Declining student enrollment in Virginia 1972-1981: an examination of its extent, State Board of Education policies, and changes effected by selected school divisions

Edward Hughes Pruden
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DECLINING STUDENT ENROLLMENT IN VIRGINIA 1972-1981: AN EXAMINATION OF ITS EXTENT, STATE BOARD OF EDUCATION POLICIES, AND CHANGES EFFECTED BY SELECTED SCHOOL DIVISIONS

The College of William and Mary in Virginia

Ed.D. 1983

University Microfilms International 300 N. Zeib Road, Ann Arbor, MI 48106
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OF EDUCATION POLICIES, AND CHANGES
EFFECTED BY SELECTED SCHOOL DIVISIONS

A Dissertation
Presented to
The Faculty of the School of Education
The College of William and Mary in Virginia

In Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

by
Edward Hughes Pruden, Jr.
May 1983
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by

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Approved May 1983 by

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Dedication

This study is dedicated to my father, whose life has been an example of scholarship at its best; to my mother, for her tireless encouragement of my educational endeavors; and especially to my wife, who has been supportive and helpful in every way.
ACKNOWLEDGEMENTS

Many people have helped in the preparation of this study. At the State Department of Education, several persons were generous with their time and expertise: Howell L. Gruver, Elizabeth F. Gaines, Dr. Richard L. Boyer, James Ward, and Grey W. Ritchie. Sincere appreciation is expressed to the responding Superintendents and/or their designees for their thoughtful and thorough response to the questionnaire.

Special thanks are expressed to David O. Williams, Principal of George Wythe High School, for having so graciously accommodated the irregular schedule of his assistant during post-graduate study.

Greatest appreciation is expressed to the doctoral committee, Dr. Unger, Dr. Losito, and especially to its chairman, Mr. Chesser, for their guidance, instruction, and encouragement.
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CHAPTER ONE

In the 1950s and 1960s, education in America was growing. Student populations were rapidly expanding, financial support was increasing, and new schools were being built. This period of expansion ended in the 1970s, when student populations declined, budgets tightened, and new school construction decreased.

Declining student enrollment is presenting a problem at the national, state, and local levels. Public school enrollment nationwide peaked in 1971 at 46.1 million pupils, and has continued to decline each year. In Virginia, public school enrollment reached its highest number during the 1975-76 school term at nearly 1.1 million students. Enrollment in Virginia has declined yearly since 1975-76, and high school enrollments are expected to continue to decline at least through 1995. With the exception of a few suburban school divisions, most local divisions in Virginia are continuing to experience decline.

Declining pupil enrollment leads to several problems. The management of decline requires school administrators to possess competencies different from those needed in the management of growth. Decisions must be made on when, where, and how to close or consolidate schools rather than on building new schools. Few new teachers are hired, and school staffs become older, more stable, and more expensive
as they move up the pay scale. Reduction-in-force policies must be
developed. School board budgets are more closely examined and analyzed,
since the public assumes that declining enrollments would imply
reduced expenditures. School-community relations become increasingly
important, as the closing of school buildings and the transfer or
termination of staff can become emotional issues.

These complex conditions, then, lead one to inquire to what
extent declining student enrollment has occurred in local school
divisions in Virginia; what policies, if any, have been enacted by
the State Board of Education relative to declining enrollment; and
what effect a severely declining enrollment may have had in the
areas of formal curriculum, professional personnel, school organi-
zational patterns, and the utilization of buildings.

Therefore, it is hypothesized that:

1. Local school divisions in Virginia have experienced a
   decline of 25 percent or more in their student popu-
   lations during the decade 1972-1981.

2. Enrollment in Virginia school divisions declined to
   the extent that formal policies related to declining
   enrollment were developed and enacted by the State
   Board of Education during the decade 1972-1981.

3. Local school divisions having experienced a decline
   of 25 percent or more of student populations during
   the decade 1972-1981 have had to effect changes in:
   a. formal curriculum;
   b. professional personnel; and
   c. school organizational patterns and utilization
      of buildings.

These changes are the direct result of declining
student enrollment.
In a study by the National School Public Relations Association, it is stated that, "decline in enrollment is not an isolated problem. As one part of major dislocations in the nation's social patterns, it requires extraordinary leadership to devise methods of coping with it." It is suggested that the problem be identified early, faced head-on, and approached in light "of the total educational program of the district."

The hypotheses were based on the assumption that (1) as in other states, there would be local divisions in Virginia which would have recently experienced a severe decline in enrollment; (2) since the statewide enrollment total has declined each year since the 1975-1976 school term, the State Board of Education would be concerned about declining enrollment and might have enacted policies related thereto; (3) a local division which had experienced a severe decline would have had to effect changes in matters of curriculum, personnel, organization and building utilization.

The study is significant in that those school divisions which have experienced a decline of 25 percent or more will be enumerated and identified. Further, the policies enacted by the State Board of Education in response to declining enrollment, and the effect of declining enrollment upon the identified local divisions in the areas of curriculum, professional personnel, and school organization patterns or

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building utilization will be determined. These data will provide additional information on declining enrollment in Virginia, and consequently may serve as a base of understanding for school divisions experiencing decline in the future.

The study was concerned with action taken by the State Board of Education of Virginia and with local divisions within the Commonwealth of Virginia which have experienced at least a 25 percent decline in student population over the decade 1972-1981. No other state or its localities will be considered in the collection and analysis of data.

The study was intended to identify the policies enacted by the State Board of Education related only to declining enrollment and changes effected by identifying local divisions in the following areas only: formal curriculum, professional personnel, and school organizational patterns or building utilization.

Curriculum refers only to the academic instructional program carried out by the schools during the regular school day. The extra-curriculum such as athletics, clubs, and other after-school organizations are not included in the curriculum referred to in this study.

Enrollment figures for all local divisions in Virginia for the decade 1972-1981 were obtained either from the State Department of Education or from the local divisions. The numerical and percentage decline in each division was determined. Divisions which have declined by 25 percent or more were identified.

Minutes of the State Board of Education were searched and analyzed for policies enacted by the Board related to declining enrollment.
A survey instrument to determine changes effected by local divisions in response to declining enrollment in the areas of curriculum, personnel, and school organizational patterns and building utilization was developed, field-tested (see Appendix B, page 110) and used to gather data from the divisions which have declined by 25 percent or more during the decade 1972-1981.

The review of related literature is divided into six sections. The first section includes the review of literature related to the first hypothesis, the numerical extent of the decline of student populations. The next includes the review of literature concerning the second hypothesis, State Board action related to declining enrollment. Three sections comprise the review of literature related to the three areas examined in the third hypothesis: curriculum, personnel, and school organizational patterns and utilization of buildings. The final section is a review of literature related to the general subject of declining enrollment which does not correspond to one of the categories above.

Review of Literature Related to Numerical Decline

"Beginning during 1971, the enrollment in the public schools (nationwide) dropped by one-half million pupils. The real trouble began, however, during 1974, when the enrollment decline reached three-quarters of a million pupils and a steady decline was predicted for
the next decade."²

A sampling of newspaper articles revealed the national scope of
the problem of declining enrollment. The school population is decreasing
in the Atlanta, Georgia metropolitan area. Enrollment is declining in
DeKalb, Fulton, and Clayton counties, and the City of Atlanta has lost
32 percent of its students during the decade 1971-1980.³ In the Phoenix,
Arizona area, the Tempe Elementary School District will close seven of
its twenty-six schools during the next two years. The Creighton Elementary
School District in central Phoenix has had a decrease of 40 percent
of its students between 1960 and 1980.⁴ School systems in the Washing­
ton, D. C. area are experiencing declining enrollment. Losses for the
1980-81 school year over the previous years were over seven thousand
students in the District; five thousand in Montgomery County, Maryland;
seven thousand in Prince George County, Maryland; and two thousand in
Fairfax County, Virginia.⁵

Enrollment peaked in Wisconsin during the 1971-72 school year at
999,921 students. The 1980-81 enrollment is 830,247, a decrease of
169,674, or 17 percent. During the last decade, the school population

²Address by William H. Seawell, "Is There Any Word?" to the Annual
Meeting, Virginia Association of Secondary School Principals, Fredericks­
burg, Virginia, 26 June 1981.


in Milwaukee County has decreased 33 percent.\(^6\) In the State of Alabama, the 1968-69 school year enrollment was 859,327. By 1981-82, there were 758,721 students in Alabama public schools, a decline of 100,606, or 12 percent.\(^7\) The decline of numbers of students in New Haven, Connecticut, over the decade from 1971-72 to 1980-81 was over 17 percent. School officials predict the decline will continue until 1990 with a loss of an additional 10 percent of the student population.

In Virginia, evidence of declining enrollment was found in various press releases. Enrollment in Norfolk Public Schools declined steadily since the late 1960s, and decreased 1,323 students during the 1980-82 school term. The student population in the City of Portsmouth has decreased 1 percent each year since 1971, and declined 1.5 percent during the 1980-81 school year. Chesapeake Public Schools enrollment declined by 304 students during the 1980-81 year.\(^9\) School officials in Hanover County reported a decrease of 300 students for the 1980-81 school term.\(^10\) Richmond Public Schools enrolled 998 fewer pupils for the 1981-82 school year. Henrico County enrolled 500 fewer students for the same year.\(^11\)

In summary, declining public school enrollment is a national phenomenon. According to the National Center for Educational Statistics,

public school enrollment reached its highest level in September of 1971 at 46.1 million students. By the beginning of the 1980-81 school year, there were 40.7 million students, a decline of 5.4 million, or 11.7 percent.  

Review of Literature Related to Actions by State Board of Education

Graham conducted a study to "examine and describe some of the courses of action available to legislators and educators as they attempt to face the problem of declining enrollments" in Virginia.  

"Specifically, the study was designed to determine the statewide level policy implications of declining enrollments in Virginia."  

The major conclusions of the study by Graham were:

1. To compensate for the decline in numbers of clients for regular programs, new and expanded programs have been added requiring major shifts in personnel.
2. Increased funding for public education will be required to compensate for inflation and the higher costs associated with special programs.
3. Mandated new and expanded programs may require significant additional expenditures, both in program and in capital outlay funds.  

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14 Ibid.
15 Ibid.
Recommendations based on the findings of the study included:

1. A diverse committee of educators and/or planners should be appointed by the State Board of Education to review current enrollments, current program mandates, and future trends in growth.
2. The State funding formula should be viewed in light of the unique problems created by declining enrollments.
3. The State Board of Education should seriously consider establishing a long-range planning and policy analysis department.
4. Either the General Assembly or the State Board of Education should provide adequate and alternate cost analyses of new and expanded programs as they are mandated. This information should be determined for all partners in the financing of education.  

Review of Literature Related to Declining Enrollment and Curriculum

Imhoff conducted a study "to determine whether there existed subject curriculum modifications associated with categories of high schools experiencing declining enrollment." Data were collected for 202 member high schools and the state offices of the North Central Association of Colleges and Schools. Conclusions were:

(1) Rural-small place schools had no basic change in the general education, the elective, or the academic curricula,
(2) Mid-sized schools exhibited no trend in the general education, the elective, or the academic curricula.
(3) High schools of all categories decreased foreign language curriculum.
(4) Large metropolitan schools increased mathematics, social studies, and science curricula.

16 Ibid.
17 Rhoda Fay Amstutz Imhoff, "Subject Curriculum Modifications Associated with High Schools Experiencing Declining Enrollment" (Ph.D. dissertation, University of Colorado at Boulder, 1979), precis.
(5) Large metropolitan schools had no discernible trend in the electives with the exception of art which increased.

(6) Rural-small place schools had an increase in the number of teachers teaching outside their fields of preparation even though this category of schools generally retained their professional staffs.

(7) In both large metropolitan and mid-sized schools, the reduction of students was accompanied by a contraction of personnel services.

(8) In large metropolitan schools, the number of classroom teachers decreased in a larger proportion than the decrease in students which resulted in larger average class sizes.

(9) Although there was an increase in the units of credit taught in all fields of study with the exception of foreign language, the rate of increase decreased across the time span studied.

(10) The decrease in offerings did not cluster around any individual portion (general education, elective, academic) of the subject curriculum.

Sebulsky, et al., examined several school divisions experiencing declining enrollment to determine what affect it was having on curriculum. Findings included: rising Scholastic Aptitude Test scores, improved instruction, and a solidified curriculum in Ambler, Pennsylvania; in Flagler, Colorado, where the school population had decreased 45 percent during the last decade, school officials were forced to have double-grade classes, combined vocational facilities and shared music teachers with neighboring divisions; school offices in Champaign, New York, attempted to keep enrollment figures up by admitting students from Canada and Vermont; officials in Pottsdawn, Pennsylvania attempted to retain only the most effective teachers as enrollment decline caused staff reductions; in Tulsa, Oklahoma, teaching staff

\(^{18}\)Ibid.
was reduced by allowing teachers to transfer within similar disciplines, such as science and math, early retirements, and leaves of absence.  

Cottingham studied "in-service designs that offset the lack of new ideas, techniques and recent training that normally come through a degree of staff turnover and employment of new individuals into the school system" which is lacking in systems experiencing declining enrollment.  

Schools in Macomb, Oakland, and Wayne counties were studied.

The data indicated that layoff of teachers and administrators due to student enrollment decline, was evident throughout the school districts, located in Macomb, Oakland, and Wayne counties. As a result of declining student enrollment, the sample population indicated that 83.6 percent of the school districts reduced teaching staffs, while 59.3 percent reduced administrative personnel.

The sample population identified various plans which they believed could offset massive program cutbacks and staff reductions. A ranked list of plans from highest to lowest was reported as follows:

1. Close elementary, middle and junior high schools
2. Normal attrition of staff
3. School administrators and central office staff involved in developing plans
4. Layoff of staff
5. Discussion of staff placement
6. Normal attrition of staff and layoffs
7. Layoffs negotiated with unions

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20 Sherman Cottingham, "Declining Enrollment: Efforts Undertaken to Provide Maintenance and Improvement of Instruction Through In-Service Education" (Ed.D. dissertation, Wayne State University, 1979), precis.
Greene, et al., described the unique secondary organizational plan adopted by the Richmond School Board. Concern about the declining student population in Richmond caused the administration to present to the school board a series of several options for the reorganization of secondary education. Each plan was designated by a letter of the alphabet from A to G. After long consideration the School Board adopted Plan G, and it was implemented in the fall of 1978.

Seven traditionally-organized, self-contained high schools were consolidated into three secondary school complexes. All of the seven buildings remained in operation. Thomas Jefferson, Huguenot, and George Wythe High Schools were consolidated into the Jefferson-Huguenot-Wythe High School Complex; John Marshall and Maggie L. Walker High Schools were consolidated into the Marshall-Walker High School Complex. Armstrong and John F. Kennedy High Schools were consolidated into the Armstrong-Kennedy High School Complex. Armstrong and Kennedy were paired because of their close proximity to one another in the eastern area of the city. The two high schools located south of the James River, Huguenot and Wythe, were grouped with Jefferson to form a three-building complex which would allow space for an expected population increase in south Richmond. The remaining two high schools, Walker and Marshall, were paired to form a complex to serve the north-central area of Richmond.

\[\text{Ibid.}\]
Each complex has a coordinating principal, building-level principals and assistant principals. Each academic department is organized with complex-level and building-level chairmen. All athletic teams, musical organizations, class organizations, and most extra-curricular activities are complex-wide. Students may ride a school bus from one building in the complex to meet classes or activities which are held in another building. Eventually the use of the word complex was discontinued.

Greene, et al., suggested advantages which Richmond Schools have experienced while operating under Plan G: shared courses and facilities between buildings within the complex; a more varied curriculum; reduced expenditures for capital improvements; more flexibility in scheduling and staffing; cooperation with middle schools whose students will attend those high schools; absence of neighborhood resentment toward the closing of a school building; space to accommodate future increases in student population; more competitive athletic teams, musical groups, and extracurricular activities.22

Dallow conducted a case study of the Hauppauge High School in Hauppauge, New York, "to develop instructional alternatives which will enable schools to maintain varied curricular opportunities while

responding to a reduction in the actual number of pupils served."

Instructionally, the crucial decision involves identification of the clientele to be served. In addition to the determination of a district's organizational pattern, consideration must be given to the extent of community education, the role for such diverse groups as senior citizens and preschoolers, alternative schools, and extended grade options.

The author proposes that educators in general retain their instructional priorities toward all of the diverse expectations they and their communities have developed, including the 3 Rs. For administrators, though, especially those not yet involved in decline management, a stress on a new triad -- the 3 Ps; project, plan, and publicize -- is urged.

