art offerings. Neither district offered distributive education.

It would appear that the reorganization has not resulted in a capability to increase units offered, but only in a capability to maintain offerings at a fairly constant level.

G. Graduate Follow-Up Status (Table 4)

Overall, for the eight years since the reorganization, both Story City and Rock Valley had comparable numbers of graduates pursue post-secondary education.

II. District Characteristics (Tables 5-6)

A. Assessed Valuation (Table 5)

Prior to the reorganization, the wealth behind each Story City student was \$10,362, almost \$7,000 less than the wealth behind Rock Valley students. In the eighth year of reorganization, the comparison district wealth differential had increased to about \$20,000.

B. General Fund Millage Rate (Table 5)

In 1968-69, one year before reorganization with Roland, Story City's general fund millage rate was 43.927, or 14.130 mills greater than Rock Valley's, its comparison district. This difference was maintained through the first four years of the reorganization. Beginning in 1973-74, however, the millage rates of the two districts became more similar and finally in 1976-77, the millage rates of the reorganized district and Rock Valley were almost identical at 35.781 and 35.081, respectively.

This change in millage rates for Story City residents represents an overall decrease of about eight mills or \$2.16 per \$1,000 of assessed valuation, while for Rock Valley residents it represents an overall increase of about seven mills or \$1.89 per \$1,000 of assessed valuation. From this standpoint, Story City's reorganization appears to have been beneficial.

C. General Fund Expenditures (Table 5)

In 1968-69, Story City's general fund expenditure per pupil was \$48 less than that of its comparison district, Rock Valley. By 1976-77, the differential decreased to a \$35 advantage for the comparison district. During the period of reorganization from 1969-70 to 1976-77, per pupil expenditures for the reorganized district twice exceeded expenditures in the Rock Valley comparison district. In 1972-73, the reorganized district had a \$4 per pupil advantage and in 1975-76, the reorganized district had a \$23 per pupil advantage.

In general, however, it appears that the reorganization of Story City with Roland did not result in ability to match the per pupil expenditures of the comparison district. Although again, it should be noted that Roland, by 1976-77, had gained a \$125 per pupil spending advantage over its comparison district through the reorganization.

D. Average Daily Membership (ADM) (Table 5)

Prior to reorganization with Roland, Story City's 1968-69 ADM was almost identical to that of Rock Valley. Both districts had ADM's of just over 700. In the ensuing period until 1976-77, the comparison district's ADM decreased to 668, an absolute loss of 42 students or 5.91 percent, while the reorganized district's ADM decreased from 1,051 to 955, an absolute loss of 96 students or 9.13 percent.

E. Sales Tax Receipts (Table 6)

Prior to reorganization, Story City Sales Tax receipts totaled \$53,303 less than its comparison district, Rock Valley. By 1976-77, the difference had decreased to a \$29,422 advantage for Rock Valley. Most of the Story City gain occurred from 1970-71 to 1971-72, a 19.2 percent increase, and from 1975-76 to 1976-77, a 25.5 percent increase.

III. Transportation (Table 7)

In the year prior to reorganization, Story City spent 5.2 percent of its general fund budget on transportation and transported 36.6 percent of its student body. Its comparison district, Rock Valley, spent 8.5 percent of its general fund budget for transportation and transported 48.7 percent of its students. In terms of miles per day, Rock Valley buses traveled almost two and one-half times the miles per day traveled by Story City buses.

By 1976-77, Story City had reduced its percentage of general fund expenditure for transportation to 4.4 percent, while the percentage of general fund expenditures allocated to transportation by Rock Valley increased to 11.1 percent. The total miles traveled per day were quite similar for the two districts in 1976-77. Average transportation costs per pupil increased for both districts from 1968-69 by almost 50 percent. The percentage of pupils transported for Story City increased to 42.3 percent from 1968-69, an increase of almost 6 percent, while over the same period, Rock Valley's percentage of pupils transported increased a little over 1 percent.

The average cost per pupil during the 1968-69 year was \$89 for Story City and \$83 for its comparison district, Rock Valley. This figure remained relatively unchanged through 1973-74 for Story City in its reorganized form, while average per pupil costs for Rock Valley registered per pupil increased each year through 1973-74 or \$15, \$5, \$22, \$16 and \$25, respectively. From 1973-74 through 1976-77 the reorganized district had increases in average per pupil costs of \$23, \$5 and \$12, respectively, while average per pupil costs for Rock Valley dropped sharply from \$166 in 1973-74 to \$135 in 1974-75 and were \$132 and \$149, respectively in 1975-76 and 1976-77.

Since Story City and Rock Valley were quite dissimilar with respect to initial transportation circumstances, few conclusions can be drawn. At best, only the most recent circumstances can be compared and discussed as was done in the preceeding paragraphs.

IV. Non-Instructional Expenditures (Tables 8-9)

A. Fixed Charges and Operation and Maintenance (Table 8)

The percentages of general fund expenditures for operation and maintenance and for fixed charges were quite comparable for Story City and Rock Valley prior to reorganization, with Story City spending a slightly higher percentage of its general fund for both categories than Rock Valley.

Through the eight years of reorganization history, the percentages of general fund expenditures for fixed charges for both districts were fairly equal, ranging from a little less than 7 percent in 1969-70 to a high of about 10 percent in 1976-77.

Both Story City and Rock Valley were spending comparable percentages of their general fund on operation and maintenance in 1968-69. Through the first years of reorganization, the reorganized Story City district spent about 3 percent more on operation and maintenance than did Rock Valley. During the fourth, fifth and sixth years of reorganization, both districts spent about the same percentages for operation and maintenance. During 1975-76 and 1976-77, the percentage of general fund expenditures for operation and maintenance increased in the reorganized district and again amounted to about a 3 percent higher spending level than for the comparison district.

The data sugest that expenditures for fixed charges and for operation and maintenance generally represented a higher percentage of the general fund in the reorganized district than in the comparison district.

B. Administration (Table 9)

Administration expenditures for both categories of expenditures, administrative and administrator, represented a higher percentage of the general fund for Story City than they did for Rock Valley prior to the reorganization. From the first year of reorganization in 1969-70 through 1975-76, expenditures for both categories in Table 9 generally represented a higher percentage of the general fund for the comparison district than they did for the reorganized district. In 1976-77, the percentage of general fund expenditures for both administration categories were about equal for both districts.

The data suggest that the percentage of the general fund spent for administration would probably have been slightly higher for Story City had the reorganization not occurred. However, the temporary advantage of the reduced percentage of general fund expenditures for administration for the reorganized district appears to have dimished.

V. Summary

A. School Quality Indicators

With respect to school quality indicators, the 1969-70 reorganization, from the standpoint of Story City, resulted in the following consequences:

1) little advantage in terms of instructional expenditures; 2) pupil-teacher ratios that were fairly comparable for both the reorganized district and the comparison district; 3) a considerably higher average teacher salary resulting in an \$1,800 average teacher salary advantage for Story City over its comparison district; 4) a higher percentage of advanced degree teachers as compared to the comparison district; 5) a considerable advantage in terms of the number of professional support staff and 6) a slight gain in specific categories of course offerings, but no advantage in ability to increase total curriculum scope or the number of total units offered.

B. District Characteristics

In terms of the district characteristics of ADM, millage and general fund expenditures, the following consequences appear to have resulted:

1) ADM's for both the reorganized district and the comparison district decreased each year from 1968-69 to 1976-77; 2) general fund millage rates were reduced through reorganization and 3) no advantage in terms of general fund per pupil expenditures resulted from the reorganization.

C. Transportation

Since transportation circumstances for Story City and Rock Valley were quite different in the initial comparison year, 1968-69, and transportation variables were not considered in the selection of comparison districts, no conclusions with respect to gains or loses which may have been brought about by the reorganization have been drawn. A comparison of changes in transportation circumstances across the time period studied indicates that Story City spent a little over 5 percent of its budget on transportation prior to reorganization and 4.4 percent in 1976-77, while Rock Valley spent corresponding percentages of 8.5 percent and 11.1 percent, respectively.

D. Non-Instructional Expenditures

From the standpoint of non-instructional expenditures related to fixed charges and operation and maintenance facilities, it appears the reorganized district has spent a higher percentage of its general fund on fixed charges and on operation and maintenance than its comparison district.

With respect to administration, it appears that a temporary advantage accrued to the reorganized district, but by 1976-77, the advantage had been diminished.

Figure 1
Summary of Reorganization Consequences for Roland-Story Reorganization

Item	Roland-Story
Instructional Expenditures	+
Pupil-Teacher Ratios	+
Average Teacher Expenditures	+
Teacher Degree Status	+
Professional Support Staff	+
Curriculum Offerings	+
General Fund Millage Rate	+
Expenditures Per Pupil	+
Transportation	+
Non-Instructional Expenditures	+

^{+ =} beneficial consequences

^{0 =} little or no change in consequences

^{? =} inconclusive consequences

^{- =} negative consequences

. Table | School Quality -- Instructional Expenditures Pupil-Teacher Ratios and Dropouts

						Pupil-			Total
	Yes a second	Dropou	ts	% of GF		Rati	os		Instructional
		ADM		Spent for				Over	Expenditures
Year	District	7-12	%	Instruction	k=6	7-9	10-12	All	Per Pupil
						. ,			
1968-69	Roland	1/160.8	.6	58.4	20.9	NA ²	12.7	16.3	\$ 519
	'Russell	1/163.7	.6	60.7	21.7	NA	15.1	17.5	382
	Story	2/322.0	.6	63.8	25.0	. NA	15.2	17.8	454
	Rock Valley	9/326.1	2.8	62.1	19.4	NA	15.7	17.7	502
1969-70	Roland-Story	1/1051.8	.2	60.5	23.3	16.6	19.7	19.5	544
1303-14	Russell	0/326.3	.0	65.8	17.6	11.1	14.6	14.8	453
	Rock Valley	5/716.8	.7	64.5	19.8	13.9	17.5	17.5	585
2000	0.1. 1.01	1/1057 5	.9	62.4	21.9	15.9	15.3	18.5	597
1970-71	Roland-Story	1/1053.5	2.1	62.8	20.8		16.1	14.6	487
	Russell	7/336.3	.7	66.9	19.7		14.3	19.3	639
	Rock Valley	5/713.7		60.9	23.1				
	0.3-1.01	1/519.8	.2	63.0	22.5	18.5	17.5	19.1	568
1971-72	Roland-Story	2/156.1	1.3	60.0	29.5	17.4	8.1	17.7	496
	Russell Rock Valley	4/332.9	1.2	62.4	23.2	16.5	17.0	20.8	620
	ROCK Valley	4/ 552.5	7.67	02.					
1972-73	Roland-Story	1/513.4	,2	65.1	21.2	17.5	17.8	17.7	592
19/2-73	Russell	1/152.4	- 17	61.8	24.0	20.5	12.7	14.4	553
	Rock Valley	2/309.7	.6	59.4	22.5	16.2	15.5	16.5	588
	ROCK VALLEY	27003.1							
1973-74	Roland-Story	11/515.5	2.1	62.2	21.9	17.5	18.6	17.8	626
19/3-14	Russell	3/150.5	1.9	61.0	24.0	20.3	9.8	14.2	568
4. 35.0	Rock Valley	4/342.0	1.2	57.6	18.2	15.3	16.0	16.5	640
	NOCK VALLEY								
1974-75	Roland-Story	15/527.2	2.8	61.2	20.6	18.0	17.9	17.2	688
19/4-10	Russell	2/153.7	1.3	55.8	20.9	21.0	13.2	13.8	622
	Rock Valley	4/341.3	1.2	57.4	18.1	15.8	15.1	15.6	717
	Noch valley								
1975-76	Roland-Story	11/500.6	2.2	60.0	20.0	16.6	16.8	16.9	845
15(0-10	Russell	3/161.1	1.9	57.7	16.8	14.0	11.6	14.9	728
	Rock Valley	4/341.8	1.2	56.5	16.2	15.9	13.9	14,8	822
1000 00	Dalland Ctarry	7/499.8	1.4	60.4	18.5	14.6	14.1	16.5	983
1976-77	Roland-Story Russell	6/147.1	4.1	56.4	17.3	13.0	9.9	14.9	817
	Rock Valley	2/366.6	.5	57.2	16.8	16.5	15.8	15.2	1018
	NOCK VALLEY	2,000.0							

¹ ADM/Teacher Headcount

²NA Information Not Available

Table 2
School Quality -- Average Teacher Expenditures, Degree
Status and Professional Support Count

T	T		^		Degree Status	
		Average Teacher		% Less Than		
Year	District	Expenditures	Support Count	Bachelors	% Bachelors	% Advanced
1 cai	District	Experior server				
1968-69	Roland	\$ 6,655	NA ¹	NA	NA	NA ·
1300-03	Russell	6,114	NA	NA NA	NA	NA
	Story	6,192	NA	NA .	NA .	NA
	Rock Valley	7,051	NA	. NA	NA NA	NA
	NOCK VULLEY					
1969-70	Roland-Story	7,925	NA	NA	NA	NA
1909-70	Russell	6,382	NA	NA	NA	NA
*	Rock Valley	8,097	NA	NA	NA	NA
	NOCK Valley	Marie Control Sale				
1970-71	Roland-Story	8,315	6	NA NA	NA	NA
1970-71	Russell	6,594	0	NA NA	NA.	NA
	Rock Valley	9,566	4	NA NA	NA	NA
	NOCK VALLEY					
1071 70	Roland-Story	8,556	. 6	NA	NA	NA
1971-72	Russell	7,428	2	NA	NA	NA
	Rock Valley	10,371	4	NA	NA	NA .
	Rock valley					
1000 57	Roland-Story	8,659	6	7.1	71.5	21.4
1972-73	Russell	7,578	0	26.3	73.7	0
	Rock Valley	8,096	3	2.5	82.5	15.0
	Rock valley					
2007 04	Roland-Story	9,072	6	7.1	67.9	25.0
1973-74	Russell	6,646	2	15.8	78.9	5.3
	Rock Valley	8,684	3	4.1	78.4	17.5
	Rock valley					
2004 05	Roland-Story	9,394	6	3.6	71.0	25.4
1974-75	Russell	7,130	2	11.5	81.0	7.5
	Rock Valley	9,077	3	2.6	78.9	18.5
	ROCK VALLEY					
2005 00	Roland-Story	11,412	5	1.8	72.7	25.5
1975-76	Russell	8,597	2	11.1	83.3	5.6 .
		9,685	3	1.8	87.3	10.9
	Rock Valley					
1000 00	Roland-Story	12,293	5	0	73.2	26.8
1976-77	Roland-Story Russell	9,903	1	5.3	89.4	5.3
		10,436	1	0	85.7	14.3
	Rock Valley	20,100			JESSEL MESSES	

¹ Information Not Available

. Table 3 School Quality -- Curriculum Offerings Expressed as Carnegie Units $^{\mathrm{l}}$

		Agr.	Art	Bus.	Dist		For.	Hlth.		Ind.					Soc.		Dr.	
Year	District	Edu.	Edu.	Edu.	Edu.	Eng.	Lang.	P.E.	Hmk.	Art	Math	Music	Sci.	O.E.	Sci.	18T	Edu.	Tota
1970-71	Roland-Story	3.5	3.0	6.5	0.0	6.0	3.0	1.0	4.0	1.5	5.0	3.0	5.0	0.0	6.0	3.0	.5	51.0
	Russell	0.0	0.0	6.0	0.0	5.0	1.0	1.0	2.0	0.0	6.0	.5	3.0	0.0	4.0	2.0	.5	31.0
	Rock Valley	4.0	3.0	4.0	0.0	4.0	2.0	1.0	2.0	3.0	5.0	2.0	4.0	0.0	5.0	0.0	.5	39.5
1971-72	Roland-Story	3,5	3.0	6.5	0.0	6.0	2.0	1.0	4.0	1.5	5.5	3.0	4.5	.5	5.5	4.0	.5	51.0
	Russell	0.0	2.0	6.0	0.0	5.0	0.0	1.0	2.0	0.0	6.0	1.5	3.0	0.0	4.0	3.0	.5	34.0
	Rock Valley	4.0	3.0	4.0	0.0	4.0	2.0	1.0	2.0	3.0	5.0	2.0	4.0	0.0	5.0	0.0	.5	39.5
1972-73	Roland-Story	4.0	3.0	6.5	0.0	6.5	3.0	1.0	4.0	1.5	5.5	3.0	4.5	.5	5.0	4.0	.5	52.5
	Russell	0.0	3.0	6.0	0.0	5.0	0.0	1.0	2.0	0.0	6.0	.5	4.0	0.0	4.0	3.0	.5	35.0
	Rock Valley	4.0	4.0	4.0	0.0	6.0	2.0	1.0	2.0	3.0	5.0	2.0	4.0	0.0	5.0	0.0	.5	42.5
1973-74	Roland-Story	4.0	3.0	6.5	0.0	7.25	2.0	1.0	4.0	1.5	5.5	3.0	5.25	0.0	4.75	4.0	.5	52.2
	Russell	0.0	4.0	4.5	0.0	5.0	1.0	1.0	2.0	0.0	6.0	.5	4.0	0.0	4.75	3.0	.5	37.0
	Rock Valley	4.0	4.0	4.0	0.0	9.0	2.0	1.0	2.0	3.0	5.0	2.0	4.0	0.0	5.0	0.0	.5	45.5
1974-75	Roland-Story	4.0	3.0	6.5	0.0	7.75	2.0	1.0	4.0	1.5	6.5	3.0	4.75	0.0	4.5	4.0	.5	53.0
	Russell	0.0	3.0	4.5	0.0	5.0	2.0	1.0	2.0	0.0	6.0	1.5	4.0	0.0	4.5	3.0	.5	37.0
	Rock Valley	4.0	4.0	3.0	0.0	10.0	1.0	5.0	2.0	3.0	6.0	3.0	4,0	0.0	5.0	0.0	.0	49.0
1975-76	Roland-Story	4.0	3.0	6.5	0.0	7.25	3.0	1.0	4.0	1.5	6.0	3.0	4.25	0.0	5.0	4.0	.5	53.0
	Russell	0.0	3.0	4.5	0.0	6.5	2.0	1.0	2.0	0.0	6.0	.5	4.0	0.0	4.5	5.0	.5	39.5
	Rock Valley	4.0	4.0	3.0	0.0	7.0	1.0	5.0	2.0	3.0	6.0	3.0	4.0	0.0	5.0	0.0	.0	47.0
1976-77	Roland-Story	4.0	3.0	5.0	0.0	6.0	3.0	1.0	4.0	1.5	5.0	3.0	4.0	0.0	5.0	4.0	.5	49.0
	Russell	0.0	3.0	4.5	0.0	6.0	2.0	1.0	2.0	0.0	6.0	.5	4.0	0.0	3.5	4.0	.5	37.0
	Rock Valley	4.0	4.0	3.0	0.0	6.0	2.0	5.0	2.0	3.0	6.0	2.0	4.0	0.0	5.0	0.0	1.0	47.0

¹A Carnegie Unit is defined as a course offering measure equivalent to one hour of instruction per day for a period of 36 weeks or a full school year

· Table 4
School Quality -- Status of Students
One Year After Graduation

			econdary		econdary		lob	041	ner ¹
		Non-Vo	cational		tional		ket		W %
Year	District	No.	%	No.	%	No.	%	No.	%
					-				
1968-69	Roland	NA2	NA	NA	NA	NA	NA	NA	NA 7.0
	Russell	15	57.7 -	5	19.2	5	19.2	1	3.8
	Story	NA	NA	AM	NA	NA	NA	NA	NA
	Rock Valley	20	37.7	11	20.8	19	35.8	3	5.7
1969-70	Roland-Story	35	41.7	25	29.8	12	14.3	12	14.3
1505-10	Russell	9	37.5	6	25.0	4	16.7	5	20.8
	Rock Valley	25	47.2	9	16.9	9	16.9	10	18.9
1970-71	Roland-Story	NA	NA	NA	NA	NA	NA	NA	NA
1970-71	Russell	NA	NA	NA	NA	NA	NA	NA	NA
	Rock Valley	. NA	NA	NA	NA ·	NA	NA	NA	NA
1971-72	Roland-Story	34	45.9	15	20.3	25	33.8	0	.0
19/1-72	Russell	6	23.1	9	34.6	9	34.6	2	7.7
	Rock Valley	29	46.8	9	14.5	5	8:1	19	30.6
1000 07	Roland-Story	29	30.8	17	18.1	39	41.5	9	9,6
1972-73	Russell	5	20.8	2	8.3	15	62.5	2	8.3
	Rock Valley	20. *	31.7	15	23.8	19	30.2	9	14.3
1973-74	Roland-Story	22	25.9	20	23.5	37	43.5	6	7.1
1975-74	Russell	3	12.5	8	33.3	9	37.5	4	16.7
	Rock Valley	15	38.5	10	25.6	10	25.6	4	10.3
		18	21.4	19	22.6	41	48.8	6	7.1
1974-75	Roland-Story	4	16.0	5	20.0	14	56.0	2	8.0
	`Russell Rock Valley	25	40.9	6	9.8	25	40.9	5	8.2
	D 1 - 1 01	30	37.5	27	33.8	19	23.8	4	5.0
1975-76	Roland-Story	2	7.4	3	11.1	12	44.4	10	37.0
	Russell Rock Valley	17	27.9	17	27.9	19	31.1	8	13.1
		28	34.1	10	20.7	32	39.0	5	6.1
1976-77	Roland-Story	4		17	5.0	11	55.0	4	20.0
	Russell Rock Valley	17	20.0 35.4	9	18.8	15	31.2	7	14.6

10ther includes military service, unemployed, housewife

²NA Information Not Available

Table 5
District Characteristics -Assessed Valuation Per Pupil, General Fund Millage,
General Fund Expenditure Per Pupil and Average Daily Membership

Year	District	Assessed Valuation Per Pupil	General Fund Millage	General Fund Expenditure Per Pupil	Average Daily Membership
3050 50	Roland	\$ 11,950	51.842	\$ 833	342.2
1968-69		10,977.	34.023	629	332.7
	Russell		43.927	664	710.6
	Story	10,362	29.797	773	706.9
1	Rock Valley	17,273	29.191	115	700.9
1000 00	Roland-Story	12,770	48.182	841	1,051.8
1969-70		11,499	40.620	688	326.3.
	Russell	18,391	31,351	857	716.8
	Rock Valley	10,391	01,001	00.	
1970-71	Roland-Story	13,025	47.297	891	1,053.5
1310-11	Russell	10,729	47.803	775	336.3
	Rock Valley	18,779	34.009.	928	713.7
	NOCK VALLEY				
1971-72	Roland-Story	13,002	44.850	901	1,087.0
13/1-12	Russell	11,293	45.201	827	335.5
	Rock Valley	20,076	32.011	993	706.8
	noch variety				
1972-73	Roland-Story	13,684	42.567	910	1,059.4
	Russell	12,177	43.023	895	316.6
	Rock Valley	20,631	34.009	989	692.9
	noon (azzo)				
1973-74-	·Roland-Story.	16,233	39.828	1,006	1,066.9
	Russell	11,969	38.721	931	312.2
	Rock Valley	21,997	34,009	1,111	694.9
	10011 14220				
1974-75	Roland-Story	16,928	37.682	1,124	1,029.5
1314-13	Russell	14,430	36.254	1,115	303.3
	Rock Valley	21,346	34.009	1,248	671.6
	NOCK VALLEY				
1975-76	Roland-Story	18,428	40,578	1,408	945.7
1310-10	Russell .	14,721	43,244	1,261	297.3
	Rock Valley	22,082	35.541	1,456	649.2
	nock variey				
1976-77	Roland-Story	90,059	35.781	1,556	955.0
±310-11	Russell	74,987	38,437	1,431	284.0
	Rock Valley	110,146	35.081	1,683	668.0

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Table 6
District Characteristics -Sales Tax Receipts

		69-	%	70-	%	71-	%	72-	%	73-	%	74-	%	75-	%	76-	%
District	1968-69		Change	75	Change		Change		Change								
		31,001		31,735		33,229		32,118		32,869		24,722		24,318		27,703	
Roland	30,767		.8		2.4		4.7		-3.3		2.3		-24.8		-1.6		13.9
		35,924		28,305	10	38,403	* .	33,836		39,657		37,402		37,547		41,574	
Russell	32,474		10.6		21.2		35.7		-11.9		17.2		5.7		.4		10.7
		144,902		153,390		182,767		213,716		274,182		280,612	,	286,712		359,740	
Story City	144,237		.5		5.9		19.2		16.9		28.3		2.3		2.2		25.5
		210,820		219,135		236,924		260,780		310,995		321,798		374,803		389,162	
Rock Valley	197,540		6.7		3.9		8.1		10.1		19.3		3.5		16.5		3.8
		182,305		178,700		191,555		209,206		240,671		241,232		258,101		290,833	
State (000)	170,455		7.0		-2.0		7.2		9,2		15.0		.2		7.0		12.7

Table 7

Transportation Characteristics for Roland, Russell, Story and Rock Valley

		Trans. Exp.	Average	Average Cost		Total Miles	Cos	t (Dollars a	ind Percen	t)	Percent of
		as a % of	Pupils	Per Pupil	No. of	Traveled	Cost of	THE STATE OF THE	1	Total	Pupils
Year	District	General Fund	Trans./Day	Transported	Buses	Per Day	Buses	Salaries	Gas	Dollars	Transported
1968-69	Roland	6.2	139	\$ 84	4	162	\$ 3,157	\$ 3,780	1,127	611 710	40.6
						102	(26.9)	(32.3)	(9.6)	\$11,712	40.6
	Russell	11.0	192	109	7	334	5,025	- 8.248	2,967	20,834	57.7
							(24.1)	(39.6)	(14.2)	1 20,00	
	Story	5.2	260	89	8	291	7,422	9,900	2,073	23,253	36.6
							(22.3)	(42.6)	(8.9)		
	Rock Valley	8,5	344	83	13	719 -	5,079	15,516	434	28,598	48.7
							(17.8)	(54.3)	(1.5)		
1969-70	Roland-Story.	5.6	502	81 *	1 12	539	9,591	19,339	4,710	40,807	47.7
							(23.5)	(47.4)	(11.5)		
	Russell	10.0	190	101	7	382	5,942	9,186	3,049	19,210	58.3
						- 634	(30.9)	(47.8).	(15.9)		
	Rock Valley	6.6	342	98	14	775	7,536	15,835	4,881	33,488	47.7
1970-71	D. 1- 1 01						(22.5)	(47.3)	(14.6)		
1970-71	Roland Story	4.9	495	82	12	623	9,601	19,568	5,213	40,589	46.9
	Russell	9.3					(23.6)	(48.2)	(12.8)		
	MUSSELL	9.5	189	110	7	366	6,227	9,022	3,722	22,986	56.2
	Rock Valley	6.5	7.45	107			(27.1)	(39.2)	(16.2)		
	Hock valley	0.0	345	103	14	771	7,736	16,455	5,147	35,664	48.3
1971-72	Roland-Story	4.4	492	93	10		(21.7)	(46.1)	(14.4)		
-312-12	Notaria-Story	4.4	492	93	12	605	10,960	20,542	4,131	45,670	45.3
	Russell	7.8	191	106		7.00	(23.9)	(44.9)	(9.0)		
		7.0	191	100	7 .	360	6,227	9,643	3,852	20,223	56.8
	Rock Valley	6.6	339	125	14	600	(30.8)	(47.7)	(19.0)		
	1.00.00		333	120	14	802	9,189	19,516	6,725	42,281	47.9
1972-73	Roland-Story	3,9	576	79	11	304	(21.7)	(46.2)	(15.9)		
			. 0.0	1	11	304	10,802	19,631	4,038	45,546	54.4
	Russell	9.3	186	116	7	310	(23.7)	(43.1)	(8.9)	04 07-	
			200	110		310	(25.7)	10,408	3,864	24,235	58.7
	Rock Valley	7.3	322	141	14	751	10,616	(42.9)	(15.9)	45 400	15.5
				1	-	(31	(23.3)	20,421	5,497	45,492	46.5
							(23.3)	(44.9)	(12.1)		

Table 7 (continued)

		Trans. Exp.	Average	Average Cost		Total Miles	Cost (Dollars and Percent)			Percent of	
		as a % of	Pupils	Per Pupil	No. of	Traveled	Cost of			Total	Pupils
Year	District	General Fund	Trans./Day	Transported	Buses	Per Day	Buses	Salaries	Gas	Dollars	Transported
1973-74	Roland-Story	8.4	554	\$ 89	11	395	\$11,231	\$20,353	6,582	\$49,381	51.9
							(22.7)	(41.2)	(13.3)		
	Russell	9.8	182	75	7	320	4,956	9,472	3,835	22,118	58.3
					177.4		(22.4)	(42.8)	(17,3)		
	Rock Valley	8.2	309	166	16	583	9,332	20,615	8,657	51,094	44.5
							(18.3)	(40.3)	(16.9)		
1974-75	Roland-Story	8.8	460	112	- 11	343	8,779	22,394	8,041	51,655	44.7
							(16.9)	(43.4)	(15.6)		
	Russell	9.1	172	161	8	376	6,409	10,763	5,090	27,733	56.8
							(23,1)	(38.9)	(18.4)		
	Rock Valley	7.8	307	135	14	674	7,447	15,608	7,855	41,482	45.8
							(18.0)	(37.6)	(18.9)		
1975-76	Roland-Story	8.9	444	117	11	315	9,043	22,534	8,302	51,829	46.9
							(17.4)	(43.5)	(16.0)		
	Russell	9.6	166	178	6	277	6,409	12,393	5,539	29,582	55.9
							(21.7)	(41.9)	(18.7)		
	Rock Valley	8.6	313	132	15	568	6,902	15,164	7,553	41,285	48.2
							(16.7)	(36.7)	(18.3)		
1976-77	Roland-Story	10.3	404	129	10	516	9,798	22,554	8,760	52,131	42.3
							(18.8)	(43.3)	(16.8)		
	Russell	10.0	170	220	6	312	11,196	15,057	6,505	37,402	59.9
							(29.9)	(40.1)	(17.4)	The second second	To the Tool
	Rock Valley	8.6	335	149	15	555	10,372	23,591	6,949	50,023	50.1
							(20.7)	(47.2)	(13.9)		
											1

Table 8

Non-Instructional Expenditures -Fixed Charges and Operation and Maintenance.

