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AN EVALUATION AND NEEDS STUDY

OF CLINTON SCHOOL BUILDINGS (TITLE)

BY

THOMAS LEE DOUGHERTY 1

FIELD STUDY

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

SPECIALIST IN EDUCATION

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY CHARLESTON, ILLINOIS



I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING THIS PART OF THE GRADUATE DEGREE CITED ABOVE

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AN EVALUATION AND NEEDS STUDY OF CLINTON SCHOOL BUILDINGS

By

Thomas Lee Dougherty

Spec. in Ed., Eastern Illinois University, 1982

ABSTRACT OF A .FIELD STUDY

Submitted in partial fulfillment of the requirements for the degree of specialist in Education at the Graduate School of Eastern Illinois University

Charleston, Illinois

The purpose of this field study was to evaluate the physical facilities of the Clinton school district and determine the adequacy of those facilities for the next five years. The procedures followed in the study included the writer working as a member of a board of education appointed facilities committee.

Some of the specific areas of concentration for the writer included collection and interpretation of data for the purpose of describing conditions and making projections of need. The major sources of data used in this study included school district enrollment and financial records, articles from professional journals, records of live births from the office of the County Clerk in both Logan and McLean County, and area population information secured from the United States Department of Commerce, Bureau of the Census. Data derived from these sources were used to develop a Cohort Survival Table for the Clinton school district. This Cohort Survival Table was helpful in projecting enrollment for the next five years. The conclusions reached as a result of this study were:

- The six attendance centers presently used by the district are structurally sound and with adequate maintenance should remain so for several years.
- Based on present revenue, the district could afford to build a modest addition (\$250,000) without an

increase in local taxes.

- Based on present and projected enrollment, there is no urgent need for additional facilities.
- 4. Annual reviews of local enrollment should be updated to insure as much accuracy as possible in determining the possible need for additional space.

CHAPTER I

INTRODUCTION

Between 1970 and 1976, the Clinton school district was forced to make substantial cuts in all three major funds in order to maintain a responsible level of deficit spending. As a result of these cuts, teachers and administrators were released, programs were eliminated, and physical facilities were not adequately maintained.

During the past few years, the Clinton school district has been in the enviable position of realizing substantial increases in local tax monies generated for the most part by the construction of a nuclear power plant located seven miles east of Clinton, but within the boundaries of the school district. As funds have become available, the school district has upgraded the buildings and reinstated and expanded instructional programs. The one area neglected was an evaluation of the use of present facilities, and the study of a possible need for expansion to meet any future needs.

The purpose of this field study was to examine the present use of existing physical facilities and make recommendations based on present needs and projected future needs. This study was written by an elementary principal, having served this district in that capacity for the past twelve years. The evolution of this project began during an administrative discussion of specific lack

of space for certain activities in all four of our elementary schools and our senior high school.

In September of 1980, the superintendent made a recommendation to the board of education that a district-wide facility study group be appointed to determine the possible need for expansion of present facilities to accomodate the educational program. The scope of the committee work included an assessment of the use of existing space, a review of current programs and services, the development of and review of present and projected enrollment figures, a review of the district financial status, and recommendations to the board of education based on a summary of this information.

The board of education determined that the committee be comprised of volunteers from the citizens advisory council, teachers, administrators, and one board member. Representing the administrative group was the superintendent, the high school principal, and the writer of this study. During the first committee meeting, the following activities were suggested as a result of total group input:

- The administrative staff was asked to submit
 a summary of the general condition of each of
 the attendance centers.
- Building principals were directed by the committee to serve as a guide for tours through each of the respective school buildings.

- 3. A subcommittee was established to interview major employers regarding plans for expansion or cutback as it would relate to school enrollment.
- 4. The superintendent and the writer of this study were asked to submit a report to the committee regarding past, present, and projected enrollment figures for the district.
- The principals, after staff consultation, would submit any program expansion plans that would require additional space.
- The district business manager was asked to submit to the committee a summary of the general financial status of the district.
- 7. The final recommendation was to be submitted by the committee to the board of education as a result of conclusions drawn from the study.

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CHAPTER II

LOG OF ACTIVITIES

<u>April 1980</u>--A discussion among elementary principals centered on the problem of needing another classroom for third grade students for the 1980-81 school year. Several ideas were considered, but none seemed feasible.

<u>May 1980</u>--There were further discussions among elementary principals regarding space problems. The Douglas School principal related that space was still not available for a library. Also, the High School principal related difficulty in meeting space needs of the vocational department. The possibility of shared construction costs with Richland College was discussed.