Eisenberger indicated that declining enrollments have led to decreased state and federal funding for schools, which caused cutbacks in curriculum and programs. "In growth, the passage of time tends to balance errors of judgment in resource allocation; in decline, time compounds them." It was suggested that some curricular redesign is necessary during decline; that it may be necessary to "trade the necessities of life, such as consumer education, for the basics, such as math, reading, and writing. Declining resources necessitate a closer look at all school-housed programs and will encourage the view that schools should not continue to duplicate facilities found in the


24 Ibid.


26 Ibid.
community or to stimulate training which could be accomplished in real situations at a more economical and effective level."^27

Martin has investigated "the impact of declining enrollment (and developed and tested) a model for examining alternative solutions to the problem. The model consisted of two parts: projection of future staff and student enrollment and simulations or alternative curriculum models."^28

It was found that:

(1) The standard curriculum could not accommodate all of the students and did not provide for a wide variety of needs.
(2) The core curriculum could not accommodate the student body.
(3) The modified magnet could accommodate the student body and did provide for a variety of educational needs.
(4) The interdisciplinary model could accommodate the student body and did provide for a variety of needs.
(5) The modified magnet and interdisciplinary models would be the most difficult to implement.

The findings and conclusions of the study imply that school districts faced with declining enrollment must reorganize the curriculum or drastically reduce options for students. School districts must analyze their present and future curriculum models to determine which will best serve their needs.^29

Anderson reported that declining enrollment presents an opportunity to re-examine educational goals, improve the curriculum, discard

[^27] Ibid., p. 51.


[^29] Ibid.
or modernize obsolete structures to meet contemporary programs, and reduce overall costs. It was suggested that a committee comprised of both school staff and citizens develop a comprehensive, district-wide plan. Some key points for the committee to consider are class size, racial balance, equity (fairness), school zone stability, flexibility, and safety. "It does not all necessarily boil down to keeping as many of the 'new' schools open as possible and shutting the oldest schools." Other factors may be just as important as "newness," such as helping preserve neighborhoods, minimize busing, and maintaining racial integration.

Gates reviewed the experiences of Scottsdale, Arizona, study commission which examined the secondary curriculum during a period of declining enrollment. The commission had forty-six members: fifteen elected students, fifteen parents, fifteen professional educators, and the chairman (Gates, Assistant Superintendent). The following factors were considered important in deciding which courses to discontinue: courses required by the state legislature, local school board, or regional colleges and universities; courses strongly supported by special interest groups within the community; courses academic departments desired to maintain; the retention of teachers with more

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31 Ibid., p. 68.
32 Ibid.
seniority, with their accompanying certifications and "pet courses", had an effect; expensive equipment and facilities available had to be considered. The commission developed a 350-course outline divided into three categories: requisite, standard, and optional electives. Concluded Gates, "We took the politics out of educational decision making."

Review of Literature Related to Declining Enrollment and Personnel

Cox studied "the impact of declining enrollment and retirements on the projected need for public secondary school principals in the years 1980 to 1985 (in California) and the number of categories being prepared for the principalship."

Selected Findings:
(1) Declining enrollments will result in fewer administrative positions in California public secondary schools 1980 to 1985; however, California public schools will continue to need a supply of well-qualified principals in the period 1980 to 1985.
(2) Eighty-six percent of public secondary school principals are male and caucasian.
(3) Only 16 percent of the California public secondary school principals responding in this study were 55 years of age or older.
(4) California public secondary school principals are leaving the principalship at the rate of 10 to 25 percent per year.

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34 Ibid.
(5) Of the 197 California public secondary school principals responding in this study, 9.7 percent have held the principalship for one year or less.

Selected Conclusions:

(1) The data from this study suggest that approximately 25 percent of the public secondary school districts in California are experiencing declining enrollments. That the decline will result in fewer administrative positions in California public secondary schools in 1980 to 1985 was indicated by 79 (39.51%) of the 197 principals responding to the questionnaire. It appears that declining enrollment will have little effect on the demand for California public secondary school principals, but will definitely affect support personnel and may result in a higher rate of resignations among principals caused by the loss of support people.

(2) Nationally, one thousand high schools have closed in the six-year period 1974 to 1980. It is reasonable to conclude that one thousand more could close in the 1980 to 1985 period.

(3) The findings of this study indicate that 50 to 100 public high schools will close in California in the 1980 to 1985 period.

(4) Early retirement is not a major factor in principal retirement rates.

Selected Recommendations:

(1) Screening internship, and other methods should be used to make sure that the right person has been selected for the principalship and that he/she has the training to carry out the complex responsibilities of a modern comprehensive secondary school. School districts should also have a plan that would support the principal in his/her first principalship.

(2) Colleges and universities should develop extensive inservice programs for principals in their sphere of influence.36

Seitz studied the "policies and procedures involved in reassigning administrators to positions of either differing job

36 Ibid.
descriptions or remuneration due to the impact of declining enroll-
ment."

Selected Conclusions:

(1) There seems to be no direct relationship between student losses and school closures. Further, there are indications that closing schools in response to shrinking enrollments is becoming less acceptable as a solution to problems associated with enrollment decline.

(2) Declining enrollment districts are generally making greater reductions in the administrator category than they are in the teaching category.

(3) Attrition and early retirements implemented through long range planning are significant factors in alleviating planned administrative reassignments and reductions due to enrollment decline.

(4) Professional and personal qualities of administrators take precedence over non-performance type considerations in administrative reassignment decisions.

(5) Administrative reassignments initially have a negative effect upon morale; however, better communication and administrative efficiency seem to occur as a concommitant to such decisions and actions.

(6) A majority of declining enrollment districts appear basically to be utilizing a competency or performance type evaluation system to make administrative reassignments; however, there seems to be considerable reluctance to commit these non-seniority type procedures into written form.

(7) A high correlation exists between the basic concepts of participative management and perceived successful procedures with respect to administrative reassignment decisions.

Selected Recommendations:

(1) Declining enrollment districts, through participative involvement with both staff and community, should develop long range contingency plans and needs assessments to effectively deal with projected administrative reassignments giving special attention to the factors of attrition and early retirements.

(2) A comprehensive evaluation system for administrators based upon performance, personality, and leadership should be employed as a supplement to Stull Bill requirements.

(3) Districts should develop written procedures based upon performance evaluations for reassigning administrators due to the impact of declining enrollment. Within the procedures the superintendent must retain final flexibility of decision-making with respect to the assignment of administrative personnel. 38

Kritsonis investigated "the implications of selected State Supreme and District Court decisions rendered across the nation which relate to the non-renewal of public school professional personnel for reasons of declining enrollment or economic stress." 39

Three inescapable conclusions were apparent from the data:

(1) Boards should be prepared to defend the reasons given for nonrenewal of employee contracts and should be aware that the burden is placed on the Board to sustain the reasons which are given for dismissal.

(2) It is a fact that employees protected by a teachers' tenure act and seniority provisions have definite guaranteed employment advantages over those not protected by tenure. From the standpoint of employed teachers, their organizations would be well advised to strive to develop tenure laws for the protection of public school professional personnel.

(3) Greater consistency from state to state is needed if Boards are to function with maximum efficiency and all teachers are to receive equal treatment under the law. 40

38 Ibid.


40 Ibid.
Cuban studied the political and organizational impacts in Arlington County, Virginia, resulting from declining enrollment and school consolidation, 1973 through 1978. "As a popular topic, shrinking enrollment is one of the most politically visible (and divisive) issues to face superintendents and school boards since desegregation." Cuban lists organizational consequences to include: a reduction-in-force policy based on seniority leads to a lack of security for newer personnel, and a staff imbalance, with an absence of young, ambitious, risk-taking types; reduction-in-force erodes gains made in the employment of minority and female staff; too few advancement opportunities for the young and ambitious; a heightened adversarial relationship between the teacher and administrative unions versus the school board and central office staff over the elimination of positions; low staff morale, forced transfers; the impact on children and the instructional program of an increasingly older, more experienced staff.

Berryman conducted a study to "discover those factors which affect staff reduction planning and incorporate the factors in a staff reduction planning model which could be used by local districts (in the State of Illinois) when faced with the necessity of dismissing competent staff members." 

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42 Ibid., 367.

43 Ibid.

44 John Richard Berryman, "Staff Reduction Due to Severe Enrollment Decline: Guidelines for Planning in the State of Illinois" (Ed.D. dissertation, University of Illinois at Urbanna-Champaign, 1979), precis.
The major factors which appear to affect staff reduction planning are enrollment projections, statutory (Illinois School Code) requirements for the dismissal of teachers, civil rights of the individual, teacher certification, school district interests (finance, quality program, quality staff), negotiated agreements, and staff/public relations.\textsuperscript{45}

Heitzeg conducted a study "to develop and test a model for determining the impact of declining student enrollments upon staff development in the public schools."\textsuperscript{46}

Analysis of the findings indicated that:

1. Younger staff members have a higher level of formal, professional-growth activity than their older counterparts.
2. Generally, teachers at higher degree levels tend to participate in more formal, professional-growth activities than their counterparts at a lower degree status; however, those teachers at the MA and BA+ 40 level participate less or have a lower formal, professional-growth activity level than any other degree level group.
3. There is no evidence of a systematic interaction between age of teachers and their level of degree attainment; however, if the MA only and the BA+ 40 group had been eliminated from the sample, it appears as though there may have been an interaction effect.
4. There is a wide variance of participation in formal, professional-growth activities depending upon the teachers age level and degree status. The very lowest level of participation was for those people with the lowest degrees and who are in the oldest category.
5. The declining student enrollments in the school district under study will contribute to a reduction of the formal, professional-growth activities of the staff in future years. The major reason for the reduction is that as the staff

\textsuperscript{45} Ibid.

\textsuperscript{46} Howard Tyrone Heitzeg, "Student Enrollment Decline: A Model for Determining Implications for Staffing and Staff Development in the Public Schools" (Ph.D. dissertation, Michigan State University, 1978), precis.
gets older, it will tend to assume the behaviors of those people in those age groups (lower activity level) and there will not be the addition of younger staff members who are the most active, to offset this decline.

The findings and conclusions of this study clearly imply that the vitality of the educational institution in a declining enrollment era will decrease unless ways are found by educational decision makers to offset some of the reduced tendency of staff to participate in formal, professional-growth activities.47

Salvi conducted a study to:

determine and compare the organizational characteristics of selected secondary schools and job satisfaction characteristics of teachers, and administrators in Westchester County, New York as perceived by two categories: (1) those in school districts with a high rate of declining enrollment; (2) those in school districts with a low rate of declining enrollment. Moreover, the study sought to determine if significant interrelationships existed among the perceptions of the secondary school teachers and administrators with respect to organizational characteristics and job satisfaction characteristics. Furthermore, the study sought to determine if significant relationships existed between the perceptions of secondary school teachers and administrators with respect to each of the organizational and job satisfaction characteristics and the variables of age, years in the school district, school size, and school district size.48

Selected conclusions were:

... those from school districts with a high rate of declining enrollment perceived their organizations as less consultative and therefore further from participatory management along a continuum of organizational development than those from school districts with a low rate of declining enrollment; ... The

47 Ibid.

participants from school districts with a high rate of declining enrollment were less likely to be as satisfied with their jobs as those from school districts with a low rate of declining enrollment; ... In school districts with a high rate of declining enrollment, the younger teachers and those with the least years in their school districts perceived their organizations as further from participatory management than the older teachers and those with the most years in their school districts. Older teachers and those with the most years in their school districts were highly satisfied with their pay and security, while younger teachers and those with the least years in their school districts were highly satisfied with their work motivation, socialization, supervisors, and growth need.49

Kimball studied teacher morale as affected by transfer as a consequence of declining enrollments.50 The research was conducted in a suburban elementary school district near Chicago, Illinois. The Purdue Teacher Opinionnaire was used as the investigative instrument.

Based on an analysis of the findings, it was concluded that there was a relationship between the groups established for the study and teacher morale. In all cases, teachers awaiting transfer showed higher morale than teachers already transferred and teachers who will not transfer, and teachers already transferred showed higher morale than teachers who will not transfer.51

Review of Literature Related to Declining Enrollment and School Organizational Patterns and Building Utilization

Ringers conducted a study "to discover the political interactions leading to policy decisions for the management of underutilized school

49 Ibid.


51 Ibid.
facilities, to determine the actual policies which resulted from
those activities, and to investigate the satisfaction level of persons
who participated in the process during a period of declining pupil
enrollment in Arlington, Virginia.\textsuperscript{52} Selected findings include:

The development of policies and guidelines for the manage­
ment of underutilized school space passed through three
distinct periods in Arlington: (1) a period of preparation
for an uncertain future when the decline in pupil enrollment
was recognized and capital projects were questioned; (2) a
period of issue clarification after enrollment decline was
accepted as a reality and consolidation of schools began;
and (3) a period of implementation of policies which had
been consolidated into a single set of priorities and pro­
cedures which recognized school and communities interest...
The general level of satisfaction with the process as per­
ceived by those who responded to the survey was good with
respect to the information made available and the ground
rules established. Larger numbers of persons participated
in the successive periods of policy development, but satis­
faction with the process dropped in each successive phase...
The following conclusions were drawn: (1) Political
relationships should be strengthened. Political action to
influence decisions requires timing, supporters, and stra­
tegies. If relationships can be strengthened before
crises arise, the time required to reach a solution to the
problem may be lessened. (2) Policies for managing under­
uti lized school space should be developed. The process of
developing policies creates an awareness of the issues,
the alternatives, and the constraints in various courses
of actions. (3) Participative decision-making opportunities
should be provided in non-crisis situations so that skills
may be developed.\textsuperscript{53}

\textsuperscript{52}Joseph Ringers, Jr., "Managing Underutilized Facilities During
a Period of Declining Pupil Enrollment—A Description Study of Arling­
ton, Virginia" (Ed.D. dissertation, University of Virginia, 1980),
precis.

\textsuperscript{53}Ibid.
Fox conducted a study to determine:

(1) The number of schools closed in Los Angeles County as a result of pupil enrollment declined between 1969 and 1975.
(2) How schools closed as a result of pupil enrollment decline were reutilized.
(3) The amount of revenue realized from school reutilization.
(4) The uses made of revenue realized from school reutilization.
(5) The savings effected by the closure of a school.
(6) The beneficial aspects of school reutilization.
(7) The detrimental aspects of school reutilization. 54

Selected Findings:

(1) Forty-one schools, thirty-seven elementary schools and four junior high schools, were closed in Los Angeles County as a result of pupil enrollment decline between 1969 and 1975.
(2) School districts reutilized twenty-five of the closed schools; eleven were leased to other agencies, three were sold, and two were being advertised for sale.
(3) Nineteen of the twenty-five schools reutilized by districts were used for other educational programs; thirteen were used for adult education. Eight of the schools leased to other agencies were used for educational purposes.
(4) The selling price for schools sold ranged from $300,000 to $977,000.
(5) Eleven schools were leased with a mean annual revenue from leasing of $43,715 and a median annual revenue of $60,000.
(6) Revenue received from leased facilities was used for unrestricted general fund expenditures. Proceeds from the sale of schools were restricted for remodeling and maintaining existing facilities.
(7) Districts effected an average savings of $66,122 in personnel and benefits and $37,398 in operations and maintenance for each school closed. The total average savings for each school closed was approximately $100,000.

54 Andrew James Fox, "Reutilization of School Facilities as a Result of Pupil Enrollment Decline" (Ed.D. dissertation, University of Southern California, 1975), precis.
(8) The beneficial aspects of school reutilization most frequently cited were:
(a) increased revenue available for general education and support services,
(b) improvement to some segment of the educational program, and
(c) improved management of existing facilities.

(9) Detrimental aspects of school reutilization were parental and staff resistance to school closures if they had not been involved in the decision making process.

Conclusions: The following conclusions were drawn:

(1) Based upon declining enrollment records, most districts should have closed schools a year earlier than they did.
(2) Schools closed as a result of declining enrollment were most often reutilized for other educational programs.
(3) Schools were converted to income generating uses.
(4) Districts effected a savings of approximately $100,000 in personnel and support services for each school closed.
(5) The process of closing a school became less difficult when the community and staff were involved in the decision making.\(^5\)

Poynter studied the:

quantitative aspects of the selected geographical, financial, and social characteristics, as well as staffing redeployment and building utilizations in the declining student enrollment districts of the State of Ohio. This study has described the implemented staffing redeployments and building utilizations and the reasons therefore as reported by superintendents administering to the public school districts which have had a decline in student enrollment of over 5 percent from the 1969-70 school year through the 1974-75 school year.\(^6\)

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\(^5\) Ibid.