		Fixed	Charges	Operation and Maintenance		
			% of		% of General Fund	
Year	District	Amount	General Fund	Amount		
					37.0	
1968-69	Roland	\$ 20,756	7.2	\$ 37,706	13.2	
	Russell	12,976	6.2	31,015	14.8	
	Story	32,750	6.9	48,746	10.3	
	Rock Valley	36,953	6.8	49,704	9.1	
1969-70	Roland-Story	62,978	7.1	108,363	12.2	
1969-70	Russell	15,007	6.7	21,043	9.4	
	Rock Valley	42,461	6.9	53,076	8.6	
1970-71	Roland-Story	68,211	7.3	111,403	11.9	
	Russell	20,203	7.8	31,509	12.1	
	Rock Valley	47,406	7.2	49,356	7.4	
1971-72	Roland-Story	78,337	8.0	103,873	10.6	
15/1-12	Russell	22,846	8.2	36,045	13.0	
	Rock Valley	51,262	7.3	50,702	.7.2	
					To the Park Street	
1972-73	Roland-Story	80,833	8.4	94,244	9,8	
	Russell	25,110	8.9	29,561	10.4	
	Rock Valley	56,262	8.2	66,192	9.7	
			0.4	113,749	10.6	
1973-74	Roland-Story	90,411	8.4	33,442	11.5	
No. 121	Russell	28,510	9.8	77,648	10.1	
	Rock Valley	63,014	8.2	77,040	10.1	
1974-75	Roland Story	101,354	8.8	122,759	10.6	
	Russell	30,906	9.1	38,544	11.4	
	Rock Valley	65,623	7.8	86,167	10.3	
1075 70	D-1	118,718	8.9	161,206	12.1	
1975-76	Roland-Story		9.6	39,018	10.4	
	Russell Rock Valley	36,037 81,064	8.6	94,266	9.9	
	1.50k Yazzoy					
1976-77	Roland-Story	152,983	10.3	180,293	12.1	
	Russell	40,644	10.0	49,269	12.1	
	Rock Valley	96,500	8.6	110,720	9.8	

Table 9
Non-Instructional Expenditures -Administration

		Total Admi	nistrative ^l	Total Administrator ²		
			% of		% of	
Year	District	Amount	General Fund	Amount	General Fund	
					8.95	
1968-69	Roland	\$ 32,459.60	11.38	\$25,548.62	4.95	
	Russell	13,550.29	6.47	10,372.89		
	Story	46,209.99	9.79	38,356.99	8.13	
	Rock Valley	39,153.58	7.16	32,888.90	6.02	
1969-70	Roland-Story	73,764.00	8.33	59,713.00	6.74	
2000	Russell	16,814.27	7.48	13,625.77	6.06	
	Rock Valley	53,810.00	8.75	45,380.00	7.38	
	1.00					
1970-71	Roland-Story	75,437.00	8.04	55,819.00	5.95	
1970-71	Russell	18,664.65	7.16	11,816.80	4.53	
	Rock Valley	45,216.00	6.82	33,651.00	5.07	
1071 70	Roland-Story	82,147.29	8.38	65,398.40	6.67	
1971-72	Russell	28,638.81	10.31	22,588.81	8.13	
	Rock Valley	61,523,32	8.76	54,889.69	7.81	
				64 000 54	6 67	
1972-73	Roland-Story	83,300.38	8.63	64,020.54	6.63	
	Russell	24,376.77	8.60	16,603.37	5.86	
	Rock Valley	61,692.34	9.00	50,277.21	7.33	
1973-74	Roland-Story	89,676.25	8.35	66,528.82	6.19	
	Russell	31,610.52	10.87	23,649.11	8.13	
	Rock Valley	65,833.53	8.53	53,590.48	6.94	
1974-75	Roland-Story	89,792.46	7.76	67,068.19	5.79	
19/4-/3	Russell	34,325.35	10.15	24,318.74	7.19	
	Rock Valley	69,703.51	8.31	56,587.34	6.75	
				67 640 67	F 77	
1975-76	Roland-Story	98,632,33	7.40	73,647.93	5.53	
	Russell	33,155.94	8.84	27,343.93	7.29	
	Rock Valley	75,925.78	8.03	60,318.25	6.38	
1976-77	Roland-Story	112,701.26	7.58	86,051.22	5.79	
	Russell	41,393.13	10.18	28,499.90	7.01	
	Rock Valley	80,109.01	7.12	65,025.99	5.78	

 $¹_{\mbox{Administrative}}$ expenditures include all administrator expenditures plus Board of Education and clerical expenditures

²Administrator expenditures include all expenditures for superintendent, assistant superintendent, business manager, principals and supervisors

CLARENCE-LOWDEN CASE STUDY

The Clarence-Lowden reorganization in 1973-74 represents a reorganization type described in the introduction as the combining of two smaller districts. The analysis which follows will examine the consequences of reorganization in two parts. First through the comparison of Clarence and Pomeroy, and second through the comparison of Lowden and Collins.

In the first instance, Pomeroy will be used to simulate the status of Clarence had it not reorganized, and in the second instance, Collins will serve to simulate the status of Lowden.

Clarence-Pomeroy Comparison

I. School Quality Indicators (Tables 1-4)

A. Dropout Status (Table 1)

Prior to the 1972-73 reorganization, dropout ratios of Clarence and Pomeroy were 2.8 and 1.7 percent, respectively. The dropout ratio for the reorganized district in 1973-74-on, remained slightly higher, except in 1975-76, than the Pomeroy dropout ratio. The state dropout ratios ranged from a low of 2.56 in 1972-73 to a high of 2.98 in 1973-74 and averaged about 2.8 percent across the six-year period.

B. Pupil-Teacher Ratios (Table 1)

In 1972-73, Clarence had an overall pupil-teacher ratio of 14:1. No data were available regarding k-6, 7-9 and 10-12 pupil-teacher ratios for Clarence; therefore no comparisons can be made in this year except for the overall ratio. For Pomeroy, the overall pupil-teacher ratio was 15:1, while ratios for k-6, 7-9 and 10-12 were 23:1, 14:1 and 8:1, respectively.

From 1973-74 through 1976-77, the overall pupil-teacher ratio for the reorganized district first decreased slightly to 13:1, then increased to 17:1 and finally decreased to 14:1, where it remained through 1976-77. The lowest pupil-teacher ratios for Clarence, as for its comparison district, occurred in grades 10-12, dropping to 12:1 in 1976-77. The overall pupil-teacher ratio for Pomeroy remained fairly constant through the five-year period as did the 7-9 and 10-12 ratios. At one point, the 10-12 pupil-teacher ratio for Pomeroy dropped below 8:1.

In 1976-77, a considerable difference in the k-6 pupil-teacher ratio existed between the reorganized and comparison district. The ratios were 19:1 and 26:1, respectively. The overall pupil-teacher ratios and 7-9 ratios were comparable for Clarence and Pomeroy, while 10-12 ratios were 12:1 and 9:1, respectively.

Pupil-teacher ratios were generally lower in grades k-6 in the reorganized district and generally higher in the comparison district in grades 10-12. Both the reorganized district and the comparison district have extremely costly 10-12 pupil-teacher ratios.

C. Instructional Expenditures (Table 1)

Prior to reorganization, instructional expenditures for Clarence and Pomeroy were quite similar, both in terms of the instructional expenditures per pupil and in terms of the percentage of the general fund spent for instruction. Clarence spent \$679 per pupil for instruction and 62.8 percent of its general fund on instruction, while Pomeroy spent 64.2 percent of its general fund for instruction and \$614 per pupil on instruction.

Following its reorganization in 1973-74, Clarence continued to spend a lower percentage of its budget for instruction each year thereafter than it had spent prior to reorganization, except in 1976-77. The 1976-77 expenditure for instruction was 63.3 percent of the total general fund or less than a 1 percent overall increase from 1972-73 expenditures. This expenditure totaled \$1,011 per pupil.

Pomeroy, the comparison district, on the other hand, also spent a lower percentage of its general fund from 1973-74 through 1975-76 than it had in 1972-73. Pomeroy's 1976-77 expenditures for instruction exceeded the percentage spent in 1972-73 by a little more than 1 percent.

D. Teacher Characteristics (Table 2)

The teacher characteristic information is composed of average teacher expenditure and degree status data. The average teacher expenditures for Clarence, prior to reorganization, were \$7,998, which was \$407 more than for the comparison district. This advantage was maintained over the next four years and had increased to a \$1,849 differential by 1976-77. From this standpoint, the reorganization appears to have been beneficial to Clarence in that it probably has increased its potential to attract and retain highly qualified teachers.

No degree information was available for Clarence prior to the reorganization; however in the first year of reorganization, 15.6 percent of its teaching staff had less than a Bachelors degree and no teachers on staff had degrees beyond the Bachelor level. In the comparison district, 7.7 percent of the teachers had less than a Bachelors degree, while no teaching staff had advanced degrees.

In the final comparison year, Clarence had reduced its non-degree teaching staff to 10.3 percent or four teachers and had increased its percentage of advanced degree teachers 2.5 percent or by one teacher. The comparison district, on the other hand, had completely eliminated non-degree teachers from its staff and had increased its number of teachers with advanced degrees from zero to three.

It would appear from the standpoint of degree status that the reorganization did not result in a marked improvement for Clarence when contrasted with the comparison district.

E. Professional Support Staff (Table 2)

Professional support staff count for Clarence in 1972-73 numbered two as did the support count for Pomeroy, the comparison district. In the first year of reorganization, Clarence, as well as pomeroy, recorded a support count of two. In the second and third years of reorganization, the support count for Clarence dropped to one, while Pomeroy's support count remained at two. In 1976-77, support count for both districts numbered two. No advantage in terms of ability to increase professional staff appears to have been derived from the reorganization.

F. Curriculum Offerings (Table 3)

Prior to its reorganization, Clarence offered a total of 34.25 Carnegie units, while its comparison district offered a total of 40.5 units. During the first year of its reorganization through 1976-77, Clarence offered more units than its comparison district. Clarence's offerings increased to a high of 58 units in 1974-75 and fell to 51 in 1976-77. During the four-year period of reorganization in which data are shown, curriculum offerings for Clarence exceeded the offerings of the comparison district by as much as 18 units and as few as 8 units.

Curriculum areas in which Clarence's reorganization produced some gains and resulted in more units offered than its comparison district included: art, business, mathematics and science. Areas in which little or no gain resulted from the reorganization and in which offerings for the reorganized district were about equal to those of the comparison district included: music, social science, industrial arts, health and physical education, foreign language, English and homemaking. The area in which a considerable gain was realized through reorganization was trades and industry, while after reorganization occurred, it offered an average of about four units each year for four years. Agricultural education offerings were not available to Clarence students prior to its reorganization. The reorganized district was able to offer a small number of agricultural units from 1973-74 through 1975-76 but was unable to maintain the offerings in 1976-77, while the comparison district offered four units for each of the five years. Neither the reorganized district nor the comparison district offered any courses in office education or in distributive education.

G. Graduate Follow-Up Status (Table 4)

Table 4 reflects the status of students one year after graduation. In the year before reorganization, Clarence had about 33 percent of its graduates pursue post-secondary education, while about 52 percent of Pomeroy's students pursued post-secondary education. Over the four-year period of reorganization, relatively the same percentage of students from the reorganized district and from the comparison district pursued some form of post-secondary education.

II. District Characteristics (Table 5-6)

A. Assessed Valuation (Table 5)

Before its reorganization with Lowden, Clarence had a per pupil wealth of \$17,601; this increased to \$20,921 in the first year of reorganization and to \$21,252, \$21,806 and \$105,984 in subsequent years. The comparison district had a per pupil wealth in 1972-73 of \$22,012 and \$4,411 more than Clarence. In 1976-77, the per pupil wealth for the comparison district was \$124,703 or \$18,719 more than the per pupil wealth of the reorganized district. Considering the changeover from property assessments of 27 percent to 100 percent, this difference is proportionately the same as it was in 1972-73.

B. General Fund Millage Rate (Table 5)

Prior to its reorganization, Clarence's general fund millage rate exceeded the rate for the comparison district by a little more than 7 mills. The millage rate for the reorganized district remained, on the average, about 6 mills higher than the comparison district millage rate from 1973-74. A 1-mill levy prior to reorganization would have raised \$1,824 for Clarence and \$2,386 for Pomeroy. In 1976-77, that same levy would raise \$16,883 for the reorganized district and \$2,543 for the comparison district. Millage rates do not appear to have decreased as a result of reorganization for Clarence residents.

C. General Fund Expenditures (Table 5)

General fund expenditures per pupil were \$125 higher for Clarence than for Pomeroy prior to reorganization. Per pupil expenditures for the reorganized district increased each year through 1976-77 to a high of \$1,598, a total increase in per pupil expenditures of \$516. Per pupil expenditures for Pomeroy decreased from \$957 to \$954 in 1973-74 and increased to \$1,159 in 1974-75 and to \$1,330 in 1975-76. The 1976-77 per pupil expenditures for Pomeroy decreased to \$1,294 from the preceding year's \$1,330 figure.

D. Average Daily Membership (ADM) (Table 5)

The total ADM for Clarence was 383.8 in 1972-73 as compared to 401.5 for Pomeroy. For the two years following reorganization, the ADM for the reorganized district decreased. In 1976-77, the ADM for the reorganized district was 590.0, a drop of 21.6 students from its high of 611.6 in the first year of reorganization. Pomeroy's ADM remained fairly constant over the three-year period from 1972-73 with an increase of about 5 percent occurring in 1973-74. In 1976-77, Pomeroy's ADM was 393.0 or 8.5 students less than in 1972-73.

E. Sales Tax Receipts (Table 6)

Sales tax receipts for Clarence in 1972-73 were \$77,545 or about \$26,000 more than for the comparison district. Receipts increased over the next

four years by an average of about 13 percent per year for Clarence and amounted to \$128,499 in 1976-77. Receipts for Pomeroy then decreased from 1975-76 to 1976-77 by almost 9 percent to a level of \$68,410. This resulted in a \$60,000 differential between the two districts in 1976-77, with Clarence having the higher receipts.

III. Transportation (Table 7)

The proportion of expenditures, expressed as a percentage of the general fund, for both Clarence and Pomeroy was nearly the same in 1976-77 as it was the year prior to the reorganization, with Clarence spending about 4 percent of its budget on transportation and Pomeroy spending about 5 percent on transportation. Percentages spent for transportation increased in the reorganized district each year, until 1976-77, to a high of 7.4 percent in 1975-76 and then dropped to 4.2 percent in 1976-77. Transportation as a percentage of the general fund in Pomeroy, however, remained almost unchanged at a little less than 5 percent across the entire five-year period.

Average per pupil costs for Clarence were \$108 in 1972-73 and increased to \$125 in 1976-77, reaching a high of \$143 in 1974-75. Pomeroy's average per pupil costs were \$79 in 1972-73 and increased to \$95, which was the highest figure, in 1976-77. The comparison district transported an average of about 17 percent more of its student body than did the reorganized district from 1973-74 through 1976-77. From 1973-74-on, both the reorganized district's and the comparison district's average pupils transported per day figures remained fairly constant as did total miles traveled per day for both districts from 1974-75 through 1976-77. Gas costs increased dramatically for the reorganized district from 1973-74 to 1974-75 rising from \$1,375 to \$10,753. Correspondingly, the total miles traveled per day also increased from 294 to 441.

IV. Non-Instructional Expenditures (Tables 8-9)

A. Fixed Charges and Operation and Maintenance (Table 8)

The percentage of the general fund spent for fixed charges remained close to 9 percent for Clarence through 1975-76, except in 1974-75, when it dropped to 8.3 percent. For Pomeroy, the percentage gradually decreased from 1972-73 through 1974-75 to 8.4 percent, and then gradually increased to 9.7 percent in 1976-77, an overall change from 1972-73 to 1976-77 of 0.6 percent. The overall change in the percentage of general fund spent for fixed charges for Clarence was 1.4 percent.

The percentage of expenditures for operation and maintenance for Clarence rose from 11.1 percent of the general fund in 1972-73 to a high of 13.3 percent in 1976-77, an overall change of 2.2 percent. For the comparison district, the percentage of expenditures for operation and maintenance increased from 8.0 percent in 1972-73 to a high of 15.2 percent in 1974-75 to follow the same pattern with respect to expenditures for operation and maintenance. Both districts increased operation and maintenance expenditures by about 2 percent overall from 1972-73 to 1976-77.

B. Administration (Table 9)

Non-instructional expenditures for administrative purposes, which includes the category of administrator expenditures and clerical and board of education amounts, accounted for 9.6 and 10.9 percent of the general fund for Clarence and Pomeroy, respectively, in 1972-73. This expenditure percentage for Pomeroy remained constant over the following four-year period, while for the reorganized district it increased in the first year of reorganization to 10.5 percent, then gradually decreased to 8.3 percent in 1976-77.

For the four years of reorganization history, percentages of total administrative expenditures in the comparison district exceeded those of the reorganized district by about 1 to 3 percent on the average.

The percentage of expenditures for administrators, which included: superintendents, assistant superintendents, business managers, principals and supervisors, was 8.7 percent during the first year of reorganization for the reorganized district. This amount decreased to 7.4 percent during the second year of reorganization and remained stable through 1976-77. For the comparison district, the expenditure percentage for administrators was 8.5 percent in 1973-74 and remained fairly constant through 1975-76. In 1976-77, the amount increased to 9.7 percent of the general fund.

V. Summary

A. School Quality Indicators

In terms of school quality indicators, the 1973-74 reorganization resulted in the following consequences: 1) little or no advantage in terms of instructional expenditures; 2) pupil-teacher ratios which were slightly lower overall, considerably lower for grades k-6 and about the same as the comparison district for grades 7-9 and 10-12; 3) no advantage from the standpoint of improved teacher preparation with respect to type of degree held; 4) a considerable advantage in terms of the average expenditure per teacher resulting in an expenditure of over \$1,800 more than that of the comparison district; 5) no advantage in terms of ability to increase professional support staff and 6) a distinct advantage in the scope of curricular offerings, and in a few specific categories of course offerings.

B. District Characteristics

In terms of the district characteristics of ADM, millage rates and general fund expenditures, the following consequences have resulted:

1) ADM's for both the reorganized and the comparison district decreased across the years for which data were compared; 2) general fund millage rates do not appear to have decreased through reorganization and 3) per pupil expenditures continued to remain higher for Clarence than its comparison district following the reorganization.

C. Transportation

Prior to reorganization, both districts spent a comparable percentage of the general fund on transportation. By 1976-77, percentages spent for transportation were similar to percentages in earlier years. Definitive conclusions cannot be drawn, since transportation circumstances for the two districts are quite dissimilar.

D. Non-Instructional Expenditures

Administration expenditures were higher for the comparison district throughout the period studied. Comparison district expenditures for fixed charges and for operation and maintenance accounted for a higher percentage of general fund expenditures than did the reorganized district expenditures.

Lowden-Collins Comparison

I. School Quality Indicators (Tables 1-4)

A. Dropout Status (Table 1)

The dropout rates across the five-year period were 0.8, 2.7, 2.4, 0.7 and 1.4 percent, respectively, for Lowden. The dropout rates for Collins were 3.0, 1.8, 1.8, 8.4 and 1.0 percent, respectively. On the average, dropout rates for Collins were twice as high as for Lowden, with an average rate of 3.2 percent over the five-year period, compared to an average dropout rate of 1.6 percent for Lowden.

B. Pupil-Teacher Ratios (Table 1)

Pupil-teacher ratio data for grades k-6, 7-9 and 10-12 were not available for Lowden in the year prior to reorganization; therefore, comparisons can be made only from 1973-74 through 1976-77. Ratios for grades k-6, 7-9 and 10-12 for the two districts were markedly similar across the four-year period, with k-6 ratios in a range from 17:1 to 19:1, 7-9 ratios in a range from 11:1 to 16:1 and 10-12 ratios in a range from 11:1 to 12:1. More substantial differences existed in the overall pupil-teacher ratio for the two districts with the ratios being higher in the reorganized district than the comparison district. In 1974-75, the greatest difference occurred with a pupil-teacher ratio in the reorganized district of 18:1 and a ratio of 13:1 in the comparison district. By 1976-77, Lowden's overall pupil-teacher ratio had increased by two students to 15:1 and Collins' overall ratio had decreased from 14:1 in 1972-73 to 11:1.

C. Instructional Expenditures (Table 1)

Instructional expenditures were examined in terms of a percentage of the general fund and in terms of expenditures per pupil. Lowden spent 51.8 percent of its general fund on instruction, and Collins spent 52.5 percent in the year prior to reorganization. In the first year of reorganization through 1976-77, the reorganized district spent a higher

percentage for instruction each year than did Collins, the comparison district. In 1976-77, the reorganized district spent 63.3 percent for instruction and Collins spent 7.6 percent less or 55.7 percent for instruction.

In terms of per pupil expenditures for instruction, Lowden, prior to reorganization, spent \$21 per pupil more than Collins for instruction. Beginning in 1973-74, the first year of reorganization, and each year thereafter, Lowden spent more per pupil for instruction than its comparison district. By 1976-77, the differential had increased to more than \$150 per pupil. It appears that had Lowden not reorganized, it would have been spending a considerably lesser amount for instruction than it is now spending.

D. Teacher Characteristics (Table 2)

The teacher characteristic information was composed of average teacher expenditures and degree status. Teacher expenditure information was compared across the five-year period from 1972-73 to 1976-77. Prior to reorganization, Lowden had an average teacher expenditure advantage of \$759 over Collins, its comparison district. Through reorganization, this advantage increased to \$2,825 in 1976-77. Degree status data were incomplete for the year prior to reorganization, so no pre-reorganization comparisons were possible; however, in 1973-74, 15.6 percent of the teaching staff of the reorganized district had less than a Bachelors degree, while 11.1 percent of the Collins' staff had less than a Bachelors degree. In 1976-77, the reorganized district still had 10.3 percent of its staff with less than a Bachelors degree, while Collins' teaching staff all had Bachelors degrees. Reorganization appears not to have substantially impacted Lowden's ability to upgrade the degree status of its teachers.

E. Professional Support Staff (Table 2)

Professional support was defined as non-teaching staff including: guidance counselors, health personnel, librarians, psychologists, media personnel and instructional television personnel. In 1972-73, Lowden had a support count of one; this increased to two in the first year of reorganization. From 1974-75 through 1975-76, the count fell to one and then increased to two again in 1976-77. The comparison district had two professional support staff in 1972-73, which it maintained throughout the five-year period. In 1975-76, the support count for Collins reached a five-year high of three. It appears that even through reorganization, Lowden has not been able to increase its support staff nor has it been able to maintain the initial support count level achieved in the first year of reorganization.

