

DOCUMENT RESUME

ED 184 208

EA 012 515

AUTHOR
TITLE

Dembowski, Frederick L.
The Effects of Declining Enrollments on the
Instructional Programs of Public Elementary and
Secondary Schools.

PUB DATE
NOTE

Apr 80
24p.; Paper presented at the Annual Meeting of the
American Educational Research Association (Boston,
MA, April 7-11, 1980).

EDRS PRICE
DESCRIPTORS

MF01/PC01 Plus Postage.
Computer Assisted Instruction; *Curriculum;
*Declining Enrollment; Dropout Rate; Elementary
Secondary Education; Nontraditional Education;
Questionnaires; School Districts; Surveys; Teacher
Characteristics; *Teaching Methods

ABSTRACT

Using a nationwide survey of 95 school districts, this study attempted to assess the patterns and effects of declining enrollment. The survey examined the current effects of declining enrollment on instructional and supervisory programs. Utilizing a random sample of school districts stratified by size of district in 1977, region, and percent of school population change from 1970 to 1977, the author sent questionnaires to school superintendents in districts across the United States. Results indicated definite differences between schools with decreasing and increasing enrollments. Districts with declining enrollment showed less decrease in dropout rates. They also had older teachers, and more early retirement programs and required teachers to be able to teach in more subject areas. The effects of declining enrollment related to instructional issues were increased use of alternative education and computer assisted instruction methods, a shortened materials replacement cycle, and changes in the quality of the program. Staffing, course offerings, courses taught, and facility space allocated were decreased more in academic than in vocational curriculum areas. (Author/JM)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT
OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

ED184208

THE EFFECTS OF DECLINING ENROLLMENTS ON
THE INSTRUCTIONAL PROGRAMS OF
PUBLIC ELEMENTARY AND SECONDARY SCHOOLS

by

Frederick L. Dembowski*

A presentation at the Annual Conference of the American Educational
Research Association, Boston, Massachusetts, April, 1980.

*NOTE - Dr. Dembowski is an Assistant Professor of Educational Administration
at the State University of New York at Albany

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

F. Dembowski

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

Introduction

In the past ten years, American public elementary and secondary schools have been confronted with a problem that has been beyond the prior personal experience of most administrators, that of declining enrollments. Not since the depression years of the 1930's have school administrators had to deal with problems of underutilization of space, reduction in labor force, and budgetary cutbacks for a prolonged period of time. After World War II, the "baby boom," combined with an expanding economy, resulted in swelled school enrollments and an emphasis on mass education as a societal priority. There followed nearly thirty years of unprecedented growth of American education. Suddenly, it seems, the growth stopped and the enrollment trend reversed direction. Because most educators were accustomed to growth, they were largely unprepared to accept the reality of nongrowth and declining enrollment, least of all being able to deal with the problem.

In the past three years, 1976-1979, there has been an abundance of suggestions on how to deal with the problem of declining enrollments. Because of the financial structure of American education, however, most of these recommendations have concentrated on the effects of declining enrollments on capital issues. Prevalent in the professional literature are articles with titles such as "How to Cut Your Staff," "Closing Schools Without Alienating Your Community," or "How to Get the Most out of Your State Finance Formula." Few studies have looked at declining enrollments as an opportunity for improving education. Fewer still have focused on the instructional aspects of enrollment declines. Thus, there is a need to ascertain the effects of declining enrollments on the instructional process. It is with this need in mind that this study was undertaken.

This study has a threefold purpose: first, to examine the literature to determine both causes and trends of enrollment decline; second, to disclose the

experiences of school districts with declining enrollments; and third, to determine the effects of declining enrollments on instructional programs and supervisory practices. These three research issues were investigated through the following means:

1. A thorough review of the literature was undertaken to assess the causes, patterns, and effects of declining enrollments;
2. An analysis of studies of declining enrollment histories of school districts to ascertain findings, conclusions, and recommendations;
3. A nationwide survey of 95 school districts was used 1) to assess the current effects of declining enrollments on instructional and supervisory programs and 2) to determine how school administrators are coping with the problem.

This research report will focus on the empirical study, giving the results of the findings of the nationwide survey. The complete review of the literature may be found in the original study report, available through the Association of Supervision and Curriculum Development, and in the ERIC system.