\(^6\) Norman Clifton Poynter, "The Effects of Declining Enrollment on Staff Redeployment and Building Utilization in Ohio Public School Districts" (Ph.D. dissertation, Miami University, 1976), precis.
The data presented by this study revealed that school districts now have sufficient floor space for additional program offerings. The districts do not have policies for the abandonment of academic school buildings and as a result many districts have buildings that are vacant. Although the school districts have eliminated some elementary and secondary general academic positions, the extra floor space has enabled them to increase their program offerings and lower their pupil-teacher ratio. The certified staff that would have been reduced because of the eliminated instructional positions have instead been redeployed into increased program offering positions and used to lower the pupil-teacher ratio.  

Parker studied the:

extent to which policies and procedures for utilizing school facilities with declining enrollments existed on state and local levels. The focus on this study was directed to the following basic questions: (1) What types of policies and procedures exist on state and local levels? (2) What policies and procedures are formulated on state levels? (3) How are policies and procedures initiated on local levels? (4) What are the purposes of state and local policies and procedures? (5) How are state and local policies and procedures regulated? (6) What segments of the educational program do policies and procedures affect?

The conclusions were:

(1) Most policies and procedures on state and local levels were established for maintaining and expanding quality education with surplus space.
(2) Procedures used to implement many policies ranged from school closings to utilizing surplus space.
(3) The purposes of state and local policies were more efficient use of surplus space and facilities.
(4) Educational programs affected by policies ranged from expanding special education and ongoing programs to improving educational programs by eliminating portable structures.

57 Ibid.

(5) Policy regulation ranged from federal and state mandates to local school board jurisdictions.59

Review of Literature Related to Declining Enrollment in General

Burgner conducted a study:

to determine the perceived effects of declining enrollment in unified school districts in Los Angeles County and to determine what procedures could be devised and followed to either avoid or minimize any difficulties inherent in such situations.

Answers were sought to the following questions: (1) What have been the problems created by declining enrollment in unified school districts in the following specific areas: Enrollment Projections, Finances, Personnel, Physical Plant, Instructional Program, and Determining and Communicating Priorities? (2) How did these problems manifest themselves? (3) What approaches were utilized in order to minimize the difficulties created by these problems? (4) How effective were these approaches? (5) How might these problems be handled if they were encountered again? (6) What are the major pitfalls to be avoided when dealing with the problems? (7) What additional problems are foreseen?60

Selected findings and conclusions are:

(1) All districts were forced to reduce personnel.
(2) Three districts expressed a concern with their teaching staff growing older and becoming static.
(3) School closure was the most serious problem faced by the districts.
(4) The five districts having least difficulty closing a school stressed the importance of making all the benefits of closure known.
(5) All but three closed schools have been converted to alternative educational use.
(6) The impact of declining enrollment produced both positive and negative effects on the instructional program.

59 Ibid.
(7) Six districts found any reductions in programs or personnel are done best if they minimally affect the instructional program.

(1) Financial difficulties can most effectively be handled by reducing costs which do not directly affect the instructional program.
(2) Attrition will usually meet the need for reduced number of employees.
(3) Termination letters adversely affect staff morale.
(4) Communication of the benefits of school closure will reduce potential difficulties.
(5) Districts were forced to create innovative programs as enrollment and staff declined.
(6) Communicating with staff and community enables them to better cope with the ramifications of declining enrollment.
(7) Advanced planning is the key to handling the problems and opportunities presented by declining enrollment.  

Faust conducted a study to "identify and analyze the social and political factors that affected two school closing decisions in the Cincinnati Public Schools and to develop recommendations for improving the process of making school closing decisions in the future."  

Several social and political factors were identified as having affected the decisions in the cases that were studied. The principals and the school communities had learned about the proposed closing of their schools through information leaks from the central office in both instances. Subsequent efforts to involve the communities in the decision process were rejected because they appeared to have occurred after the decisions had been made. The communities did not believe their opinions were desired. They resented having "outsiders" making decisions as to what was good for them. They were being requested to give up their school and were unable to understand how the new situation would be any

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61 Ibid.

better for their children than was the existing one. There was a sense of ownership of their institution that caused the people to fight for its preservation even though the facility was recognized to be in poor condition.

The following recommendations were made to guide decision makers who will be considering the closing of schools because of declining enrollments in the future: (1) A comprehensive collection of data concerning each school should be compiled and a school should be considered for closing only if such action is supported by the data. (2) School principals who will be affected by the closings should be involved in the decision from the start of the data collection stage. (3) The affected communities should be involved before any decisions are reached about specific schools that are to be closed. (4) Involvement should encompass a broader "community" than served by one school whenever possible. (5) All of the information that is relevant to the decisions should be available to all participants in the decision process. (6) Sufficient time should be allowed for a careful study of the problem and the development of possible solutions. (7) Some kind of improvement in the educational opportunities of the pupils should be offered as an incentive to parents to accept the loss of their school. (8) The emotional nature of a school closing should be recognized and the decision process conducted with understanding. (9) Consideration should be given by the board to the recommendations that result from the involvement of the community. (10) There should be no equivocation by the board of its decision. 63

Francis applied three theory areas to the school-closing decision-making process in Madison, Wisconsin. The decision of the school board to close three elementary schools was opposed by three of the seven board members, the mayor, other city officials, parents, and neighborhood residents. Recommendations of two board-authorized study groups were not heeded. The three theories applied by Francis to analyze the process were the public facility location theory, community decision-making theory, and change agent theory. "It was found that all three theory areas helped explain the school closing decision. The change

63Ibid.
agent's behavior was of overriding importance in explaining both the decision and the controversy. 64

Boyd discussed educational policy making in declining suburban school districts, "... the politics of scarcity is the politics of conflict (Wilson, 1973). "Thus, the changeover from growth to decline has posed unfamiliar and difficult problems for educational leaders and has increased the importance of the conflict management function of government... "There is a tendency to view declining enrollment as a state or national phenomenon. For school districts, it is not. Enrollment is a local phenomenon, in each district a unique configuration of birth rate, population migration, age of community, economic growth in a community, and other factors (Florio, 1976)." 65

Irvin investigated:

(1) the extent of student population decline in the public schools of North Carolina;
(2) the implications of student population decline for school management; and
(3) some alternative actions available to school management in North Carolina. 66

Regarding alternatives for school management, Irvin listed:

Personnel—Since staff reduction was considered an inevitable result of declining enrollment, various alternatives


were proposed, from normal attrition (via retirements, resignations, and leaves) to layoffs. Careful planning afforded other, often more desirable options—demotion, reassignment, and the use of early retirement incentives;

Program—A positive approach and prior planning were recommended for maintaining high priority programs and services. The constraints of reduced funding and staff reductions encouraged management to examine programs and explore all available alternatives;

Facilities—With proper planning surplus space presented an opportunity rather than a problem. After meeting educational needs (relieve overcrowding, establish libraries, learning centers, labs, work areas, ...) community needs were considered (adult education, day care centers, recreation areas, ...); then remaining surplus property was made available to public or private agencies for revenue producing purposes (rent, lease, sell ...). Proper utilization of all property was deemed imperative.67

Bedell conducted a study:

to determine whether or not declining enrollment can be associated positively with conditions which may be expected to influence program quality negatively. Information was gathered and analyzed in the school districts throughout the two county area of Oakland and Wayne Counties in southeastern Michigan.68

Some of Bedell’s findings are:

... that declining enrollment was viewed as a major problem by respondents primarily in combination with other problems such as employee attitudes and changing populations. Respondents believed that class size was not impacted by declining enrollment, but that the scope of the program offerings was severely affected. They also believed that support personnel had not been affected. The overwhelming

67 Ibid.

majority believed that decline did not affect maintenance or the quality of building, cleaning, and support services in the non-teaching areas. They identified the most important effect of declining enrollment to be the decline of employee morale.

The superintendents alone were asked to rank the three major problems of finances, unionization, and declining enrollment facing them, and they ranked declining third. Most of them did modify this opinion by stating that declining enrollment made the other two problems more exaggerated. 69

Bishop listed factors other than a declining birth rate which may contribute to declining enrollment: "residential housing patterns, rising property values, local building costs, shift from first to second generation housing, commercial development, in and out migration, non-public school patterns, undeveloped land use, zoning requirements, multi-unit housing development, past population trends, local school community fertility and birth rates, and the abortion rate." 70 There is, then, the need for extensive demographic analysis, detailed assessment of existing school facilities, formulation of several alternatives to deal with decline. Factors to consider about school buildings include: condition of the facility, potential for disposal, ethnic distribution, geographic location, physical and natural barriers, student transportation, and the establishment of new attendance zones. 71 Financially advantaged districts may not close or consolidate schools but may lower

69 Ibid.
71 Ibid., 289.
class sizes, develop new instructional programs and instructional alternatives, or provide additional study of resource facilities in schools where this was not previously possible.72

Klingler examined the impacts of declining enrollment upon the twelve school districts in Bergen County, New Jersey, that had experienced a decline of over 20 percent between 1971 and 1978.73

Essential questions investigated in this study were:
(1) Will school districts utilizing long-range planning to solve declining enrollment problems tend to have a greater chance of implementing major decisions than districts using short-range planning? (2) Will community groups having a history of supporting school board decisions and new emerging groups tend to become active and forceful in their criticism of the board when confronted with the board's major declining enrollment decisions and resulting impacts?74

The study's findings indicate that administrators and school boards facing severe declining enrollments will have to implement a comprehensive long-range plan in order to carry out a recommendation to close a school. The plan should incorporate community input in the decision-making process. Districts involved in reducing staffs and/or eliminating programs can implement these decisions in a one-year time frame or less, provided they use some type of comprehensive plan. Community input is not necessary to successfully implement these decisions.

With regard to the intensity of the conflicts, the study's findings revealed that superintendents and board members were affected the most by large turnouts of hostile parents at public meetings. Angry protests of

72Ibid., 290.
74Ibid.
parents resulted in a few boards modifying or withdrawing their decisions.75

Romantino attempted to determine "the effect of declining public school enrollments have had on staffing, educational programming and building utilization in selected school districts in Pennsylvania."76 Selected findings were: "eighty-four buildings were sold, twenty-two leased, twenty-six razed, and eleven mothballed. Other dispositions included warehousing, administrative offices, community recreation centers, senior citizens centers and adult education centers. Superintendents indicated that if enrollments continue to decline that their greatest concern will be staffing, then closing schools, and finally educational programming."77

Romantino concluded:

(1) As the size of the school district increases, concern of superintendents intensifies regarding staffing, educational programming and building closings.
(2) There was no positive relationship between the decline in student enrollment and reduction in staffing.
(3) Staffing has accelerated faster than enrollments for special education programs.
(4) School districts relied on attrition as opposed to other measure when reducing staffs.
(5) Closing schools precipitated the reduction in ancillary and administrative staffing.
(6) Educationally, school districts terminated various sections of course offerings with foreign languages losing 101 sections and/or courses.

75Ibid.


77Ibid.
(7) Athletic activities were terminated with greater frequency on the middle/junior high level than at the high school level.

(8) Extra class activities were terminated more on the high school level with chess and debate (being) the areas of greatest termination.\textsuperscript{78}

McPherrin conducted a study which examined enrollment decline and accompanying financial problems between July, 1972, and December, 1978, in a large suburban school district in Illinois.\textsuperscript{79}

Between 1972 and 1978, enrollment in the district's schools declined 25 percent, state aid decreased drastically, several new contracts calling for increased salaries were negotiated with teachers, and inflation dramatically increased the cost of operation. In response to these challenges, the district's board of education closed five elementary schools, moved all sixth graders into the district's three junior high schools, cut costs sufficiently to maintain the same level of expenditure in the Education Fund for the last four years, reduced the district's teaching/administrative staff, and successfully passed a referendum that increased the local tax rate by $.39.\textsuperscript{80}

Colton and Frelich examined the process of closing schools in St. Louis, Missouri. "Neither community involvement nor careful economic planning characterized the school-closing process in St. Louis during the period 1968-1977."\textsuperscript{81} The authors cite two factors primarily responsible: a policy commitment to the neighborhood school concept;

\textsuperscript{78}Ibid.


\textsuperscript{80}Ibid.

\textsuperscript{81}David Colton and Alan Frelich, "Enrollment Decline and School Closings in a Large City," \textit{Education and Urban Society} 11 (May 1979), 413.
and, a "bureaucratic structure and procedure (which) gave an advantage to building level administrators who wanted to preserve low levels of building utilization." Principals manipulated the data because they wanted extra space in their buildings. The central office structure did not allow for the integration of all pertinent data. "The internal structure of the organization affected its response to its problems." How did the decision-makers in St. Louis avoid "having the financial exigencies focus attention on the financial advantages that would accrue from wholesale school closings?" They concentrated on other factors, such as: short-run political advantages (low conflict) for central administrators; extra space for building principals; continuation of neighborhood schools for stable neighborhoods; reassignment to contiguous schools suited opponents of integration. "The financial dimension never came into focus."

Spathelf attempted to identify strategies to deal with the "new and perplexing problems" that accompanies declining enrollment in Michigan. Selected findings include:

Superintendents experiencing decline favored operating one or more buildings on a reduced budget, e.g., part-

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82 Ibid.
83 Ibid., 415.
84 Ibid.
85 Ibid.
time administrator, secretary, or custodian, and balancing class loads for more effective space utilization...
Superintendents also gave higher ratings to those alternatives designed to increase revenues or decrease expenditures as compared to those alternatives not so designated, thus, recognizing the potential revenue loss normally associated with declining enrollments ...
Survey superintendents rated various factors which they believed had influence on declining student enrollment decision-making at the district level. A rank-order listing of factors from highest to lowest was established as follows:

1. board of education
2. community pressures
3. school district management team
4. professional education training
5. previous superintendency experience
6. employee unions
7. state government agencies...

The study substantiates through ratings given by superintendents the notion prevalent in current literature on this topic that community involvement and community pressure affect declining enrollment decision-making at the local school level. Although the school closing is identified as one feasible alternative to declining enrollments, superintendents' ratings of alternatives indicate some preference for those which would reduce costs, increase revenue, or will be less harsh than the school closings.87

Krabbe studied two of the major concerns associated with declining enrollment: reduction in force and the use of surplus physical facilities.88 Krabbe's results were:

The data shows that considerable concerns are being evidenced in these systems regarding RIF but not nearly as much over surplus space. Fully 70% of the principals and all of the superintendents indicated much concern over the RIF problem. Regarding RIF as an issue in the future, both saw the problems intensifying.

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87 Ibid.
In terms of factors to be used when making decisions concerning RIF, effect on educational program was the primary consideration of the principals and the superintendents.

For affecting a reduction in force, both groups indicated the most frequently used methods as transfer, retirement, and resignation.

By comparison, the issue of developing surplus space is of little concern to principals or superintendents. For the future, the superintendents view the problems of surplus space growing larger, but the principals disagreed.

When asked about factors to consider when making decisions regarding surplus space, effect on educational program and operating costs ranked as the first two considerations by the principals. The superintendents had operating costs and public relations as their first two considerations.

New curricula offerings and special subject areas were listed as the most frequent uses made of available surplus space.

All four systems indicated formal policies were in effect for dealing with RIF and three out of four indicated formal policies in effect for use of surplus space. 89

O’Neil attempted to identify "key characteristics of the planning process involved in dealing with the problems" of declining enrollment, and to develop "a planning manual to guide the efforts of school managers" in solving similar problems. 90

Burns conducted a study "to investigate ways in which resistance to change may be reduced or alleviated by the board of education when

89 Ibid.

 coping with changes brought about by a declining enrollment pattern."91

The most prominent participatory concept expressed by the sample which reduced resistance to change was the citizens' committee. Most school districts held public hearings on declining enrollment and the changes that were to be implemented. The major impetus for change is from outside of the school board's realm of control. Resistance lessens when staff and the public are not bypassed... Since the press plays an important role in forming public opinion, the data revealed that press conferences reduced resistance to the change. When joint letters are distributed by the affected school's principal and the parent organization, resistance to change is lowered... The board of education should assume the responsibility for developing the ways and means for participation, communication, and education between parents, the board, staff, and city officials.92

Heilbronner studied "school administrators' perceptions of changes that have occurred in programming, instructional material, and personnel during a period of declining enrollment in the public elementary school districts of suburban Cook County, Illinois... The following conclusions were reported:

1. Responding school districts experiencing declining enrollment reported that their average class size and their teacher-pupil ratio remained stable; the number of new programs and programs dealing with traditional non-school concerns increased; no particular instructional methodology was utilized as a response to declining enrollment; the existence of surplus space within school buildings led to a perceived improvement in the quality of their educational programming...