F. Curriculum Offerings (Table 3)

Prior to its reorganization, Lowden offered its students a total of 31.5 Carnegie Units of instruction. For the same year, Collins offered a comparable 30 units. From the first year of reorganization through 1976-77, Lowden offered its students an average of about 22 units more each year than did its comparison district. In addition, the reorganization made offerings available in the areas of trade and industry and

agricultural education, which were not offered in the comparison district. Some advantage also accrued to the reorganized district in the areas of business education, math and science. A considerable overall advantage in terms of curriculum offerings is evident in the reorganization, and it would appear that had Lowden not reorganized, curriculum offerings for Lowden students would have been considerably less.

G. Graduate Follow-Up Status (Table 4)

Except for one year, 1975-76, the reorganized district had a higher percentage of students pursuing post-secondary education as measured by graduate follow-up results. The percentage of students from the reorganized district who pursued post-secondary education ranged from about 52 to 57 percent, while for the comparison district, the range was generally from 30 to 44 percent to a high of 80 percent seeking post-secondary education experiences in 1975-76.

A. Assessed Valuation (Table 5)

In the year prior to reorganization, a difference of only \$500 per pupil existed between Lowden and Collins; Lowden having a \$20,604 per pupil valuation and Collins a \$19,083 per pupil valuation. In 1976-77, Collins had a per pupil assessed valuation of \$158,676 or about \$53,000 more per pupil than Lowden.

B. General Fund Millage Rate (Table 5)

Prior to reorganization, Lowden's millage rate was 41.531 or about $3\frac{1}{2}$ mills higher than for Collins. A 1-mill levy for Lowden would raise \$1,427 and for Collins \$1,267. Millage rates for Lowden residents continued to remain higher across the four-year period from 1973-74 to 1976-77, ranging from 4 to 6 mills higher. In 1976-77, the millage rate for Lowden residents had decreased from 41.531 in 1972-73 to 36.200, and from 38.187 to 31.359 for Collins.

C. General Fund Expenditures (Table 5)

General fund expenditures per pupil were \$54 higher for Lowden students than for Collins students prior to reorganization. These per pupil expenditures, for both districts, increased over the four-year period from 1973-74 to 1976-77 to \$1,011 and \$859 for Lowden and Collins, respectively, thus resulting in an expenditure of \$152 per pupil more for Lowden than for Collins.

D. Average Daily Membership (ADM) (Table 5)

Average daily membership for both Collins and the reorganized district decreased from 1973-74 through 1976-77. ADM's for the four-year period

from 1973-74 to 1976-77 dropped about 3 percent for the reorganized district, while dropping about 14 percent for Collins. The consequences of the decline are evident in the lower pupil-teacher ratios for Collins.

E. Sales Tax Receipts (Table 6)

Little comparison can be made between Lowden and Collins with respect to sales tax receipts, since data prior to 1975-76 were unavailable for Collins. However, sales tax receipts for Lowden were more than six times those for Collins in 1975-76 and more than five times more in 1976-77.

III. Transportation (Table 7)

In 1972-73, Lowden spent almost 5 percent of its general fund budget on transportation and Collins spent 7.4 percent. For the first year of reorganization and for two years thereafter, the reorganized district spent between 5.5 and 7.5 percent of its general fund for transportation; during that same period, Collins spent between 4.3 and 8.4 percent. By 1976-77, the percentage spent for transportation in the reorganized district decreased to 4.2 percent, while the percentage of the general fund budget spent for transportation in Collins decreased from 7.4 to 4.8 percent.

The average per pupil transported costs for the two districts differed initially by \$17 per pupil, with Lowden spending the higher amount. In 1973-74, average per pupil transported costs were \$94 and \$96 for the reorganized district and Collins, respectively. In 1974-75, average pupil expenditures for the reorganized district rose sharply to \$143, while for Collins they remained about the same. In 1976-77, average per pupil costs for Collins had increased markedly from \$99 in 1974-75 to \$140. Average per pupil costs for the reorganized district in 1976-77 were \$125, which was about the same as per pupil costs in 1975-76. This represented a total per pupil cost increase of 33 percent for the reorganized district over the 1973-74 figures, and a 46 percent increase for the comparison district.

IV. Non-Instructional Expenditures (Tables 8-9)

Two aspects of non-instructional expenditures have been considered; one includes expenditures for administration, and the other expenditures for fixed charges and operation and maintenance.

A. Fixed Charges and Operation and Maintenance (Table 8)

Prior to its reorganization, Lowden spent 9.9 percent of its general fund on fixed charges and 13.4 percent for operation and maintenance; its comparison district spent 8.5 percent and 8.8 percent, respectively. In 1976-77, the reorganized Lowden district spent 10.4 percent and 13.3 percent for fixed charges and operation and maintenance, respectively. For the same year, Collins spent 10.9 percent for fixed charges and 10.7 percent for operation and maintenance.

In terms of fixed charges and operation and maintenance, the reorganization of Lowden with Clarence, in 1973-74, appears to have had little impact in reducing non-instructional expenditures.

B. Administration (Table 9)

In terms of administration expenditures, Lowden spent a little over 20 percent of its budget on this non-instructional category in the year prior to reorganization, and only about 15.5 percent on administration expenditures in 1976-77, a reduction of about 5 percent. Collins spent almost 26 percent of its general fund on administration expenditures in 1972-73, and a little over 25 percent in 1976-77. Lowden spent less on a percentage basis on administration than its comparison Collins than it probably would have had it not reorganized.

V. Summary

A. School Quality Indicators

Lowden's 1973-74 reorganization with Clarence resulted in: 1) a higher percentage of the budget being spent for instruction; 2) a more cost efficient overall pupil-teacher ratio than its comparison district; 3) no advantage in the ability to upgrade the overall degree status of its teaching staff; 4) an improved ability to substantially increase the per teacher expenditures to more than a \$2,800 per teacher differential over the comparison district; 5) no advantage in the ability to increase the professional support staff count or to maintain the slight increase realized in the first year of reorganization and 6) a considerable overall advantage in terms of curriculum offerings.

B. District Characteristics

District characteristics of ADM, millage rates and general fund expenditures for Lowden resulted in the following consequences: 1) ADM for the four-year period dropped about 3 percent, while for the comparison district ADM dropped about 14 percent; 2) millage rates for Lowden residents remained higher than the comparison district rates across the four-year period of reorganization, thus reorganization did not result in reduced tax rates for the reorganized district and 3) reorganization resulted in increased general fund expenditures per pupil for Lowden. In 1976-77, the advantage was \$152 per pupil over the comparison district.

C. Transportation

Both the reorganized district and the comparison district were spending close to 10 percent of the general fund budget on transportation across the time period studied. Per pupil costs for transportation increased markedly for both Lowden and the comparison district from 1972-73 to 1976-77.

D. Non-Instructional Expenditures

Lowden was unable to reduce the percentage of its general fund non-instructional expenditures for fixed charges and operation and maintenance through reorganization with Clarence in 1973-74. The percentage of general fund budget spent for administration was, however, reduced from 9.6 percent prior to reorganization to 8.3 percent in 1976-77.

Figure 1 Summary of Reorganization Consequences for Clarence-Lowden Reorganization

Item	Cla	rence-Lo	wden
Instructional Expenditures		0	
Pupil-Teacher Ratios		0	
Average Teacher Expenditures		+	
Teacher Degree Status		?	
Professional Support Staff		0	
Curriculum Offerings		+	
General Fund Millage Rate		0	
Expenditures Per Pupil		+	
Transportation		0	
Non-Instructional Expenditures		0	

^{+ =} beneficial consequences

^{0 =} little or no change in consequences

^{? =} inconclusive consequences

^{- =} negative consequences

Table 1
School Quality -- Instructional Expenditures
Pupil-Teacher Ratios and Dropouts

		Dropou	its	% of GF			Teacher ios		Total Instructional
Year		ADM 7-12	%	Spent for Instruction	k-6	7-9	10-12	Over All	Expenditures Per Pupil
		gotta.			NAl	NA	NA	14.0	\$ 679
1972-73	Clarence	5/178.2	2.8	62.8				14.2 15.4	614
	Pomeroy	2/190.4	1.7	64.2	23.1	14.3	8.4		548
	Lowden	1/130.0	.8	51.8	NA.	NA	NA	13.5	
	Collins	4/133.4	3.0	52.5	19.3	18.3	17.0	13.7	527
3007 04		8/300.0	2.7	59.1	19.3	16.1	12.2	13.0	704
1973-74	Clarence-Lowden	2/201.9	1.0	60.1	27.0	13.6	7.8	16.2	573
	Pomeroy Collins	2/113.1	1.8	54.4	17.5	16.0	11.4	11.8	665
						and c			goo
1974-75	Clarence-Lowden	7/286.5	2.4	54.7	16.5	. 11.3	12.4	17.5	798
	Pomeroy .	3/203.8	1.5	57.0	26.4	13.8	8.1	15.4	661
	Collins	2/109.0	1.8	53.1	18.8	12.8	11.0	12.9	684
2005 50		2/286.0	.7	59.3	18.0	13.5	11.8	14.5	873
1975-76	Clarence-Lowden	2/204.4	.9	60.1	24.7	12.9	8.7	14.6	800
	Pomeroy Collins	9/107.7	8.4	54.0	19.2	11.8	10.6	13.3	720
10	COTTINS	3/20101							
1976-77	Clarence-Lowden	4/283.0	1.4	63.3	18.9	13.5	11.5	14.7	1,011
1310-11	Pomeroy	1/214.0	.5	65.4	25.7	13.4	9.0	15.1	1,135
	Collins	1/099.0	1.0	55.7	16.6	11.3	10.8	10.7	859

¹NA Information Not Available

Table 2
School Quality -- Average Teacher Expenditures, Degree
Status and Professional Support Count

					Degree Status	NA .0 NA .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
Year	District	Average Teacher Expenditures	Support Count	% Less Than Bachelors	% Bachelors	% Advance
				NA ¹	NA .	NΔ
1972-73	Clarence	\$ 7,998	2		The second second	
	Pomeroy .	7,591	2	11.5	88.5	
	Lowden	7,103	1	NA NA	NA	
	Collins	6,444	2	11.1	98.9	.0
1973-74	Clarence-Lowden	7,534	2	15.6	84.4	1
	Pomeroy	7,114	2	7.7	92.3	
	Collins	6,929	2	11.1	98.9	.0
	00111110					
1974-75	Clarence-Lowden	11,518	1	16.3	81.4	2.3
19/4-75	Pomeroy	7,915,	2	12.0	88.0	.0
	Collins	7,452	2	.0	100.0	.0
	Collins	1,102				
	02	9,737	1	13.2	84.2	.6
1975-76	Clarence-Lowden		2	3.8	88.5	7.7
AT VALUE	Pomeroy	8,702 8,163	3	.0	.100.0	.0
	Collins	8,160				
		10.70%	2	10.3	87.2	2.5
1976-77.	Clarence-Lowden	10,703		.0	84.2	15.8
	Pomeroy	8,854	2	.0	100.0	.0
	Collins	7,875	2	.0	200.0	122 1 2 2 3

¹NA Information Not Available

		Agr.	Art	Bus.	Dist.		For.	Hlth.	4	Ind.					Soc.		Dr.	
Year	District	Edu.	Edu.	Edu.	Edu.	Eng.	Lang.	P.E.	Hmk.	Art	Math	Music	Sci.	0.E.		T&1	Edu.	Total
														12.23.4				180
1972-73	Clarence	0.0	1.0	4.5	0.0	5.0	2.0	1.5	2.0	3.0	5.0	2.0	4.0	0.0	4.0	0.0	.25	34.25
	Pomeroy	4.0	0.0	5.0	0.0	5.5	2.0	1.0	3.0	4.0	6.0	2.0	4.0	0.0	4.0	0.0	0.0	40.5
	Lowden	0.0	1.0	4.0	0.0	4.5	2.0	1.0	2.0	3.0	5.0	.5	4.0	0.0	4.0	.5	0.0	31.5
	Collins	0.0	.5	4.25	0.0	4.0	2.0	1.0	2.5	1.5	5.0	1.0	4.25	0.0	4.0	0.0	0.0	30.0
1973-74	Clarence-Lowden	.5	2.0	6.5	0.0	6.0	12.0	1.0	4.5	1.5	7.5	2.0	5.5	0.0	4.5	3.5	.5	47.5
	Pomeroy	4.0	0.0	5.0	0.0	5.5	2.0	1.0	3.0	4.0	6.0	2.0	4.0	0.0	4.0	.5	0.0.	41.0
	Collins	0.0	.5	4.0	0.0	4.0	1.0	1.0	2.5	1.5	5.0	1.0	4.0	0.0	4.0	0.0	0.0	28.5
1974-75	Clarence-Lowden	2.5	3.0	6.5	0.0	7.0	2.0	1.0	4.0	1.5	11.5	2.0	6.0	0.0	4.5	6.0	.5	58.0
	Pomeroy	4.0	0.0	5.0	0.0	5.5	2.0	1.0	3.0	4.0	5.0	2.0	4.0	0.0	4.0	.5	0.0	40.0
	Collins	0.0	.5	4.0	0.0	4.0	1.0	1.0	3.0	1.5	5.0	1.0	4.0	0.0	4.0	0.0	0.0	29.0
1975-76	Clarence-Lowden	2.0	4.0	8.5	0.0	5.0	2.0	1.0	3.0	1.0	7.5	2.0	5.0	0.0	4.0	5.0	.5	50.5
	Pomeroy	4.0	1.0	5.0	0.0	5.0	2.0	1.0	3.0	4.0	5.0	2.0	4.0	0.0	5.0	.5	0.0	41.5
	Collins	0,0	.5	5.0	0.0	4.0	1.0	1.0	3.0	1.0	5.0	1.0	4.0	0.0	4.0	.0.0	0.0	29.5
1976-77	Clarence-Lowden	0.0	3.0	8.0	0.0	5.0	2.0	1.0	4.0	2.0	8.5	2.0	8.0	0.0	3.5	3.5	.5	51.0
	Pomeroy	4.0	2.5	6.0	0.0	4.0	2.0	1.0	4.0	4.5	5.0	2.0	3.0	0.0	4.0	1.0	0.0	43.0
	Collins	0.0	.5	5.0	0.0	4.0	1.0	1.0	4.0	2.0	5.0	.5	3.0	0.0	4.0	0.0	0.0	30.0

A Carnegie Unit is defined as a course offering measure equivalent to one hour of instruction per day for a period of 36 weeks or a a full school year.

Table 4
School Quality -- Status of Students
One Year After Graduation

			econdary ational		econdary tional	Jo Mar	ob rket	Other ¹	
Year	District	No.	%	No.	%	No.	%	No.	1 %
			00.5	4	13.8	12	41.4	7	24.3
1972-73	Clarence	6	20.7		1	9	30.0	5	16.
	Pomeroy	5	16.7	11	36.7	,		3	13.0
	Lowden	9	39.1	6	26.1	5	21.7		
	Collins	. 4	16.7	3	12.5	10	41.7	7	29.
1973-74	Clarence-Lowden	21	40.4	9	17.3	11	21.2	11	21.
	Pomeroy	6	20.7	9	31.0	11	37.9	3	10.
	Collins	5	17.8	6	21.4	10	35.7	7	25.
	00111110								
1974-75	Clarence-Lowden	15	26.8	14	25.0	20	35.7	7	12.
1974-75		7	23.3	11	36.7	9	30.0	3	10.0
	Pomeroy	5	31.2	2	12.5	6	37.5	3	18.
	Collins	- 1	01.2		""				
			07 7	14	32.6	14	32.6	5	11.
1975-76	Clarence-Lowden	10	23.3		1	5	16.1	8	25.
	Pomeroy	- 6	19.3	12	38.7			1	6.
	Collins	10	66.7	. 2	13.3	2	13.3	1	1 0.
									1 77
1976-77	Clarence-Lowden	15	27.8	13	24.1	20	37.0	6	11.
	Pomeroy	6	26.1	5.	21.7	7	30.4	5	21.
	Collins	3	30.0	. 0	0.0	4	40.0	3	30.

 $^{^{1}\}mathrm{Other}$ includes military service, unemployed, housewife

Table 5
District Characteristics -Assessed Valuation Per Pupil, General Fund Millage,
General Fund Expenditure Per Pupil and Average Daily Membership

Year	District	Assessed Valuation Per Pupil	General Fund Millage	General Fund Expenditure Per Pupil	Average Daily Membership
1000 07	Clarence	17,601	39,242	\$1,082	383.8
1972-73		22,012	31,826	957	401.5
	Pomeroy Lowden	20,604	41.531	1,058	256.5
THE IN	Collins	19,083	38.187	1,004	246.0
1973-74	Clarence-Lowden	20,921	38.623	1,191	611.6
	Pomeroy	21,645	31.826	954	420.3
	Collins	26,421	35,555	1,223	212.3
1974-75	Clarence-Lowden	21,252	38,416	1,459	594.5
13/4-13	Pomeroy .	23,477	31.826	1,159	401.1
	Collins	27,796	34.271	1,288 ·	207.1
1975-76	Clarence-Lowden	21,806	41.321	1,470	579.4
	Pomeroy	24,794	33,762	1,330	379.8
	Collins	28,812	35,501	1,333	199.8
1976-77	Clarence-Lowden	105,984	36,200	1,598	590.0
1310-11	Pomeroy	124,703	31.693	1,294	393.0
	Collins	158,676	31.359	1,543	182.0

Table 6
District Characteristics -Sales Tax Receipts

		73-	%	74-	%	75-	%	76-	%
District	1972-73	74	· Change	75	Change	76	Change	77	Change
		100,699		109,222		114,525		128,499	
Clarence	77,545								
			29.9		8.5		4.9		12.2
		67,289		68,116		75,071		68,410	
Pomeroy	51,285		31.2		1.2		10.2		-8.9
		69,984		71,718		88,841		89,094	
Lowden	63,736								
			9.8		2.5		23.9		.3
		NA		NA		. 14,236		22,079	,
Collins	NA								
			NA		NA		NA		55.1
		240,671		241,232		258,101		290,833	
State (000)	209,206								
			15.0		.2		7.0		12.7

 $[\]frac{1}{2}$ NA Information Not Available from the lowa Department of Revenue

Table 7
Transportation Characteristics for Clarence, Pomeroy, Lowden and Collins

V -		Trans. Exp.	Average	Average Cost		Total Miles					Percent of
17 -		as a % of	Pupils	Per Pupil	No. of	Traveled	Cost of			Total	Pupils
Year	District	General Fund	Trans./Day	Transported	Buses	Per Day	Buses	Salaries	Gas	Dollars	Transported
1972-73	01	4.7	2=0								-
1912-10	Clarence	4.3	170	\$108	6	186	\$1,315	\$15,118	808	\$18,428	44.3
		4.5					(7.1)	(82.0)	(4.4)		
	Pomeroy	4.7	290	79	7	310	7,156	8,359	.2,792	24,749	72.1
	Lowden						(28.9)	(33,8)	(11.3)		
	Lowden	4.7	157	95	4	182	3,987	6,480	1,734	14,902 ·	61.1
							(26.8)	(43.5)	(11.6)		
	Collins	7.4	150	78	3	- 111	3,264	5,185	1,676	11,688	61.0
3005 54							(27.9)	(44,4)	(14.3)		
1973-74	Clarence-Lowden	5.5	319	94 .	8	294	4,778	15,191	1,375	29,958	52.1
							(15.9)	(50.7)	(4.6)		
	Pomeroy	4.7	287	85	7	289	7,837	8,905	4,019	24,365	71.4
							(32.1)	(36.5)	(16.5)		
	Collins	8.4	131	96	4	193	3,078	5,342	2,826	12,505	61.8
				*			(24.6)	(42.7)	(22.6)		
1974-75	Clarence-Lowden	5.9	302	143	9	441	4,778	15,416	10,753	43,168	50.8
							(11.1)	(35.7)	(24.9)		
	Pomercy	4.5	279	83	7	281	7,837	9,125	4,941	23,204	69.6
			SART SA				(33.8)	(39,3)	(21.3)		
	Collins	4.3	125	99	4	462	8,779	22,394	8,041	51,655	60.4
						3 2 7 3 2 3 4 2 3	(17.0)	(43.4)	(15.6)		
1975-76	Clarence-Lowden	7.4	312	124	8	442	4,778	17,310	7,944	38,747	53.9
							(12.3)	(44.7)	(20.5)	10-10 Land	
	Pomeroy	4.6	279	64	7	282	7,610	10,396	5,391	24,105	73.4
							(31.6)	(43.1)	(22.4)		
	Collins .	5.5	108	138	4	178	3,129	5,985	3,553	14,950	54.0
							(20.9)	(40.0)	(23.8)		
1976-77	Clarence-Lowden	4.2	319	125	8	448	4,778	18,407	8,191	39,809	54.1
							(12.0)	(46.2)	(20.6)		
	Pomeroy	4.9	257	95	7	. 280	7,610	11,011	5,294	24,538	65.4
							(31.0)	(44.9)	(21.6)	2.,000	55.1
- The same	Collins	4.8	101	140	4	183	3,379	6,186	2,621	14,070	55.5
							(24.0)	(44.0)	(18.6)	,,,,,	00.0

Table 8

Non-Instructional Expenditures -Fixed Charges and Operation and Maintenance

		Fixed	Charges	Operation	and Maintenance
			% of		% of
Year	District	Amount	General Fund	Amount	General Fund
1972-73	Clarence	\$37,393	9.0	\$ 46,208	11.1
19/2-75	Pomeroy	35,118	9.1 .	30,610	8.0
	Lowden	26,903	9.9	36,479	13.4
	Collins	21,026	8.5	21,808	8,8
1973-74	Clarence-Lowden	67,066	9.2	92,477	12.7
	Pomeroy	34,555	8.6	48,210	12.0
	Collins	23,527	9.1	27,016	10.4
1974-75	Clarence-Lowden	72,029	8.3	107,679	12.4
	Pomeroy	38,933	8.4	70,472	15.2
	Collins	24,621	9.2	30,832	11.6
1975-76	Clarence-Lowden	76,871	9.0	108,487	12.7
	Pomeroy	49,585	9.8	55,921	11.1
	Collins	27,628	10.4	27,543	10.3
1976-77	Clarence-Lowden	98,034	10.4	125,394	13.3.
	Pomeroy	49,084	9.7	53,927	10.6
	Collins	30,513	10.9	30,161	10.7

Table 9
Non-Instructional Expenditures
Administration

		Total Admi	nistrative ¹	Total Admi	nistrator2
Year	District	Amount	% of General Fund	Amount	% of General Fund
1972-73	Clarence	\$39,815.00	9.6	\$30,666.00	7.4
	Pomeroy	42,053.22	10.9	34,095.40	8.9
	Lowden	29,764,00	11.0	24,898.00	.9.2
	Collins	36,804.09	14.9	29,366.16	11.9
1973-74	Clarence-Lowden	76,712.82	10.5	63,301.71	8.7
	Pomeroy	44,706.21	11.1	34,075.25	8.5
	Collins	36,467.57	14.0	27,956.61	10.8
1974-75	Clarence-Lowden	77,094.74	8.9	64,471.76	7.4
	Pomeroy	51,828.03	11.1	37,756.04	8.1
	Collins	39,933.23	15.0	31,215.33	11.7
1975-76	Clarence-Lowden	76,026.22	8.9	63,420.10	7.4
	Pomeroy	52,544.49	10.4	42,011.89	8.3
	Collins	43,063.00	16.2	32,955.02	12.4
				60, 607, 44	7.3
1976-77	Clarence-Lowden	78,601.56	8.3	68,683.44	
	Pomeroy	56,054.73	11.0	49,086.80	9.7
	Collins	42,221.75	15.0	28,437.18	10.1

 $^{^{1}}$ Administrative expenditures include all administrator expenditures plus Board of Education and clerical expenditures

²Administrator expenditures include all expenditures for superintendent, assistant superintendent, business manager, principals and supervisors

VINTON-GARRISON CASE STUDY

The Vinton-Garrison 1969-70 reorganization falls under the heading described in the case study introduction as the combining of a larger district with a smaller district. The analysis which follows will concentrate on the discussion of Garrison and its comparison district, Rembrandt, since more benefits would be expected to accrue to Garrison as a result of the reorganization than to Vinton. A second, abbreviated comparison will then be made between Vinton and its comparison district, Audubon.

Garrison-Rembrandt Comparison

I. School Quality Indicators (Tables 1-4)

A. Dropout Status (Table 1)

Dropouts for the reorganized district represented an average of about 2.6 percent of the average daily membership across the nine-year period. The dropout rate for Rembrandt was consistently lower across the nine-year period, averaging less than 1 percent per year.

B. Pupil-Teacher Ratios (Table 1)

The overall pupil-teacher ratio for Rembrandt remained fairly constant over the nine-year period decreasing from about 12:1 to 10:1. For Garrison, overall pupil-teacher ratios prior to the 1969-70 reorganization increased from 11:1 to 21:1 in the initial year of reorganization and remained fairly stable through 1972-73. In 1972-73 through 1975-76, overall pupil-teacher ratios decreased to about 18:1 and decreased further to about 17:1 in 1976-77. Pupil-teacher ratios for Rembrandt were considerably lower than for the reorganized district through the period. Grades k-6 and 7-9 ratios were extremely low for Rembrandt, sometimes dropping to 9:1.

C. Instructional Expenditures (Table 1)

For the nine-year period, per pupil instructional expenditures increased from \$754 to \$945 for the reorganized district and from \$611 to \$1,056 for Rembrandt, the comparison district. On the other hand, instructional expenditures, as a percentage of the general fund, decreased for Garrison from 69.4 percent in 1968-69 to 63.1 percent in 1976-77. Over the same time span, Rembrandt's percentage of expenditures for instruction decreased from 66.4 percent to 58 percent. For both districts, the nine-year period resulted in a smaller percentage of the budget being allocated for instruction, thus non-instructional expenditures have been accounting for increasingly larger amounts of the education dollar.

D. Teacher Characteristics (Table 2)

Two variables were examined in the teacher characteristic category: average teacher expenditures (a proxy for teacher salaries) and degree status of teachers.

From the period 1971-72 to 1976-77, average teacher expenditures for the reorganized district increased from \$9,193 to \$11,630, an increase of 26 percent. For the same time period, average teacher expenditures for the comparison district increased from \$8,235 to \$9,291 or 13 percent. Teacher salaries in the reorganized district were consistently and considerably higher than in the comparison district throughout the time period studied.

Perhaps accounting for much of the lower teacher expenditures in the comparison district is the fact that a fairly large percentage of the teaching staff have less than a Bachelors degree, and that for only one year did Rembrandt have any teaching staff with degrees beyond the Bachelor level. The reorganized district, on the other hand, had a very small percentage of non-degree teachers and a considerably higher percentage of teachers with degrees beyond the Bachelor level.