June 1980--The Elementary principals met with the superintendent regarding lack of space to adequately house small group instruction groups within buildings--especially Lincoln and Douglas Schools. The speech therapist was meeting students in the hallway, and the school office was often used by the school psychologist for testing. Storage space was extremely limited at both Lincoln and Douglas Schools.

<u>August 1980</u>--Administrative meeting discussion centered on alternatives for crowded conditions at the elementary level. It was recommended that a facilities study should be considered by the board of education.

<u>September 1980</u>--The recommendation for a facilities study was presented to the board of education at the regularly scheduled board meeting. A tentative target date for completion of the study was set for June, 1981.

October 1980--Members of the Citizens Advisory Council were asked to serve on the facilities committee. Seven members of this council agreed to serve.

December 1980--Organizational meeting of facilities committee was held on December 15, 1980. The agenda included an explanation of the purpose of the study and suggestions of activities to help in meeting the purpose. The major activity planned was a tour of all the buildings.

January 1981--The tours were conducted by the building principals, who gave an overview of current space problems in each building.

<u>February 1981</u>--Industrial subcommittee planned a survey of major local industry to determine short and long range plans by industry that would affect school enrollment. Also, the Richland College sub-committee was charged with determining what plans Richland had that would affect the high school vocational program.

<u>April 1981</u>--The business manager met with the committee to share a summary of district financial status.

May 1981--The district enrollment records and projections were reviewed with the committee. It was suggested at this point that the committee wait for the September 1981 kindergarten enrollment totals in order to compare the incoming class size with the existing class.

September 1981--The report to the committee included the September 1981 enrollment at the kindergarten level showing a 10.6 percent loss when compared to the September 1980 kindergarten enrollment.

<u>November 1981</u>--The administration shared recent enrollment data with the committee. Enrollment figures and projections indicated a decline that would make available as many as three elementary classrooms during the next three to four years. This could be done without significantly increasing class size. As a result of discussions at this meeting, it was agreed that the recommendation to the board of education be revised to reflect the new information. It was agreed that any recommendations for construction should be delayed until conditions indicate that additional space will be needed for an extended period of time.

CHAPTER III

SELECTED ACTIVITY ANALYSES

The guided tours conducted by the building principals provided an opportunity for all committee members to become more familiar with the daily operation of the buildings. For some of the committee members it was their first visit to some of the buildings.

At the beginning of each of the tours, there was a brief presentation by each of the building principals. Informational items in this presentation included the year of construction, the year of any addition to the original building, major remodeling dates, and any other information deemed pertinent for a better understanding of the facility. Also shared with the committee, were the most recent Life Safety Reports and letters from structural engineers regarding the structural status of the two older buildings.

At the time of the tours, all six school buildings were in compliance with Building Specifications for Health and Safety in Public Schools, Circular A157. This information was certified by the Architectural and Engineering Service Corporation of Decatur, Illinois, and was completed on August 18, 1980.

Because of the age of Webster School and the original building at the Junior High School, the school district requested a structural investigation of those two buildings. This investigation was completed

on April 4, 1980, by the engineering firm of Lankton, Ziegele, Terry and Associates, Inc. of Peoria, Illinois. Nothing was found in this investigation to indicate major deterioration of either structure. Specific recommendations were made to insure the continued safe usage of these buildings.

The writer of this study was directly responsible for collecting and interpreting data in the areas of historical, present, and projected enrollments as they relate to the building needs of the school district. The writer was assisted by the district business manager in collecting district financial data for the committee.

In order for the committee to better understand the problems related to space needs, the writer reviewed with the committee not only the past enrollment records, but also the financial problems facing the district prior to the construction of the power plant. Following is a summary of the oral report to the committee.

During the early to middle seventies, the Clinton school district was experiencing moderate growth in total enrollment while per pupil costs were increasing and total revenues were remaining constant. The local high school was completed in 1972 to replace a building that had been condemned. The referendum to build the high school had been passed in 1970 after four unsuccessful attempts. Because of these failures, the local school board was hesitant to consider another referendum to raise local taxes to maintain programs during a growth period.

The direction of the board of education then became centered

on making substantial cuts in the total budget. Three rural buildings were closed between 1971 and 1976. This action obviously affected the pupil-teacher ratio during these years. The pupil-teacher ratio in 1970 was 16.5 to 1 and by 1976 this ratio was 19.8 to 1. Fortunately, total district enrollment was gradually declining by 1975. Figure I shows the number of teachers employed by the district between 1970 and 1981. The major budget cuts are dramatically reflected in Figure I at year 1971 and year 1976.

Between 1970 and 1976, there were only minor fluctuations in total revenue for the school district. The construction of the power plant had a dramatic effect on the total revenue of the school district. This fact is graphically demonstrated by Figure II.