2. Responding school districts experiencing declining enrollment reported that the replacement cycle of

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92 Ibid.
instructional material decreased and the use of teacher-made material decreased.

3. Responding school districts experiencing declining enrollment reported that the number of classroom teachers remained stable; the use of paid para-professionals increased; the use of unpaid volunteers decreased; and there was a slight decrease in student support services provided and the number of persons who worked directly with curriculum excluding classroom teachers.93

Grzymkowski attempted to identify

the relationships between student enrollment statistics and the major factors influencing administrative decision-making processes in educational systems with declining and stable enrollments. The results of the study indicate that successfully managed systems with these enrollment conditions have: (1) an organizational structure with some elements of both centralization and decentralization; (2) involvement of internal and external constituencies in decision making; (3) an emphasis on long range planning and support mobilization; (4) planning specifically related to priorities with strong goal orientation; (5) increased use of accountability/evaluation methods; (6) increased data requirements; (7) sensitivity to a community's demands.94

In summary, the review of related literature described 31 dissertations, ten newspaper articles, eight published articles, and one public address. Four of the items were concerned with public schools in Virginia. Graham offered state-level policy implications of declin-


ing enrollment. Green, Belsches, and Mladenoff described the development and implementation of the secondary school consolidation plan in Richmond known as Plan G. Ringers studied the management of under-utilized school facilities in Arlington. Cuban examined the political and organizational impacts of declining enrollment in Arlington, 1973-1978. While there have been numerous studies of declining enrollment at both the national and state levels, and while several studies have been conducted within the general topic of declining enrollment in Virginia or its localities, no study cited above appears to address itself specifically to the questions raised in this study.

This study is intended to determine the extent local school divisions in Virginia have experienced declining student enrollment; what policies, if any, have been enacted by the State Board of Education regarding declining enrollment; and what effect, if any, has a severely declining student population had upon the localities in the areas of formal curriculum, professional personnel, and school organizational patterns and utilization of buildings.

Chapters Two, Three, and Four will review respectively the data concerning each of these phases of the study. Summary and conclusions will be presented in Chapter Five.

The first hypothesis of the study is: Local school divisions in Virginia have experienced a decline of 25 percent or more in their student populations during the decade 1972-1981. In Chapter Two, the questions implied by this hypothesis, data gathered in response to the questions, and an analysis of the data will be presented.
CHAPTER TWO

School enrollments are declining throughout the nation—not uniformly or even universally, but with enough persistence to constitute one of the most troublesome problems facing school districts today. Neither the magnitude nor the duration of the decline were foreseen by educational and statistical experts only a few years ago.¹

The basic questions raised by the hypothesis are: (1) Have Virginia and its local divisions experienced a decline in student population, as have other states and localities within the United States? (2) Has the decline in enrollment been consistent over time or has it been merely occasional? (3) Which local divisions in Virginia have experienced the most severe decline in enrollment?

To attempt to answer these questions, it was necessary to secure enrollment data for the state and its local divisions for each of the ten years studied. These data were obtained from (and with the assistance of) Howell L. Gruver, Director of the Division of Management Information Services, State Department of Education. Additional enrollment data were obtained from local divisions. Statewide and division enrollment figures used in the study were the Fall membership, calculated on September 30 of each year.

Statewide enrollment figures appear to be relatively stable over the decade 1972-72 to 1980-81. Fall membership for the 1972-72 school term was 1,074,073. Ten years later, during the 1980-81 school term, statewide Fall membership was 1,010,371, a decrease of 63,702 pupils, or less than six percent. During the decade, the highest statewide enrollment was 1,103,669 during the 1975-76 school term, an increase of 29,596 pupils, or 2.75 percent over the base year. The lowest statewide enrollment during the decade studied was tallied during the last year, 1980-81, at 1,010,371 pupils, a decrease of 93,298 students or 8.4 percent from the year of highest enrollment. In summary, the statewide Fall membership during the decade studied decreased overall by less than six percent, and varied during the decade by no more than 8.4 percent. ²

There were two changes in the law which had the effect of increasing enrollment figures in the Virginia public schools after a trend toward decline had begun. The first was a financial incentive provided by the state in 1973 to encourage local divisions to establish kindergartens. Several local divisions had initiated their kindergarten programs many years earlier (Richmond City School officials established kindergarten in 1908), but most local divisions established kindergarten programs in response to state funding incentives in 1968 and 1973. ³

²State Department of Education.
The second change in the law was to advance the determination date for entry into the public schools from September 30 to December 31. The determination date was advanced one month per year for three consecutive school terms, 1974-75 through 1976-77, thus admitting children whose birthdays fell within a 13-month period rather than within the usual 12-month span. Thus, the addition of five-year-olds and the enrollment of children for one additional month each year for three years increased public school enrollment even though the pool of school-age children had not increased. Without these two changes in school attendance law, enrollment figures for Virginia public schools may have continued to decline (as had been the case in the early 1970s) rather than reflect an increase in enrollment during the mid-1970s.

Enrollment data for the local divisions in Virginia were then examined to determine which, if any, divisions had experienced a net loss in student population for 1971-72 to 1980-81.

The number of local divisions was not consistent throughout the decade studied (1972-1981). For the 1971-72 and 1972-73 school terms, there were 135 local divisions which reported enrollment figures to the State Department of Education. There were 134 divisions reporting enrollment the following year, 1972-73, because the enrollment for the Town of Saltville was included in the figures for Smyth County. The number of divisions decreased by one again

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during the 1974-75 term, at which time the cities of Nansemond and Suffolk consolidated. The addition of Manassas Park in 1976 and Manassas Park City in 1977 raised the number of local school divisions reporting enrollment to 135, and that number remained constant through the 1980-81 school year. There are 140 local governing units in Virginia. However, only 135 report enrollment data to the State Department, while five others include their enrollment figures with a neighboring locality. James City County enrollment data is reported under that of Williamsburg City. The same is true for Bedford (Bedford County), Emporia (Greenville County), Fairfax (Fairfax County), and Salem (Roanoke County).

Regarding the question of which divisions, if any, had experienced a net loss of student population between the 1971-72 and 1980-81 school terms, it was found that 84 of the 135 local divisions extant in 1980-81, or 62 percent, had fewer students enrolled during the 1980-81 school term than in 1971-72. The 84 divisions are listed in Table 1.

TABLE 1

Divisions Which Experienced a Net Loss of Student Population from the 1971-72 to 1980-81 School Terms

<table>
<thead>
<tr>
<th>Accomack</th>
<th>Carroll</th>
<th>Floyd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alleghany</td>
<td>Charles City</td>
<td>Giles</td>
</tr>
<tr>
<td>Amelia</td>
<td>Charlotte</td>
<td>Goochland</td>
</tr>
<tr>
<td>Arlington</td>
<td>Clarke</td>
<td>Grayson</td>
</tr>
<tr>
<td>Bath</td>
<td>Craig</td>
<td>Greensville</td>
</tr>
<tr>
<td>Brunswick</td>
<td>Dickenson</td>
<td>Halifax</td>
</tr>
<tr>
<td>Buchanan</td>
<td>Dinwiddie</td>
<td>Henrico</td>
</tr>
<tr>
<td>Buckingham</td>
<td>Essex</td>
<td>Henry</td>
</tr>
<tr>
<td>Campbell</td>
<td>Fairfax</td>
<td>Highland</td>
</tr>
</tbody>
</table>
However, there was a wide disparity in the extent of decline, ranging from a decrease of less than 100 pupils in some divisions to the loss of several thousands of students in other divisions. Clearly, the existence of a net decrease in student enrollment, then, does not answer all of the questions concerning the extent of declining enrollment in local divisions.

Enrollment data were then examined for decreases in student population for both five and ten consecutive years within the decade studied. It was found that 89 of the 135 local divisions extant in 1980-81, or 66 percent, experienced a decline in Fall membership for the five consecutive school terms from 1975-76 to 1980-81. The 89 divisions are listed in Table 2.
TABLE 2

Divisions Which Experienced a Decline in Fall Membership for the Five Consecutive School Terms from 1975-76 to 1980-81

<table>
<thead>
<tr>
<th>Accomack</th>
<th>Goochland</th>
<th>Prince William</th>
<th>Falls Church</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albermarle</td>
<td>Greensville</td>
<td>Richmond County</td>
<td>Fredericksburg</td>
</tr>
<tr>
<td>Alleghany</td>
<td>Halifax</td>
<td>Roanoke County</td>
<td>Hampton</td>
</tr>
<tr>
<td>Amelia</td>
<td>Hanover</td>
<td>Scott</td>
<td>Harrisonburg</td>
</tr>
<tr>
<td>Amherst</td>
<td>Henrico</td>
<td>Shenandoah</td>
<td>Hopewell</td>
</tr>
<tr>
<td>Appomattox</td>
<td>Henry</td>
<td>Smyth</td>
<td>Lexington</td>
</tr>
<tr>
<td>Arlington</td>
<td>Isle of Wight</td>
<td>Southampton</td>
<td>Lynchburg</td>
</tr>
<tr>
<td>Augusta</td>
<td>King &amp; Queen</td>
<td>Sussex</td>
<td>Manassas Park</td>
</tr>
<tr>
<td>Brunswick</td>
<td>Lancaster</td>
<td>Tazewell</td>
<td>Martinsville</td>
</tr>
<tr>
<td>Buchanan</td>
<td>Louisa</td>
<td>Washington</td>
<td>Newport News</td>
</tr>
<tr>
<td>Buckingham</td>
<td>Lunenburg</td>
<td>Westmoreland</td>
<td>Norfolk</td>
</tr>
<tr>
<td>Campbell</td>
<td>Mathews</td>
<td>Wise</td>
<td>Norton</td>
</tr>
<tr>
<td>Charles City</td>
<td>Mecklenburg</td>
<td>York</td>
<td>Petersburg</td>
</tr>
<tr>
<td>Charlotte</td>
<td>Nelson</td>
<td>Cape Charles</td>
<td>Portsmouth</td>
</tr>
<tr>
<td>Clarke</td>
<td>Northampton</td>
<td>Alexandria</td>
<td>Radford</td>
</tr>
<tr>
<td>Cumberland</td>
<td>Northumberland</td>
<td>Bristol</td>
<td>Richmond City</td>
</tr>
<tr>
<td>Dinwiddie</td>
<td>Nottoway</td>
<td>Charlottesville</td>
<td>South Boston</td>
</tr>
<tr>
<td>Essex</td>
<td>Orange</td>
<td>Chesapeake</td>
<td>Staunton</td>
</tr>
<tr>
<td>Fairfax</td>
<td>Page</td>
<td>Clifton Forge</td>
<td>Suffolk</td>
</tr>
<tr>
<td>Floyd</td>
<td>Patrick</td>
<td>Colonial Heights</td>
<td>Waynesboro</td>
</tr>
<tr>
<td>Fluvanna</td>
<td>Pittsylvania</td>
<td>Covington</td>
<td>Williamsburg</td>
</tr>
<tr>
<td>Frederick</td>
<td>Prince George</td>
<td>Danville</td>
<td>Winchester</td>
</tr>
</tbody>
</table>

It may be concluded that declining enrollment was a wide-spread phenomenon in Virginia, since two-thirds of the local divisions had experienced a decrease in student population for five consecutive years. However, as in the case of net decrease in number of pupils over a decade, there was a wide disparity in the extent of decrease.

Nine divisions, or 6.7 percent, were found to have declined in Fall membership for ten consecutive year, from 1971-72 to 1980-81.

The nine divisions are listed in Table 3.
TABLE 3
Divisions Which Experienced a Decline in Fall Membership for the Ten Consecutive School Terms from 1971-72 to 1980-81

<table>
<thead>
<tr>
<th>Division</th>
<th>City</th>
<th>Division</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arlington</td>
<td>Falls Church</td>
<td>Portsmouth</td>
<td></td>
</tr>
<tr>
<td>Alexandria</td>
<td>Hampton</td>
<td>Richmond City</td>
<td></td>
</tr>
<tr>
<td>Charlottesville</td>
<td>Martinsville</td>
<td>Waynesboro</td>
<td></td>
</tr>
</tbody>
</table>

However, the questions could be raised whether the decline in enrollment was severe, even if consistent over a decade, and whether other divisions may have experienced a similar or more severe overall decline during the decade, even if such decline was not consistent over ten years. Therefore, a final question was examined: namely, which divisions had experienced an overall decline during the decade of 20 or 25 percent and more?

Eighteen local divisions, or 13.3 percent, were found to have experienced an overall decline in Fall membership of 20 percent and more during the decade 1971-72 to 1980-81. The eighteen divisions are listed in Table 4.

TABLE 4
Divisions Which Experienced a Decline in Fall Membership of 20 Percent and More During the Decade 1971-72 to 1980-81

<table>
<thead>
<tr>
<th>Division</th>
<th>City</th>
<th>Division</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arlington</td>
<td>Charlottesville</td>
<td>Martinsville</td>
<td></td>
</tr>
<tr>
<td>Charles City</td>
<td>Clifton Forge</td>
<td>Norfolk</td>
<td></td>
</tr>
<tr>
<td>Northumberland</td>
<td>Covington</td>
<td>Portsmouth</td>
<td></td>
</tr>
<tr>
<td>Southampton</td>
<td>Danville</td>
<td>Richmond City</td>
<td></td>
</tr>
<tr>
<td>Sussex</td>
<td>Falls Church</td>
<td>Staunton</td>
<td></td>
</tr>
<tr>
<td>Alexandria</td>
<td>Hampton</td>
<td>Waynesboro</td>
<td></td>
</tr>
</tbody>
</table>
Other divisions decreased in student population by a large percentage, but not by a full 20 percent. Divisions which experienced an overall decline of more than 16 percent but less than 20 percent during the decade studied were the counties of Dinwiddie, Goochland, Lancaster, Northampton, Franklin, and the cities of Roanoke, Fredericksburg, and Suffolk.

Both annexations and consolidations complicated the analysis of local enrollment figures, and may have been to some extent the reasons that several other local school divisions did not reflect a larger percentage of declining enrollment or a decline for more consecutive years. The City of Petersburg annexed parts of two neighboring counties, effective January 1, 1972, resulting in an increase of 8,021 citizens (4,629 from Prince George County and 3,392 from Dinwiddie County). Thus, the enrollment in Petersburg Public Schools increased from 8,072 pupils during the 1971-72 school term to 9,200 students during the 1972-73 school term. Also, the enrollment for Petersburg schools increased from 8,784 pupils during the 1974-75 school term to 9,163 students during 1975-76, primarily due to the addition of the kindergarten grade level. Therefore, without the annexation of students from Prince George and Dinwiddie Counties, and the addition of kindergarten, Petersburg enrollment figures may have declined yearly, as had been the case in other cities.
The City of Bristol annexed 5,267 citizens from Washington County, effective January 1, 1974, which was primarily responsible for an increase in Bristol Public Schools enrollment from 3,004 during the 1973-74 school term to 4,002 the following year. Even so, Bristol school enrollments declined each year from 1975-76 through 1980-81.

The Cities of Nansemond and Suffolk consolidated, effective January 1, 1974. Consequently, the enrollment total for Suffolk Public Schools increased the following year, but has declined yearly since the merger.

Two annexations which became effective on January 1, 1976, significantly increased enrollment figures for the receiving locality. Lynchburg City annexed 1,486 persons from Bedford County and 9,071 from Campbell County, for a total increase of 10,557 citizens. This resulted in an increase in the Lynchburg School enrollment of approximately 2,000 students, from 9,618 during the 1975-76 school term to 11,650 during the following term. Roanoke City annexed 13,522 citizens from Roanoke County, which helped to increase Roanoke City Schools enrollment from 15,938 during the 1975-76 school term to 17,988 during the 1976-77 term. Except for the enrollment increases during the year which correspond to the annexations, both Lynchburg and Roanoke City schools have decline in number of students yearly during the decade studied.