It appears that reorganization has enabled Garrison to pay teachers at a higher level and in addition, the reorganized district has a higher percentage of advanced degree teachers and fewer teachers with less than a Bachelors degree.

E. Professional Support Staff (Table 2)

In the support staff area, Carrison's reorganization resulted in a substantial acquisition of specialized education support staff. Over the six-year period from 1971-72 to 1976-77, Rembrandt had from one to two professional support staff, while the reorganized district had at least eight each year and as many as ten in one year.

F. Curriculum Offerings (Table 3)

No comparisons can be made between Rembrandt and Garrison before the reorganization took place, since data were only available from 1970-71 through 1976-77; however in 1970-71, the reorganized Garrison district offered about 23 more Carnegie Units than Rembrandt. Garrison also provided offerings in agricultural education, art education, distributive education, foreign language and trades and industry for 1970-71, which the comparison district did not provide. In addition, the reorganized district provided more units in the areas of business education, English and science.

In 1976-77, a margin of 20 units was still held by the reorganized district over Rembrandt. The reorganization of Garrison provided a substantial improvement in curriculum offerings over what probably would have been offered to students had the reorganization not taken place.

G. Graduate Follow-Up Status (Table 4)

As an indicator of school quality, the number of graduates seeking to continue their education in a formal educational setting was gathered through the use of data from the annual graduate follow-up reports. The data indicate that for most of the eight years for which data were available, the comparison district had a higher percentage of graduates pursue postsecondary education than did the reorganized district. Percentages of students pursuing either vocational or non-vocational post-secondary education varied more for the comparison district than for the reorganized district, with percentages for the comparison district ranging from 29 to 87 percent, while percentages for the reorganized district ranged from 42, to 63 percent.

II. District Characteristics (Tables 5-6)

A. Assessed Valuation (Table 5)

Per pupil wealth for Garrison was \$19,580 in 1968-69 or about \$4,100 higher than for Rembrandt. Assessed valuation per pupil was reduced for Garrison through reorganization in the initial year to \$11,457, and remained well below the 1968-69 level until 1976-77, when land was assessed at 100 percent of the value. Per pupil wealth for the comparison district remained higher than for the reorganized district throughout the period studied, averaging about \$15,000 higher over the nine-year period.

B. General Fund Millage Rate (Table 5)

Prior to reorganization, millage rates for Garrison and Rembrandt were 42.258 and 38.385, respectively. In 1976-77, the millage rate for the reorganized district was 40.481, reaching a high of 47.277 miles in 1975-76. For the comparison district, the millage rate was 36.989 or about 1 mill lower than in 1968-69, reaching a high of 49.905 mills in 1970-71.

C. General Fund Expenditures (Table 5)

General fund expenditures per pupil for Garrison students remained below the 1968-69 level until 1974-75. Per pupil expenditures for the comparison district were consistently higher than for the reorganized district from the first year of reorganization through 1976-77. Per pupil expenditures for the comparison district were about \$335 higher on the average than expenditures for Garrison.

D. Average Daily Membership (ADM) (Table 5)

The total average daily membership for the reorganized district decreased from 1,926.9 in 1969-70 to 1,688.0 in 1976-77. This represented a 14 percent decrease. For the comparison district, ADM decreased from 202.4 to 143.0 during the same period, representing a 42 percent decrease overall.

E. Sales Tax Receipts (Table 6)

Sales tax receipts information was not reported for Garrison nor for Rembrandt by the Department of Revenue prior to 1975-76; therefore, no meaningful comparisons can be made. Receipts for 1975-76 and 1976-77 were fairly comparable.

III. Transportation (Table 7)

Through reorganization in 1969-70, Garrison spent 4 percent less for general fund expenditures for transportation. Most of the years from 1969-70 to 1976-77, Rembrandt spent a slightly higher percentage of its budget for transportation. Both districts spent between 3.5 to 5 percent throughout the period from 1969-70 to 1976-77.

Average per pupil costs for the reorganized district rose from \$90 in the initial year of reorganization to \$185 in the eighth year or reorganization. Corresponding increases for the comparison district were from \$106 to \$206. Both represented increases of approximately 100 percent.

The reorganized district traveled over 900 miles per day through 1973-74, and transported an average of almost 700 pupils per day. Then in 1974-75, total miles traveled per day for the reorganized district decreased to just under 600 miles, while the average number of students transported remained at about the same level as in previous years. One possible explanation of this phenomenon is that new and larger buses were purchased, thus reducing miles traveled.

Total transportation costs for the reorganized district almost doubled from 1969-70 to 1976-77, increasing from \$62,012 to \$119,968. Total transportation costs for the comparison district also nearly doubled over the period, rising from \$11,581 to \$19,567, with gas costs increasing about 160 percent for the reorganized district and about 130 percent for Rembrandt.

IV. Non-Instructional Expenditures (Tables 8-9)

Two expenditure categories make up non-instructional expenditures: fixed charges and operation and maintenance expenditures and administrative expenditures.

A. Fixed Charges and Operation and Maintenance (Table 8)

For Garrison, the combined expenditures for fixed charges and operation and maintenance accounted for 16 percent of the total general fund expenditures in the year prior to reorganization, while for Rembrandt, the same two items represented 17.6 percent of the general fund expenditures. In the first year of reorganization, the percentage of the general fund spent on fixed charges and operation and maintenance increased from 16 to 18 percent, while correspondingly, the increase for Rembrandt was from 17.6 percent to 29.6 percent. Throughout the remainder of years compared, the percentage of expenditures for these two items, in both districts, ranged from about 16 to 20 percent, with the reorganized district spending a slightly lower percentage.

B. Administration (Table 9)

In 1968-69, administration expenditures for both districts accounted for about 7 percent of the total general fund. From 1969-70, the percentages spent for administration ranged from about 7 to 11 percent, running about 2 to 4 percent higher each year for the comparison district.

V. Summary

A. School Quality Indicators

In terms of school quality measures studied over the period from 1968-69 through 1976-77, the following is evident: 1) expenditures for instruction on a per pupil basis remained lower for the reorganized district than for the comparison district throughout the entire period, and the percentage of the general fund spent for instructional purposes decreased for both districts over the years studied; 2) overall pupil-teacher ratios for the comparison district remained fairly constant over the nineyear period, and were considerably lower than those for the reorganized district, especially in grades k-6 and 7-9, where pupil-teacher ratios sometimes dropped to a low of 9:1; 3) teacher salaries in the reorganized district were both consistently and considerably higher than in the comparison district; 4) the reorganized district had a higher percentage of teachers with advanced degrees and a lower percentage of teachers without degrees than did its comparison district; 5) in terms of professional support staff, the reorganized district had a considerable advantage over its comparison district; 6) the scope of curriculum offerings was increased substantially through reorganization and 7) the reorganized district consistently had a smaller percentage of its graduates pursuing post-secondary education than did the comparison district.

B. District Characteristics

In terms of average daily membership, general fund millage rates and general fund expenditures, the following observations can be made: 1) ADM's for both districts decreased over the years studied, by 14 percent for the reorganized district, and by 42 percent for the comparison district; 2) general fund millage rates for Carrison residents were about 2 mills lower in 1976-77 than the 42.258 mill level in 1968-69, while millage rates for Rembrandt residents were 36.989 or about 1 mill less in 1976-77 than in 1968-69 and 3) general fund expenditures were consistently lower across the years studied for the reorganized district than for the comparison district.

C. Transportation

The comparison district spent a higher percentage of general fund expenditures for transportation than the reorganized district, for most of the years compared. In 1976-77, the reorganized district and the comparison district were spending 4.3 and 6.3 percent, respectively, for transportation.

Average per pupil costs for transportation nearly doubled from 1969-70 to 1976-77 for both districts. For the reorganized districts, average per pupil costs increased from \$90 to \$185, and from \$106 to \$206 for the comparison district. Cas cost was a major factor in the increases for both districts.

D. Non-Instructional Expenditures

Both districts spent between 16 and 20 percent of the general fund budget on fixed charges and operation and maintenance expenditures combined. Rembrandt spent slightly more, with a high of 29.6 percent in one year. Administrative expenditures for both districts ranged between 7 and 11 percent from 1969-70 through 1976-77, with the comparison district spending an average of about 2 to 4 percent more each year than the reorganized district.

Vinton-Audubon Comparison

I. School Quality Indicators (Tables 1-4)

A. Dropout Status (Table 1)

Vinton's dropout rate averaged a little under 3 percent across the nine-year period, while the dropout rate for Audubon averaged under 1 percent.

B. Pupil-Teacher Ratios (Table 1)

Overall pupil-teacher ratios for both Vinton and Audubon remained quite comparable over the nine-year period, with Vinton ratios generally remaining slightly higher than Audubon ratios. The overall ratios for both districts gradually decreased from about 20:1 in 1968-69 to about 17:1 in 1976-77.

C. Instructional Expenditures (Table 1)

Prior to its reorganization, Vinton spent 69.8 percent of its budget or about 5 percent more than Audubon on instruction. Throughout the years of reorganization, Vinton continued to spend a higher percent of its budget on instruction than its comparison district; Audubon, however, spent a greater number of dollars per pupil every year in which data were examined.

D. Teacher Characteristics (Table 2)

In 1971-72, the first year teacher expenditure information was available, Audubon teacher expenditures exceeded those of Vinton by \$112 per teacher, and by 1976-77, the differential had increased to \$1,634. In terms of degree status, both districts had an extremely high percentage of degree teachers on staff throughout the period, with Audubon having a slightly higher percentage of degree teachers and Vinton having slightly fewer non-degree teachers on staff.

E. Professional Support Staff (Table 2)

Vinton had more support staff each year from 1971-72 through 1976-77, and as many as five more in one year and three more for most years compared.

F. Curriculum Offerings (Table 3)

During the second year of reorganization, the first year for which curriculum data were available, Vinton offered about six fewer total Carnegie Units than Audubon. From 1971-72 through 1974-75, a comparable number of units were offered by the districts. In 1975-76 and 1976-77, Vinton offered about nine more total units than Audubon.

G. Graduate Follow-Up Status (Table 4)

Across the nine-year period, Vinton and Audubon had roughly equal proportions of their graduates pursue post-secondary education. The percentages ranged from about 35 to 70.

II. District Characteristics (Tables 5-6)

A. Assessed Valuation (Table 5)

Audubon's \$12,343 per pupil valuation was about \$3,000 more than Vinton's in 1968-69. By 1976-77, Audubon had a per pupil valuation of \$88,242, which represented about a \$16,000 per pupil advantage over Vinton.

B. General Fund Millage Rate (Table 5)

The general fund millage rate for Vinton changed from 39.227 in 1968-69 to 40.481 in 1976-77, reaching a high of 47.277 in 1975-76. For Audubon, millage rates were 41.371 in 1968-69, climbing to a high of 47.451 in 1970-71, and decreased to 40.096 in 1976-77.

C. General Fund Expenditures (Table 5)

Before reorganization, Vinton was spending \$656 per pupil, while Audubon spent \$791. Throughout the following eight-year period, Audubon continued to spend a substantially higher amount per pupil than Vinton. Expenditures in 1976-77 were \$1,667 for Audubon or \$170 more per pupil than for Vinton.

D. Average Daily Membership (ADM) (Table 5)

Average daily membership in the reorganized district decreased 14 percent from the initial year of reorganization to 1976-77, while Audubon's average daily membership decreased by 28 percent over the same period.

E. Sales Tax Receipts (Table 6)

Sales tax receipts over the nine-year period increased by 64 percent for Vinton and 84 percent for Audubon, with receipts totaling about \$168,000 more for Vinton.

III. Transportation (Table 7)

Vinton spent 3.3 percent more of its budget on transportation in 1968-69 than Audubon. Both districts changed little over the next eight years. Vinton spent 4.3 percent of its budget for transportation in 1976-77, and Audubon spent 6.1 percent. Average pupil costs for Vinton transportation increased from \$90 in 1969-70 to \$185 in 1976-77, and for Audubon from \$82 to \$174 in the same years. Each year Audubon traveled a considerably greater number of miles per day, and transported a higher percentage of its students. Gas costs accounted for a substantial portion of increased transportation costs for both districts.

IV. Non-Instructional Expenditures (Tables 8-9)

A. Fixed Charges and Operation and Maintenance (Table 8)

In the first year of reorganization, Vinton spent 18 percent of its general fund for the two expenditure categories of fixed charges and operation and maintenance. In the same year, Audubon spent 17.8 percent of its budget for the two items. In 1976-77, Vinton was spending 19.4 percent for operational maintenance and fixed charges, while Audubon was spending 21.5 percent.

B. Administration (Table 9)

Administration expenditures totaled 7.2 percent of general fund expenditures for Vinton in the first year of its reorganization, while Audubon spent 9.3 percent. In 1976-77, Vinton spent 7.9 percent on administration or slightly more than Audubon.

V. Summary

A. School Quality Indicators

Results of the comparison in terms of school quality indicators were as follows: 1) the reorganized district spent a higher proportion of its budget for instructional expenditures than did the comparison district; however, it spent fewer dollars per pupil; 2) overall pupil-teacher ratios were quite comparable for the two districts; 3) higher average teacher salaries were paid to teachers in the comparison district; 4) the reorganized district had a greater number of professional support staff and 5) Vinton's total curriculum offerings were less than or equal to its comparison district through 1974-75, while 8 to 9 more units were offered to Vinton students in 1975-76, 1976-77.

B. District Characteristics

Average daily membership in both districts decreased. For Vinton, the decrease from 1969-70 to 1976-77 was 14 percent, and for Audubon, 28 percent.

A comparison of millage rates for the two districts in 1968-69 and again in 1976-77, indicates neither changed very much from the first year compared to the last year. General fund expenditures per pupil in the comparison district were initially higher than in the reorganized district and remained higher throughout the period studied.

C. Transportation

The percentage of general fund expenditures for transportation changed little over the period studied, with Vinton spending about 4 percent of its budget in 1976-77 for transportation and Audubon spending about 6 percent. Average pupil costs for transportation rose from a range of \$80 to \$90 in 1969-70, to a range of \$170 to \$185 in 1976-77, with Vinton spending the higher amount per pupil. Gas cost increases were largely responsible for the increased in both districts.

D. Non-Instructional Expenditures

The non-instructional expenditures for fixed charges and operation and maintenance remained at about 18 to 20 percent of the total general fund expenditures across the time period studied. Vinton and Audubon spent between 7 and 9 percent on administration from 1969-70 through 1976-77.

Figure 1 Summary of Reorganization Consequences for Vinton-Garrison Reorganization

Item	Vin	ton-Garrison
Instructional Expenditures		0
Pupil-Teacher Ratios		+
Average Teacher Expenditures	*.	?
Teacher Degree Status		+
Professional Support Staff		+
Curriculum Offérings		+
General Fund Millage Rate		0
Expenditures Per Pupil		0
Transportation		?
Non-Instructional Expenditures		0

^{+ =} beneficial consequences
0 = little or no change in consequences

^{? =} inconclusive consequences

^{- =} negative consequences

Table |
School Quality -- Instructional Expenditures
Pupil-Teacher Ratios and Dropouts

	[· · · · · · · · · · · · · · · · · · ·	I styres					Teacher ios**		Total
		Dropo	uts	% of GF		Rat	105**		Instructional
		ADM		Spent for			10.10	Over-	Expenditures
Year	District	7-12	%	Instruction	k-6	7-9	10-12	A11	Per Pupil
1968-69	Vinton	21/746.4	2.8	64.8	24.3	18.8	14.9	20.2	\$ 425
1500-05	Audubon	2/797.9	.2	59.4	26.6	10.5	17.9	19:3	470
	Garrison	84.2	NA*	69.4	14.0	NA	8,8	11.2	754
	Rembrandt	0/102.5	.0	66.4	13.3	NA	11,.2	12.5	611
1969-70	Vinton-Garrison	17/803.8	.2	61.8	22,1	NA	19.1	20.9	451
1969-70	Audubon	1/658.3	.2	58.4	18.8	NA	18.8	18.8	.512
	Rembrandt	0/049.2	.0	66.1	12.0	NA	10.1	11.2	708
1000 01	Window Committee	18/1910.4	.9	63.6	20.8	20.5	18.6	20.3	513
1970-71	Vinton-Garrison	10/1634.1	.6	59.9	20.2	NA	20.0	19.7	552
	Audubon Rembrandt	0/208.0	.0	65.2	12.3	NA	10.5	11.6	711
1053 50	Vinton-Garrison	10/848.5	1.2	63.4	23.4	21.9	18.7	20.7	552
1971-72		3/751.3	.4	60.1	20.3	19.5	. 18.7	18.7	614
	Audubon Rembrandt	1/095.9	1.0	63.4	11.5	11.5	12,5	11.5	778
							30.0	30.4	588
1972-73	Vinton-Garrison	23/872.3	2.6	64.4	21.8	20.7	18.0	19.4	622
	Audubon	7/738.8	.9	59.8	19.0	17.2	17.4	18.2	
	Rembrandt	0/084.6	.0	64.2	11.7	10.3	11.0	10.7	780
2007 04	Vinton-Garrison	39/904.9	4.3	61.6	20.8	19.2	17.8	18.7	613
1973-74	Audubon	2/722.3	.3	57.5	21.6	16.4	17.3	19,1	636
	Rembrandt	1/077.2	1.3	60.2	13.8	9.5	10.3	10.9	840
1974-75	Vinton-Garrison	37/913.8	4.1	60.7	21.0	19.9	17.9	18.9	673
1974-75	Audubon	8/710.5	1.1	59.8	20.8	15.9	16.9	18.4	733
	Rembrandt	1/077.4	1.3	60.4	13.5	10.0	9.5	12.3	. 859
1975-76	Vinton-Garrison	41/872.2	4.7	61.9	20.0	19.5	17.1	18.0	828
1973-76	Audubon	4/700.1	.6	58.6	20.6	16.0	16.5	17.6	836
	Rembrandt	1/083.4	1.2	59.5	13.6	11.0	10.3	10.7	1005
1076 77	Vinton-Garrison	33/850.0	3.9	63.1	19.9	18.4	16.5	16.9	945
1976-77	Audubon	17/669.0	2.5	58.9	17.8	17.1	14.5	16.7	982
	Rembrandt	1/082.0	1.2	58.0	12.2	11.5	9.5	10.2	1056

^{*}NA Information Not Available

^{**}ADM/Teacher Headcount

Table 2
School Quality -- Average Teacher Expenditures, Degree
Status and Professional Support Count

				Degree Status					
		Average Teacher	•	% Less Than					
Year	District	Expenditures	Support Count	Bachelors	% Bachelors	% Advanced			
1968-69	Vinton	NAl	. NA	NA	NA	NA			
	Audubon	NA	NA	NA NA	NA NA	NA .			
	Garrison	NA	NA	NA NA	NA .	NA			
	Rembrandt	NA	NA	NA	NA	NA			
1969-70	Vinton-Garrison	NA ·	NA	NA	NA	NA			
	Audubon	NA	. NA	NA	NA.	NA .			
	Rembrandt	NA	NA ·	NA	AN	NA			
1970-71	Vinton-Garrison	· NA	NA	. NA	NA	NA .			
	Audubon	NA	NA .	NA NA	NA	NA			
	Rembrandt	NA	NA	NA	NA	NA			
		A 0 307	10			. NA			
1971-72	Vinton-Garrison	\$ 9,193		NA	NA				
	Audubon	9,081	5	NA	NA	NA ·			
	Rembrandt	8,235	2	NA	NA	NA			
1972-73	Vinton-Garrison	9,372	9	1.0	78.7	20.3			
	Audubon	9,470	5	8.2	. 74.1	17.6			
	Rembrandt	7,573	1	22.2	66.7	11.1			
1973-74	Vinton-Garrison	9,166	8	1.0	80.4	18.6			
13/3-/4	Audubon	10,025	5	3.9	75.3	20.8			
	Rembrandt	8,236	0	18.8	75.0	6.2			
					00.0	10.0			
1974-75	Vinton-Garrison	10,203	8	1.0	80.0	19.0			
	Audubon	11,183	5	2.6	79.5	17.9			
	Rembrandt	9,461	2	18.8	81.3	0.0			
1975-76	Vinton-Garrison	11,034	9	2.1	83.9	14.0			
	Audubon	11,878	5	2.5	83.5	14.0			
	Rembrandt	9,354	2	16.7	83,3	0.0			
1976-77	Vinton-Garrison	11,630	8	0.0	86.9	13.1			
-510-11	Audubon	13,264	5	2.6	82.0	15.4			
			1			0.0			
	Rembrandt	9,291	1	20.0	0.08	C			

¹NA Information Not Available

		Agr.	Art	Bus.	Dist.		For.	Hlth.		Ind.					Soc.		Dr.	
Year	District	Edu.	Edu.	Edu.	Edu.	Eng.	Lang.	P.E.	Hmk.	Art	Math	Music	Sci.	0.E.	Sci.	18T	Edu.	Total
1970-71	Vinton-Garrison	4.5	3.0		1.0			1.0	4.0	0.0						-		
19/0-/1	Audubon		4.0	6.5	1.0	6.0	6.0	1.0	4.0	2.0	6.0	1.0	6.0	0.0	5.0	3.5	.25	55.75
	Rembrandt	4.0		7.5	1.0	10.0	3.0	1.0	6.5	3.0	7.0	.5	5.0	0.0	5.0.	2.5	.5	61.0
	Remoranot	0.0	0.0	5.0	0.0	4.5	0.0	1.0	2.0	2.0	7.0	2.0	4.0	0.0	4.0	0.0	.5	32.0
1971-72	Vinton-Garrison	4.5	3.0	6.0	0.0	6.0	6.0	1.0	5.0	3.0	6.0	1.0	6.0	1.5	5.0	4.0	.25	58.25
	Audubon	4.0	4.0	4.5	0.0	11.0	3.0	1.0	5.5	1.0	7.5	.5	4.0	3.0	4.5	4.5	.5	58.5
	Rembrandt	0.0	0.0	5.5	0.0	4.5	2.0	1.0	2.0	1.0	5.0	2.0	4.0	0.0	4.0	0.0	.5	31.5
										1.0	0.0	2.0		0.0	1.0	0.0	••	01.0
1972-73	Vinton-Garrison	4.0	3.0	6.0	0.0	9.5	6.0	1.0	5.0	2.5	6.0	1.0	6.0	1.5	4.0	8.0	.25	63.75
	Audubon	4.0	4.0	4.5	0.0	8.5	5.0	1.0	7.0	1.0	7.5	.5	4.0	3.0	4.0	4.5	.5	59.0
5.45	Rembrandt _	2.0	0.0	4.0	0.0	4.5	2.0	1.0	2.0	2.0	5.0	2.0	4.0	0.0	4.0	2.0	.5	35.0
1973-74	Vinton-Garrison	4.0	3.0	8.0	0.0	6.0	6.0	1.0	5.0	4.0	5.5	0.0		7.0	4.5		.25	60.25
	Audubon	4.0	4.0	4.5	0.0	9.0	5.0	1.0	8.0	1.0	6.5	.5	6.0	1.0		6.0	.25	61.5
	Rembrandt	2.0	0.0	4.0	0.0	4.5	1.0	2.0	2.0	2.0	5.0	2.0	4.0	1.0	4.0			35.0
			0.0	7.0	0.0	4.5	1.0	2.0	2.0	2.0	3.0	. 2.0	4.0	1.0	420	1.0	•5	33.0
1974-75	Vinton-Garrison	4.0	4.0	8.5	1.0	8.0	6.0	1.2	5.0	4.5	5.5	.5	7.0	1.0	4.5	6.0	.0	67.7
	Audubon	5.0	4.0	5.0	0.0	9.0	6.0	1.0	8.0	1.0	6.5	1.5	4.0	3.0	4.0	6.5	.5	65.0
	Rembrandt	2.0	0.0	4.0	0.0	4.5	1.0	1.0	1.0	2.0	5.0	2.0	4.0	0.0	4.0	1.0	.5	32.0
1975-76	Vinton-Garrison	4.0	4.0	9.5	1.0	8.5	6.0	1.2	5.0	4.5	6.5	-	7.0	1.0	4.0	5.0	.0	67.7
	Audubon	5.5	4.0	5.0	0.0	9.0	6.0	1.0	5.0	1.0	6.5	.5	4.0	3.0	4.0	3.0	.5	58.0
	Rembrandt	2.0	0.0	4.0	0.0	. 4.5	3.0	1.0	2.0	2.0	5.0		4.0	0.0				
		2.0	0.0	7.0	0.0	. 4.5	3.0	1.0	2.0	2.0	3.0	2.0	4.0	0.0	4.0	4.0	•5	38.0
1976-77	Vinton-Garrison	4.0	4.0	9.0	0.0	7.5	7.0	1.0	6.0	3.5	6.5	0.0	6.0	0.0	4.0	4.5	.0	67.0
	Audubon	5.5	4.0	5.0	0.0	9.5	6.0	1.5	5.0	.5	6.5	.5	3.0	3.0	4.0	5.0	.0	59.0
	Rembrandt	0.0	0.0	6.0	0.0	4.5	3.0	1.0	2.0	2.0	5.0	1.0	4.0	0.0	4.0	4.0	.5	37:0

¹A Carnegie Unit is defined as a course offering measure equivalent to one hour of instruction per day for a period of 36 weeks or a full school year.