Because of the dramatic increase in revenue produced as a result of the construction of the power plant, money became available for many areas that had been grossly neglected over the previous years. Figure I shows the reinstatement of several teaching positions between 1976 and 1978. This would not have been feasible without the additional revenue produced by the power plant.

Because of a shortage of funds, major maintenance of all school buildings had been grossly neglected during the years 1970 to 1976. As a result of increased revenues, all major maintenance needs were met between 1976 and 1981 at a cost of approximately one million dollars.



NUMBER OF TEACHERS EMPLOYED BY SCHOOL DISTRICT

FIGURE I

FIGURE II





In attempting to make enrollment projections for the next five years, the writer collected data relating to historical district enrollment, historical kindergarten enrollment, and area live births. The historical district enrollment is shown in Figure III and Table I. The historical kindergarten enrollment is shown in Figure IV. As shown in Figure III, the district enrollment peaked in 1972 and has since shown a somewhat steady decline at an average rate of 2.1 percent per year. As shown in Figure IV, the kindergarten enrollment has demonstrated considerably more fluctuation during this period of time, but with an average decline of 1.6 percent per year.

Enrollment projections over even a short period of time is often difficult. After reviewing the literature, the writer made the decision to use a method researched by Shaw which indicated that:

The Cohort-Survival Method of Projection is best used as a relatively short-range forecast tool where in-migration and out-migration ratios are expected to remain fairly stable or where the ratios are expected to change at approximately the same rate as they have in the recent past. Stated simply, the Cohort-Survival Method of Enrollment Forecasting should be accurate to the degree that the factors which have affected the enrollment positively or negatively in the past continue to exist in the future and continue to influence enrollment to the same degree as in the past.

The information presented in Table II indicates the retention of students from one year to the next year based on the previous twelve years. The previous twelve years were chosen to include the time prior to the construction of the power plant and up to the present. The information was taken from the data presented by the enrollment figures in Table I.

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¹Robert C. Shaw, "How Accurate Can Enrollment Forecasting Be?," <u>NASSP</u> Bulletin, Volume 64, Number 439, November, 1980, 15.

FIGURE III

HISTORICAL ENROLLMENT K-12 FOR THE SCHOOL DISTRICT



ENROLLMENT

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1010 P. A.B. 400.

TABLE I

						GR	ADE L	EVELS						
Sept.	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
1970	163	196	187	196	220	187	218	191	194	202	186	165	159	2464
1971	167	198	189	190	193	207	199	227	190	190	191	178	163	2482
1972	171	196	182	198	199	202	232	205	230	196	196	176	161	2544
1973	140	170	184	177	203	184	191	234	202	244	193	169	151	2442
1974	168	157	165	179	181	207	194	202	232	220	222	165	159	2451
1975	162	188	137	163	180	178	206	191	195	235	212	203	139	2389
1976	187	170	166	142	153	179	177	209	188	223	207	194	180	2375
1977	170	195	148	151	149	152	179	173	205	222	187	190	161	2282
1978	136	188	176	155	158	149	163	184	177	229	174	182	153	2224
1979	163	143	174	179	151	151	142	167	175	172	211	166	142	2136
1980	160	170	129	170	180	146	154	142	159	179	165	193	148	2095
1981	143	178	142	121	166	171	151	166	141	151	173	150	160	2013

ENROLLMENT DATA FOR THE SCHOOL DISTRICT

FIGURE IV

HISTORICAL ENROLLMENT FOR KINDERGARTEN FOR THE SCHOOL DISTRICT



TABLE II

COHORT SURVIVAL TABLE

GRADE	PERCENT RETENTION
FIRST GRADE	111.4
SECOND GRADE	92.0
THIRD GRADE	102.2
FOURTH GRADE	105.6
FIFTH GRADE	96.2
SIXTH GRADE	104.1
SEVENTH GRADE	104.1
EIGHTH GRADE	99.9
NINTH GRADE	107.7
TENTH GRADE	94.0
ELEVENTH GRADE	92.5
TWELFTH GRADE	88.0

Six of the twelve figures in Table II indicate a retention in excess of one hundred percent. The transient students were included in this count and would explain how the totals could indicate a retention rate of over one hundred percent.

In order to make projections for district enrollment for the next five years, the writer researched the live birth records for a two county area over the past twelve years. This data was obtained from the office of the Logan and McLean County Clerks. Figure V shows the increase in the number of area live births over the past several years.