The enrollment data were examined a final time to determine whether there were local divisions which had declined in student
population as severely as 25 percent or more during the decade 1971-72 to 1980-81. It was found that there were eleven divisions in Virginia, or 8 percent, which had declined in Fall membership by 25 percent and more. The first hypothesis, that local school divisions in Virginia have experienced a decline of 25 percent and more in student populations during the decade 1972-1981, was accepted. The eleven divisions are listed in Table 5.

**TABLE 5**

<table>
<thead>
<tr>
<th>Divisions Which Experienced a Decline in Fall Membership of 25 Percent and More During the Decade 1971-72 to 1980-81</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arlington</td>
</tr>
<tr>
<td>Northumberland</td>
</tr>
<tr>
<td>Southampton</td>
</tr>
<tr>
<td>Alexandria</td>
</tr>
</tbody>
</table>

The eleven divisions listed in Table 5 have experienced the most severe declining student enrollment during the decade studied among the local school divisions in Virginia. The effect of such a severe decline in number of pupils upon curriculum, personnel, school organizational patterns, and building utilization upon the eleven school divisions will be examined in Chapter Four.

The second hypothesis is: Enrollment in Virginia school divisions declined to the extent that formal policies related to declining enrollment were developed and enacted by the State Board of Education during the decade 1972-1981. In Chapter Three, data related to the second hypothesis will be presented and analyzed.
CHAPTER THREE

Statewide public school enrollment has declined yearly since reaching its highest level during the 1975-76 school term. At least nine local divisions experienced a decline in student enrollment for each of the five years preceding the 1975-76 school term. Therefore, it was assumed that the State Board of Education would, at some time during the decade under study (1972-1981), become aware of the existence of declining enrollments in the state and in certain local divisions. The second hypothesis provided an opportunity to investigate the State Board's awareness of and action in response to declining student enrollments.

A search of the minutes of the meetings of the State Board of Education revealed that no specific policies related to declining student enrollment were enacted during the decade 1972-1981. Further, there was only one specific reference to the topic of declining enrollment in the minutes of the State Board during the decade studied:

**Report on Declining Enrollment**

Dr. Boyer presented a report on declining enrollment in the public schools of the Commonwealth. The major factors that affect public school enrollment were reported to be (1) number of live births, (2) mobility of the population, (3) private school enrollments, (4) holding power of the
school, and (5) legislation which has to do with the eligi-

bility of children to enter school.

Mr. Tulloch requested that the members of the Board be sent copies of Dr. Boyer's remarks.1

Dr. Richard L. Boyer, Associate Superintendent for Planning and Evaluation, began his report to the State Board with an examination of the five major factors which can affect public school enrollment. He then discussed possible impacts of declining enrollment, such as the aging of the instructional staff (as fewer new teachers are hired), aging of the population in general and its accompanying shift of emphasis on youth to a society predominated by adults, smaller class size, necessary adjustments in staffing, increase in per pupil cost of education, and the public's perception of schools when a smaller percentage of the population has children in school.

Dr. Boyer also advised the board to use the enrollment figures from the 1975-76 school term as the base year when comparing enrollment statistics during the next several years. He further advised educators in local divisions not to assume that their divisions would be unaffected by declining enrollment since it is a long-term phenomenon which may not yet have occurred in certain divisions. Boyer noted that approximately 25 local divisions, particularly suburban divisions which surround smaller cities, may experience a stable or slightly increased enrollment, even though decreasing enrollment is predicted for the state as a whole. He further advised caution

in changes which would increase personnel or facilities during a time when the public may expect reduced educational budgets as a result of declining enrollment.

Boyer's report to the State Board concluded with a review of opportunities for improving public education which occur during periods of declining enrollments, such as the improvement of educational programs rather than the construction of new buildings, the increased personalization of instruction, and the improvement of the quality of staff. ²

Even though there were no policies concerning declining enrollment enacted by the State Board of Education, and only one specific reference to declining enrollment can be found in the minutes of the meetings of the Board during the decade 1972-1981, it would be incorrect to assume that the Board was either unaware of or unconcerned about the phenomenon of declining enrollment in Virginia. Boyer explained during an interview that declining enrollment "permeated discussion and planning" of the Board, but was often merely one of many factors, difficult to isolate, taken into account in a particular situation. ³

While there were no further direct references to declining enrollment found in State Board of Education records, there was an act of the General Assembly related to the phenomenon. The enrollment

² Dr. Richard L. Boyer, interview, Richmond, VA, March, 1982.
³ Boyer, Ibid.
loss provision of the state funding formula permits local divisions to receive credit for one-half of the decline in enrollment during the previous school term. In computing the division enrollment for state funding purposes, one-half the number of the enrollment decrease during the previous year would be added to the current average daily membership.

Almost before district officials may realize that enrollment is declining, they will be hit by an insidious effect—loss of state financial aid. When such aid is calculated on the basis of average daily attendance, it vanishes with the student. Unfortunately, the costs of educating students who were once in attendance do not disappear as quickly. Bonds must still be serviced; facilities maintained; and staff salaries paid.

In a survey conducted by the National School Boards Association in 1975, 71 percent of the respondents listed reduced state aid as an effect of declining enrollment in their districts; it far outranked any other single effect in severity.4

Therefore, in response to this problem, Chapter 667 of the Appropriation Act of 1980 of the Virginia General Assembly provided for "an additional state payment per pupil, equal to the state share of the Basic Operation Cost for a locality, for one-half of the enrollment loss in ADM for the prior year."

In summary, there were no specific policies related to declining enrollment enacted by the State Board of Education during the decade 1972-1981. Therefore, the second hypothesis, "Enrollment in

Virginia school divisions declined to the extent that formal policies related to declining enrollment were developed and enacted by the State Board of Education during the decade 1972 to 1981," was rejected. The only specific reference to declining enrollment found in the minutes of meetings of the State Board was a report to the Board by Dr. Richard L. Boyer, Associate Superintendent for Planning and Evaluation, on declining enrollment in the public schools of Virginia. Decreasing pupil population was a subject, however, when the Board considered in its discussions and planning. The General Assembly in 1980 enacted an enrollment loss provision in the state funding formula which allows local divisions to add one-half of the number of the decline in enrollment from the previous year to its average daily membership for the current year when computing division enrollment for state funding purposes.

The third hypothesis was, "Local school divisions having experienced a decline of 25 percent or more of student populations during the decade 1972-1981 have had to effect changes in formal curriculum, professional personnel, school organizational patterns, and utilization of buildings." In Chapter Four, data related to the hypothesis obtained from divisions which had declined by 25 percent or more will be presented and analyzed.
CHAPTER FOUR

If the children go and then the money goes, can the educational program be far behind? More than 20 school districts reported cutting staff and/or programs as a first step in dealing with declining enrollment. Several more stated that it is no longer possible to maintain the level of per-pupil expenditures called for in previous budgets. When "something's gotta give," that "something" is usually classroom teachers or specialists and programs most likely to be categorized as "frills"—an athletic program here, an instrumental music course there, advanced courses in math and science in one district, reading clinics or foreign language programs for elementary pupils in another.1

In Chapter Two, data were presented which indicated that eleven school divisions in Virginia had experienced a decline in student enrollment of at least 25 percent during the decade 1971-72 to 1980-81. It is reasonable to assume that the loss of at least one-quarter of the pupils in any school system would have some impact upon the curriculum, personnel, school organizational patterns, and the utilization of buildings in each of these school divisions. During the review of related literature, it was noted that many school divisions, in Virginia and in other states, had experienced the effect of declining enrollment in these areas of the school program and operation.

The literature was again reviewed for the purpose of noting the ways in which declining enrollment had affected school divisions, in the three categories to be studied. From the list of consequences of declining enrollment gleaned from the literature, a questionnaire was developed. The questionnaire was field-tested and then sent to the superintendents of the eleven divisions identified as having declined in student enrollment by 25 percent or more during the decade studied. The questionnaire was used to gather data on the actual impact of declining enrollment in the areas studied upon those eleven divisions in Virginia having the 25 percent or greater decline.

The questionnaire contained 31 consequences of declining enrollment. These 31 consequences were arranged under three categories: formal curriculum, professional personnel, and school organizational patterns and utilization of buildings. A fourth category, general information, contained questions about local school board policies concerning reduction-in-force and use of surplus space.

The respondents were asked to indicate whether any of the 31 phenomena related to declining enrollment had occurred within their respective divisions. If the response was positive, the respondents were asked to indicate the extent to which declining enrollment was, in their judgment, the causative factor. The respondents could indicate that declining enrollment was entirely, substantially, partially, marginally, or not at all responsible
for the existence of a given phenomenon in their respective divisions. The last response was included to provide respondents with a method to indicate that while a given phenomenon did occur during the decade studied, declining enrollment was not the causative factor.

Therefore, two kinds of data were collected with the questionnaire: the existence of the decline-related phenomena, and the extent to which declining enrollment was the causative factor. In tabulating and analyzing the data, a numerical value was assigned to each of the five possible responses as follows:

- Entirely: 4
- Substantially: 3
- Partially: 2
- Marginally: 1
- Not at All: 0

A numerical average of the responsibility of declining enrollment for the existence of a given phenomenon was computed. The average is hereafter referred to as the composite strength index (CSI). The purpose of computing the average of responses for each item was to attempt to quantify the combined judgment of the respondents as to the degree to which declining student enrollment was the causative factor in the existence of each phenomenon. Responses were received from ten of eleven, or 91 percent, of the local divisions to which the questionnaire was sent. Several attempts were made to obtain data from the division from which no response was received. The original letter and survey were followed by a second mailing of the
of the same. A letter and two telephone calls to the superintendent's office, at appropriate intervals, were not successful in securing a response.

A variety of size and location are found among the eleven divisions which declined 25 percent and more in student population during the decade studied. Six of the eleven localities, or 55 percent, are designated cities in Virginia. However, three of the six urban divisions had student populations of more than 23,000 during the 1980-81 school term, and three had enrollments of less than 5,100 students during the same year. Three divisions would be considered suburban, the larger two having 1980-81 school term enrollments of over 10,000 students, and the smallest, less than 1,100. Two divisions would be considered rural, with 1980-81 school year enrollments of less than 3,200 students. Therefore, the eleven divisions which were studied included large cities, small cities, suburbs, and rural areas within Virginia. Geographically, three divisions are located in northern Virginia, two are located in the Tidewater region, two in the Shenandoah Valley area, and one division is located in each of these locations: central Virginia, southside Virginia, the Northern Neck, and western Virginia.

Changes in formal curriculum reported by the respondents to this study are presented in Table 6. In an Illinois study by Heilbronner cited in Chapter One, the increased use of paid paraprofessionals as a result of declining enrollment was reported. However, in this study, eight of the ten responding divisions, or 80 percent,
TABLE 6.
Survey Responses to Changes in Formal Curriculum

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Entirely</th>
<th>Substantially</th>
<th>Partially</th>
<th>Marginally</th>
<th>Not at All</th>
<th>Composite Strength Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Reduced course offerings.</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
<td>2.00</td>
</tr>
<tr>
<td>B. Higher pupil-teacher ratios.</td>
<td>2</td>
<td>8</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>2.50</td>
</tr>
<tr>
<td>C. Lower pupil-teacher ratios.</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2.67</td>
</tr>
<tr>
<td>D. Double-grade or combined classes.</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td>2.20</td>
</tr>
<tr>
<td>E. Combined use of vocational education facilities (two or more schools, or two or more neighboring divisions).</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>1.80</td>
</tr>
<tr>
<td>F. School use of community facilities (such as vocational training in the field rather than in simulated educational environments).</td>
<td>3</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>G. Reduction of support personnel, such as paraprofessionals, aids, etc.</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>2.50</td>
</tr>
<tr>
<td>H. Other ____________________________</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(No Responses)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
reported reduced numbers of support personnel such as paraprofessionals. The average composite strength index was 2.5. Imhoff and Romantino cited reduced foreign language course offerings in their studies. Imhoff reported an increase in math, social studies, and science course offerings. Seventy percent of the respondents to this study reported having reduced numbers of course offerings (CSI = 2.0). In Chapter One, Imhoff's study cited higher pupil-teacher ratios; Heilbrunner reported stable pupil-teacher ratios; and Poynter reported lower pupil-teacher ratios. In this study, 60 percent of the respondents reported having lower pupil-teacher ratios (CSI = 2.67) and 20 percent reported having higher pupil-teacher ratios (CSI = 2.5). It is assumed the other 20 percent did not experience a change in pupil-teacher ratios. Sebulsky cited the combined use of vocational education facilities with neighboring localities in Flagler, Colorado. Sixty percent of the respondents to this study reported having combined use of vocational education facilities, but the relatively weak CSI of 1.8 seems to indicate that declining student enrollment was only one of several reasons for this practice. Sebulsky also reported the existence of double-grade classes in Flagler. Fifty percent of the respondents to this study reported having double-grade or combined classes (CSI = 2.2). With the exception of combined use of vocational education facilities, all of the changes in formal curriculum appear to be at least partially the result of declining student enrollment.
Survey responses to changes in professional personnel are presented in Table 7. Ninety percent of the responding divisions were reported to have used both layoffs (CSI = 2.89) and involuntary transfers (CSI = 2.77) between schools as methods to reduce personnel due to declining enrollment. In studies by Seitz, Burgner, and Romantino, attrition was reported to be one of the primary methods used to reduce staff. Involuntary transfers between academic disciplines (CSI = 2.62), demotions (CSI = 1.87), part-time contracts (CSI = 1.87), and reduced auxiliary educational programs (CSI = 2.5) were reported to have occurred in 80 percent of the responding divisions. Seventy percent reported voluntary retirement without replacement (CSI = 1.86), voluntary transfers between schools (CSI = 2.42), and voluntary transfers between academic disciplines (CSI = 2.14). Sixty percent of the responding divisions reported having reduced personnel by not replacing voluntary resignees (CSI = 1.67). Voluntary leaves of absence (CSI = 1.6) and the encouragement of early retirement (CSI = 1.6) were reported by 50 percent. Of the three areas of change studied, professional personnel was the area of change with the most positive responses, with an average of 72.5 percent of the divisions responding positively. No change listed in Category II - Professional Personnel, was found to be present in fewer than 50 percent of the responding divisions. The average composite strength index for each phenomenon was 2.15 with higher-than-average indexes for layoffs (CSI = 2.89), involuntary transfers between schools (CSI = 2.77), and between academic disciplines (CSI = 2.62) and reduced auxiliary educational programs (CSI = 2.50).
TABLE 7
Survey Responses to Changes in Professional Personnel

<table>
<thead>
<tr>
<th>Extent to Which Declining Enrollment is Responsible</th>
<th>Yes</th>
<th>No</th>
<th>Entirely</th>
<th>Substantially</th>
<th>Partially</th>
<th>Marginally</th>
<th>Not at All</th>
<th>Composite Strength Index</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
<td>1.86</td>
</tr>
<tr>
<td>Normal attrition without replacement</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td></td>
<td>1.67</td>
</tr>
<tr>
<td>1. voluntary retirements</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td></td>
<td></td>
<td>2.14</td>
</tr>
<tr>
<td>2. voluntary resignations</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
<td>2.42</td>
</tr>
<tr>
<td>3. voluntary transfers</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td></td>
<td></td>
<td>2</td>
<td>1</td>
<td>1.60</td>
</tr>
<tr>
<td>a. between academic disciplines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. between schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. voluntary leaves of absence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>5. other</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crisis-Oriented Personnel Actions:</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td>1.60</td>
</tr>
<tr>
<td>1. encouragement of early retirement</td>
<td>9</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td></td>
<td>2.89</td>
</tr>
<tr>
<td>2. layoffs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Extent to Which Declining Enrollment is Responsible