Table 4
School Quality -- Status of Students
One Year After Graduation

			econdary		econdary	Jo	ket	Other ¹		
			ational		tional		7	1		
Year	District	No.	%	No.	%	No.	%	No.	%	
				0.5	01.5	27	07 5	15	13.0	
1968-89	Vinton	48	41.7	25	21.7		23.5	10	8.8	
	Audubon	52	45.6	28	24.6	24			1	
	Garrison	NA ²	NA .	NA	NA	NA .	NA	NA	NA	
	Rembrandt	17	70.8	4 .	16.7	3	12.5	0	0.0	
								Mr.		
1969-70	Vinton-Garrison	37	28.2	36	27.5	35	26.7	23	17.0	
	Audubon	55	40.4	41	30.1	29	21.3	11	8.:	
	Rembrandt	6	40.0	6	40.0	1	6.7	2	13.3	
1970-71	Vinton-Garrison	NA	NA	NA	NA	NA	NA	NA	NA	
1310 11	Audubon	NA NA	NA	NA	NA	NA	NA	NA .	NA	
	Rembrandt	. NA	NA	NA	NA	NA	NA	NA .	NA	
	Komerante									
1971-72	Vinton-Garrison	'46	38.6	29	24.4	26	21.8	18	15.	
19/1-/2	Audubon	49	36.8	31	23.3	21	15.8	32	24.	
	Rembrandt	4	23.5	1	5.9	7	41.2	5	29.	
	Kempranut								149	
1972-73	Vinton-Garrison	31	23.8	29	22.3	36	27.7	34	26.	
19/2-13	Audubon	33	27.7	29	24.4	39	32.8	18	15.	
	A STATE OF THE PARTY OF THE PAR	. 9	42.8	1	4.8	6	28.6	5	23.	
	Rembrandt	9	42.0						1100	
		33	29.7	19	17.1	42	37.8	17	15.	
1973-74	Vinton-Garrison	17	15.9	19	17.8	43	40.2	28	26.	
	Audubon	7	46.7	2	13.3	4	26.7	2	13.	
	Rembrandt	1	40.7				H. Yr.			
		38	28.8	21	15.9	55	41.7	18	13.	
1974-75	Vinton-Garrison	38 28	22.6	29	23.4	49	39.5	18	14.	
	Audubon		57.1	2	14.3	3	21.4	1	7.	
	Rembrandt	8	37.1	-	14.0			1		
		40	32.3	29	22.3	44	33.8	15	11.	
1975-76	Vinton-Garrison	42		30	26.3	35	30.7	19	16.	
	Audubon	30	26.3	2	13.3	9	60.0	0	0.	
	Rembrandt	4	26.7	2	10.0					
			77 5	14	10.8	46	35.4	29	22.	
1976-77	Vinton-Garrison	41	31.5			47	38.2	25	20.	
	Audubon	29	23.6	22	17.9	3	27.3	1	9.	
	Rembrandt	7	63.6	0	0.0	,	21.0	1	1	

 $^{^{1}\}mathrm{Other}$ includes military service, unemployed, housewife

^{2&}lt;sub>NA</sub> Information Not Available

Table 5
District Characteristics -Assessed Valuation Per Pupil, General Fund Millage,
General Fund Expenditure Per Pupil and Average Daily Membership

				General Fund	
		Assessed Valuation	General Fund	Expenditure	Average Daily
Year	District	Per Pupil	Millage	Per Pupil	Membership
			*		1,759.1
1968-69	Vinton	\$ 9,582	39.227	\$ 656	
	Audubon	12,343 •	41.371	791	1,700.5
	Garrison	19,580	42,258	1,087	214.6
	Rembrandt	15,458	38,385	. 920	212.7
1969-70	Vinton-Garrison	11,457	39.802	729	1,926.9
	Audubon	12,942	46.928	882	1,649.9
	Rembrandt	16,059	45.404	1,072	202.4
					- 03 - 4
1970-71	Vinton-Garrison	11,722	43.329	806	1,910.4
	Audubon	13,245	47.451	921	1,634.1
	Rembrandt	16,041	49.905 .	1,089	208.0
1971-72	Vinton-Garrison	11,894	42.845	871	1,903.4
	Audubon	14,235	45.022	1,021	1,554.7
	Rembrandt	17,931	47.378	1,227	196.0
1972-73	Vinton-Garrison	12,335	38.996	913	1,861.6
20112 10	Audubon	14,689	43.741	1,041	1,514.9
	Rembrandt	20,661	46.237	1,214	171.2
	None, en				
1973-74	Vinton-Garrison	13,026	38.235	995	1,829.4
13/0-14	Audubon	15,673	43,510	1,107	1,466.7
	Rembrandt	21,806	44.374	1,394	164,4
1974 75	Vinton-Garrison	13,900	39.104	1,110	1,818.2
1914 10	Audubon	15,262	44.529	1,227	1,434.6
	Rembrandt	24,700	41.954	1,422	160.2
1975-76	Vinton-Garrison	14,349	47.277	1,336	1,761.3
13/0-10	Audubon	15,746	46.820	1,427	1,390.4
	Rembrandt	26,327	44.921	1,688	150.3
1976-77	Vinton-Garrison	72,232	40.481	1,497	1,688.0
1910-11	Audubon	88,242	40.096	1,667	1,293.0
	Rembrandt	150,546	36.989	1,797	143.0

Table 6
District Characteristics -Sales Tax Receipts

District	1968-69	69 - 70	% Change	70 - 71	% Change	71 - 72	% Change	72 - 73	. % Change	73 - 74	% Change	74 - 75	% Change	75 -	% Change	76 - 77	% Change
Vinton	443,877	446,875		459,264		471,014		529,006		618,858		624,872		649,007		726,032	
V 711 5011	440,077		.6		2.8		2.6		12.3		17.0		1.0		3,9		11.9
Audubon	303,997	322,847		320,927		323,943		368,325		468,071		452,812		485,241		55,8,739	
	000,337		6.2		6		.9		13.7		27.1		-3.3		7.2		15.1
Garrison	NA ¹	NA		NA		NA		NA		NA		NA		12,220		15,668	
oar i i son	IVA		NA		NA		NA		NA		NA		NA				28.2
Rembrandt	NA	NA		NA NA		NA ·		NA		. NA		NA		13,746		17,941	
Mano, and			NA		. NA		NA.		NA		NA		NA				30.5
State (000)	170 455	182,305		178,700		191,555		209,206		240,671		241,232		258,101		290,833	
01010 (000)	270, .00		7.0		-2.0		7.2		9.2		15.0		.2		7.0		12.7

NA Information Not Available

Table 7
Transportation Characteristics for Vinton, Audubon, Garrison and Rembrandt

		Trans. Exp.	Average	Average Cost		Total Miles	Cos	t (Dollars a	nd Percent	:)	Percent of
		as a % of	Pupils	Per Pupil	No. of	Traveled	Cost of			Total	Pupils
Year	District	General Fund	Trans./Day	Transported	Buses	Per Day	Buses	Salaries	Gas	Dollars	Transporte
1968-69	Vinton	3.4	608	\$ 80	14	758	\$11,910	\$25,631	5,783	\$ 48,538	34.6
							(23.1)	(52.8)	(11.9)	4 10,000	01.0
	Audubon	6.7	1,005	96	30	1,743	17,917	42,024	10,964	95,940	59.1
							(18.7)	(43.8)	(11.4)		
	Garrison	7.3	127	106	5	173	3,685	7,006	1,168	13,395	59.1
							(27.5)	(52.3)	(8.7)		
	Rembrandt	4.2	148	80	4	148	2,985	4,950	1,707	11,858	69.0
							(25.2)	(41.7)	(14.4)		
1969-70	Vinton-Garrison	3,5	686	90	20	948	13,646	32,700	7,003	62,012	36.0
							(22.0)	(52.7)	(11.3)		
	Audubon	6.4	916	82	30	1,755	19,890	44.796	11,032	96,622	55.5
							(20.6)	(46.4)	(11.4)		3-16
	Rembrandt	5.2	141	106	4	201	2,621	5,400	1,739	11,591	69.8
							(22.6)	(46.6)	(15.0)		
1970-71	Vinton-Garrison	3.7	703	96	13	963	13,643	37,681	8,024	67,192	36.9
							(20.3)	(56.1)	(11.9)		
	Audubon	5.4	870	102	30	1,221	23,387	35,208	9,086	89,045	53.2
						4.4	(26.3)	(39.5)	(10.2)		47.
	Rembrandt	4.3	141	91	NR ¹	194	2,464	5,850	1,925	12,783	67.8
							(19.3)	(45.8)	(15.1)		
1971-72	Vinton-Garrison	3.5	690	101	20	959	15,080	39,022	7,070	69,728	36.3
							(21.6)	(56.0)	(10.1)		
	Audubon	5.1	834	105	25	1,301	21,442	38,754	9,166	87,758	53.6
							(24.4)	(44.2)	(10.4)		
	Rembrandt	4.7	129	109	4	204	3,719	6,020	2,087	14,093	. 65.8
1972-73					4 4 40		(26.4)	(42.7)	(14.8)		
19/2-15	Vinton-Garrison	3.7	695	104	20	949	16,814	40,370	7,875	72,254	37.3
							(23.3)	(55.9)	(10.9)		
	Audubon	5.1	782	104	NR	1,237	20,335	37,539	8,083	81,473	51.6
	Rembrandt	1.0					(25.0)	(46.1)	(9.9)		
	Remorandt	4.8	112	126	4	193	3,719	6,020	1,958	14,144	65.5
							(26.3)	(42.6)	(13.8)		
									AVE TO		

NR Not Reported

Table 7 (continued)

		Trans. Exp.	Average	Average Cost		Total Miles	Cos	st (Dollars a	nd Percent	1)	Percent of
		as a % of	Pupils	Per Pupil	No. of	Traveled	Cost of			Total	Pupils
Year	District	General Fund	Trans./Day	Transported	Buses	Per Day	Buses	Salaries	Gas	Dollars	Transported
1973-74	Vinton-Garrison	3.9	695	\$120	20	001	616 077	A44 000		A -5 5	
			035	\$120	20	921	\$16,273 (19.5)	\$44,806	12,624	\$ 83,321	38.0
	Audubon	5.9	839	109	24	1,379	17,214	(53.8)	(15.2) 14,586	07 004	F.T. 0
						1,019	(18.8)	(43.6)	(15.9)	91,804	57.2
	Rembrandt	4.1	104	136.	3	189	3,719	5,330	2,592	14,147	63.4
							(26.3)	(37.7)	(18.3)	14,147	00.4
1974-75	Vinton-Garrison	4.3	685	144	19	564	19,360	47,921	16,121	98,775	. 37.7
							(19.6)	(48.5)	(16.3)		
	Audubon .	5.8	773	130	24	1,259	21,605	42,274	15,583	100,808	53.9
	Rembrandt						(21.4)	(41.9)	(15.5)		
	Remorandt .	3.9	98	140 .	4	186	3,718	5,130	2,689	13,744	61.3
1975-76	Vinton-Garrison	4.2	654				(27.1)	(37.3)	(19.6)		
20.0	VIII 0011-0011 1 5011	4.2	654	174	18	570	19,694	57,241	16,640	112,499	37.1
	Audubon	. 5.8	758	154	07	1 100	(17.5)	(50.9)	(14.8)		
		. 0.0	730	154	23	1,120	21,960	49,880	18,256	116,784	54.5
	Rembrandt	4.4	95	151	4	192	(18.8)	(42.7)	(15.6)		
			30	101	7	192	1,883	6,394 (44.6)	3,140	14,328	63.3
1976-77	Vinton-Garrison	4.3	647	185	18	573	18,174	50,389	(21.9)	119,968	38.3
							(15.1)	(42.0)	(15.2)	119,968	38.3
	Audubon	6.1	744	174	23	1,188	23,760	51,226	20,358	129,751	57.5
							(18.3)	(39.5)	(39.5)	123,701	57.5
	Rembrandt	6.3	95	206	4	184	1,883	8,202	4,008	19,567	66.4
							(9.6)	(41.9)	(20.5)		
	Anne Joseph										

Table 8
Non-Instructional Expenditures -Fixed Charges and Operation and Maintenance

		Fixed	Charges	Operation	and Maintenance
			% of		% of
Year	District	Amount	General Fund	Amount	General Fund
1968-69	Vinton	\$ 69,150	6.0	\$123,615	10.7
	Audubon	87,938	6.5	150,731	11.2
	Garrison	16,732	7.2	20,509	8.8
	Rembrandt	12,932	6.6	21,583	11.0
1969-70	Vinton-Garrison	94,612	6.7	158,090	11.3
	Audubon	96,845	6.7	161,240	11.1
	Rembrandt	24,214	11.2	39,980	18.4
1970-71	Vinton-Garrison	109,555	7.1 .	152,777	9.9
	Audubon	101,949	6.8	157,284	10.4
	Rembrandt	18,382	8.1	23,133	10.2
1971-72	Vinton-Garrison	122,516	7.4	165,501	9.9
	Audubon	109,037	6.9	191,395	12.1
	Rembrandt	19,027	7.9	21,876	9.1
1972-73	Vinton-Garrison	136,109	8.0	177,070	10.4
	Audubon	118,502	7.5	187,367	11.9
	Rembrandt	16,938	8.1	21,300	10.2
1973-74	Vinton-Garrison	158,699	8.7	183,579	10.1
	Audubon	127,856	7.9	264,962	16.3
	Rembrandt	24,195	10.6	23,152	10.1
1974-75	Vinton-Garrison	159,579	7.9	192,624	9.5
	Audubon	144,170	8.2	191,061	10.9
	Rembrandt	20,413	9.0	22,996	10.1
1975-76	Vinton-Garrison	216,039	9.2	214,002	9.1
	Audubon	168,730	8.5	269,091	13.6
	Rembrandt	27,780	10.9	23,547	9.3
1976-77	Vinton-Garrison	247,955	9.8	241,885	9.3
	. Audubon	206,654	9.6	255,892	11.9
	Rembrandt	27,696	10.8	23,660	9.2

Table 9
Non-Instructional Expenditures -Administration

		Total Admir	nistrative ¹	Total Admin	istrator
			% of		% of
Year	District	Amount	General Fund	Amount	General Fund
1968-69	Vinton	\$ 85,532.00	7.41	\$ 72,710.04	6.30
	Audubon	130,077.25	9.67	123,887.04	9.21
	Garrison	15,087.54	6.46	11,429.10	4.89
	Rembrandt	14,577.63	7.44	14,577.63	7.44
1969-70	Vinton-Garrison	100,784.00	7.18	86,489.97	6.16
	Audubon	135,320.02	9.30	127,880.00	8.79
	Rembrandt	18,634.82	8.59	15,940.00	7.35
1970-71	Vinton-Garrison	106,954.00	6.9	86,245.00	5.6
1970-71	Audubon	142,479.00	9.5	122,173.00	8.1
	Rembrandt	20,753.00	9.2	14,355.00	6.3
	Renbrandt	20,730.00		21,000,00	
1971-72	Vinton-Garrison	108,659.82	6.55	91,752.29	5.53
	Audubon	144,730.91	9.11	127,198.52	8.01
	Rembrandt	20,953.22	8.71	15,703.22	6.52
1972-73	Vinton-Garrison	124,877.83	7.34	97,803.32	5.75
	Audubon	145,949.34	9.25	128,144.78	8.12
	Rembrandt	20,543.59	9.88	14,270.16	6.86
2007 54	W: 1 - Coi	152,734.58	8.39	121,895.21	6.69
1973-74	Vinton-Garrison	149,850.70	9.22	131,737.04	8.11
	Audubon Rembrandt	24,329.74	10.61	17,664.24	7.70
1974-75	Vinton-Garrison	161,708.31	8.01	135,915.04-	6.73
	Audubon	160,446.32	9.11	138,831.32	7.88
	Rembrandt	24,993.10	10.97	17,803.26	7.81
1975-76	Vinton-Garrison	173,717.27	7.38	138,763,18	5.89
1310-10	Audubon	151,961.26	7.65	127,460.50	6.42
	Rembrandt	25,721.89	10.13	18,488.65	7.28
7 1					
1976-77	Vinton-Garrison	196,071.00	7.76	152,276.92	6.03
	Audubon	169,452.66	7.86	142,927.02	6.63
	Rembrandt	29,552.68	11.50	19,531.24	7.60

 $^{^{1}}$ Administrative expenditures include all administrator expenditures plus Board of Education and clerical expenditures

 $^{^2}$ Administrator expenditures include all expenditures for superintendent, assistant superintendent, business manager, principals and supervisors

STUART-MENLO CASE STUDY

In 1971-72, Stuart and Menlo reorganized to form a new school district. This reorganization represented the combining of a larger district, Stuart, with a smaller district, Menlo. Again, comparison districts were selected for both Stuart and Menlo in order to simulate the status of the two reorganized districts. The comparison district for Stuart was Parkersburg, and for Menlo the comparison district selected was Ledyard.

As before, two separate analyses were made. The Menlo-Ledyard comparison is more extensively treated, since Menlo would be expected to have more to gain from the reorganization than Stuart. This comparison will be followed by a more abbreviated comparison of Stuart and Parkersburg.

Menlo-Ledyard Comparison

I. School Quality Indicators (Tables 1-4)

A. Dropout Status (Table 1)

No dropout data were available for comparison purposes before the first year of reorganization. However, for the six-year period beginning in 1971-72, the dropout rate for the reorganized district was consistently higher than for Ledyard. Dropout rates for the reorganized district ranged from a high of 5.9 percent in 1972-73 to a low of 1.8 percent in 1971-72, averaging about 3.6 percent across the six-year period. For four of the six years, Ledyard had no dropouts, and for 1973-74 and 1974-75 school years, the dropout rate averaged 1.6 percent.

B. Pupil-Teacher Ratios (Table 1)

Prior to its reorganization, the pupil-teacher ratios for Menlo, in general, were extremely costly and inefficient. Pupil-teacher ratios for grades 10-12 and grades k-12 were 2.2 and 7.7, respectively. Corresponding ratios for Ledyard were 8.4 and 11.4, respectively. In 1976-77, the fifth year of reorganization, pupil-teacher ratios in the reorganized district were 24:1 for grades k-6, 14:1 for grades 7-9, 20:1 for grades 10-12 and 17:1 overall. Corresponding pupil-teacher ratios for the comparison district were 12:1, 13:1, 7:1 and 8:1, respectively. It appears that pupil-teacher ratios were greatly improved from a cost efficiency standpoint for Menlo through its reorganization.

C. Instructional Expenditures (Table 1)

Instructional expenditures were examined both in terms of expenditures per pupil and as a percentage of the total general fund. In 1970-71, a year prior to reorganization, Menlo spent 62.5 percent of its budget on instruction, while its comparison district, Ledyard, spent 64.8 percent. By 1976-77, both districts were spending a lesser percentage of the budget on instruction, with Menlo spending 56.4 percent and Ledyard spending

56.1 percent. It would appear that the reorganization did not result in an ability for the reorganized districts to spend a greater percentage of their budgets for instruction.

D. Teacher Characteristics (Table 2)

Prior to reorganization, average teacher expenditures in Menlo were \$5,048 or \$1,431 less than for Ledyard, the comparison district. From the first year of reorganization in 1971-72 through 1976-77, average teacher expenditures for Menlo increased and remained substantially above expenditures for the comparison district. In 1976-77, the average teacher expenditure in the reorganized district was \$10,727 or \$3,611 higher than in the comparison district. From this stanpoint, the reorganization helped promote higher salaries for teachers, thus enabling the reorganized district to attract and maintain highly qualified and experienced teachers.

E. Professional Support Staff (Table 2)

Before reorganizing in 1971-72, professional support staff counts for both Menlo and Ledyard equaled two. The support staff count remained at two for Ledyard until 1976-77, then fell to one, while support staff counts for Menlo increased to three in the first year of reorganization, to four in the second year and subsequently to six and seven, thus resulting in a considerable advantage for the reorganized district in terms of ability to provide specialized services to both teachers and students.

F. Curriculum Offerings (Table 3)

In 1970-71, Menlo and its comparison district, Ledyard, each offered a total of about 34 curriculum units. Ledyard maintained total curriculum offerings ranging from about 31 to 39 across the next six years, while Menlo-s total offerings ranged from a high of 51 in 1972-73 to a low of 42.5 in 1976-77. Through its reorganization, Menlo gained, for its students, advantages in the curriculum areas of agricultural education, trades and industry and science. Offerings for both districts were about equal in the areas of social science, music, math, homemaking, health and physical education, English, business education and art education. Menlo offered less units in industrial arts than did Ledyard. Neither Menlo nor Ledyard offered units in office education nor distributive education.

G. Graduate Follow-Up (Table 4)

In terms of the percentage of students pursuing post-secondary education, the comparison district consistently had a substantially higher percentage of students seeking post-secondary educational training than did the reorganized district. From 1971-72 through 1976-77, the reorganized district had an average of about 38 percent of its graduates continue formal education through post-secondary experiences, while Ledyard averaged about 59 percent.

II. District Characteristics (Tables 5-6)

A. Assessed Valuation (Table 5)

In terms of wealth per pupil, Menlo students were backed by about \$7,000 less per pupil than Ledyard students prior to the 1971-72 reorganization. By 1976-77, the per pupil wealth differential advantage, held by the comparison district, had increased to about \$68,000 per pupil. Assessed valuations in 1976-77 were \$90,041 for the reorganized district and \$158,236 for the comparison district.

B. General Fund Millage Rate (Table 5)

Millage rates for Menlo residents prior to reorganization were 49.979, or about 7 mills higher than for Ledyard residents. After the reorganization in 1971-72, the millage rates for the reorganized district remained consistently higher than millage rates for the comparison district each year thereafter, with 1976-77 millage rates for Menlo totaling 35.592 and 34.933 for Ledyard. In terms of ability to raise money for education, a 1-mill levy in 1970-71 raised \$1,084 for Menlo and \$1,490 for Ledyard. In 1976-77, a 1-mill levy raised \$19,303 for Menlo and \$8,160 for Ledyard.

C. General Fund Expenditures (Table 5)

In 1970-71, Menlo spent \$154 per pupil more than its comparison district, which spent \$1,026 per pupil. Each year thereafter through 1976-77, the comparison district spent more per pupil than the reorganized district. In 1976-77, Ledyard per pupil expenditures totaled \$1,527, which exceeded the reorganized district per pupil expenditures by \$246. Thus, reorganization did not increase the ability to spend more per pupil for Menlo.

D. Average Daily Membership (ADM) (Table 5)

From 1971-72, average daily memberships for Menlo and Ledyard declined steadily through 1976-77, resulting in overall losses for the reorganized district of about 14 percent, and for the comparison of about 21 percent. The reorganized district decreased from an ADM of 924 in 1971-72 to 794.0 in 1976-77, while the comparison district decreased from 243.5 to 191.0 over the same time period.

E. Sales Tax Receipts (Table 6)

Sales tax receipts, prior to 1975-76, were not available from the Department of Revenue; therefore only two years of data can be compared. Sales tax receipts for Menlo in 1975-76 and 1976-77 were \$16,602 and \$18,759, respectively. Ledyard's 1975-76 receipts totaled \$12,125, while receipts for 1976-77 reached \$17,184.

III. Transportation (Table 7)

Before its reorganization in 1970-71, Menlo spent 4.9 percent of its budget for transportation. In the same year, Ledyard spent an equal percentage of its budget for transportation. Menlo's average per pupil cost in 1970-71 was \$108 compared to \$85 for Ledyard. Menlo, however, transported 30 fewer students and traveled 20 miles per day further. The average per pupil cost in the reorganized district, from the first year of reorganization through 1976-77, exceeded the average per pupil cost for the comparison district. Per pupil costs for the comparison district reached a high of \$205 per pupil in 1976-77, compared to \$154 for the reorganized district. The reorganized district also transported students between three and six times more miles per day, and transported, on the average, between two and three times as many students as the comparison district.

Per pupil costs for the reorganized district increased sharply over the six-year period of reorganization, and by 1976-77, although comparable number of students were transported about 150 miles per day further than in 1971-72, the average cost per pupil increased by almost 77 percent, and the percentage of the budget spent for transportation increased from 4.9 percent to 9 percent. At the same time, Ledyard maintained a fairly stable transportation percentage figure across the six-year period, spending 4.7 percent in 1971-72 and 4.8 percent in 1976-77. Gas and salaries for transportation personnel in the reorganized district accounted for much of the increase, with gas increasing from \$6,309 in 1971-72 to \$14,800 in 1976-77 and salaries increasing from \$25,664 to \$46,492 during the same time period.

IV. Non-Instructional Expenditures (Tables 8-9)

Two categories of non-instructional expenditures were examined: expenditures for fixed charges and operation and maintenance and expenditures for administration.

A. Fixed Charges and Operation and Maintenance (Table 8)

In the year before reorganization, Menlo spent 17.3 percent of its budget for fixed charges and operation and maintenance, while its comparison district spent 16.3 percent. In the first year of reorganization, the percentage spent on fixed charges and on operation and maintenance increased to 21.2 percent for Menlo and 19.2 percent for Ledyard. By 1976-77, the reorganized district was spending 22.5 percent on these same two categories, while Ledyard was spending 19.5 percent. It is apparent that both the reorganized district and the comparison district spent increasingly greater percentages of their budgets on operation and maintenance and fixed charges, and furthermore, that reorganization has not resulted in an ability to hold down these expenditures.

B. Administration (Table 9)

In terms of administrative expenditures, Menlo spent 13.3 percent of its general fund for administration in 1970-71, while Ledyard spent 7.3 percent. However, after reorganization in 1971-72, the reorganized Menlo district spent a lower percentage of its budget each year than did Ledyard. Thus, reorganization apparently helped produce a greater degree of efficiency in the area of administration expenditures.

V. Summary

A. School Quality Indicators

Consequences of the reorganization in terms of school quality indicators were: 1) no gain in ability to spend a higher percentage of the general fund for instruction; 2) improved pupil-teacher ratios from a cost efficiency standpoint; 3) an ability to pay significantly higher teacher salaries; 4) a considerable gain in the employment and retention of specialized professional support staff to better serve the student and teacher needs and 5) an improved curriculum in terms of the scope of offerings.

B. District Characteristics

In terms of district characteristics related to ADM, millage rates and general fund expenditures, the following consequences have resulted: 1) ADM's for both Menlo and Ledyard have decreased over the span of years data were compared at rates of 14 and 21 percent, respectively; 2) millage rates for Menlo were higher than the comparison district before reorganization and were not reduced through reorganization and 3) Menlo spent \$154 more per pupil than its comparison district prior to reorganization, but less than the comparison district each year of its reorganization.

C. Transportation

Menlo spent an increasingly higher amount per pupil for transportation than its comparison district; however, the average cost per pupil for transportation in the reorganized district increased about 77 percent since the first year of reorganization, and the percentage of the general fund spent on tansportation has nearly doubled, while remaining constant in the comparison district.

D. Non-Instructional Expenditures

The percentage of expenditures for fixed charges and operation and maintenance increased markedly for both Menlo and Ledyard, rising to more than 22 percent of the total budget for Menlo, and more than 19 percent for Ledyard. The percentage of expenditures for administration has been reduced through reorganization for Menlo, decreasing from more than 13 percent of the general fund budget in 1970-71 to 8.4 percent in 1976-77. On the other hand, the percent of expenditures for administration in the comparison district increased from 7.3 percent in 1970-71 to 9 percent in 1976-77.

Stuart-Parkersburg Comparison

I. School Quality Indicators (Tables 1-4)

A. Dropout Status (Table 1)

Dropout ratios for the reorganized district were somewhat higher across the period from 1971-72 to 1976-77. Dropout ratios for the reorganized district ranged from 1.8 percent to 5.9 percent and averaged about 4 percent per year, while for the comparison district, the ratios varied from 1.2 percent to 3.4 percent and averaged a little less than 2 percent across a sixyear period from 1971-72 to 1976-77.