The Survey Instrument

The review of literature on the effects of declining enrollments showed that instructional program effects were sadly neglected, compared to the other areas of the educational enterprise. In all areas, there was a lack of data-based empirical studies concerning the effects of declining enrollments, to substantiate professional "hunches" and impressionistic contentions. The study was undertaken to disclose some of these "hunches" and to provide empirical evidence to support or refute these contentions.

To accomplish this purpose, a questionnaire was mailed to 320 school districts across the United States. The districts surveyed were selected from



the published list compiled by the U.S. Office of Education. The sample was stratified according to three criteria:

- (1) pupil enrollment of the school district (ADM) in 1977. There were two categories for size, over 10,000 but less than 100,000, and under 10,000.
- (2) H.E.W. Region of the United States - the: Northeast, Midwest, South, and West.
- (3) percent student population change (ADM) from 1970-1977 - there were five basic categories: increasing greater than 5%, +5% to -5%, -6% to -10% -11% to -20%, and greater than -20% decrease.

The questionnaire asked the selected school districts to respond to a number of questions regarding the extent to which declining enrollments effected their instructional programs. The districts were asked to limit their reported effects to changes that occurred from 1970 to 1977. Altogether, over 120 questions were asked with emphasis on the following areas: staffing patterns, instructional technology changes, demographics, and instructional program content areas. Most information was obtained through objective type questions, but there were several open-ended questions asking for the unique aspects of the respondees educational situation.

The Results of the Survey

Ninety-five responses were received to the questionnaire, representing a response rate of 31 percent. The responses were fairly evenly distributed among the strata, and there were responses in all cells of the strata.

The first analysis of the data consisted of a comparison of the characteristics of school districts with increasing versus decreasing student populations from 1970 to 1977. Table 1 shows selected responses for various characteristics. Fewer districts with decreasing enrollments showed a decrease in the drop-out rate change experienced, than districts with an increase in student enrollments. A higher percentage of declining enrollment districts have faced an increase in the median age of the teaching

TABLE 1

The Effect of Enrollment Changes on Various Personnel Issues

Variable	School Districts			
	Increasing Enrollments		Decreasing Enrollments	
	No. of Responses	Percent	No. of Responses	Percent
Drop-out Rate Change?				
No	13	42	27	47
Yes, increase	5	16	15	26
Yes, decrease	13	42	16	28
Staff Median Age Change?				
No	4	14	9	15
Yes, older	12	41	35	59
Yes, younger	13	45	15	25
Teacher Retirement Policy Change?				
No	24	73	40	69
Early retirement	5	15	15	26
Later retirement	3	9	2	3
Subject Area Certification Change?				
One subject only	5	17	6	11
More than one	8	27	25	46
No change	17	57	23	43
Use of Part-time Staff Change?				
No	5	16	14	23
Yes, increase	25	78	46	77
Yes, decrease	2	6	0	0
Relocate Staff?				
No	11	36	15	27
Yes	20	65	41	73
Inservice Programs for Training Staff?				
No	5	16	8	13
Yes	26	84	52	87

staff. Most districts, regardless of enrollment trends, have not changed their teacher retirement policy; however, a greater percentage of declining enrollment districts have instituted an early retirement incentive program. A much larger percentage of declining districts are requiring teachers in their districts to have state teaching certifications in more than one subject area. School districts, regardless of enrollment trends, have increased the use of part-time staffing. A slightly larger percentage of declining districts have reallocated staff than increasing districts. A majority of all districts are providing in-service training programs for their staff. Thus, it is apparent that districts with declining enrollments behave differently than school districts with increasing enrollments.

Table 2 examines differences between increasing and decreasing enrollment school district with regard to various instructional issues.