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Entirely</th>
<th>Substantially</th>
<th>Partially</th>
<th>Marginally</th>
<th>Not at All</th>
<th>Composite Strength Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. forced transfers--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. between academic disciplines</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td></td>
<td>2.62</td>
</tr>
<tr>
<td>b. between schools</td>
<td>9</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td></td>
<td>2.77</td>
</tr>
<tr>
<td>4. demotions</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td></td>
<td>1.87</td>
</tr>
<tr>
<td>5. part-time contracts</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td></td>
<td>1.87</td>
</tr>
<tr>
<td>6. reduced auxiliary education programs</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
<td>2.50</td>
</tr>
<tr>
<td>7. other ______________</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(No responses)</td>
</tr>
</tbody>
</table>
Survey responses to changes in school organizational patterns and utilization of buildings are presented in Table 8. Ninety percent of the responding divisions reported the establishment of new attendance zones (CSI = 2.77). Fox and Romantino cited alternative uses of surplus school buildings in their studies, such as warehousing, administrative offices, community recreation, senior citizen centers, and the leasing or sale of surplus buildings. Eighty percent of the respondents to this study reported the use of surplus buildings for non-educational uses, such as warehousing and administrative offices (CSI = 3.0). Re-alignment of building-grade arrangements also was reported by 80 percent (CSI = 3.12). Seventy percent of the respondents reported allowing surplus space within school buildings to be used at the discretion of the principal (CSI = 2.42). Sixty percent reported the leasing of surplus buildings to other municipal agencies for uses such as community recreation or senior citizen centers (CSI = 3.5). Re-utilizing surplus buildings for alternative educational programs, such as adult, special, or vocational education, was reported by 50 percent of the respondents. Fifty percent also reported mothballing (CSI = 3.0) or abandonment (CSI = 3.0) as the disposition of closed school buildings. Greene, et al., described the consolidation of seven high schools into three high school complexes in Richmond, Virginia. Forty percent of the respondents to this study reported the consolidation of separate schools into complexes (CSI = 2.5). The sale of surplus school buildings was also reported by 40 percent (CSI = 2.75). Thirty
### TABLE 8
Survey Responses to Changes in School Organizational Patterns and Utilization of Buildings

<table>
<thead>
<tr>
<th></th>
<th>Extent to Which Declining Enrollment is Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>1. establishment of new attendance zones</td>
<td>9 1 3 2 3 1</td>
</tr>
<tr>
<td>2. re-alignment of building-grade arrangement (such as moving the 9th or 8th grade from the middle school to the high school)</td>
<td>8 2 2 5 1</td>
</tr>
<tr>
<td>3. admitting non-resident students. If so, on a tuition basis or free? Only three of seven responded: One tuition, one free, and one both.</td>
<td>7 3 1 3 2</td>
</tr>
<tr>
<td>4. consolidation of separate schools into &quot;complexes&quot;</td>
<td>4 6 3 1</td>
</tr>
<tr>
<td>5. other</td>
<td>(No responses)</td>
</tr>
</tbody>
</table>
B. Utilization of Buildings:

1. Extra space left to discretionary use of the principal.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Entirely</th>
<th>Substantially</th>
<th>Partially</th>
<th>Marginally</th>
<th>Not at All</th>
<th>Composite Strength Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>2.42</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Reutilization--

   a. alternative educational uses, such as adult, special, or vocational.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Entirely</th>
<th>Substantially</th>
<th>Partially</th>
<th>Marginally</th>
<th>Not at All</th>
<th>Composite Strength Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2.20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   b. non-educational uses, such as warehousing, administrative offices, etc.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Entirely</th>
<th>Substantially</th>
<th>Partially</th>
<th>Marginally</th>
<th>Not at All</th>
<th>Composite Strength Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Revenue producing--

   a. sold

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Entirely</th>
<th>Substantially</th>
<th>Partially</th>
<th>Marginally</th>
<th>Not at All</th>
<th>Composite Strength Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2.75</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   b. leased to other agencies for uses such as community recreation or senior citizen centers.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Entirely</th>
<th>Substantially</th>
<th>Partially</th>
<th>Marginally</th>
<th>Not at All</th>
<th>Composite Strength Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>3.50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Closed--

   a. abandoned

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Entirely</th>
<th>Substantially</th>
<th>Partially</th>
<th>Marginally</th>
<th>Not at All</th>
<th>Composite Strength Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
b. mothballed  
c. razed  

5. Other (See Below) ________________________________________

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Entirely</th>
<th>Substantially</th>
<th>Partially</th>
<th>Marginally</th>
<th>Not at All</th>
<th>Composite Strength Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
<td>3.00</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td>2.66</td>
</tr>
</tbody>
</table>

Two school buildings rented by city to other agencies.

One old building closed; six classrooms of children placed in two churches.
percent had surplus buildings razed (CSI = 2.66). Sebulsky reported that the Champlain, New York, school system admitted students from Vermont and Canada. The admission of non-resident students was reported by 70 percent of the responding divisions; however, the CSI of .71 indicated that declining enrollment was, at best, only marginally responsible for this practice. Three of the seven divisions reporting the admission of non-resident students responded to the question, "If so, on a tuition basis or free?". One division reported tuition basis, one free, and one responded both tuition and free (no details provided).

Declining student enrollment was judged by the respondents to be of more significance as a cause for the existence of changes listed in Category III, School Organizational Patterns and Utilization of Buildings than for the two previous categories. The average composite strength index for all items in Category I, Formal Curriculum, was 2.09. The average CSI for Category II, Professional Personnel, was 2.15. For Category III, the CSI average was 2.61, well beyond partially and approaching substantially as the extent to which declining enrollment was the cause of the phenomena listed, as measured on the scale.

Category IV, General Information, was comprised of two questions regarding the existence of School Board policies on reduction-in-force and on the use of surplus space. Regarding reduction-in-force, it was asked if there existed a School Board policy, and if so, was it based upon seniority, job performance, some other criteria, or a combination of factors. One hundred percent of the responding divisions were reported
to have a reduction-in-force policy. Seniority was either the only factor or was one of the primary factors in the policies of all responding divisions. Seventy percent of the responding divisions reported seniority as the only or primary criterion. Other responses included seniority and job performance; areas of training and endorsement, evaluation, other areas of competence, and seniority (listed in order of priority); and a combination of factors, including seniority, job performance, and the needs of the division.

Krabbe reported in his study that 75 percent of the divisions he examined had formal board policies for the use of surplus space. However, Poynter reported that none of the Ohio school districts in his study had a policy for the use of surplus space. One hundred percent of the respondents to this study reported no School Board policy on the use of surplus space.

To summarize the data, Table 9 was compiled of changes given a compositive strength factor of 1.5 or higher by the majority of responding divisions, listed in descending order of the highest number of divisions reporting the change. The table illustrates the pervasiveness of the changes associated with declining student enrollment among the ten responding divisions.

The 31 changes associated with declining enrollment included in the questionnaire are listed in order of composite strength index in Table 10. The changes are ranked in order of the average extent of responsibility attributed to declining enrollment by the respondents
<table>
<thead>
<tr>
<th>Change</th>
<th>Composite Strength Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Professional Personnel Layoffs</td>
<td>2.89</td>
</tr>
<tr>
<td>9 Involuntary Transfers Between Schools</td>
<td>2.77</td>
</tr>
<tr>
<td>9 Establishment of New Attendance Zones</td>
<td>2.77</td>
</tr>
<tr>
<td>8 Re-alignment of Building-Grade Arrangements</td>
<td>3.12</td>
</tr>
<tr>
<td>8 Non-educational Uses of Buildings, such as Warehousing and Offices</td>
<td>3.00</td>
</tr>
<tr>
<td>8 Involuntary Transfers Between Academic Disciplines</td>
<td>2.62</td>
</tr>
<tr>
<td>8 Reduction of Support Personnel, such as Aides and Paraprofessionals</td>
<td>2.50</td>
</tr>
<tr>
<td>8 Reduced Auxiliary Educational Programs</td>
<td>2.50</td>
</tr>
<tr>
<td>8 Demotions of Professional Personnel</td>
<td>1.87</td>
</tr>
<tr>
<td>8 Part-time Contracts for Professional Personnel</td>
<td>1.87</td>
</tr>
<tr>
<td>7 Voluntary Transfers Between Schools</td>
<td>2.42</td>
</tr>
<tr>
<td>7 Use of Surplus Space Left to Principals' Discretion</td>
<td>2.42</td>
</tr>
<tr>
<td>7 Voluntary Transfers Between Academic Disciplines</td>
<td>2.14</td>
</tr>
<tr>
<td>7 Reduced Course Offerings</td>
<td>2.00</td>
</tr>
<tr>
<td>7 Voluntary Retirements without Replacement</td>
<td>1.86</td>
</tr>
<tr>
<td>6 Surplus Buildings Leased to Other Agencies, such as Community Recreation or Senior Citizens Centers</td>
<td>3.50</td>
</tr>
<tr>
<td>6 Lower Pupil-Teacher Ratios</td>
<td>2.67</td>
</tr>
<tr>
<td>6 Combined Use of Vocational Education Facilities</td>
<td>1.80</td>
</tr>
<tr>
<td>6 Voluntary Resignations without Replacement</td>
<td>1.67</td>
</tr>
</tbody>
</table>
### TABLE 10

**CHANGES RELATED TO DECLINING ENROLLMENT**  
**IN ORDER OF COMPOSITE STRENGTH INDEX**

<table>
<thead>
<tr>
<th>Composite Strength Index</th>
<th>Change</th>
<th>Number of Divisions Reporting The Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.50</td>
<td>Surplus Buildings Leased to Other Municipal Agencies, such as Community Recreation and Senior Citizens Centers</td>
<td>6</td>
</tr>
<tr>
<td>3.12</td>
<td>Re-alignment of Building-Grade Arrangements</td>
<td>8</td>
</tr>
<tr>
<td>3.00</td>
<td>Abandonment of Surplus Buildings</td>
<td>5</td>
</tr>
<tr>
<td>3.00</td>
<td>Mothballing of Surplus Buildings</td>
<td>5</td>
</tr>
<tr>
<td>3.00</td>
<td>Non-educational Uses, such as Warehousing and Administrative Offices</td>
<td>8</td>
</tr>
<tr>
<td>2.89</td>
<td>Layoffs of Professional Personnel</td>
<td>9</td>
</tr>
<tr>
<td>2.77</td>
<td>Involuntary Transfers Between Schools</td>
<td>9</td>
</tr>
<tr>
<td>2.77</td>
<td>Establishment of New Attendance Zones</td>
<td>9</td>
</tr>
<tr>
<td>2.75</td>
<td>Selling of Surplus Buildings</td>
<td>4</td>
</tr>
<tr>
<td>2.67</td>
<td>Lower Pupil-Teacher Ratios</td>
<td>6</td>
</tr>
<tr>
<td>2.66</td>
<td>Razing of Surplus Buildings</td>
<td>3</td>
</tr>
<tr>
<td>2.62</td>
<td>Involuntary Transfers Between Academic Disciplines</td>
<td>8</td>
</tr>
<tr>
<td>2.50</td>
<td>Higher Pupil-Teacher Ratios</td>
<td>2</td>
</tr>
<tr>
<td>2.50</td>
<td>Reduction of Support Personnel, such as Paraprofessionals</td>
<td>8</td>
</tr>
<tr>
<td>2.50</td>
<td>Reduced Auxiliary Educational Programs</td>
<td>8</td>
</tr>
<tr>
<td>2.42</td>
<td>Voluntary Transfers Between Schools</td>
<td>7</td>
</tr>
<tr>
<td>2.42</td>
<td>Use of Extra Space Left to Principals' Discretion</td>
<td>7</td>
</tr>
<tr>
<td>2.25</td>
<td>Consolidation of Separate Schools into Complexes</td>
<td>4</td>
</tr>
<tr>
<td>2.20</td>
<td>Double-Grade or Combined Classes</td>
<td>5</td>
</tr>
<tr>
<td>2.20</td>
<td>Alternative Educational Uses, such as Adult, Special, or Vocational Education Programs</td>
<td>5</td>
</tr>
</tbody>
</table>
in whose divisions the change was found. The range of the composite strength index is zero to four.

A copy of the cover letter to the superintendents of the eleven divisions studied, and the whole questionnaire with response totals entered, may be found in the appendix.

The third hypothesis was, "Local school divisions having experienced a decline of 25 percent or more of the student population during the decade 1972-1981 have had to effect changes in:

A. formal curriculum;
B. professional personnel; and
C. school organizational patterns and utilization of buildings.

These changes are the direct result of declining student enrollment." In the area of formal curriculum, each change was present

<table>
<thead>
<tr>
<th>Composite Strength Index</th>
<th>Change</th>
<th>Number of Divisions Reporting The Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.14</td>
<td>Voluntary Transfers Between Academic Disciplines</td>
<td>7</td>
</tr>
<tr>
<td>2.00</td>
<td>Reduced Course Offerings</td>
<td>8</td>
</tr>
<tr>
<td>1.87</td>
<td>Part-time Contracts</td>
<td>8</td>
</tr>
<tr>
<td>1.87</td>
<td>Demotions Among Professional Personnel</td>
<td>7</td>
</tr>
<tr>
<td>1.86</td>
<td>Voluntary Retirements without Replacement</td>
<td>6</td>
</tr>
<tr>
<td>1.80</td>
<td>Combined Use of Vocational Education Facilities</td>
<td>6</td>
</tr>
<tr>
<td>1.67</td>
<td>Voluntary Resignations without Replacement</td>
<td>6</td>
</tr>
<tr>
<td>1.60</td>
<td>Voluntary Leaves of Absence</td>
<td>5</td>
</tr>
<tr>
<td>1.60</td>
<td>Encouragement of Early Retirement</td>
<td>5</td>
</tr>
</tbody>
</table>
in at least 20 percent of the responding divisions, an average of 53 percent; and one change, reduction of support personnel such as paraprofessionals and aides, was present in 80 percent of the responding divisions. Therefore, it could be stated that local divisions having experienced a decline of 25 percent or more of student population during the decade have had to effect changes in formal curriculum.

In the area of professional personnel, each change was present in at least 50 percent of the responding divisions, an average of 72 percent; and two changes, layoffs and involuntary transfers between schools, were present in 90 percent of the responding divisions. Therefore, it could be stated that local school divisions having experienced a decline of 25 percent or more of student population during the decade 1972-1981 have had to effect changes in professional personnel.

In the area of school organizational patterns and utilization of buildings, each change was present in at least 30 percent of the responding divisions, an average of 59 percent; and one change, establishment of new attendance zones, was present in 90 percent of the responding divisions. Therefore, local school divisions having experienced a decline of 25 percent or more of student population during the decade 1972-1981 have had to effect changes in school organizational patterns and utilization of buildings.
To determine whether these changes were the direct result of declining student enrollment, the composite strength indexes were examined. For a change to be considered the direct result of declining student enrollment, the CSI would be 4.0, the numerical value assigned to the response entirely. While individual respondents did respond with entirely (the result of declining student enrollment) for particular changes, the average CSI varied from a low of 1.60 to a high of 3.50. No change had a CSI of less than 1.0, or not at all (the result of declining enrollment). Seven changes, or 23%, had a CSI of between 1.0 and 2.0, or marginally. Seventeen changes, or 57%, had a CSI of between 2.0 and 3.0, or partially. Five changes, or 16%, had a CSI of between 3.0 and 4.0, or substantially (the result of declining student enrollment). Therefore, it cannot be stated that the changes were, in each instance, the direct result of declining student enrollment, and the third hypothesis is rejected.

In Chapter Five, a summary of the study, conclusions, discussion, and implications for future research will be presented.
CHAPTER FIVE

Declining public school enrollment is a nationwide phenomenon. It began during the 1970s and is expected to continue, at least at the high school level, into the 1990s. With the exception of a few suburban school divisions, most local divisions in Virginia are continuing to decline in enrollment.

The purposes of the study were to: determine the extent of declining enrollment at the state and local levels; identify the local divisions which have experienced the most severe decline; identify and examine State Board of Education policies related to declining enrollment; and study the effect of declining enrollment of the most severely affected divisions in the areas of formal curriculum, professional personnel, school organizational patterns, and utilization of buildings.

In the review of literature, it was found that: declining enrollment is a topic found frequently in the press and in educational periodicals; it has been the subject of numerous doctoral dissertations (of which 31, from 23 universities and 16 states, are cited in this study); findings in the studies did not correlate in every instance (for example, one researcher found higher
pupil-teacher ratios as a result of declining enrollment, one found no change, and one found lower pupil-teacher ratios).

In Chapter Two, data related to the first hypothesis were presented and analyzed. The basic questions emerging from the hypothesis were: (1) Have Virginia and its local divisions experienced a decline in student population, as have other states and localities within the United States? (2) Has the decline in enrollment been consistent during the decade studied or has it been merely occasional? (3) Which local divisions in Virginia have experienced the most severe decline in enrollment?

Statewide enrollment figures were relatively stable over the decade 1972-1981: Fall membership recorded in 1971 was 1,074,073. The largest enrollment, 1,103,669, occurred during the 1975-1976 school term. In 1980, the Fall membership was 1,010,371. Statewide enrollment varied by no more than 8.4 percent and decreased overall by less than six percent during the decade studied.

State financial incentives for localities to establish kindergartens (1973), and the advancement of the determination date for entry into public school from September 30 to December 31 between 1974 and 1977, had the effect of increasing enrollments for those years even though the number of school-age children did not change.