B. Pupil-Teacher Ratios (Table 1)

The overall pupil-teacher ratios were about 20:1 for Stuart and Parkers-burg before the reorganization. These ratios remained from one to two pupils higher across the next six years for the comparison district than for the reorganized district. The greatest discrepancy between the two districts occurred in the pupil-teacher ratio for grades 7-9, where ratios for the reorganized district sometimes dropped to about half of those for the comparison district.

C. Instructional Expenditures (Table 1)

Before reorganization, Stuart spent 61.3 percent of its general fund on instruction. In that same year, Parkersburg, the comparison district, spent 58.4 percent. From 1971-72 through 1976-77, the percentage of general fund expenditures for instruction for both districts was relatively equal, while in terms of total dollars spent for instruction, the reorganized district spent an average of about \$50 per pupil more than the comparison district across the six-year period.

D. Teacher Characteristics (Table 2)

In terms of average teacher expenditures, Stuart maintained higher salaries for teachers than Parkersburg from 1970-71 until 1975-76, when Parkersburg spent about \$1,000 more per teacher than the reorganized district for both 1975-76 and 1976-77. With respect to degree status of teaching staff, the reorganized district consistently had a higher percentage of non-degree teachers on staff than did the comparison district. The reorganization, with respect to the ability to offer higher teacher salaries or a more highly trained teaching staff, appears to have achieved a less than successful result.

E. Professional Support Staff (Table 2)

Beginning with the third year of reorganization, Stuart maintained a considerable advantage over its comparison district in the area of professional support staff, offering students and teachers the services of from six to seven specialized support personnel as compared with the one to three offered by Parkersburg.

F. Curriculum Offerings (Table 3)

Before its reorganization with Menlo, Stuart offered about four more units of instruction than its comparison district. Through reorganization with Menlo in 1971-72, the total curriculum offerings were not substantially increased, and by 1976-77, Parkersburg, the comparison district, offered 38.75 units, or about four units less than the reorganized district. Some gains were made by the reorganized district, however, in the specific curriculum areas of business education, English and science.

G. Graduate Follow-Up Status (Table 4)

On the average, more students from the reorganized district pursued post-secondary education than did students from the comparison district. Across the six-year period, an average of about 45 percent of the students from the reorganized district and an average of about 40 percent of the students from the comparison district sought post-secondary education experiences.

II. District Characteristics (Tables 5-6)

A. Assessed Valuation (Table 5)

Per pupil wealth in terms of assessed valuation increased from \$9,704 to \$90,041 for Stuart and from \$12,924 to \$74,216 for Parkersburg in the period from 1970-71 to 1976-77. Per pupil wealth for the comparison district was higher each year through 1973-74 and lower each year from 1974-75 through 1976-77.

B. General Fund Millage Rate (Table 5)

The general fund millage rates for both the reorganized and comparison districts underwent a gradual decline over the period from 1971-72 through 1976-77. Stuart residents realized a decrease of about 12 mills over the period, while Parkersburg residents realized a decrease in millage rates over the same period of about 5 mills. In 1976-77, millage rates for Menlo and Parkersburg residents were 35.592 and 38.214, respectively.

C. General Fund Expenditures (Table 5)

General fund expenditures per pupil for Stuart increased from \$792 in 1970-71 to \$1,353 in 1976-77, while corresponding expenditures for the comparison district increased from \$1,180 in 1970-71 to \$1,308 in 1976-77. Following the reorganization, per pupil expenditures for the reorganized district were higher than for the comparison district every year but one.

D. Average Daily Membership (ADM) (Table 5)

Since 1970-71, average daily membership for the comparison district remained relatively stable, ranging from about 300 to 320. Average daily

membership for the reorganized district since 1971-72 underwent a gradual decrease from year to year, with a total decrease for the period of about 14 percent. For the reorganized district, ADM decreased from 435.8 to 427.0.

E. Sales Tax Receipts (Table 6)

Sales tax receipts increased approximately \$32,000 from 1970-71 through 1976-77 for Stuart and about \$88,000 for Parkersburg. A difference of about \$19,000 existed between Stuart and Perkersburg in 1970-71, and in 1976-77, sales tax receipts for Parkersburg were about \$75,000 higher than for Stuart.

III. Transportation (Table 7)

In 1976-77, Stuart spent 3 percent more of its budget on transportation than in 1970-71, and Parkersburg spent about 4 percent less for transportation. Average transportation costs per pupil for the same period increased from \$84 to \$205 for Stuart and from \$90 to \$169 for Parkersburg. Gas costs for the reorganized district increased from \$6,309 in 1971-72 to \$14,800 in 1976-77. This represents an increase in gas costs of 134 percent. The corresponding increase in gas costs for the comparison district was from \$2,503 to \$8,027. Total transportation costs for the comparison district increased from \$53,031 in 1971-72 to \$91,235 in 1976-77. Corresponding increases for Parkersburg were from \$26,811 to \$41,548.

IV. Non-Instructional Expenditures (Tables 8-9)

A. Fixed Charges and Operation and Maintenance (Table 8)

Prior to reorganization, fixed charges and operation and maintenance expenditures for both Stuart and Parkersburg accounted for 18.7 percent of the general fund. In 1976-77, the same two items accounted for 23.5 percent of the general fund expenditures for Stuart and 19.9 percent for Parkersburg. This represents a slightly higher increase in the percentage of expenditures for fixed charges and operation and maintenance over the period of time from 1970-71 to 1976-77 for the reorganized district than for the comparison district.

B. Administration (Table 9)

Total administrative expenditures accounted for 11.2 percent of Stuart's budget in 1970-71 and for 8.6 percent of Parkersburg's budget in the same year. In 1976-77, Stuart was spending nearly 3 percent less of its budget for administration, and Parkersburg was spending about 1 percent less of its budget for administration.

V. Summary

A. School Quality Indicators

In terms of school quality indicators, the reorganization resulted in:
1) little or no advantage in instructional expenditures and pupil-teacher ratios; 2) little impact with respect to the ability to upgrade the degree status of teaching staff; 3) average expenditures per teacher, which were about \$1,000 less than for the comparison district; 4) a considerable gain in the area of professional support staff and 5) little gain in ability to greatly expand curriculum scope, although some specific areas of the curriculum were improved.

B. District Characteristics

With respect to ADM, millage rates and general fund expenditures, the following resulted: 1) ADM for Stuart decreased, while the ADM for the comparison district remained relatively stable; 2) general fund millage rates for both districts underwent a gradual decline from 1971-72 through 1976-77 and 3) general fund expenditures for both districts increased across the seven-year period from 1970-71 to 1976-77 to \$1,353 for Stuart and to \$1,308 for Parkersburg.

C. Transportation

Average transportation costs per pupil for Stuart and Parkersburg increased 144 percent and 88 percent, respectively, from 1970-71 to 1976-77, while the percentage of the general fund spent for transportation decreased almost 4 percent for Parkersburg and increased 2.5 percent for Stuart.

D. Non-Instructional Expenditures

Non-instructional expenditures for fixed charges and operation and maintenance underwent a gradual increase for both districts, and in 1976-77, represented 22.5 percent of Stuart's general fund expenditures and 19.2 percent of Parkersburg's general fund expenditures.

Administrative expenditures for both districts were arount 9 percent in 1976-77. This represented a 2.2 percent decrease from 1970-71 for Stuart, and about a 1 percent decrease from 1970-71 for Parkersburg.

Figure 1
Summary of Reorganization Consequences for Stuart-Menlo Reorganization

Item	Stuart-Menlo
Instructional Expenditures	0
Pupil-Teacher Ratios	+
Average Teacher Expenditures	+
Teacher Degree Status	0
Professional Support Staff	+
Curriculum Offerings	+
General Fund Millage Rate	0
Expenditures Per Pupil	0
Transportation	
Non-Instructional Expenditures	?

^{+ =} beneficial consequences

^{0 =} little or no change in consequences

^{? =} inconclusive consequences

^{- =} negative consequences

Table 1
School Quality -- Instructional Expenditures
Pupil-Teacher Ratios and Dropouts

		Dropou	ıts	% of GF		Pupil- Rat	Teacher ios		Total Instructional
		ADM		Spent for				Over	Expenditures
Year	District	7-12	%	Instruction	k-6	7-9	10-12	A11	Per Pupil
		NA ¹		61.3	22.8	NA	14.9	19.9	\$ 538
1970-71	Stuart .			58.4	24.5	NA	15.8	19.7	507
	Parkersburg	10		62.5	16.6	NA	2.2	7.7	788
2.0	Menlo	NA			16.7	NA	8.4	11.4	665
	Ledyard	0		64.8	16.7	IVA	0.4	11.	
1971-72	Stuart-Menlo	8/435.8	1.8	60.1	20.1	17.2	18.8	17.1	559
19/1-72		0/300.9	0.0	60.6	20.2	21.3	19.0	19.4	505
	Parkersburg Ledyard	0/123.2	0.0	62.1	21.7	16.8	8.1	11.6	695
	Ledyard	0, 220.2	1						
1972-73	Stuart-Menlo	25/425.0	5.9	59.4	18.9	18.1	15.8	17.8	563
1312-10	Parkersburg	3/333.2	.9	60.2	19.8	23.4	19.1	19.6	477
	Ledyard	0/114.0	0.0	57.9	15.9	14.3	7.1	11.8	626
	Ledyard		1						
1973-74	Stuart-Menlo	15/431.1	3.5	58.4	21.9	15.9	15.4	17.0	568
1370-11	Parkersburg	11/321.1	3.4	58.2	19.3	24.0	17.3	18.9	517
	Ledyard	1/113.4	.9	59.5	14.9	14.3	7.1	11.2	675
	Loayara								
1974-75	Stuart-Menlo	17/433.1	3.9	56.7	21.4	11.2	14.4	17.8	640
131110	Parkersburg	7/308.9	2.3	52.7	18.9	23.4	16.3	17.2	597
	Ledyard	3/123.4	2.4	52.0	14.4	14.8	7.9	11.4	. 651
							15.6	17.2	729
1975-76	Stuart-Menlo	9/448.2	2.0	57.0	23.7	12.6		19.9	756
	Parkersburg	4/322.6	1.2	59.7	18.2	24.3	17.6	8.8	807
	Ledyard	0/108.5	0.0	52.8	14.0	13.3	7.1	0.0	001
1000 00	Cturnet Manile	21/427.0	4.9	56.4	24.3	14.3	19.5	16.5	788
1976-77	Stuart-Menlo	7/319.0	2.2	56.7	19.3	16.4	16.1	20.1	824
	Parkersburg Ledyard	0/105.0	0.0	56.1	12.4	12.8	6.8	8.3	1,008.

¹NA Information Not Available

Table 2
School Quality -- Average Teacher Expenditures, Degree
Status and Professional Support Count

					Degree Status	
		Average Teacher		% Less Than		
Year	District	Expenditures	Support Count	Bachelors	% Bachelors	% Advanced
				NAl	NA .	NA
1970-71	Stuart	\$ 8,214	2		NA NA	NA NA
	Parkersburg	7,985	1	· NA	NA NA	NA NA
	Menlo	5,048	2	NA		NA NA
	Ledyard	6,479	2	NA	NA	NA
1971-72	Stuart-Menlo	8,147	3	NA	NA	NA
	Parkersburg	8,456	2	. NA	NA	AN
	Ledyard	6,730	2	". NA	NA	NA
1972-73	Stuart-Menlo	9,209	4	14.6	79.2	6.2
1912-10	Parkersburg	7,944	2	9.3	81.4	9.3
	Ledyard	6,005	. 5	26.3	68.4	5.3
1973-74	Stuart-Menlo	8,244	6	12.8	78.7	8.5
1975-74	Parkersburg	8,127	2	6.3	87.4	6.3
	Ledyard	5,986	2	25.0	65.0	10.0
1974-75	Stuart-Menlo	9,437	7	6.3	91.7	3.0
1974-73	Parkersburg	8,196	3	6.3	. 87.4	6.3
	Ledyard	5,943	2	11.1	83.3	5.6
		30 757	7	6.5	89.1	4.4
1975-76	Stuart-Menlo	10,357	1	9.1	84.8	6.1
	Parkersburg	11,017		15.0	80.0	5.0
	Ledyard	5,616	2	13.0	30.0	
1976-77	Stuart-Menlo	10,727	7	4.3	91.4	4.3
	Parkersburg	11,634	3	3.0	91.0	6.0
	Ledyard	7,116	1	4.3	87.1	8.6

¹NA Information Not Available

Table 3
School Quality -- Curriculum Offerings Expressed as Carnegie Units¹

		Agr.	Art	Bus:	Dist.		For.	Hlth.		Ind.		4			Soc.		Dr.	
Year	District	Edu.	Edu.	Edu.	Edu.	Eng.	Lang.	P.E.	Hmk.	Art	Math	Music	Sci.	O.E.	Sci.	T&1	-Edu.	Total
1970-71	Stuart	3.0	2.0	3.0	0.0	7.0	2.0	1.0	3.0	3.5	5.0	.75	5.0	1.0	6.0	0.0	.5	42.75
	Parkersburg	3.0	1.0	4.0	0.0	4.5	2.0	1.0	3.0	2.0	6.0	.5	5.0	0.0	5.0	0.0	.5	37.5
	Menlo	0.0	1.0	3.25	0.0	4.0	1.0	1.0	4.0	4.0	5.0	1.0	3.0	0.0	6.0	0.0	.5	33.75
	Ledyard	0.0	1.0	6.0	0.0	5.5	3.0	1.0	2.0	2.0	5.0	.5	4.0	0.0	4.0	0.0	.5	34.5
1971-72	Stuart-Menlo	4.0	3.0	6.0	0.0	8.0	2.0,	1.0	3.0	3.5	5.0	.75	7.0	1.0	5.5	.5	.5	50.75
	Parkersburg	3.0	2.0	4.0	0.0	5.5	2.0	1.0	3.0	2.0	6.0	.5	5.0	4.0	0.0	.5	.0	38.5
	Ledyard	0.0	2.0	7.0	0.0	5.5	5.0	1.0	2.0	2.0	5.0	.5	4.0	0.0	4.0	0.0	.5	38.5
1972-73	Stuart-Menlo	4.0	3.0	6.0	0.0	9.0	2.0		7.0									
2312-10	Parkersburg	3.0	2.0	4.0	0.0	5.5		1.0	3.0	3.5	5.0	.5	7.0	1.0	5.5	.5	.5	51.5
	Ledyard	0.0	2.0	6.0	0.0		2.0	1.0	3.0	3.0	6.0	.5	5.0	0.0	4.5	0.0	.5	40.0
	Lecyard	0.0	2.0	6.0	0.0	6.5	3.0	1.0	2.0	2.5	5.0	.5	4.0	0.0	4.0	0.0	.5	37.0
1973-74	Stuart-Menlo	4.0	3.0	5.5	0.0	6.0	1.0	.1.0	3.0	1.5	6.0	.5	7.0	0.0	5.0	2.5	.5	46.5
	Parkersburg	3.0	2.0	5.0	0.0	5.75	2.0	1.0	3.25	3.0.	6.25	.5	5.0	0.0	5.25	0.0	.5	42.5
	Ledyard	0.0	2.0	7.0	0.0	6.5	3.0.	1.0	2.0	3.5	5.0	.5	4.0	0.0	4.0	0.0	.5	39.0
1974-75	Stuart-Menlo	4.0	2.0	5.5	0.0	6.0	2.0	1.0	3.5	1.5	6.0	.5	7.0	0.0	4.5	2.5	.5	46.5
	Parkersburg	3.0	3.0	5.0	0.0	4.5	3.0	1.0	3.5	3.0	6.0	.5	5.0	0.0	5.0	0.0	.5	43.0
	Ledyard	0.0	2.0	6.0	0.0	4.5	1.0	1.0	3.0	3.0	5.0	.5	4.0	0.0	4.0	0.0	.5	34.5
1975-76	Stuart-Menlo	4.0	2.0	5.5	0.0	6.0	2.0	1.0	4.0	1.5	6.0	.5	7.0	0.0	4.5	2.5	.5	47.0
	Parkersburg	4.0	4.0	3.5	0.0	4.0	2.0	1.0	4.0	4.0	6.5	.75	3.0	0.0	5.0	0.0	.5	42.25
	Ledyard	0.0	2.0	5.0	0.0	4.0	2.0	1.0	3.0	3.0	5.0	.75	4.0	0.0	4.0	0.0	.0	33.25
			4									•20	7.0	0.0	1.0	0.0	.0	
1976-77	Stuart-Menlo	5.0	2.0	5,5	0.0	5.0	1.0	1.0	3.0	1.0	6.0	.5	6.0	0.0	3.5	2.5	.5	42.5
100	Parkersburg	4.0	3.0	4.0	0.0	3.0	2.0	1.0	4.0	3.0	6.5	.25	3.0	0.0	4.5	0.0	.5	38.75
	Ledyard	0:0	.5	5.0	0.0	5.0	2.0	1.0	3.0	3.0	5.0	.5	4.0	0.0	2.5	0.0	.0	31.5

¹A Carnegie Unit is defined as a course offering measure equivalent to one hour of instruction per day for a period of 36 weeks or a full school year.

Table 4
School Quality -- Status of Students
One Year After Graduation

			econdary		econdary		Job		1
		Non-Voc	ational	Vocat	tional		ket	-	erl
Year	District	No.	%	No.	%	No.	%	No.	%
								18.19	NA
1970-71	Stuart	NA ²	NA	NA	NA	NA	NA	NA	
	Parkersburg	NA	NA	NA	NA	NA	NA	NA.	NA NA
	Menlo	NA	NA	NA	NA	NA	NA.	NA	
	Ledyard	NA	NA	NA	. NA	NA	NA	NA	NA
							00.6	14	25.9
1971-72	Stuart-Menlo	8	14.8	16	29.6	16	29.6		15.5
	Parkersburg	13	22.4	10	17.2	16	27.6.	9	
	Ledyard	3	20.0	8	53.3	3	20.0	1	6.7
	1								000
1972-73	Stuart-Menlo	8	11.1	10	13.9	39	54.2	15	20.8
	Parkersburg	17	21.9	4	12.5	9	28.1	12	37.5
	Ledyard	. 8	33.3	4	16.7	12	50.0	0	0.0
							7.5	9	16.4
1973-74	Stuart-Menlo	14	25.4	12	21.8	20	36.4		
	Parkersburg	15	23.8	12	. 19.0	25	39.7	11	17.5
	Ledyard	4	21.0	6	31.6	7	36.8	2	10.5
							10.0	10	18.5
1974-75	Stuart-Menlo	13	20.0	14	21.5	26	40.0.	12	39.1
	Parkersburg	12	26.1	.0	0.0	16	34.8	18	16.7
	Ledyard	0	0.0	8	66.7	2	16.7	2	10.
								6	12.0
1975-76	Stuart-Menlo	7	14.0	7	14.0	30	60.0		42.5
	Parkersburg	12	25.5	0	0.0	15	31.9	20	1
	Ledyard	3	13.0	9	39.1	9	39.1	. 2	8.7
		10	05.0	13	20.9	24	38.7	9	14.5
1976-77	Stuart-Menlo	16	25.8	7	12.9	22	40.7	12	22.2
	Parkersburg	13	24.1		26.3	6	31.6	1	5.3
	Ledyard	7	36.8	5	20.5	0	01.0		1

 $^{^{\}mathrm{1}}\mathrm{Other}$ includes military service, unemployed, housewife

²NA Information Not Available

Table 5

District Characteristics -Assessed Valuation Per Pupil, General Fund Millage,
General Fund Expenditure Per Pupil and Average Daily Membership

		****		General Fund	
		Assessed Valuation	General Fund	Expenditure	Average Daily
Year	District	Per Pupil	Millage	Per Pupil	Membership
1970-71	Stuart	\$ 9,704	47.355	\$ 792	675.3
	Parkersburg	12,934	43.748	1,180	649.9
	Menlo	15,259	49.979	812	263.2
	Ledyard	22,096	42,651	1,026	249.7
					924.0
1971-72	Stuart-Menlo	11,821	45.791	929	640.3
	Parkersburg	13,228	42.620	833	243.5
	Ledyard	25,606	33.376	1,120	243.5
1972-73	Stuart-Menlo	12,883	43.517	948	870.5
	Parkersburg	12,949	39.373	791	666.4
	Ledyard	24,949	37.631	1,081	223,5
1973-74	Stuart-Menlo	13,624	40.473	973	867.5
	Parkersburg	13,718	37.726	887	642.7
	Ledyard	26,532	33.868	1,134	212.3
1974-75	Stuart-Menlo	17,577	36.846	1,128	837.8
	Parkersburg	15,317	38.063	1,132	618.1
	Ledyard	24,377	36.296	1,251	228.7
					605.0
1975-76	Stuart-Menlo	17,845	42.062	1,281	825.2
	Parkersburg .	15,376	43.007	1,266	615.7
	Ledyard	27,504	40.523	1,527	202.7
1976-77	Stuart-Menlo	90,041	35,592	1,353	794.0
2310-11	Parkersburg	74,216	38.214	1,308	642.0
	Ledyard	158,236	34.933	1,625	191.0
	Ledyard	100,200	31,500	-,0.0	

Table 6
District Characteristics -Sales Tax Receipts

		-41 FeW	%		%		%		%	1	%		%
District	1970-71	1971-72	Change	1972-73	Change	1973-74	Change	1974-75	Change	1975-76	Change	1976-77	Change
		116,824		130,423		151,552		136,599		122,978		143,424	
Stuart	111,544												
			4.7		11.6.		16.2		-9.9		-1.0		16.6
		136,500		164,915	y. 1 /			182,966		186,384		218,715	
Parkersburg	130.001	136,300		104,913	* 100	188,483		182,966		185,364		210,713	
	200,002		5.0		20.8		14.3		-2.9		,1.9		17.3
		NAl		NA		NA		NA		16,602		18,759	
Menlo	NA												17.0
			NA		NA		NA		NA				13.0
افده اسد ا	NI A	NA		NA		NA.	1	. NA		12,125		17,184	
Ledyard	NA		NA		NA ·		NA		NA				41.7
		191,555		209,206	4	240,671		241,232		258,101		290,833	
State (000)	178,700		7.2		9.2		15.0		.2		7.0		12.7

¹NA Not Available from lowa Department of Revenue

Table 7
Transportation Characteristics for Stuart, Parkersburg, Menlo and Ledyard

		Trans. Exp.	Average	Average Cost		Total Miles	Cos	st (Dollars a	and Percent	.)	Percent of
		as a % of Pupils	Pupils *	Per Pupil Transported	No. of Buses	Traveled Per Day	Cost of			Total	Pupils
Year Distri	·District	General Fund	Trans./Day				Buses	Salaries	Gas	Dollars	Transported
1970-71	Stuart	6.5	366	A 04						10751418	
15/0-/1	Stuart	0.3	266	\$ 84	7	387	\$ 7,014	\$12,595	5,915	\$30,669	54.2
	Parkersburg	7.0	007				(22.9)	(41.1)	(19.3)		
	Farkersburg	7.9	293	90	. 8	360	7,114	12,719	2,544	26,403	45.1
	Menlo	4.0	3-5				(26.9)	(48.2)	(9.6)		
	Meuto	4,9	173	108	5	218	3,469	11,468	1,753	18,711	65.8
	1			*	Y		(18.5)	(61.3)	(9.4)		
	Ledyard	4.9	203	85	. 6	198	5,210	6,750	2,036	17,215	81.2
1001 00							(30.3)	(39.2)	(11.8)		
1971-72	Stuart-Menlo	6.8	458	116	13	605	12,518	25,664	6,309	53,031	49.6
W. William							(23.6)	(48.4)	(11.9)		
	Parkersburg	5.6	284	94	8	357	7,804	13,149	2,503	26,811	44.4
							(29.1)	(49.0)	(9.3)		
	Ledyard	4.7	188	97	6	198	5,210	7,166	2,138	18,160	77.0
							(28.7)	(39.5)	(11.8)		
1972-73	Stuart-Menlo	6.3	425	125	13	522	9,372	29,041	6,638	53,064	48.8
							(17.7)	(54.7)	(12.5)		
	Parkersburg	6.1	287	97	8	370	7,804	13,766	2,800	27,772	43.1
							(28.1)	(49.6)	(10.1)		
	Ledyard	4.9	179	101	5	184	5,496	7,166	2,012	18,077	79.9
							(30.4)	(39.6)	(11.1)		
1973-74	Stuart-Menlo	8.3	424	128	13	641	10,169	24,050	8,062	54,064	48.8
							(18.8)	(44.5)	(14.9)	,	
	Parkersburg .	4.6	282	106	8	366	7,804	13,846	4,703	29,991	43.9
							(26.0)	(46.2)	(15.7)	20,002	40.5
	Ledyard	5.7	153	123	4	184	5,710	6,386	2,797	18,762	72.2
					TANK S		(30.4)	(34.0)	(14.9)	20,,102	
								(01.0)	(200)		

Table 7 (continued)

		Trans. Exp.	Average	Average Cost		Total Miles	Cos	t (Dollars a	nd Percent	.)	Percent of
		as a % of	Pupils	Per Pupil	No. of	Traveled	Cost of			Total	Pupils
Year	District	General Fund	Trans./Day	Transported	Buses	Per Day	Buses	Salaries	Gas	Dollars	Transported
1974-75	Stuart-Menlo	8.4	398	\$179	13	714	\$16,641 (23.3)	\$28,916 (40.4)	13,251 (18.5)	\$71,566	47.5
	Parkersburg	6.5	271	140	9	195	10,217 (27.0)	14,253 (37.6)	7,545 (19.9)	37,901	43.9
	Ledyard	5.1	147.	137 -	. 5	106	5,710 (28.4)	6,688 (33,3)	3,086 (15.4)	20,071	. 64.2
1975-76	Stuart-Menlo	8.4	385	204	13	717	12,801 (16.3)	36,746' (46.8)	14,033 (17.9)	78,524	46.7
	Parkersburg	4.4	261	132	8	178	10,268 (29.9)	13,639 (39.7)	5,794 (16.9)	34,366	42.4
	Ledyard	4.9	149	138	5	103	5,710 (27.7)	6,756 (32.7)	3,030 (14.7)	20,632	73.8
1976-77	Stuart-Menlo	9.0	445	205	13	.763	15,547 (17.0)	46,492 (51.0)	14,800 (16.2)	91,235	56.1
	Parkersburg	4.1	246	169	8	299	11,262 (27.1)	14,450 (27.1)	8,027 (19.3)	41,548	38.3
	Ledyard	. 4.8	133	154	5	141	5,500 (26.9)	7,710 (37.7)	2,998 (14.7)	20,457	69.6