A much larger percentage of declining enrollment districts use alternative education, perhaps as an attempt to lower the drop-out rate. There is little difference between the two groups of districts in the use of team teaching or individualized instructional methods. A greater percentage of declining districts use computer assisted instruction methods; however, the majority of both types of districts do not use computer assisted instruction. There is a great difference in the response to the question regarding whether the district has had to change its materials replacement cycle. Sixty-three percent of the increasing enrollment districts responded that they have shortened their replacement cycle while only 32% of the declining enrollment districts have shortened their cycle. Finally, when asked if they thought the quality of the educational program had changed, the majority of both types of districts responded no, while a greater percentage of declining enrollment districts responded that the quality of the programs had either increased or

TABLE 2

The Effect of Enrollment Changes on Various Instructional Methodologies

Variable	School Districts			
	Increasing Enrollments		Decreasing Enrollments	
	No. of responses	Percent	No. of responses	Percent
Use Alternative Education?				
No	12	43	13	29
Yes	16	57	32	71
Use Team Teaching?				
No	9	35	17	40
Yes	17	65	26	60
Use Individualized Instruction?				
No	6	21	12	25
Yes	22	79	37	75
Use Computer Assisted Instruction?				
No	20	77	25	63
Yes	6	23	15	37
Materials Replacement Cycle Change?				
No	11	37	41	68
Yes	19	63	19	32
Quality of Educational Program Change?				
No	22	71	32	52
Yes, increase	8	26	22	38
Yes, decrease	1	3	4	7

7

decreased. Thus, it appears that school districts with increasing enrollments have enjoyed a greater degree of stability of the quality of educational programs than districts with declining enrollments, at least as perceived by the district administrators. The next section of the study was concerned with specific curriculum areas, and the changes incurred during the period between 1970 and 1977.

The Effects of Declining Enrollment on Specific Curriculum Areas

The effects of declining enrollments on five instructional program areas are examined below. These instructional areas are: (1) student enrollment changes in each subject areas, (2) staffing changes in each area, (3) courses offered but not necessarily taught in each area, (4) courses actually taught in each area, and (5) facility space allocated to each subject area. The last part of the survey questionnaire consisted of 60 questions which were used to assess the impact of enrollment changes in different subject areas. School district responses were reported on a Likert-type scale to indicate the degree to which enrollment changes affect a particular subject area. Respondents to the questionnaire had five options to choose from. The options, indicating both the direction and magnitude of the effect of enrollment changes on the subject area were:

- "1" - indicating a significant (greater than 25%) increase,
- "2" - indicating a slight (5% to 25%) increase,
- "3" - indicating no change (+5% to -5%),
- "4" - indicating a slight decrease (-5% to -25%),
- "5" - indicating a significant decrease (greater than -25%).

Thus, for each subject area, there were five sets of scales, with each scale designating the impact of declining enrollments on each of five effects (enrollments, staff, course offerings, courses taught, and facility space) on each of fifteen different subject areas. Tables 3-7 present data on each of

the five effects of district enrollment changes on all fifteen subject areas listed on the questionnaire. In all these analyses, the five-point Likert type scale was used to compute the mean response of all responses in each of the five categories school districts. Since each subject had its own response, the low value of the mean is 1.00, the highest possible value is 5.00, and the expected mean is 3.00. Thus, for each subject, a mean lower than 3.00 indicates an increase of the effect for that subject area, while a mean of higher than 3.00 indicates a decrease in the effect.

Table 3 presents the effect of enrollment decline on changes in the percentage of the total student population that has enrolled to take each of the fifteen subjects listed. Rather than commenting on each subject separately, only the highlights of the table are discussed. The data in this table, as well as Tables 4-7, may be analyzed in two different ways. First, a horizontal axis analyses wherein the changes by school districts enrollment decline category are examined to see what effect enrollment changes have on a particular subject area. For example, language arts, shows that there is an increase in the mean from the low value of 2.52 for school districts with increasing enrollments (which indicates that these districts had an increase in the percentage of students taking these courses), to a low value of 3.13 for the high decline in the number of students taking these courses. Again, the F statistic reveals whether the difference among the means for that subject is statistically significant.