By comparing the enrollment data in Table I, and the live birth data in Figure V, and using the percentage of students retained as indicated for a particular grade level in the Cohort Survival Table found in Table II, the writer projected enrollment for all grade levels as shown in Table III. For clarification, if the kindergarten class of 1982 were followed for three years, the calculations would be as follows: The 1982 enrollment was 158 students, and when multiplied by the retention figure of 111.4 percent in Table II, the student population at the first grade level in 1983 would be 176. To determine the number of students projected for second grade in 1984, simply multiply the number enrolled in 1983 by 92 percent as indicated in Table II. This would result in 162 students for second grade in 1984.

Table III indicates a projected growth rate of just over four percent per year at the kindergarten level for the next five years.







YEAR.

TA	BL	E	T	TT	
_				_	

Sept.	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
1982	158	159	164	145	128	160	178	157	166	152	142	160	132	2001
1983	163	176	146	168	153	123	167	185	157	179	143	131	140	2031
1984	167	182	162	149	177	147	128	174	185	169	168	132	115	2055
1985	170	186	167	166	157	170	153	133	174	199	159	157	116	2106
1986	172	189	171	171	175	151	177	159	133	187	187	147	138	2157

KINDERGARTEN-TWELFTH GRADE ENROLLMENT PROJECTIONS

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If these projections are reasonably accurate, the increase could be absorbed without significantly increasing class size at the primary level. Obviously, if the area birth rate continues to increase, the implications are more serious and would call for an additional study of alternatives.

In making the enrollment projections, the most difficult and perhaps the most important variable was the status of the local economy. In November of 1981, the local tube mill at the Revere Copper and Brass Company was closed. This created unemployment for two hundred persons, most of which lived within the Clinton school district. This event created rumors concerning the status of the remainder of the Revere plant which employs almost seven hundred persons.

In addition to the Revere problem, the Baldwin employees at the power plant have gradually been leaving this area as their particular portion of the plant has been completed.

In October of 1980, a survey was completed by the building principals in the Clinton schools to determine the number of students whose parents would be affected by the closing of the Revere plant and the completion of the power plant. The results of this survey are shown in Table IV. Obviously, these factors would have a tremendous impact on the school district as well as the local economy.

Prior to the final enrollment projections, several members of the committee were confident that a building program would be

TARLE	TV
TADDC	TV

SCHOOL	BALDWINS # STUDENTS	%	REVERE # STUDENTS	%	TOTAL # STUDENTS	2	ENROLLMENT OCT 30, 1981
DOUGLAS	28	14.0	19	9.5	47	23.5	200
LINCOLN	17	8.8	14	7.2	31	16.7	196
WASHINGTON	44	12.4	19	5.3	63	17.8	353
WEBSTER	23	9.9	13	5.6	36	15.5	232
JR. HIGH	64	13.0	47	9.5	111	22.6	491
HIGH SCHOOL	53	8.2	72	11.1	125	19.4	644
TOTAL	229	11.1	184	8.0	413	19.3	2,116

STUDENTS WHOSE PARENTS EMPLOYED AT BALDWIN/REVERE

needed by 1984. For this reason, the writer of this study was asked to make a rough sketch of a modest addition that might be appropriate for Douglas School. The committee also asked the writer of this study to prepare a cost estimate for the addition to Douglas School.

Figure VI shows the sketch of the proposed addition to Douglas School. This proposed addition has a total area of 4,730 square feet and includes two small group instruction areas, two classrooms, two restrooms, and a library.

In estimating a total cost for this project, the writer researched the most recent construction costs for elementary school buildings. According to the April 1982 issue of American School and University, the present costs of construction of an elementary school is \$45.12 per square foot. This figure includes site development, building construction, furnishings, equipment, and fees. The total estimated costs of the proposed addition was approximately \$215,000.

FIGURE VI

SKETCH OF DOUGLAS SCHOOL ADDITION



CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS

As a result of this study, the committee reached the following conclusions and made the following recommendations.

- 1. The six school buildings presently used for housing students in the Clinton district are in good to excellent condition. There are presently no violations of Life Safety Code requirements in the Clinton school system. If prudent maintenance procedures are followed, the school buildings should be functional for several years.
- 2. Based on present revenue, the school district could build a modest addition (\$250,000) without an increase in local taxes. This could be done by simply using the building fund balance that was formerly used for major maintenance and remodeling.
- 3. Based on present enrollment and the five year projected enrollment figures, there is no urgent need for additional facilities at this time. There will be a need for additional space if present birth rates continue.

- 4. There were fifteen members of the committee. This committee would have been more functional if the membership had been from ten to twelve. Attendance at the meeting would have been more consistent. Future committees of this type should have a limited membership.
- 5. The superintendent should appoint a three member committee of administrators to monitor enrollment and make annual updates on enrollment projections.

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