Table 8
Non-Instructional Expenditures -Fixed Charges and Operation and Maintenance

		Fixe	d Charges	Operation and Maintenance		
			% of		% of	
Year	District	Amount	General Fund	Amount	General Fund	
1970-71	Stuart	\$ 45,337	8.5	\$ 54,722	10.2	
1310-12	Parkersburg	28,673	5.4	70,201	13.3	
	Menlo	23,632	7.6	30,111	9.7	
	Ledyard	21,679	8.4	20,276	7.9	
1971-72	Stuart-Menlo	72,312	8.4	109,982	12.8	
	Parkersburg	36,354	6.8	66,277	12.4	
	Ledyard	23,066	8.4	29,364	10.8	
1972-73	Stuart-Menlo	62,578	7.6	90,286	10.9	
	Parkersburg	41,503	7.9	67,793	12.8	
	Ledyard	21,208	8.8	21,019	8.7	
1973-74	Stuart-Menlo	75,670	8.9	103,680	12.3	
	Parkersburg	46,628	8.2	68,979	12.1	
	Ledyard	22,458	9.3	27,775	11.5	
1974-75	Stuart-Menlo	70,763	7.5	141,286	14.9	
	Parkersburg	56,745	8.1	87,571	12.5	
	Ledyard	26,738	9.3	26,159	9.1	
1975-76	Stuart-Menlo	101,787	9.6	119,294	11.3	
	Parkersburg	70,367	9.0	81,010	10.4	
	Ledyard	26,117	8.4	37,387	12.1	
1976-77	Stuart-Menlo	105,827	9.5	143,642	13.0	
· ME	Parkersburg	83,634	9.0	95,462	10.2	
	Ledyard	32,469	9.5	35,636	10.4	

Table 9
Non-Instructional Expenditures -Administration

		Total Admir	nistrative ¹	Total Administrator ²			
			% of .		% of		
Year	District	Amount	General Fund	Amount	General Fund		
1970-71	Stuart	\$59,699.00	11.2	\$46,164.00	8.6		
	Parkersburg	45,579.00	8.6	32,870.00	6.2		
	Menlo	41,261.00	13.3	29,594.00	9.5		
	Ledyard	18,680.73	7.3	13,156.00	5.1		
1971-72	Stuart-Menlo	73,610.17	8.5	60,525.85	7.0		
10.1	Parkersburg	52,091.36	9.8	46,040.74	8.6		
	Ledyard	28,512.80	10.5	23,912.80	8.8		
1972-73	Stuart-Menlo	71,249.13	8.6	57,313.26	6.9		
	Parkersburg	44,239.88	8.4	34,995.84	6.6		
	Ledyard	28,901.13	12.0	22,895.56	9.5		
1973-74	Stuart-Menlo	72,538.36	8.6	54,118.51	6.4		
13,0-11	Parkersburg	60,353.49	10.6	51,450.11	9.0		
	Ledyard	29,418.93	12.2	22,986:00	9.5		
1974-75	Stuart-Menlo	80,056.70	8.5	59,927.23	6.3		
	Parkersburg	63,535.97	9.1	50,348.15	7.2		
	Ledyard	34,393.80	12.0	25,774.76	9.0		
1975-76	Stuart-Menlo	83,659.92	7.9	64,969.24	6.1		
1310-10	Parkersburg	65,718.82	8.4	51,975.95	6.7		
	Ledyard	43,123.38	13.9	28,818.23	9.3		
1976-77	Stuart-Menlo	92,713.61	8.4	75,539.81	6.8.		
2010 11	Parkersburg	73,881.73	7.9	64,928.81	7.0		
	Ledyard	30,973.47	9.0	20,118.20	5.9		

 $^{^1}$ Administrative expenditures include all administrator expenditures plus Board of Education and clerical expenditures

²Administrator expenditures include all expenditures for superintendent, assistant superintendent, business manager, principals and supervisors

MILES-SABULA CASE STUDY

The Miles-Sabula reorganization in 1974-75 represents the reorganization of two smaller districts. The analysis which follows will examine the consequences of the reorganization through comparisons of conditions prior to reorganization, and at various points in time after the reorganization. Changes in conditions will be examined in terms of Miles, and its comparison district, Sentral, and Sabual and Colo, its comparison district.

Miles-Sentral Comparison

I. School Quality Indicators (Tables 1-4)

A. Dropout Status (Table 1)

The dropout rate for Miles for the four-year period studied was less than 1 percent, and only about 1.4 percent for Sentral, the comparison district. This was an absolute loss of 10 students for Miles and 12 students for the Sentral district across the four-year period.

B. Pupil-Teacher Ratios (Table 1)

Incomplete data prohibited complete pupil-teacher ratio comparisons prior to the Miles-Sabula reorganization; however, overall ratios in 1973-74 were 17:1 for Miles and 14:1 for Sentral. The overall ratios for the two districts were about the same in 1976-77 as in 1973-74. Pupil-teacher ratios for the reorganized district tended to fluctuate more than did ratios for the comparison district. This was especially true for the pupil-teacher ratios in grades k-6. On the average, pupil-teacher ratios for Sentral were lower across all grade levels for each of the years compared.

C. Instructional Expenditures (Table 1)

Before its reorganization, Miles spent about \$200 less per pupil on instruction than Sentral, and about 4 percent less of its general fund on instruction than did Sentral. After its reorganization in 1974-75, instructional dollars per pupil spent by the reorganized district were still about \$200 less than those for Sentral. During the second and third years of reorganization, per pupil expenditures in the reorganized district still lagged behind those for Sentral.

By 1976-77, however, Miles did increase the percentage of expenditures for instruction to 59.4 percent or 5 percent more than they were prior to reorganization. The percentage of expenditures for instruction for Sentral decreased over the same period by about 4 percent to 54.3 percent.

D. Teacher Characteristics (Table 2)

Average teacher expenditures for Miles were \$587 less than for Sentral prior to reorganization. By 1976-77, average teacher expenditures were \$1,721 higher in the reorganized district than for Sentral. Degree status information was incomplete; therefore, no observations on this aspect could be made.

E. Professional Support Staff (Table 2)

In 1973-74, both Miles and Sentral had professional support counts of three. Through reorganization, Miles increased its count to seven, and then to eight in 1975-76, where it remained through 1976-77. Support counts for Sentral were nine, six and five, respectively, in 1974-75, 1975-76 and 1976-77. An advantage in terms of professional support staff was clearly acquired through reorganization.

F. Curriculum Offerings (Table 3)

Little or no improvement resulted from the reorganization terms of ability to improve the scope of curricular offerings in the reorganized district. The reorganized district offered an average of about 42 units each of the three years of reorganization or about two to three units more per year than the comparison district. Some improvement resulted for the reorganized district in terms of special curriculum areas such as art, business education and science. However, fewer offerings were provided by the reorganized district in agricultural education and in English.

G. Graduate Follow-Up Status (Table 4)

Across the four-year period from 1973-74 through 1976-77, Miles sent a smaller percentage of students on to post-secondary education than did Sentral. A four-year average of about 36 percent of the graduates each year went on to post-secondary education for Miles, while an average of 52 percent of Sentral's graduates sought post-secondary educational experiences.

II. District Characteristics (Tables 5-6)

A. Assessed Valuation (Table 5)

In the year prior to reorganization, Sentral, the compariton district, had a per pupil wealth of twice that of Miles. By 1976-77, Sentral's per pupil wealth of \$184,279 was more than three times that of the reorganized district's per pupil wealth.

B. General Fund Millage Rate (Table 5)

The millage rates for Miles residents increased from 41.240 prior to reorganization, to a high of 47.294, during the second year of reorganization. Then the millage rates decreased to 43.644 in 1976-77, resulting in

an overall decrease in the millage rate of about 3 mills. For the comparison district, millage rates were 30.675 a year prior to the reorganization of Miles and Sabula and increased to a high of 35.189 mills in 1975-76, then decreased to 25.788 mills in 1976-77. Millage rates for the comparison district were lower than for the reorganized district in each year studied. While millage rates for the reorganized district have not changed substantially over the period studied, millage rates for Sentral have decreased considerably.

C. General Fund Expenditures (Table 5)

In 1973-74, the comparison district spent \$238 per pupil more than Miles. For each subsequent year, general fund per pupil expenditures for the comparison district exceeded those of the reorganized district. In 1976-77, the per pupil spending differential between the two districts was \$84. Thus, Miles did gain some ability to increase its per pupil general fund expenditure advantages held by the comparison district prior to the 1974-75 reorganization.

D. Average Daily Membership (ADM) (Table 5)

From 1974-75, both the reorganized district and the comparison district had declines in total average daily membership. The reorganized district registered a 5.5 percent decline over the period, while Sentral's decline was 7 percent.

E. Sales Tax Receipts (Table 6)

Since sales tax receipts were available only for two years, and the comparison district information could not be separated from that of surrounding towns, no sales tax receipt comparisons could be made.

III. Transportation (Table 7)

Before its reorganization, Miles spent almost 11 percent of its budget for transportation, while the comparison district spent slightly over 5 percent. Average per pupil costs for the reorganized district rose from \$188 in the first year of reorganization to \$227 in 1976-77, an increase of 20.7 percent. The percentage increase for the comparison district over the same time period was 8.9 percent.

Transportation expenditures for both districts increased over the four-year period resulting in 10.2 percent of the budget for the reorganized district and 8.3 percent of the budget for the comparison district. Transportation costs per pupil for the reorganized district appeared to be much higher proportionately than for the comparison district. The reorganized district transported about 62 more pupils per day on the average, and its total miles traveled per day, in 1976-77, was only 30 miles more than the comparison district, while its average cost per pupil was 2.3 times higher

than the comparison district's average. Much of the difference is explained by the increase in salaries paid for transportation services required for the extra buses supported by the reorganized district.

IV. Non-Instructional Expenditures (Tables 8-9)

Non-instructional expenditures examined included: expenditures for fixed charges and operation and maintenance and administration expenditures.

A. Fixed Charges and Operation and Maintenance (Table 8)

In 1973-74, fixed charges and operation and maintenance expenditures accounted for 21.9 percent of the general fund for Sentral, and 22.5 percent for Miles. In 1976-77, these same expenditures for Miles and Sentral accounted for 20.4 percent and 22.3 percent of the general fund, respectively. This represents a slight decrease in percentages for the reorganized districts, and a slight increase for the comparison district.

B. Administration (Table 9)

In terms of administrative expenditures, Miles was spending 8.4 percent of its budget for administration in 1973-74, and Sentral was spending 9.2 percent. This amount decreased, in 1976-77, for the reorganized district to 7.9 percent and increased to 9.6 percent for Sentral.

The data seems to indicate that little change, in terms of percentages spent for fixed costs, operation and maintenance and for administration, resulted from the reorganization.

V. Summary

A. School Quality Indicators

Reorganization consequences related to the factors used to measure school quality were as follows: 1) instructional expenditures were less for the reorganized district through the years compared; 2) pupil—teacher ratios for the reorganized district tended to fluctuate more than ratios for the comparison district, especially in grades k-6; 3) reorgan—ization resulted in an ability for the reorganized districts to pay teachers higher salaries; 4) reorganization resulted in allowing Miles to substan—tially increase its number of professional support staff personnel; 5) reorganization resulted in no substantial improvement in the curriculum of the reorganized district; 6) dropout rates for both districts were, on the average, between 1 and 2 percent for the years studied and 7) a smaller proportion of graduates from the reorganized district pursued post-secondary education than did graduates from the comparison district.

B. District Characteristics

Both districts declined in average daily membership over the four-year period studied. The reorganized district declined 5.5 percent, while the comparison district declined about 7 percent. Millage rates for the reorganized district were higher each year than were the rates for the comparison district. Some gains in expenditures per pupil were made during reorganization, but not enough to surpass per pupil expenditures in the comparison district.

C. Transportation

Transportation expenditures per pupil were proportionately much higher for the reorganized district. Salaries for the transportation personnel accounted for much of this difference. Transportation expenditures for both districts increased over the four-year period to 10.2 percent for the reorganized district and 8.3 percent for the comparison district.

D. Non-Instructional Expenditures

By 1976-77, as in 1973-74, non-instructional expenditures for fixed charges and operation and maintenance accounted for over 20 percent of the general fund expenditures for the reorganized district and the comparison district. Total administrative expenditures were reduced slightly for Miles through reorganization and accounted for 7.9 percent of the general fund expenditures.

Sabula-Colo Comparison

I. School Quality Indicators (Tables 1-4)

A. Dropout Status (Table 1)

The comparison district had consistently higher dropout rates across the four-year period than the reorganized district. However, the number of dropouts for both districts was quite small, with 18 students dropping out from Colo in the four-year period, and only 9 students from the reorganized district were reported as dropouts.

B. Pupil-Teacher Ratios (Table 1)

The overall pupil-teacher ratio for the comparison district remained fairly constant over the four-year period studied, at about 14:1, while the overall pupil-teacher ratio for the reorganized district remained at about 18:1 from 1974-75 through 1976-77. Prior to reorganization, the overall pupil-teacher ratio for Sabula was 22:1.

C. Instructional Expenditures (Table 1)

The amount of dollars allocated to instruction on a per pupil basis increased by more than \$300, from 1973-74 to 1976-77, for the reorganized district and by \$402 for the comparison district. Thus, the comparison district still spent more on a per pupil basis, in 1976-77, than the reorganized district did. Both districts were spending in the neighborhood of 55 to 60 percent of the general fund budget for instruction in 1976-77.

D. Teacher Characteristics (Table 2)

Teacher characteristic information studied included average expenditures for teachers and degree status of teachers. Since the information on degree status was incomplete, only average teacher expenditure information has been treated. About \$1,300 more was spent per teacher by Sabula in 1973-74 than on Colo teachers. Sabula expenditures increased from \$8,710, in 1973-74, to \$10,572, in 1976-77, an increase of about 21 percent. Expenditures for the comparison district also increased about 21 percent over the same period, increasing from \$7,432, in 1973-74, to \$9,019, in 1976-77.

E. Professional Support Staff (Table 2)

Support staff counts for the two districts were both three in 1973-74. By 1975-76, Colo's professional support staff count had increased to four, where it remained through 1976-77. Through its reorganization in 1974-75, Sabula increased its support count from three to seven, reaching a high of eight in 1975-76, where it remained. Reorganization had a positive influence on Sabula by providing more specialized staff to serve district needs.

F. Curriculum Offerings (Table 3)

Through reorganization, Sabula increased its total curriculum offerings by only six units. This six-unit advantage, in relation to the comparison district. slipped to a one-unit advantage in 1975-76, then increased to six again in 1976-77. The reorganization resulted in a slight advantage for Sabula in five specific curriculum areas: art, industrial arts, social science, homemaking and science. On the other hand, the comparison district offered more units in agricultural education, English and in trades and industry. Neither district offered office education nor distributive education.

G. Graduate Follow-Up Status (Table 4)

As an indicator of school quality, the number of graduates seeking some type of post-secondary education experience was examined. Prior to its reorganization, Sabula had about half the percentage of graduates seeking post-secondary education experiences as did Colo. From 1974-75 on, Colo had a substantially greater percentage of students who pursued post-secondary education experiences than did the reorganized district.

II. District Characteristics (Tables 5-6)

A. Assessed Valuation (Table 5)

Prior to reorganization, the reorganized district had a per pupil wealth of \$7,204 compared to the comparison district's per pupil wealth of \$24,630. In 1976-77, the per pupil wealth for the reorganized district had increased to \$59,060, while for Colo, per pupil wealth increased to \$126,950.

B. General Fund Millage Rate (Table 5)

Millage rates for Colo residents remained at about the same level, approximately 35 mills, throughout the four-year period. For Sabula residents, millage rates decreased from 50.861 mills in 1973-74 to 43.644 in 1976-77.

C. General Fund Expenditures (Table 5)

In the first year of reorganization, \$163 more was spent for each Sabula student than the year prior to reorganization. By 1976-77, expenditures for the reorganized district had increased to \$1,432 per pupil. This represented a total increase in per pupil expenditures of 53 percent. For the comparison district, per pupil expenditures increased from \$1,168 in 1973-74 to \$1,608 in 1976-77, an increase of 38 percent. Original expenditure disparities between Sabula and Colo were not dimished through reorganization.

D. Average Daily Membership (ADM) (Table 5)

Average daily membership decreased in both districts for each year studied. For the reorganized district, ADM decreased from 766 in 1974-75 to 726 in 1976-77. For the same period, Colo's ADM decreased from 339 to 329.

E. Sales Tax Receipts (Table 6)

Sales tax receipts differed by only about \$4,500 in 1973-74. By 1976-77, Sabula's sales tax receipts had increased to \$28,817, while receipts for Colo had increased from \$32,750 to \$42,367. The largest increase for Colo occurred between 1973-74 and 1974-75 and for Sabula between 1975-76 and 1976-77.

III. Transportation (Table 7)

The percentage of general fund expenditures spent for transportation was reduced by almost 50 for Colo from 1973-74 to 1976-77, decreasing from 9 percent of the general fund expenditures to 4.8 percent. The percentage of expenditures for transportation for the reorganized district increased about 1 percent over the initial reorganization year figure of 9.2 percent to 10.1 percent in 1976-77.

Average per pupil costs for transportation increased from \$188, in 1974-75, to \$227, in 1976-77, for the reorganized district. Much of the increase was due to salaries paid to transportation personnel. Colo's average per pupil costs rose from \$127, in 1973-74, to \$209, in 1976-77. The reorganized district traveled, on the average, almost 100 miles per day further each year than the comparison district and operated seven more buses from 1974-75 through 1976-77. The total miles per day traveled by the reorganized district, however, were no more than the combined miles per day traveled by both Miles and Sabula prior to reorganization. A substantial portion of the higher per pupil costs for the reorganized district appears to be due to salaries paid to transportation personnel to operate the 13 buses. It should also be noted that a substantially larger number of pupils were transported by the reorganized district than were transported by the comparison district.

Two categories of non-instructional expenditures have been considered, administration expenditures and expenditures for fixed charges and operation and maintenance.

A. Fixed Charges and Operation and Maintenance (Table 8)

Prior to reorganization, both districts were spending a little over 19 percent of the general fund budget on fixed charges and operation and maintenance. In 1976-77, the reorganized district was spending 20.4 percent on the two items or about 2 percent less than the comparison district.

B. Administration (Table 9)

The percentage of funds spent for administration for Sabula were reduced through reorganization with Miles from 11.2 to 7.9 percent in 1976-77. In 1973-74, Colo was spending 13.4 percent of its general fund on administration, and in 1976-77, 12.8 percent of the general fund was spent on administration. It would appear that reorganization has somewhat decreased the percentage of general fund expenditures going toward administration.

V. Summary

A. School Quality Indicators

From the standpoint of Sabula, the following consequences of the reorganization are apparent: 1) in 1976-77, the reorganized district was still spending fewer dollars per pupil for instruction, as it had before reorganization, than the comparison district; 2) overall pupil-teacher ratios were higher by about four pupils for the reorganized district across the three-year period of reorganization; 3) the reorganized district had considerably higher teacher salaries than its comparison district; 4) a

considerable advantage was realized from the reorganization in terms of professional support staff acquisition and 5) a slight advantage in specific curriculum areas was acquired through reorganization.

B. District Characteristics

Average daily membership for both districts continued to decrease across the four-year period from 1973-74 to 1976-77. Assessed valuation per pupil increased for both districts resulting in a \$126,950 per pupil expenditure for the comparison district and \$59,060 for the reorganized district in 1976-77. General fund expenditures increased to \$1,432 per pupil for the reorganized district and to \$1,608 per pupil for the comparison district in 1976-77.

C. Transportation

The reorganized district experienced higher average per pupil costs than the comparison district. This was primarily due to the operation of a greater number of buses. In the most current year for which data were available, transportation expenditures accounted for 9.2 percent of the general fund for the reorganized district and 4.8 percent for the comparison district.

D. Non-Instructional Expenditures

Fixed charges and operation and maintenance expenditures, as a percent of total general fund expenditures, increased gradually from about 19 percent in 1973-74 to a little over 20 percent in 1976-77 for both districts. The percent of expenditures for administration in Colo was 12.8 in 1976-77 or about 4 percent higher than for the reorganized district. The percentage of expenditures going toward administration for the reorganized district accounted for a smaller amount of the general fund after reorganization.

Figure 1
Summary of Reorganization Consequences for Miles-Sabula Reorganization

Item	Miles-Sabula
Instructional Expenditures	0
Pupil-Teacher Ratios	+
Average Teacher Expenditures	+
Teacher Degree Status	?
Professional Support Staff	+
Curriculum Offerings	0
General Fund Millage Rate	?
Expenditures Per Pupil	0
Transportation	?
Non-Instructional Expenditures	+

^{+ =} beneficial consequences

^{0 =} little or no change in consequences

^{? =} inconclusive consequences

^{- =} negative consequences

		Dropou	+ 6	% of GF			-Teacher tios		Instructional
Year	District	ADM 7-12	%	Spent for Instruction	k-6	7-9	10-12	Over All	Expenditures Per Pupil
1973-74	Miles Sentral Sabula Colo	3/187.1 4/220.7 2/173.2 6/143.7	1.6 1.8 1.2 4.2	54.4 58.2 56.7 51.3	NA ¹ 14.4 NA :	NA 14.9 NA 13.7	NA 16.7 NA 14.0	NA 13.6 NA 14.7	\$ 545 722 532 599
1974-75	East Central Sentral Colo	4/375.3 2/219.9 2/157.1	1.1 .9 1.3	54.9 57.7 51.0	24.7 14.8 22.0	22.4 15.9 14.8	18.2 15.9 12.0	18.7 12.9 15.4	604 807 655
1975-76	East Central Sentral Colo	0/362.4 2/212.8 3/163.0	0.0	58.1 57.1 54.1	12.6 16.1 19.9	.17.7 16.7 14.2	17.4 16.3 13.2	18.6 14.3 14.3	754 812 743
1976-77	East Central Sentral Colo	3/366.0 4/211.7 7/165.4	.8 1.9 4.2	59.4 54.3 56.0	23.1 18.0 18.2	18.2 16.8 27.3	17.0 13.8 12.3	17.7 13.6 14.3	850 823 901

¹NA Information Not Available

Table 2
School Quality -- Average Teacher Expenditures, Degree
Status and Professional Support Count

					Degree Status	
Year	District	Average Teacher Expenditures	Support Count	% Less Than Bachelors	% Bachelors	% Advanced
		A. The state of th				
1973-74	Miles	\$ 7,615	3	NA NA	NA	NA
	Sentral	8,202	3	NA	NA	NA
	Sabula	8,710	3	1.0	18.0	1.0
	Colo	7,432	3	NA	NA	NA
1974-75	East Central	8,761	7	NA	NA	AN
	Sentral	7,983	9	23.3	73.3	3.4
	Colo	8,412	3	.0	100.0	.0
1975-76	East Central	10,190	8	.0	· NA	NA
	Sentral	8,970	6	26.9	69.2	3.9
	Colo	7,870	4	.0	95.5	4.5
1976-77	East Central	10,572	8	NA	NA	AN
	Sentral	8,851	5	8.0	88.0	4.0
	Colo	9,019	4	.0	90.9	9.1

1NA Information Not Available

		Agr.	Art	Bus.	Dist.		For.	Hlth.		Ind.					Soc.		Dr.	
Year	District	Edu.	Edu.	Edu.	Edu.	Eng.	Lang.	P.E.	Hmk.	Art	Math	Music	Sci.	0.E.	Sci.	T&1	Edu.	Total
							70 1				72			,,,,,,	001.	101	Lug.	10 00
1973-74	Miles	0.0	2.0	6.0	0.0	4.0	3.0	1.0	2.0	4.0	6.0	.5	5.0	0.0	4.5	0.0	0.0	38.0
1-	Sentral	2.0	1.5	5.0	0.0	8.0	2.0	1.0	3.5	3.0	5.0	1.0	4.0	0.0	5.5	2.0	.5	44.0
	Sabula	0.0	3.0	5.0	0.0	6.0	1.0	1.0	3,5	4.0	4.5	1.2	4.0	0.0	5.0	.5	0.0	38.7
	Colo	3,5	2.0	6.0	0.0	7.0	3.0	1.0	3,5	0.0	5.0	.5	4.0	0.0	4.0	1.5	.5	41.5
1974-75	East Central	0.0	4.0	7.0	0.0	5.0	3.0	1.0	4.0	4.0	6.0	0.0	5.0	0.0	5.5	0.0	0.0	44.5
	Sentral	2.0	1.5	4.0	0.0	8.5	2.0	1.0	3.5	3.5	5.0	1.0	4.0	0.0	5.5	1.0	0.0	42.5
	Colo	3.0	2.0	6.0	0.0	5.5	1.0	1.0	3.0	0.0	6.0	.5	4.0	0.0	3.5	1.5	.5	37.5
1975-76	East Central	0.0	3.0	5.5	0.0	4.0	3.0	1.0	4.0	4.0	6.0	1.0	5.0	0.0	5.0	0.0	0.0	41.5
	Sentral	3.0	1.5	5.0	0.0	8.5	1.0	1.0	3.5	.5	6.0	1.0	4.0	0.0	5.5	0.0	0.0	40.5
	Colo	4.5	2.0	6.0	0,0	7.0	0.0	1.0	3.0	0.0	6.0	2.0	4.0	0.0	4.0	.5	.5	40.5
1976-77	East Central	0.0	4.0	5.5	0.0	4.0	3.0	1.0	4.0	4.0	6.0	1.0	6.0	0.0	5.0	0.0	0.0	43.5
	Sentral	4.0	1.5	4.5	0.0	8.0	1.0	1.0	3.5	0.0	6.0	1.0	4.0	0.0	6.0	0.0	0.0	40.5
	Colo	5.0	2.5	5.0	0.0	5.5.	0.0	1.0	3.5	0.0	5.0	2.0	4.0	0.0	3.5	-5	0.0	37.5

¹A Carnegie Unit is defined as a course offering measure equivalent to one hour of instruction per day for a period of 36 weeks or a full school year.