The second procedure that may be used to interpret the data in Tables 3-7 is a vertical axis analysis wherein the means of all the subject areas at one level of district population change are compared. For example as one looks down the column of means in Table 3 for high decline school districts (21-80%) one sees that the lowest mean is 1.83 for special education and the highest

TABLE 3

**The Effects of Varying Degrees of Enrollment Change
on the Student Enrollments in Particular Subject Areas**

School Districts Enrollment Patterns

Enrollment Changes in:	Increasing (+5-+35) Mean	No Change (+4-4%) Mean	Decreasing (4-10%) Mean	Decreasing (11-20%) Mean	Decreasing (21-80%) Mean	dF	F'
Language Arts	2.52	2.71	2.84	2.80	3.13	94	2.60*
Social Studies	2.59	3.00	2.95	3.10	3.00	94	3.88**
Mathematics	2.69	2.71	2.94	3.20	3.13	94	2.31
Science	2.59	2.64	3.05	3.50	3.13	94	2.80***
Foreign Language	2.93	3.14	3.47	3.90	3.89	94	4.12**
Fine Arts	2.38	2.79	3.11	3.00	2.96	94	2.95*
Industrial Arts	2.43	2.93	2.95	2.80	2.91	93	2.16
Commercial Ed.	2.56	3.00	3.00	2.80	3.00	91	1.85
Distributive Ed.	2.54	2.64	2.83	2.78	2.81	89	0.66
Home Ec. Ed.	2.69	2.57	3.11	3.10	3.00	94	2.02
Health and P.E.	2.59	3.07	2.95	2.80	2.91	94	1.51
Agriculture Ed.	3.12	3.00	3.06	3.00	3.41	76	0.97
Special Ed.	1.86	2.14	1.79	1.90	1.83	94	0.32
Compensatory Ed.	2.31	2.33	2.26	2.11	2.30	85	0.11
Driver's Ed.	2.66	2.79	2.95	2.70	3.17	94	2.27

NOTE: * p>.05
 ** p>.01
 *** p>.001

TABLE 4

**The Effects of Varying Degrees of Enrollment Change
on the Staffing of Particular Subject Areas**

Staffing Changes in:	School Districts					dF	F'
	Increasing (+5-+35) Mean	No Change (+4-4%) Mean	Decreasing 4-10% Mean	Decreasing 11-20% Mean	Decreasing 21-80% Mean		
Language Arts	2.69	2.85	2.89	2.90	3.09	94	1.20
Social Studies	2.69	2.93	3.05	3.20	3.00	94	3.56**
Mathematics	2.76	2.86	2.95	3.10	3.00	94	0.99
Science	2.79	2.71	3.11	3.30	3.04	94	2.66*
Foreign Language	2.93	3.14	3.32	3.60	3.70	94	2.96*
Fine Arts	2.48	2.71	2.89	3.20	2.91	94	2.21
Industrial Arts	2.57	2.93	2.84	3.20	2.91	93	2.64*
Commercial Ed.	2.74	3.15	3.11	2.90	2.96	91	1.68
Distributive Ed.	2.68	2.79	2.89	3.00	2.90	89	0.68
Home Ec. Ed.	2.72	2.71	3.11	3.20	2.96	94	2.14
Health and P.R.	2.66	3.00	2.95	3.10	3.04	94	1.52
Agriculture Ed.	3.12	2.91	2.94	3.00	3.41	76	1.60
Special Ed.	1.86	2.00	1.68	1.90	1.91	94	0.26
Compensatory Ed.	2.42	2.33	2.31	2.56	2.30	85	0.21
Driver's Ed.	2.72	2.71	2.84	3.00	3.04	94	1.19

NOTE: * p>.05

** p>.01

mean is 3.89 for the foreign languages. This may be interpreted to mean that of the fifteen subjects listed in high decline school districts, special education has received the largest increase in the number of students participating in that course, while the foreign languages have had the largest decrease in the number of students. Using this type of analysis, it is possible to identify which subjects are receiving increased or decreased emphasis as the school districts decline in enrollment.

The levels of significance statistic in Table 3 shows that the largest mean differences for the five school districts except for the districts with increasing enrollments. Special education, on the other hand, shows the largest increases in student enrollments, followed by compensatory education.

Of the vocational courses, agriculture education shows a decline in all districts, while both industrial arts and distributive education show increases in all categories of districts. In fact, with the exception of agricultural education, the vocational courses show student increases over the academic courses. And, enrollments increase in fine arts as district enrollments decline, and driver's education is increasing for all districts, except the high decline ones.