Both annexations and consolidations complicated the analysis of local enrollment figures. By having the effect of enlarging the student populations listed under certain localities, and decreasing
the same for others, annexations and consolidations appear to have been among the reasons that certain divisions did not experience the same degree of declining enrollment as others did.

The following enrollment data were found:

1. Eighty-four divisions in Virginia, or 62 percent, experienced a net loss of student population during the decade 1972-1981.

2. Eighty-nine divisions, or 66 percent, experienced a declining enrollment for the five consecutive school terms from 1975-1976 to 1980-1981.

3. Nine divisions, or 6.7 percent, experienced a declining enrollment for the ten consecutive school terms during the decade studied.

4. Eighteen divisions, or 7.5 percent, experienced an overall decline in student population of 20 percent and more during the decade studied. (Eight divisions declined in enrollment more than 16 percent, but less than 20 percent.)

5. Eleven divisions, or 12.3 percent, experienced an overall decline in student population or 25 percent and more during the decade studied.

The first hypothesis, local school divisions in Virginia have experienced a decline of 25 percent or more in student populations during the decade 1972-1981, was accepted.

In Chapter Three, data related to the second hypothesis were presented and analyzed. Statewide enrollment had declined yearly since the 1975-1976 school term, and at least nine divisions had experienced declining enrollment for the five consecutive years preceding the 1975-1976 school term. Therefore, it seemed reasonable to assume that the State Board of Education would have become
aware of the existence of declining enrollments in the state and in local divisions at some time during the decade under study.

A search of the minutes of the meetings of the State Board of Education revealed that no specific policies related to declining student enrollment were enacted during the decade 1972-1981. Further, the only specific reference to the topic of declining enrollment in the minutes of the State Board of Education during the decade studied was a report presented to the Board by Dr. Richard L. Boyer, Associate Superintendent for Planning and Evaluation, in which he discussed five major factors that affect public school enrollment:

1) number of live births,
2) mobility of the population,
3) private school enrollments,
4) holding power of the school, and
5) legislation which has to do with the eligibility of children to enter school.

Boyer also discussed possible impacts of declining enrollment, such as the aging of instructional staff (as fewer new teachers are hired), aging of the population in general and its accompanying shift of emphasis on youth to a society predominated by adults, smaller class size, necessary adjustments in staffing, increases in per pupil cost of education, and the public's perception of schools when a smaller percentage of the population has children in school.

Boyer's report to the State Board concluded with a review of opportunities for improving public education which occur during
periods of declining enrollment, such as the improvement of educa-
tional programs rather than the construction of new buildings,
the increased personalization of instruction, and the improvement
of the quality of staff.

While there were no further direct references to declining
enrollment found in State Board of Education records, there was
an act of the General Assembly related to the phenomenon. The
enrollment loss provision of the state funding formula permits
local divisions to receive credit for one-half of the decline in
enrollment during the previous school term. In computing the
division enrollment for state funding purposes, one-half the num-
ber of the enrollment decrease during the previous year is added
to the current average daily membership.

Although there were no policies concerning declining
enrollment enacted by the State Board of Education, and only one
specific reference to declining enrollment was found in the minutes
of meetings of the Board during the decade 1972-1981, it would be
incorrect to assume that the Board was either unaware of or uncon-
cerned about the phenomenon on declining enrollment in Virginia.
Boyer explained that declining enrollment "permeated discussion
and planning" of the Board, but was often merely one of many
factors, difficult to isolate, taken into account in a particular
situation. However, the second hypothesis was rejected.
In Chapter Four, data related to the third hypothesis were presented and analyzed. A search of the literature revealed 31 changes as a result of declining enrollment. The 31 changes were categorized in one of the three areas addressed in the third hypothesis: formal curriculum, professional personnel, and school organizational patterns and utilization of buildings. A questionnaire was developed, field-tested, and sent to the superintendents of the eleven divisions identified in Chapter Two as having declined in student population by 25 percent and more during the decade 1972-1981. Included in the questionnaire were questions regarding local school board policies on reduction-in-force and use of surplus space. The superintendents and/or their designees were asked to indicate whether changes had occurred in their divisions, and if so, to judge the extent to which declining enrollment was the cause of the change, on this scale: entirely, substantially, partially, marginally, or not at all.

Responses were received from ten of the eleven, or 91 percent, of the divisions to which the questionnaire was sent. A determined effort to secure the outstanding questionnaire was unsuccessful. The eleven divisions studied included large cities, small cities, suburbs, and rural areas within Virginia, and were geographically diverse. In the area of formal curriculum, the changes listed were found to be present in an average of 53 percent of the responding divisions. Changes listed under professional personnel were found to be present in an average of 72
percent. In the area of school organizational patterns and utilization of buildings, listed changes were found to be present in an average of 59 percent of the responding divisions.

The composite strength index, an average of the level of significance assigned by the respondents to declining enrollment as the cause of the changes present in their divisions, was computed for each change listed in the questionnaire. Seven changes, or 23 percent, were reported to have been marginally the result of declining enrollment. Seventeen changes, or 57 percent, were reported to have been partially the result of declining enrollment. Five changes, or 16 percent, were reported to have been substantially the result of declining enrollment. Individual divisions reported certain changes to be entirely the result of declining enrollment. A conservative interpretation of the responses led to the rejection of the third hypothesis.

Several conclusions may be drawn from analysis of the data:


2. Most local divisions in Virginia have experienced declining enrollment. The exceptions were a few suburban divisions.

3. The extent of declining enrollment varied among the localities from losses of less than 100 pupils to enrollment declines of 25 percent and more during the decade studied.
4. The State Board of Education did not enact official policies related to declining enrollment but received a report on the subject from the Associate Superintendent for Planning and Evaluation. Declining enrollment was one of the many phenomena often considered in the deliberations of the Board.

5. The General Assembly modified the state funding formula to moderate the loss of state funds appropriated to divisions experiencing decline.

6. Divisions most affected by declining enrollment effected changes in formal curriculum, professional personnel, and school organizational patterns and utilization of buildings. Changes commonly found and considered substantially or partially caused by declining enrollment include:

a. reduction of professional personnel,
b. involuntary transfers of staff between schools,
c. establishment of new attendance zones,
d. non-educational use of surplus school buildings, such as warehousing and office space,
e. involuntary transfers of staff between academic disciplines,
f. reduction of support personnel, such as aides and paraprofessionals,
g. reduction of auxiliary educational programs,
h. voluntary transfers of staff between schools,
i. use of surplus space in school buildings left to principal's discretion,
j. voluntary transfers of staff between academic disciplines,
k. reduced course offerings,
l. leasing of surplus buildings to other municipal agencies, such as community recreation or senior citizen centers,
m. lower pupil-teacher ratios.
Seniority was either the only criteria or was one of several criteria listed in the reduction-in-force policies of 100 percent of the responding divisions. None of the responding divisions were reported to have a school board policy regarding the use of surplus space.

7. In most instances, declining enrollment was among the causes, but not the sole cause, for changes effected by the divisions studied.

The position of the National School Public Relations Association is that declining enrollment is not an isolated problem. As one part of major dislocations in the nation's social patterns, it requires extraordinary leadership to devise methods of coping with it. It is suggested that the phenomenon be identified early, faced head-on and approached in light of the total educational program of the district. While Anderson views periods of declining enrollment as an opportunity to make certain educational improvements, the prevailing view in the literature seems to be that declining enrollment is a serious educational problem with social, political and financial overtones. As Boyd stated, "the politics of scarcity is the politics of conflict... Thus, the changeover from growth to decline has posed unfamiliar and difficult problems for educational leaders and has increased the importance of the conflict management function of government..."

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agree with the NSPRA in regard to declining enrollment being one part of major dislocations in the nation's social patterns, since "as a popular topic, shrinking enrollment is one of the most politically visible (and divisive) issues to face superintendents and school boards since desegregation." The NSPRA appears to be correct, then, when calling for extraordinary educational leadership to deal with the problems related to declining enrollment.

That declining enrollment is a problem in Virginia at the state level is evidenced by the report to the Virginia State Board of Education by Boyer and the enrollment loss provisions in the state funding formula. The fact that declining enrollment is a problem at the local level is evidenced by the high percentage of decline experienced by local divisions (eleven declining by 25 percent and more of their student populations during the decade studied) and the obviously difficult changes which had to be effected by divisions responding to the survey in the study. Declining enrollment and the changes it influenced were not isolated geographically or sociologically, but were found in large and small cities, suburban and rural areas.

Although the respondents were reluctant to cite declining enrollment as the only cause of the changes effected during the decade studied, most of the changes (73) percent were said to have

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been either partially or substantially caused by enrollment decline.

The fact that managing a division experiencing declining enrollment is a difficult task is evidenced by the widely varied responses to the problem cited in the literature and in the survey responses reported. No two sets of responses were identical. The only point on which there was unanimity was the lack of policy regarding the use of surplus space. However, the responses to the survey, when examined individually and collectively, present a view of divisions in which difficult changes related to declining enrollment were effected.

Educational leaders are certain to receive negative reactions from personnel when circumstances lead to reductions in force, involuntary transfers between schools and academic disciplines, reduction of support personnel, demotions, and part-time contracts. Almost certain to provoke controversy and opposition from the community are the establishment of new attendance zones, re-alignment of building-grade arrangements, reduced auxiliary educational programs, reduced course offerings, and the closing of a school. It is assumed that most educational leaders would resort to changes such as these only when absolutely necessary.

Therefore, the educational leader would be well-advised to follow the recommendations frequently found in the literature. Both long- and short-range planning, with close attention paid to enrollment projections and trends, should be an on-going process. Smaller, incremental changes in curriculum, personnel, and school
organization are preferable to less-frequent but major changes. Active and open communication between the educational leadership and the community can help to avoid the problems of surprise and opposition emerging from impending changes, and can help to build a positive consensus within the community toward necessary changes in the educational program.

The educational leader would be further well-advised to consult the literature for alternative courses of action when faced with declining enrollment. Divisions across the country have had to deal with the problems and opportunities presented by a decreasing student population, in some cases for as long as a decade. In addition to the educational leader's own imagination and good judgment, the experiences of other educators faced with similar circumstances can be a valuable course of information.

The variety of findings from other studies of declining enrollment is interpreted as evidence that the problems for educators posed by declining enrollment, and the responses to those problems, are as varied as the social, political, and economic circumstances found among the divisions studied. There is no standard course of action for the educational leader to follow when confronted with declining enrollment. However, there is extensive information available which can provide suggestions to help the educational leader decide which actions would be most appropriate in the unique local circumstances. This study will serve as an addition to the literature related to declining student enrollment.
Many questions related to declining enrollment remain unanswered. Suggested here are questions that future researchers may wish to study. The examination and analysis of enrollment data for the State of Virginia and its local divisions were limited in this study to the decade 1972-1981. Projections have been made regarding the duration and extent of declining enrollment, but researchers may wish to examine actual enrollment data after the passing of several years. Eleven divisions were found to have declined in student population by 25 percent and more during the decade 1972-81. Could other divisions be identified which will have experienced declining enrollment to that extent at some future date?

It was found that the Virginia State Board of Education had not enacted official policies related to declining student enrollment during the decade studied. Whether Boards of Education in other states that have experienced declining student populations have written decline-related policies should be studied. Another question is whether or not the state funding formulas in other states have been changed to ease the decrease of funding to localities experiencing declining enrollment, as is the case in Virginia.

Several studies cited in the review of the literature included data related to reduced course offerings as a consequence of declining enrollment. Foreign language courses seem to be the most frequently cited. Reduced course offerings were reported by 70 percent of the respondents to this study. However, data related to specific academic disciplines was not requested, and may be a topic studied
at a later date. One of the major inconsistencies found in the literature and in the results of this study is the relationship of declining enrollment to pupil-teacher ratios. It would be assumed that a decline in enrollment, without accompanying reduction of the number of teachers would lead to a lower pupil-teacher ratio. While that has been the case in many divisions, including 60 percent of those responding to the questionnaire in this study, there are divisions in which the pupil-teacher ratio either has not changed or has increased. The reasons for this disparity merit study.

Some of the effects of declining enrollment upon professional personnel, a broad category, were investigated in this study. Future researchers may wish to examine the effects of declining enrollment on sub-groups within professional personnel, such as central office administrators, building-level administrators, and teachers. Involuntary transfers between academic disciplines and between schools, reductions in force, and demotions were among the changes present in divisions responding to the questionnaire in this study. It is not known how many educators, or what percentages, have experienced these consequences caused, in part, by declining enrollment.

Eighty percent of the respondents reported the re-alignment of building-grade arrangements. The re-alignment could be examined for similarities, differences, the reasons for likeness or diversity, and the development of a new trend in building-grade arrangements affected by declining enrollment. Forty percent of the respondents to this study reported consolidation of separate schools
into "complexes." The extent to which the establishment of complexes achieved the intended educational goals should be investigated. Seventy percent reported that the use of extra space in school buildings was left to the discretion of the principal. The question of what uses principals put to surplus space could be studied.

During the next ten to fifteen years, an increasing number of divisions, in Virginia and other states, are expected to experience declining enrollment. This could lead to the development of more policies related to reduction-in-force. These policies should be studied for the criteria used to effect reduction. One hundred percent of the respondents to the survey in this study reported that seniority was either the only or was among the criteria contained in their reduction-in-force policies. In recent years, other criteria have been appearing in the literature, such as the quality of job performance and the personnel needs of the division. Whether or not seniority remains the primary criteria, and whether or not other criteria become increasingly used, should be studied.

It was not the purpose of this study to investigate the causes of declining enrollment in Virginia or its local divisions, or the reasons that the changes related to declining enrollment effected by the selected divisions were made. Both questions merit study.
DECLINING ENROLLMENTS

Five factors can effect public school enrollments. They are:

1. Live births
2. Mobility
3. Private school enrollments
4. Holding power
5. Eligibility laws

The most important of these factors, of course, is live births. A large number of births provides the potential for large school enrollments; a decline in live births will normally be followed by a decline in school enrollments. Virginia, like the rest of the nation, has experienced a decline in the number of live births during the past few years.

Mobility can offset, to some extent, live birth trends. This is especially true if a community has experienced a decline in births and, because of industry or other reasons, attracts
families with school-age children. Viewed from a state-wide perspec­tive, mobility is not likely to have any major effects on public school enrollments in Virginia. The reason for this, as mentioned above, is that other states also have experienced a decline in births. Virginia is not likely to be getting a significa­nt number of school-age children from other states.

The potential school population is divided into those who attend public schools and those who attend private schools. Any change in the percentage of students who attend private schools has an obvious impact on public schools.

The holding power of the schools also affects population. During recent years, efforts have been made to hold more children in school until they graduate, increasing the school population. If something should happen to encourage students to drop out of school, the school population would decrease.

Changes in laws affecting compulsory attendance and the eligibility of students to attend school also would have an effect on school enrollment. As an example, a small decline in school enrollment had started in Virginia in the early 1970s. Two changes in the law reversed this trend and for several years public school enrollment again increased. These changes made five-year olds eligible to attend public schools and shifted the determination of entry age from October 1 to January 1.
Live Births

The following examples indicate trends in live births in relation to school enrollments:

1. High school graduates through the class of 1995 are already born. Students who will be enrolled in school during the next 17 years are already with us; there will not be any more.

2. In 1976 the number of live births was smaller than the number of twelfth graders in public schools. When consideration is given to the fact that not all children who were born 17 or 18 years earlier are enrolled—some are in private schools and some have dropped out of school—this fact gains additional significance.

3. The live births since 1964 have declined as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Grade Class</th>
<th>Number</th>
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<tbody>
<tr>
<td>1964</td>
<td>Ninth grade of 1978-79</td>
<td>97,195</td>
</tr>
<tr>
<td>1968</td>
<td>Fifth grade of 1978-79</td>
<td>82,260</td>
</tr>
<tr>
<td>1972</td>
<td>First grade of 1978-79</td>
<td>74,967</td>
</tr>
<tr>
<td>1976</td>
<td>First grade of 1982-83</td>
<td>68,887</td>
</tr>
</tbody>
</table>

Primary, Intermediate, and High School
Enrollments on September 30, 1977

Another way of looking at the trend in school enrollments is to compare the actual number of students in four high school grades (8-11), four intermediate grades (4-7), and four primary grades (K-3).
During the past school year, the largest enrollment—349,458—was in grades 8-11. In spite of the fact that the largest number of drop-outs occur in grades 8 through 11, this group was considerably larger than the four intermediate grades, 321,468 students enrolled in grades 4-7. Even though the number of live births should have resulted in smaller enrollments in the four primary grades (kindergarten through grade 3), the change in entry age largely counteracted the decline; total enrollment in the four grades was 318,552.