Table 4
School Quality -- Status of Students
One Year After Graduation

			condary ational		econdary ional		lob ket	Other ¹	
Year	District	No.	%	No.	1 %	No.	%	No.	%
1973-74	Miles	10	27.0	6	16.2	13	35.i	8	21.6
	Sentral	11	22.0	17	34.0	15	30.0	7	14.0
	Sabula	2	10.0	2	10.0	7	35.0	9	45.0
d vide	Colo	6	22.2	5	18.5	13	48.1	3	11.1
1974-75	East Central	. 13	25.0	7	13.5	28	53.8	4	7.7
1314-10	Sentral	8	20.5	11	28.2	16	41.0	4	10.3
	Colo	6	23.1	6	23.1	9	34.6	5	19.2
1975-76	East Central	13	24.1	5	9.3	30	55.6	6	11.1
1310-10	Sentral	8	22.2	9	25.0	15	41.7	4	11.1
	Colo	7	33.3	9	42.8	5	23.8	0	0.0
. *				38.00					74.5
1976-77	East Central	13 7	23.6	4	7.3	19	34.5	19	34.5
	Sentral	9.	25.0	12	33.3	9	25.0	6	16.7
	Colo	4	22.2	4	22.2	7	38.9	3	16.7

lother includes military service, unemployed, housewife

Table 5
District Characteristics -Assessed Valuation Per Pupil, General Fund Millage,
General Fund Expenditure Per Pupil and Average Daily Membership

Year	District	Assessed Valuation Per Pupil	General Fund Millage	General Fund Expenditure Per Pupil	Average Daily Membership
1973-74	Miles	\$ 15,618	41.240	\$1,002	412.1
	Sentral	31,715	30.675	1,240	408.0
	Sabula	7,204	50.861	938	354.6
	Colo	24,630	36.138	1,168	337.9
1974-75	East Central	11,794	40.120	1,101	766.3
	Sentral	7 32,619	31.328	1,399	399.4
	Colo	24,582	36,260	1,285	339.1
		10 100	47.294	1,299	745.7
1975-76	East Central	12,120			385.1
	Sentral	33,830	35.189	1,424	
	.Colo.	24,302	40.112	1,373	343.0
1976-77	East Central	59,060	43.644	1,432	726.0
2310-11	Sentral	184,279	25.788	1,516	380.0
	Colo	126,950	35,055	1,608	329.0

. Table 6
District Characteristics -Sales Tax Receipts

District	1973-74	% Change	74 - 75	% Change	75 - 76	% Change	76 - 77	% Change
Miles	NA ¹	NA	NA	NA	55,979		70,373	25.7
Sentral-Fenton	NA		. NA		37,777		38,606	
		NA		NA				2.2
Sentral-Lone Rock	NA		NA .		15,390		16,788	
Sentral-Lone Rock		NA		NA				9.1
Sabula	28,393		30,131		24,665		28,817	
	20,000			6,1		-18.0		16.8
Colo	32,750		40,114		44,680		42,367	
				22.5		11.4		-5.2
State (000)	240,671		241,232		258,101		290,833	
0007	240,071			2		7.0		12.7

¹NA Information Not Available from the Department of Revenue

Table 7
Transportation Characteristics for Miles, Sentral, Sabula and Colo

		Trans. Exp.	Average	Average Cost		Total Miles	Cos	st (Dollars a	and Person	+1	Percent of
		as a % of	Pupils*	Per Pupil	No. of	Traveled	Cost of	10011415.6	ind i di den	Total	Pupils
Year	District	General Fund	Trans./Day	Transported	Buses	Per Day	Buses	Salaries	Gas	Dollars	Transported
							20000	, Outur 105	Ous	DOTTERS	Transported
1973-74	Miles	10.7	317	\$104	9	370	\$ 9,023	\$12,010	7,298	\$ 32,838	76.9
					.6		(27.5)	(36.6)	(22.2)	,	
	Sentral	5.1	415	75	9	549	7,126	13,815	6,943	31,122	
			1 10				(22.9)	(44.4)	(22.3)	,	
	Sabula	4.6	123	173	. 4	155	4,859	5,800	5,000	21,206	37.2
					1		(22.9)	(22.9)	(23.6)	,	01.2
	Colo	9.0	212	127	6	361	5,217	9,218	5,561	26,956	62.7
							(19.4)	(36.4)	(20.6)	20,500	, 02.1
1974-75	East Central	9.2	443	188	13	568	17,169	36,610	14,000	84,419	57.8
							(20.3)	(43.4)	(16.6)	0.,.20	01.0
	Sentral	7.2	382	89	10	458	6,877	13,248	7,584	33,813	
							(20.3)	(39.2)	(22.4)		
	Colo	7.5	198	162	6	453	8,319	10,728	6,212	32,036	58.4
							(26.0)	(33.5)	(19:4)	02,000	00.4
1975-76	East Central	11.5	419	243	13	523	18,883	37,661	16,460	101,760	56.2
							(18.6)	(37.0)	(16.2)	101,100	00.2
	Sentral	6.7.	392	84	9	392	6,877	13,568	7,812	32,917	
							(20.9)	(41.2)	(23.7)		
	Colo	9.2	190	174	6	402	8,573	9,792	7,375	33,096	55.4
							(25.9)	(29.6)	(22.3)		
1976-77	East Central	10.2	452	. 227	13	520	20,068	44,668	16,362	102,868	62.3
							(19.5)	(43.4)	(15.9)	,000	02.0
	Sentral	8.3	390	97	9	490	9,386	13,553	8,949	37,630	
							(24.9)	(36.0)	(23.8)	5.,550	
	Colo	4.8	171	209	6	444	8,688	12,943	7,579	35,643	52.0
							(24.4)	(36.3)	(21.3)	50,070	02.0
							, - , - , -	(, /		

Table 8
Non-Instructional Expenditures -Fixed Charges and Operation and Maintenance

		Fixed	Charges	Operation	and Maintenance
		THE PARTY OF	% of		% of
Year	District	Amount	General Fund	Amount	General Fund
1973-74	Miles	\$ 42,449	10.3	\$ 50,549	12.2
	Sentral '	49,136	9.7	61,818	12.2
	Sabula	28,275	8.5	35,417	10.7
	Colo	35,050	8.9	41,847	10.6
1974-75	East Central	77,734	9.2	103,287	12.2
MAL	Sentral	51,096	9.1	66,998	12.0
	Colo	37,048	8.5	55,730	12.8
1975-76	East Central	¥ 89,316	9.2	89,735	9.3
	Sentral	48,653	8.9	63,169	. 11.5
	Colo	42,204	9.0	47,047	10.0
1976-77	East Central	104,563	10.1	107,229 .	10.3
	Sentral	54,720	9.5	74,823	13.0
	Colo	30,513	10.9	60,108	11.4

. Table 9
Non-Instructional Expenditures -Administration

		Total Admi	nistrative ¹	Total Admi	inistrator ²
			% of		% of
Year	District	Amount	General Fund	Amount	General Fund
1973-74	Miles	\$34,528.00	8.4	\$24,296.00	5.9
	Sentral	46,701.00	9.2	34,904.00	6.9
	Sabula	37,223.00	11.2	24,379.00	7.3
	Colo	52,702.00	13.4	42,812.00	10.9
1974-75	East Central	70,782.77	8.4	52,354.02	6.2
	Sentral	46,756.01	8.4	38,006.92	6.8
	Colo	55,741.35	12.8	46,743.72	10.7
1975-76	East Central	78,522.81	8.1	58,758.32	6.1
	Sentral	-51,807.59	9.4	42,280.73	7.7
	Colo	62,816.30	13.3	51,909.26	11.0
1976-77	East Central	82,335,12	7.9	74,230.56	7.1
	Sentral	55,454.22	9.6	43,899.35	7.6
	Colo	67,849.21	12.8	59,070.14	11.2

¹Administrative expenditures include all administrator expenditures plus Board of Education and clerical expenditures

²Administrator expenditures include all expenditures for superintendent, assistant superintendent, business manager, principals and supervisors

LAURENS-MARATHON CASE STUDY

Laurens and Marathon reorganized in 1976-77. This type of reorganization was referred to in the introduction as a reorganization involving the merging of two smaller districts. Severe limitations are placed on the comparisons in this case study, since data from only one year of the reorganized status is available along with one year of data prior to reorganization. Due to this circumstance, separate comparisons of each of the two reorganized districts with comparison districts will be made only in an abbreviated fashion, and few conclusions will be drawn. A separate summary will not be included.

Laurens-Avoha Comparison

I. School Quality Indicators (Tables 1-4)

A. Dropout Status (Table 1)

In 1975-76, Laurens lost five students and Avoha lost two. In 1976-77, both districts had a dropout rate of less than 1 percent.

B. Pupil-Teacher Ratios (Table 1)

Pupil-teacher ratios for k-6 and 10-12 increased in the first year of reorganization for Laurens, while grades 7-9 and overall ratios remained about the same. In 1976-77, pupil-teacher ratios were quite comparable for the two districts, with k-6 ratios of about 19:1 and 7-9, 10-12 and overall ratios ranging from about 16:1 to 18:1.

C. Instructional Expenditures (Table 1)

Prior to reorganization, Laurens spent 62.6 percent of its general fund budget on instruction or 5.7 percent more than Avoha. This amounted to \$152 more per pupil being spent on Laurens students. In the first year of reorganization, the percentage of expenditures for instruction dropped almost 5 percent for Laurens, amounting to 58 percent, compared to 55.5 percent for Avoha. Expenditures, on a per pupil basis, remained at almost the same proportion in 1976-77 as in 1975-76, with the reorganized district spending \$871 per pupil or \$151 more per pupil than Avoha.

D. Teacher Characteristics (Table 2)

Average teacher expenditures were slightly higher for Laurens than for Avoha in 1975-76 and remained proportionately higher in 1976-77 at \$11,739, as compared to \$11,381 for Avoha. Degree status information was only available in 1975-76 for the two districts. For that year, all Laurens teaching staff had at least a Bachelors degree, while 6.1 percent of the Avoha staff held less than a Bachelors degree.

E. Professional Support Staff (Table 2)

In the first year of reorganization, professional support staff count for the reorganized district totaled three, one less than Laurens had the year prior to reorganization. The comparison district maintained a support staff count of three for both years.

F. Curriculum Offerings (Table 3)

In 1975-76, Laurens and Avoha offered total curriculum units of 49.25 and 41.0, respectively. In the first year of reorganization, Laurens increased total curriculum units offered to 56, while total units offered for Avoha fell to 38.5. Laurens increased offerings from the previous year slightly in the areas of music, math, industrial arts, homemaking, health and physical education and in foreign language.

G. Graduate Follow-Up Status (Table 4)

About 65 percent of the graduates from Laurens pursued post-secondary education in 1975-76, while about 55 percent of Avoha's graduates went on to post-secondary educational experiences. Roughly, the same percentage for both districts sought post-secondary education experiences in 1976-77.

II. District Characteristics (Tables 5-6)

A. Assessed Valuation (Table 5)

Per pupil wealth for Laurens increased from \$20,733 in 1975-76 to \$116,472 in 1976-77. Corresponding changes for Avoha were from \$17,754 to \$85,160. Property in the state was reassessed at 100 percent of value during the 1976-77 school year.

B. General Fund Millage Rate (Table 5)

The millage rate for Laurens' residents dropped from 40.670 in 1975-76 to 34.933 in the initial year of reorganization. The millage rate for Avoha residents for the same period decreased from 39.835 mills to 35.215 mills.

C. General Fund Expenditures (Table 5)

General fund expenditures per pupil increased for both districts from 1975-76 to 1976-77. Expenditures increased for Laurens by \$189 to \$1,504 per pupil in 1976-77. For Avoha, per pupil expenditures increased by \$120 to \$1,305 per pupil in 1976-77.

D. Average Daily Membership (ADM) (Table 5)

Through reorganization, Laurens' average daily membership increased from 594 to 726. Avoha's average daily membership decreased by about 3 percent in 1976-77 from 601.9 in 1975-76.

E. Sales Tax Receipts (Table 6)

Laurens' sales tax receipts were up 17.8 percent in 1976-77 over 1975-76 figures. Separate sales tax data were not available for Avoha.

III. Transportation (Table 7)

Transportation expenditures, as a percent of the general fund, remained almost unchanged after reorganization for Laurens. The percentage of general fund spent for transportation increased by 1.1 percent for Avoha in the same period. Average per pupil costs for both districts increased over the two-year period, with costs for the comparison district increasing by a substantially higher percentage.

IV. Non-Instructional Expenditures (Tables 8-9)

A. Fixed Charges and Operation and Maintenance (Table 8)

Combined expenditures for fixed costs and operation and maintenance increased 4.1 percent to 22.5 percent of the budget for Laurens and declined 1.2 percent to 22.1 percent of the total budget for Avoha.

B. Administration (Table 9)

Total administrative expenditures declined slightly to 8.8 percent of the general fund for Laurens in the initial year of reorganization, from 10.5 percent in 1975-76. The percentage of expenditures for administration increased slightly to 9.8 percent over the two-year period for Avoha.

Marathon-Diagonal Comparison

I. School Quality Indicators (Tables 1-4)

A. Dropout Status (Table 1)

Dropout rates were 2.8 percent and .5 percent, respectively, in 1975-76 and 1976-77 for Marathon. Corresponding dropout rates for Diagonal were .9 percent and 1.9 percent, respectively, for the two-year period.

B. Pupil-Teacher Ratios (Table 1)

Pupil-teacher ratios for each of the subgroups, as well as for overall pupil-teacher ratios, were increased through reorganization for Marathon. These ranged from 19:1 in grades k-6 to 16:1 for the other grades. For Diagonal, all pupil-teacher ratios, except the 10-12 ratio, showed a slight general decrease from 1975-76 to 1976-77. Pupil-teacher ratios for k-6 and overall were about 10:1, whilt 7-9 and 10-12 were 19:1 and 16:1, respectively.

C. Instructional Expenditures (Table 1)

Prior to reorganization, Marathon spent a lesser percentage of its budget for instruction, 51.9 percent, than its comparison district, but they spent more on a per pupil basis. Marathon spent \$940 per pupil, while the comparison district spent \$814 per pupil. In the first year of reorganization, the percentage spent for instruction increased by 5.1 percent for Marathon and remained about the same for Diagonal. The reorganized district in 1976-77 spent \$151 more per pupil than the comparison district.

D. Teacher Characteristics (Table 2)

Average expenditures for teachers increased just under \$3,000 from 1975-76 to 1976-77 for Marathon and for Diagonal increased about \$1,100 to \$8,407 or \$3,332 less than 1976-77 teacher expenditures for the reorganized district. Degree status information was available for only one year; therefore, little can be said about this area.

E. Professional Support Staff (Table 2)

Support staff count remained at the same level for both districts for each of the two years studied, with Marathon having one additional support staff member as compared to Diagonal.

F. Curriculum Offerings (Table 3)

Marathon increased its total curriculum offerings through reorganization by 21 units. Diagonal, on the other hand, increased its total offerings by 1.25 units from 1975-76 to 1976-77. Marathon's greatest curriculum advantages over Diagonal were in the areas of agricultural education, business education and foreign language.

G. Graduate Follow-Up Status (Table 4)

The percentage of graduates seeking post-secondary education experiences for Marathon and Diagonal in 1975-76 and 1976-77 were 42 and 44 percent and 64 and 19 percent, respectively.

II. District Characteristics (Tables 5-6)

A. Assessed Valuation (Table 5)

Per pupil assessed valuation for Marathon in 1975-76 was \$23,624 as compared with \$18,555 for Diagonal. In 1976-77, assessed valuation per pupil for Marathon and Diagonal was \$116,472 and \$92,983, respectively. The large variations from 1975-76 to 1976-77 were due to reassessment of land at 100 percent of its actual value.

B. General Fund Millage Rate (Table 5)

Millage rates for Marathon residents decreased from 47.872 in 1975-76 to 34.933 in 1976-77. Corresponding changes for Diagonal were from 45.846 to 41.013.

C. General Fund Expenditures (Table 5)

For the first year of reorganization, general fund expenditures per pupil for Marathon were \$1,504 or \$354 less than the year before; Diagonal's per pupil expenditures increased from \$1,465 to \$1,715 in 1976-77.

D. Average Daily Membership (ADM) (Table 5)

The combined average daily membership for Laurens and Marathon was 779.2 in 1975-76 and decreased to 726.0 in the first year of reorganization. For the same period, average daily membership for the comparison district increased from 188.2 to 196.3.

E. Sales Tax Receipts (Table 6)

Sales tax receipts for Marathon increased from \$24,893 to \$92,692 from 1975-76 to 1976-77, while receipts for Diagonal increased about 14 percent.

III. Transportation (Table 7)

The percentage of the budget for transportation increased .4 percent for Marathon from 1975-76 to 1976-77 from 4.7 to 5.1 percent, while the percentage decreased for Diagonal by .6 percent from 4.3 percent to 3.7 percent. Average per pupil costs increased for both districts over the two-year period and represented a very small increase for Diagonal but a substantial increase for the reorganized district. Most of the increase for the reorganized district appeared to be associated with salaries for personnel to operate and maintain the reorganized districts more than two and one-half times the number of buses as operated by Diagonal.

IV. Non-Instructional Expenditures (Tables 8-9)

A. Fixed Charges and Operation and Maintenance (Table 8)

Fixed charges and operation and maintenance expenditures, combined, accounted for 23.3 percent of Marathon's budget and 20.3 percent of Diagonal's budget in 1975-76. In 1976-77, these two items accounted for 22.5 percent of the reorganized district's budget and 20.4 percent of Diagonal's budget.

B. Administration (Table 9)

Total administrative expenditures for Marathon in 1975-76 and in 1976-77 were 13.5 percent and 8.8 percent. For Diagonal, administrative expenditures were 14.4 percent and 13.0 percent, respectively, in 1975-76 and 1976-77.

Figure 1
Summary of Reorganization Consequences for Laurens-Marathon Reorganization

. Item	Lau	rens-Marath	on
Instructional Expenditures		_	
Pupil-Teacher Ratios		. 0	
Average Teacher Expenditures		0	
Teacher Degree Status		0	
Professional Support Staff		0	
Curriculum Offerings		+	
General Fund Millage Rate		0	
Expenditures Per Pupil		0	
Transportation		-	
Non-Instructional Expenditures		?	

^{+ =} beneficial consequences

^{0 =} little or no change in consequences

^{? =} inconclusive consequences

^{- =} negative consequences

Table 1
School Quality -- Instructional Expenditures
Pupil-Teacher Ratios and Dropouts

		Dropouts		% of GF			-Teacher tios	Total Instructional	
	District	ADM	01	· Spent for	1. 6	7.0	10.10	Over	Expenditures
Year	Ulstrict	7-12	%	Instruction	k-6	7-9	10-12	All	Per Pupil
1975-76	Laurens	5/335.3	1.5	62.6	16.1	17.1	13.1	16.1	\$823
	Avoha	2/290.7	.7	56.9	18.7	17.6	17.4	18.2	671
	Marathon	3/107.5	2.8	51.9	13.7	11.0 .	11.0	10.8	940
	Diagonal	1/106.5	.9	55.6	10.3	17.7	14.3	11.1	814
1976-77	Laurens-Marathon	2/409.3	.5	58.0	19.8	16.3	16.6	16.1	871
	Avoha	3/310.0	.9	55.5	19.1	18.3	17.9	18.7	720
	Diagonal	2/107.0	1.9	58.3	10.0	19.7	16.7	10.9	992

Table 2
School Quality -- Average Teacher Expenditures, Degree
Status and Professional Support Count

					Degree Status		
Year	District	Average Teacher * Expenditures	- Support Count	% Less Than Bachelors	% Bachelors	% Advanced	
1975-76	Laurens	\$10,999	3	.0	95.7	4.3	
	Avoha	10,624	3	6.1	84.8	9.1	
	Marathon	8,577	2	11.1	83.3	5.6	
	Diagonal	7,286	1	11.8	82.3	5.9	
1976-77	Laurens-Marathon	11,739	2	NAI	NA .	NA	
	Avoha	11,381	. 3	NA	NA	NA	
	Diagonal	8,407	1	NA	NA	NA	

¹NA Information Not Available

Table 3
School Quality -- Curriculum Offerings Expressed as Carnegie Units¹

		Agr.	Art	Bus.	Dist.		For.	Hlth.		Ind.					Soc.		Dr.	
Year	District	Edu.	Edu.	Edu.	Edu.	Eng.	Lang.	P.E.	Hmk.	Art	Math	Music	Sci.	0.E.	Sci.	T&1	Edu.	Total
1975-76	Laurens	4.25	2.5	6.0	,5	5.25	4.0	1.5	3.25	3.5	5.0	2.0	5.0	0.0	5.75	.75	0.0	49.25
	Avoha	1.0	3.0	3,5	0.0	4.5	2.0	1.0	3,5	1.0	6.0	1.0	6.0	0:0	4.0	4.0	.5	41.0
	Marathon	0.0	2.0	3.0	0.0	4.0	1.0	3.0	2.0	3.0	5.0	.5	4.0	0.0	4.0	4.0	0.0	35.5
	Diagonal	0.0	.5	4.5	0.0	4.0	1.0	1.0	3.0	1.5	5.0	.75	4.0	0.0	4.5	3.0	.5	33.25
1976-77	Laurens-Marathon	4.0	2.5	6.0	0.0	5.25	6.0	2.0	4.25	4.0	6.0	3.5	5,25	0.0	6.75	.5	0.0	56.0
	Avoha	1.0	2.0	3.5	0.0	4.5	2.0	1.0	3.5	1.0	6.0	1.0	5.0	0.0	3.5	4.0	.5	38.5
	Diagonal	0.0	.5	3.5	0.0	4.0	1.0	1.0	4.5:	2.5	5.0	.5	4.0	0.0	4.5	3.0	.5	34.5

¹A Carnegie Unit is defined as a course offering measure equivalent to one hour of instruction per day for a period of 36 weeks or a full school year

Table 4
School Quality -- Status of Students
One Year After Graduation

		Post-Secondary Non-Vocational		Post-Secondary Vocational		Job Market		Other ¹	
Year	District	No.	- %	No.	%	No.	. %	No.	%
1975-76	Laurens	17	33.3	17	33.3	6	11.8	11 .	21.6
	Avoha	13	28.9	12	26.7	17	37.8	3	6.7
	Marathon	4	21.1	4	21.1	8	42.1	3	15.7
	Diagonal	2	11.1	6	33.3	9	50.0	1	5.6
1976-77	Laurens-Marathon	19	35.2	16	29.6	14	25.9	5	9,3
	Avoha	11	25.0	12	.27.3	17	38.6	4	9.1
	Diagonal	. 1	3.6	4	14.3	9	32.1	14	50.0

¹Other includes military service, unemployed, housewife

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Table 5
District Characteristics -Assessed Valuation Per Pupil, General Fund Millage,
General Fund Expenditure Per Pupil and Average Daily Membership

Year	District	Assessed Valuation Per Pupil	General Fund Millage	General Fund Expenditure Per Pupil	Average Daily Membership
1975-76	Laurens	\$ 20,733 .	40.670	\$1,315	594.8
	Avoha	17,754	39.835	1,185	601.9
	Marathon ·	23,624	47.872	1,858	184.4
	Diagonal	18,555	45.846	1,465	188.2
					,
1976-77	Laurens-Marathon	116,472	34.933	1,504	726.0
	Avoha	85,160	35,215	1,305	618.0
	Diagonal	92,983	41.013	1,715	196.3

Table 6
District Characteristics -Sales Tax Receipts

District	1975-76	1976-77	% Change
		274,466	
Laurens	233,015		17.8
		290,001	
AvohaAvoca	271,723		
		7.15	6.7
		12,082	
AvohaHancock	10,117		
	the series		19.4
		92,692	
Marathon ;	24,893		
			372.4
		423,173	
Diagonal	371,932		
			13.8
		290,833	
State (000)	258,101		
			12.7

Table 7
Transportation Characteristics for Laurens, Avoha, Marathon and Diagonal

		Trans. Exp.	Average	Average Cost	No. of	Total Miles Traveled	Cost (Dollars and Percent)				Percent of
		as a % of	Pupils	Per Pupil			Cost of			Total	Pupils
Year	District	General Fund	Trans./Day	Transported	Buses	Per Day	Buses	Salaries	Gas	Dollars	Transported
1975-76	Laurens	5,3	212	\$153	8	298	\$8,786	\$12,317 (38.0)	5,710 (17.6)	\$32,394	35.6
	.Avoha	7.1	280	167	8	429	8,040	21,393 (45.3)	9,419 (19.9)	47,222	46.5
	Marathon	4.7	108	121	3	111	NR ¹	10,850 (82.4)	NR	13,167	65.7
	Diagonal	4.3	113	176	4	190	7,956 (40.0)	5,125 (25.8)	3,106 (15.6)	19,871	60.1
1976-77	Laurens-Marathon	5.1	245	174	11	444	7,088	19,160 (45.1)	9,653	42,447	33.7
	Avoha	8.2	263	231	8	433	9,138	24,464 (40.2)	9,324 (15.3)	60,810	42.6
	Diagonal	3.7	116	179	4	190	7,819	5,807 (28.1)	3,583 (17,3)	20,666	59.2

¹NR Not Reported

Non-Instructional Expenditures -Fixed Charges and Operation and Maintenance

Table 8

		Fixed	Charges	Operation and Maintenance			
Year	District	Amount	% of General Fund	Amount	% of General Fund		
1975-76	Laurens	\$ 78,229	10.0	\$ 65,331	8.4		
	Avoha	61,651	8.6	104,821	14.7		
	Marathon	30,792	9.0	48,933	14.3		
	Diagonal	20,968	7.6	34,914	12.7		
1976-77	Laurens-Marathon	107,573	9.8	138,620	12.7		
	Avoha	76,599	9,5	101,795	12.6		
	Diagonal	26,835	8.0	41,707	12.4		

Table 9

Non-instructional Expenditures -
Administration

		Total Admi	nistrative ¹	Total Administrator ²		
Year	District	Amount	% of General Fund	Amount	% of General Fund	
1975-76	Laurens	\$82,140.80	10.5	\$66,719.63	8.5	
	Avoha	60,622.09	8.5	41,833.18	5.9	
	Marathon	44,916.72	13.5	32,966.67	9.9	
	Diagonal .	39,655.12	14.4	29,494.59	10.7	
1056 55		05 505 50	0.0	77 FOO FF	2.1	
1976-77	Laurens-Marathon	95,726.58	8.8	77,590.55	7.1	
	Avoha	78,832.06	9.8	59,349.88	7.4	
	Diagonal	43,454.02	13.0	37,882.90	11.3	

¹Administrative expenditures include all administrator expenditures plus Board of Education and clerical expenditures

²Administrator expenditures include all expenditures for superintendent, assistant superintendent, business manager, principals and supervisors