Table 6 shows staffing changes for all subject areas and for each group of school districts. This table is similar in many respects to Table 5. The most noticeable difference between the data in Table 6 and Table 5 is that the mean scores in Table 6 are not quite as high. This may indicate student-teacher ratios are changing for the subject areas and that staffing changes are not made as readily as student changes. Generally, across school districts, social studies, science, foreign language and industrial arts courses are losing staff at a rate that is statistically significant. Within high decline districts, staff reductions are greatest in foreign

TABLE 5

**The Effects of Varying Degrees of Enrollment Change
on the Course Offerings of Particular Subject Areas**

Course Offering Changes in:	School Districts					dF	F'
	Increasing +5-+35% Mean	No Change +4-4% Mean	Decreasing 4-10% Mean	Decreasing 11-20% Mean	Decreasing 21-80% Mean		
Language Arts	2.66	2.71	2.58	3.00	2.83	94	0.47
Social Studies	2.66	2.64	2.79	2.80	2.96	94	0.77
Mathematics	2.76	2.43	2.79	3.00	2.97	94	2.29
Science	2.79	2.71	2.89	2.90	2.96	94	0.43
Foreign Language	3.00	2.92	3.21	3.30	3.65	94	2.32
Fine Arts	2.52	2.71	2.89	3.00	2.91	94	1.64
Industrial Arts	2.64	2.79	2.79	2.80	2.74	93	0.21
Commercial Ed.	2.67	2.92	2.84	2.90	2.78	91	0.47
Distributive Ed.	2.71	2.93	2.94	2.67	3.00	89	1.18
Home Ec. Ed.	2.76	2.79	2.84	3.10	2.87	94	0.70
Health and P.E.	2.72	2.93	2.89	2.80	2.96	94	0.78
Agriculture Ed.	3.12	2.82	2.81	3.00	3.18	76	1.10
Special Ed.	2.07	2.29	1.89	2.20	1.91	93	0.47
Compensatory Ed.	2.38	2.25	2.36	2.56	2.35	85	0.19
Driver's Ed.	2.86	2.86	2.84	2.90	3.04	94	0.53

TABLE 6

**The Effects of Varying Degrees of Enrollment Change
On the Courses Taught in Particular Subject Areas**

Courses Taught Changes in:	School Districts					dF	F'
	Increasing +5 to +35% Mean	No Change +4-4% Mean	Decreasing 4-10% Mean	Decreasing 11-20% Mean	Decreasing 21-80% Mean		
Language Arts	2.59	2.64	2.53	2.80	3.00	94	1.35
Social Studies	2.59	2.64	2.84	2.80	3.04	94	1.82
Mathematics	2.72	2.42	2.79	3.00	3.04	94	3.18*
Science	2.69	2.79	3.05	3.10	3.00	94	1.66
Foreign Language	2.93	3.00	3.11	3.50	3.65	94	3.09*
Fine Arts	2.59	2.79	2.89	3.10	2.91	94	1.31
Industrial Arts	2.64	2.79	2.79	2.90	2.83	93	0.37
Commercial Ed.	2.74	2.85	2.89	3.00	2.87	91	0.36
Distributive Ed.	2.71	2.93	3.00	3.00	3.05	89	1.67
Home Ec. Ed.	2.72	2.71	2.84	3.10	2.91	94	0.98
Health and P.E.	2.69	2.93	2.95	2.90	3.00	94	1.35
Agriculture Ed.	3.11	2.81	2.87	3.12	3.17	78	0.93
Special Ed.	1.93	2.21	1.74	2.60	1.96	93	1.65
Compensatory Ed.	2.38	2.25	2.42	2.89	2.35	85	0.91
Driver's Ed.	2.86	2.86	2.89	3.00	3.00	94	0.29