**Overall Effect**

The highest public school enrollment occurred in 1975-76 when nearly 1,100,000 were recorded in average daily membership. A small decline to approximately 1,090,000 was noted the following year. By 1977-78 the number had been reduced to 1,073,000. Estimates for 1978-79 total approximately 1,056,000. Within the next several years the student population will fall below 1,000,000 for the first time since 1967.

Membership in primary grades will be lower in 1982 than it is now; intermediate membership will be approximately the same (because of the change in entry age); and secondary membership and overall membership will be lower.

**Possible Impacts of Declining Enrollments**

**Aging Instructional Staff.** If fewer beginning teachers will be employed in the years ahead, the median age of teachers will
gradually increase. During the last decade most public school teachers have been below age 35. By 1995 the majority of the teaching staff will probably be between age 35 and the age of retirement.

Aging Citizenry. Whereas students during the past few years have lived in a society oriented to youth, the students in the late 1980s and 1990s will grow up in a society predominated by adults. Curriculum adjustments are implicit if students are to be prepared to take their places in society as it exists when they leave high school.

Small Classes. Even in the absence of policies designed to decrease class size, classes become smaller as enrollments decrease.

Adjusted Staffing. Many adjustments in staffing will be required. Tenured teachers may be reassigned to new areas of work as the need for them in their old assignments decreases. A decrease in the number of teachers may also result in the reassignment of administrators and supervisors in the public schools.

Increasing Per Pupil Costs. Declining enrollments usually result in increased per pupil costs. Total costs cannot be reduced in direct relation to smaller number of students served. As class sizes get smaller, the per pupil cost for instruction increases. When a school bus carries 55 pupils instead of 65, the per pupil cost of transportation increases.
Public Benefit from School Program. With a smaller proportion of the population enrolled in school, fewer children and parents will realize an immediate and recognizable benefit from public schools. Taxpayers may feel that they are not benefiting as much as they have in the past from the large sums of tax money devoted to public education.

Cautions

For the next several years comparisons of school enrollments with those of ten or twenty years ago will be relatively meaningless. School enrollments reached a peak in the middle 1970s and the previous trend reversed. More meaningful comparisons can be made with 1975 used as a base year.

Secondary school administrators, teachers, and supervisory personnel should not allow themselves to be lulled into complacency with the thought "It isn't going to affect us." Such complacency could develop because high school enrollments have continued to increase. By the middle 1980s, however, high school enrollments will be significantly lower than they were during 1977-78 and they will continue to decrease, at least through 1995.

Though declining enrollment is forecast for the state as a whole, the school population in 25 divisions probably will remain stable or will increase. For the most part these are suburban school divisions surrounding smaller cities. This phenomenon must
be taken into account when policy changes are justified on the basis of declining enrollment.

Once services have been offered, it is difficult to reduce or eliminate them. Therefore, policy changes—especially those effecting secondary schools—which would result in increased personnel, facilities, materials, etc., must be approached cautiously during the next several years. If not, costs might be incurred that would be difficult to reduce as enrollment decreases.

**Opportunities**

Managing decline is probably more difficult than managing growth. The decline in school population, if managed carefully, offers some opportunities to improve public education.

**Build Programs Rather than Buildings.** For the past 25 years much effort and many resources have been devoted to constructing school buildings. While there will be a continuing need to replace outmoded facilities, greater effort and resources can now be devoted in the future to developing instructional programs.

**Personalize Instruction.** Public schools have dealt with such large numbers of students during the past quarter-century that it has been difficult to match practice and theory in "individualizing" or "personalizing" instruction. A decline in the number of students and a more favorable pupil-teacher ratio will provide greater opportunity to personalize instruction.
Improve Quality of Staff. Unlike the era from 1950 to 1975, conditions during the next quarter-century will permit careful selection of new teachers. With more applicants than job available, teachers can be selected on the basis of ability. Also, during the next decade there will be more older and experienced teachers in the public schools which will provide opportunities to build on experience through planned staff renewal programs. Careful selection of new teachers and appropriate inservice training of experienced teachers should result in instructors of high quality.

R. L. Boyer
August 1, 1978
APPENDIX B

DESCRIPTION OF THE FIELD TEST OF THE QUESTIONNAIRE

To test the questionnaire for clarify and utility, a copy was sent to the superintendent of a division in Virginia which had experienced a decline in student enrollment during the decade studied or more than 20 percent but less than 25 percent. Two modifications were made in the cover letter, both in the second sentence. The number of divisions was changed from 11 to 18, and the percent of decline was changed from 25 to 20. (See Table 4 on Page 53.)

The response was received within one week. After a thorough examination of the field-tested questionnaire, it was decided that it had elicited the type of data intended by the researcher and that it would serve its intended purposes if sent to the superintendents of the eleven divisions which had declined in enrollment by 25 percent or more between 1972 and 1981.
APPENDIX C

COVER LETTER ACCOMPANYING THE QUESTIONNAIRE
SENT TO THE SUPERINTENDENTS OF THE
ELEVEN DIVISIONS IDENTIFIED AS HAVING
DECLINED IN ENROLLMENT BY 25 PERCENT
AND MORE DURING THE DECADE 1971-1981

In partial fulfillment of the requirements for the degree of Doctor of Education at the College of William and Mary, I am conducting research on the topic of declining student enrollment. Your school division is one of eleven in Virginia which has lost 25 percent or more student population during the decade 1972-1981. The study will examine the impact of declining enrollment within the eleven divisions upon formal curriculum, professional personnel, school organizational patterns, and utilization of buildings.

It is recognized that an overburdened superintendent does not need another questionnaire, and I apologize in advance for adding to your work. However, I know you are interested in the topic and want to see the results of this research. Since the study deals with only eleven divisions, the participation of each one is very important. All responses will be confidential and the names of the divisions and respondents will not be used in the study.

The attached questionnaire was developed after a review of related literature had been completed. To increase objectivity, it is suggested that at least two persons on your staff answer the questionnaire together. Would you be so kind as to designate someone on your staff to be my contact person?

(Continued)
Your participation in this research will contribute to the understanding of the effect declining enrollment has had in Virginia. Thank you for your participation in this study.

Sincerely,

Edward H. Pruden, Jr.
Assistant Principal
George Wythe Building
Jefferson-Huguenot-Wythe High School
Richmond, Virginia 23225
(804) 231-4432
(804) 282-6434 (Home)

Attachment
### APPENDIX D

#### DECLINING ENROLLMENT QUESTIONNAIRE

<table>
<thead>
<tr>
<th>Extent to Which Declining Enrollment is Responsible</th>
<th>Yes</th>
<th>No</th>
<th>Entirely</th>
<th>Substantially</th>
<th>Partially</th>
<th>Marginally</th>
<th>Not at All</th>
<th>Composite Strength Index</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</table>

#### I. Formal Curriculum

A. Reduced course offerings.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Entirely</th>
<th>Substantially</th>
<th>Partially</th>
<th>Marginally</th>
<th>Not at All</th>
<th>Composite Strength Index</th>
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<td>7</td>
<td>3</td>
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<td>3</td>
<td>2</td>
<td></td>
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<td>2.00</td>
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B. Higher pupil-teacher ratios.

<table>
<thead>
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<th></th>
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<th>No</th>
<th>Entirely</th>
<th>Substantially</th>
<th>Partially</th>
<th>Marginally</th>
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C. Lower pupil-teacher ratios.

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<th>Partially</th>
<th>Marginally</th>
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<td>2.67</td>
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</table>

D. Double-grade or combined classes.

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<th>Substantially</th>
<th>Partially</th>
<th>Marginally</th>
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<td>1</td>
<td>1</td>
<td>2</td>
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</table>

E. Combined use of vocational education facilities (two or more schools, or two or more neighboring divisions).

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Entirely</th>
<th>Substantially</th>
<th>Partially</th>
<th>Marginally</th>
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</table>

F. School use of community facilities (such as vocational training in the field rather than in simulated educational environments).

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Entirely</th>
<th>Substantially</th>
<th>Partially</th>
<th>Marginally</th>
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<td>1</td>
<td>1</td>
<td></td>
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<td>1.00</td>
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</table>

G. Reduction of support personnel, such as paraprofessionals, aides, etc.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Entirely</th>
<th>Substantially</th>
<th>Partially</th>
<th>Marginally</th>
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<td>1</td>
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H. Other ________________________________
II. Professional Personnel

A. Normal attrition without replacement--
   1. voluntary retirements
      Yes  No Entirely Substantially Partially Marginally Not at All Composite Strength Index
            7    3      2      1      2        2           1.86
   2. voluntary resignations
      Yes  No Entirely Substantially Partially Marginally Not at All Composite Strength Index
            6    4      1      1      3        1           1.67
   3. voluntary transfers--
      a. between academic disciplines
         Yes  No Entirely Substantially Partially Marginally Not at All Composite Strength Index
              7    3      2      1      4         1.21
      b. between schools
         Yes  No Entirely Substantially Partially Marginally Not at All Composite Strength Index
              7    3      2      2      3         2.42
   4. voluntary leaves of absence
      Yes  No Entirely Substantially Partially Marginally Not at All Composite Strength Index
            5    5      1      1      2        1           1.60
   5. other ____________________________
      (No responses)

B. Crisis-Oriented Personnel Actions:
   1. encouragement of early retirements
      Yes  No Entirely Substantially Partially Marginally Not at All Composite Strength Index
            5    5      1      4         1.60
   2. layoffs
      Yes  No Entirely Substantially Partially Marginally Not at All Composite Strength Index
            9    1      4      2      1        2          2.89
   3. forced transfers--
      a. between academic disciplines
         Yes  No Entirely Substantially Partially Marginally Not at All Composite Strength Index
              8    2      2      2      3        1           2.62
      b. between schools
         Yes  No Entirely Substantially Partially Marginally Not at All Composite Strength Index
              9    1      2      4      2        1           2.77
   4. demotions
      Yes  No Entirely Substantially Partially Marginally Not at All Composite Strength Index
            8    2      2      2      1        5           1.87
5. part-time contracts
6. reduced auxiliary educational programs
7. other

III. School Organizational Patterns and Utilization of Buildings

A. School Organizational Patterns:
1. establishment of new attendance zones
2. re-alignment of building-grade arrangement (such as moving the 9th or 8th grade from the middle school to the high school)
3. admitting non-resident students. If so, on a tuition or free basis? Only three of seven responded: One tuition, one free, and one both.
4. consolidation of separate schools into "complexes"
5. other

<table>
<thead>
<tr>
<th>Extent to Which Declining Enrollment is Responsible</th>
<th>Yes</th>
<th>No</th>
<th>Entirely</th>
<th>Substantially</th>
<th>Partially</th>
<th>Marginally</th>
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</table>
B. Utilization of Buildings:

1. Extra space left to discretionary use of principal.
   - Yes: 7
   - No: 3
   - Entirely: 4
   - Substantially: 2
   - Partially: 1
   - Marginally: 0
   - Not at All: 0
   - Composite Strength Index: 2.42

2. Reutilization—
   a. alternative educational uses, such as adult, special, or vocational.
      - Yes: 5
      - No: 5
      - Entirely: 2
      - Substantially: 2
      - Partially: 1
      - Marginally: 0
      - Not at All: 0
      - Composite Strength Index: 2.20
   b. non-educational uses, such as warehousing, administrative offices, etc.
      - Yes: 8
      - No: 2
      - Entirely: 3
      - Substantially: 2
      - Partially: 3
      - Marginally: 0
      - Not at All: 0
      - Composite Strength Index: 3.00

3. Revenue producing—
   a. sold
      - Yes: 4
      - No: 6
      - Entirely: 2
      - Substantially: 1
      - Partially: 1
      - Marginally: 0
      - Not at All: 0
      - Composite Strength Index: 2.75
   b. leased to other agencies for uses such as community recreation or senior citizen.
      - Yes: 6
      - No: 4
      - Entirely: 4
      - Substantially: 1
      - Partially: 1
      - Marginally: 0
      - Not at All: 0
      - Composite Strength Index: 3.50

4. Closed—
   a. abandoned
      - Yes: 5
      - No: 5
      - Entirely: 2
      - Substantially: 2
      - Partially: 1
      - Marginally: 0
      - Not at All: 0
      - Composite Strength Index: 3.00
b. mothballed

c. razed

5. other (See Below)

Two school buildings rented by city to other agencies.

One old building closed; six classrooms of children placed in two churches.

... Continued on next page.
IV. General Information

A. Does the School Board have a Reduction-in-Force policy? If so, is it based on seniority, job performance, some other criteria, or a combination of factors?

Each of the ten responding localities' School Boards have an RIF policy. All ten mention seniority as either the only factor considered or as one of several factors considered.

B. Is there a School Board policy on the use of surplus space? If so, please describe or attach a copy of the policy.

None of the respondents reported a School Board policy on the use of surplus space.

Name of Respondent ___________________________________________
Position _______________________________________________________
Name of Division ______________________________________________
Business Address _______________________________________________
_____________________________________________________________
Business Telephone _____________________________________________

Name of Respondent ___________________________________________
Position _______________________________________________________
Business Telephone _____________________________________________
REFERENCES


VITA

Edward Hughes Pruden, Jr.

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Birthplace: Washington, D.C.

Education:

1975-1983 The College of William and Mary in Virginia
Williamsburg, Virginia
Certificate of Advanced Graduate Study in
Education
Doctor of Education

1973-1974 The University of Richmond
Richmond, Virginia
Master of Education

1968-1972 The University of Richmond
Richmond, Virginia
Bachelor of Arts
ABSTRACT

DECLINING STUDENT ENROLLMENT IN VIRGINIA 1972-1981: AN EXAMINATION OF ITS EXTENT, STATE BOARD OF EDUCATION POLICIES, AND CHANGES EFFECTED BY SELECTED SCHOOL DIVISIONS

Edward Hughes Pruden, Jr., Ed.D.

The College of William and Mary in Virginia, May 1983

Chairman: Professor Royce W. Chesser

The purposes of the study were to determine: to what extent student enrollment has declined in the state and in local school divisions in Virginia during the decade 1972-1981; what policies, if any, have been enacted by the State Board of Education relative to declining enrollment; and what effect a severely declining enrollment may have had in the areas of formal curriculum, professional personnel, and school organizational patterns and utilization of buildings.

It was found that during the decade studied: 1) statewide enrollment declined overall by less than six percent; 2) 62 percent of the divisions experienced a net loss in enrollment; 3) nine divisions declined in enrollment for ten consecutive years; 4) eighteen divisions declined 20 percent and more; 5) eleven divisions declined by 25 percent and more.

No policies related to declining enrollment were enacted by the State Board of Education during the decade studied.

A questionnaire was sent to the superintendents of eleven divisions which had declined by 25 percent and more during the decade studied. Completed questionnaires were returned by ten divisions, or 91 percent. Changes related to declining enrollment were found to have been effected in the areas of formal curriculum, professional personnel, and school organizational patterns and utilization of buildings. While the respondents did not cite declining enrollment as the sole cause of the changes effected, 73 percent of the changes were reported to have been partially or substantially the result of declining enrollment. The eleven divisions studied included large cities, small cities, suburban, and rural areas within Virginia, and were geographically dispersed.
Ninety percent of the responding divisions reported layoffs, involuntary transfers between schools, and establishment of new attendance zones. Eighty percent reported re-alignment of building-grade arrangements, non-educational use of surplus buildings, involuntary transfers between academic disciplines, reduction of support personnel, reduced auxiliary programs, demotions, and part-time contracts. Seventy percent reported voluntary transfers between schools, discretionary use of surplus space by principals, voluntary transfers between academic disciplines, reduced course offerings, and non-replacement of retirees. Sixty percent reported leasing surplus buildings to other municipal agencies, lower pupil-teacher ratios, combined use of vocational facilities, and non-replacement of resignees. One hundred percent of the respondents cited seniority as either the only criterion or one of several criteria considered in their divisional reduction-in-force policy. None of the responding divisions were reported to have a School Board policy on the use of surplus space.

Further study is needed on the effect of declining enrollment in the areas of reduced course offerings; pupil-teacher ratios; extent of layoffs, demotions, and transfers; re-alignment of building-grade arrangements; and reduction-in-force policies.