NOTE: * p > .05

TABLE 7

**The Effects of Varying Degrees of Enrollment Change
On the Facility Space Allocated to Particular Subject Areas**

Space Allocation Changes in:	School Districts					df	F'
	Increasing +5 to 35% Mean	No Change +4 to -4% Mean	Decreasing 4 to -10% Mean	Decreasing 11 to -20% Mean	Decreasing 21 to -80% Mean		
Language Arts	2.45	2.57	2.79	2.80	3.04	94	2.80*
Social Studies	2.52	2.79	2.89	2.90	3.04	94	2.85*
Mathematics	2.59	2.71	2.89	3.00	3.04	94	2.44*
Science	2.55	2.64	2.95	3.00	3.00	94	2.61*
Foreign Language	2.79	3.00	3.21	3.10	3.26	94	1.32
Fine Arts	2.31	2.71	2.94	2.90	2.65	94	2.67*
Industrial Arts	2.43	2.57	2.68	2.90	2.74	93	1.20
Commercial Ed.	2.48	2.92	2.95	2.90	2.83	91	2.12
Distributive Ed.	2.43	2.79	2.83	2.78	3.00	89	2.77*
Home Ec, Ed.	2.62	2.78	2.84	3.10	3.00	94	1.86
Health and P.E.	2.52	2.93	2.68	2.90	3.00	94	2.69*
Agriculture Ed.	2.93	2.91	2.75	2.88	3.18	78	0.88
Special Ed.	1.72	2.00	1.79	2.10	2.00	94	0.52
Compensatory Ed.	2.27	2.25	2.32	2.56	2.35	85	0.23
Driver's Ed.	2.69	2.86	2.84	2.80	2.91	94	0.48

NOTE: * $p > .05$

languages and agricultural education, while staff additions are in special education.

Table 7 presents data on course offerings for all the subject areas by category of district enrollment. None of the differences among the means is statistically significant. This suggests that regardless of the extent of enrollment decline, the course offerings in the fifteen subject areas listed remain the same. This may be interpreted to mean that while the number of courses listed on school district books remain the same, these courses are not necessarily taught. If this allegation is true, one would expect to see a higher number of F statistics and levels of significance on Table 6 which examines the actual courses taught by school districts enrollment category. This data does not support the allegation for, when examined across districts, only the Academic subject areas (mathematics and foreign languages) are experiencing significant reductions in courses actually taught; within-school district comparisons among the fifteen courses reveal that regardless of district enrollment change, all districts are teaching fewer foreign language courses. One other unusual feature of these data is that for the high declining districts there are only four subject areas which show a decline (mean above 3.00) while on both Tables 3 and 4 there are six subject areas which show a decline. This indicates that these districts are not making an effort to reduce the number of courses offered like they are in reducing the number of staff in those courses. Apparently school districts are not reducing their comprehensive educational programs as long as they are retaining teachers versatile enough to teach all these courses.

For the districts with increasing enrollments, the number of academic subjects taught are increasing to a greater extent than the vocational subject. This may be due to the fact that there are more possible electives

to offer in the academic areas than in the vocational areas. The subject area with the greatest increase in courses taught is special education. This is true regardless of whether the school district enrollments are increasing or decreasing.

Finally, Table 7 shows the facility space allocated to the various subjects for each of the five enrollment categories of school districts. A larger number of the differences among these means are statistically significant than on the two previous tables. The academic courses have the greatest differences among means, with increasing school districts allocating more space to these subjects. As districts decrease in enrollments, they also decrease the amount of space allocated to these instructional programs. This fact belies the literature which suggests that as school enrollments decline, excess space becomes available and is then allocated to the various existing instructional programs. These data may mean that school districts are getting rid of their excess space in other ways such as selling or leasing.

Conclusions and Implications of This Research

The effects of declining enrollments on instructional programs are just beginning to take shape and form. It will take a few years more before the full impact is felt and assessed. Yet, some effects are inevitable and unavoidable. The best schools can hope to do is anticipate the instructional areas most likely to be affected by declining enrollments, to determine what these effects are likely to be, and to prepare programs of modification and adjustment to accommodate the declines. Educators need not depend entirely upon the predictive quality of their intuitions to prepare for declining enrollments; nor do they have to take purely "reactive stances". While still

in the formative stages of development, and somewhat inconclusive, some research data, such as this particular study, are now available which suggest some trends and effects of declining enrollments. Therefore, school leaders do not have to wait until the crisis is upon them before taking any action. Nor, do they have to limit their assessment of the impact of declining populations to fiscal analyses as has been the prevailing pattern until now. This investigation departed from that pattern, and focused instead on instructional effects of declining enrollments. The survey included school districts of different sizes (under 10,000 and 10,000 - 40,000) with different rates of enrollment changes over a seven-year period. (1970 to 1977) instead of a single year, and in different regions of the country. The results, and the implications thereof, are generalizable with some degree of confidence.