

RECOMMENDED IMPROVEMENTS IN THE PHYSICAL PLANT
OF KANSAS UNIFIED DISTRICT #334

by

ELTON EUGENE SMITH

B. A., Kansas Wesleyan University, 1960

A MASTER'S REPORT

submitted in partial fulfillment of the
requirements for the degree

MASTER OF SCIENCE

College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1967

Approved by:

Harlan J. Trennepohl
Major Professor

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ACKNOWLEDGEMENTS

Sincere appreciation is extended to those who assisted in the preparation of this report; namely, Dr. Harlan Trennepohl for his assistance in initiating the study, and guidance and advisement throughout its completion, Mr. Gordon W. Fahrung, County Superintendent of Cloud County, Kansas, for making county records available for study, and the Administrators of Unified School District #334, Mr. Verne Kling, Mr. Ray Stanton and Mr. Wilbur Cushenberry, for cooperation in furnishing pertinent data relative to their respective attendance centers.

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INTRODUCTION

The implementation of the recent unification law, House Bill #377, passed by the Legislature of the State of Kansas, is resulting in many studies of school physical plants, and in subsequent improvement, addition, and/or new construction.

Statement of the problem. As communities are faced with such problems, they usually turn to their administrators to guide them to an acceptable solution. This is as it should be, as educational facilities cannot be planned intelligently until the scope of the program, curriculum content, and basic educational methods have been determined. The educational aim of the community, often a difficult item to define in an ever changing society, should also be carefully ascertained and considered in this phase of school plant planning. Facilities constructed in accordance with these criteria, fulfill a guideline of the American Association of School Administrators which states that, "the purpose of the school plant is to provide the physical facilities for the educational program."¹

¹American Association of School Administrators, Planning America's School Buildings (Washington: American Association of School Administrators, 1960), p. 2.

In addition to making provision for housing the program, the administrator must carefully consider the present enrollment and enrollment trends, site size and location, and school board regulations. The desirability of developing insights in this second area of over-all planning is reinforced by the following quotation, also a guideline formulated by the American Association of School Administrators.

An over-all plan preceding the planning in detail of a building or other facility should be developed for each school site. Such plans should grow out of long term enrollment estimates, maximum enrollment per site permitted by school board policy, and careful evaluation of the trends of the educational programs which if continued may call for additional or highly specialized housing.¹

A third important area in school plant research involves a study of the financial resources available to the educational program. Maximum financial support should be determined, and utilized if need be, to provide attractive, comfortable, and adequate school facilities.

Importance of the study. Kansas Unified District #334, created by passage of House Bill #377, by action of the Cloud County Planning Board, and an approval vote of a majority of the legal voters of the district who voted, is composed of four separate districts; namely, Glasco

¹Ibid., p. 7.

Grade School, Miltonvale Grade School, Glasco Rural High School, and Miltonvale Rural High School. This unification will eventually, if not presently, require construction of new facilities or major improvement and addition to the present buildings. It is with this thought in mind, as administrator serving one of the present districts, that this research is being conducted.

PURPOSE

Problem and objectives. A problem of inadequacy of school physical facilities in Kansas Unified District #334 did exist; therefore, this research had as its major objective, the formulation and offering of recommendations to assist in the solution of this problem. Secondary objectives included the adding of a bit of information to the general knowledge of school plant planning, and the development of new insights for the researcher in this educational area.

Methodology. Procedure of research involved a survey of the present school plants, a study and statement from research of what others have done in planning new facilities, and a summarization with recommendations. The survey was accomplished through personal interview, a study of records, and personal observation.

DEFINITION OF TERMS USED

Cloud County Planning Board. This title, "Cloud County Planning Board", was interpreted to mean a board of six persons, three from first or second class cities, and three from the other county area, organized for the purpose of drawing up initial plans for the unification of school districts within Cloud County, Kansas.

Unified district. The unified district shall be interpreted as meaning a designated area with an enrollment of a minimum of four hundred students, grades 1 through 12, or two hundred square miles, and \$2,000,000.00 assessed valuation under the supervision of a superintendent of schools that maintains attendance facilities for grades 1 through 12 (and kindergarten where desired) offering at least thirty units of instruction, that became operative July 1, 1966.

Administrator. The term "administrator" was interpreted as meaning a person, professionally prepared and certified by the State of Kansas, who is hired by and directly responsible to the school district Board of Education for the supervision of an administrative unit, and who serves as executive officer for the board.

Attendance Center. An attendance center was interpreted as being a school building or buildings

which had been the property of a school district disorganized by the unification act, and was being used as a school plant to house some or all of grades K-12 by the unified school district.

Comprehensive High School. The secondary school, to be rated a Comprehensive High School, must have been an accredited senior high school providing a minimum of fifty units of resident instruction each year. Units required were: English (6), social studies (5), mathematics (5), science (4), health, physical education, and safety (2), foreign language-two languages-(5), business education (6), fine arts (5), and practical arts and vocational education (12).

REVIEW OF LITERATURE

The need for providing satisfactory physical facilities in which "to house" an educational program became apparent early in the nineteenth century, and as could be expected, it came about in the New England states. Henry Barnard, secretary of the Board of Commissioners of Common Schools in Connecticut, prepared a series of papers on school architecture, which was actually only assembled information on the "school houses" in that geographic area. His pioneering noted that while some advances had been made in remedying the deficiencies of the school buildings, the actual attainment was still very low. Since the days of Henry Barnard, our conceptions of education have changed as has the importance of elementary, then secondary and then higher education increased in our advancing society.¹

In addition to these changing concepts in education, America's problem of continuing to improve its public school system has been intensified by the rapid and constant growth of school population, which resulted in serious inadequacies in school facilities.² To add

¹American Educational Research Association, "Plant and Equipment," Encyclopedia of Educational Research, (New York: The Macmillan Co., 1960), pp. 1008-1031.

²James D. MacConnell, Planning for School Buildings, (Englewood Cliffs: Prentice Hall, Inc., 1957), p. 10.

to the complexity of the population increase, Kansas, through the Unification Act, reduced the districts in number from one thousand forty-four in 1964 to three hundred forty eight in 1967, and Mr. Reida, Director of the State Facilities Section of the Kansas State Department of Public Instruction, predicts that upon its final completion only three hundred districts will remain. He states that he also believes that this reorganization of school districts in Kansas will require new or additional facilities for the new districts.¹

The need of improved facilities will bring with it to the communities--educators and lay people alike--the problem of developing superior educational specifications, as the greatest expectations for future generations should be reflected in the educational planning of school buildings. This planning should be based upon a sound, workable philosophy of education which is stated in the educational policy of the school district. Competent school administrators, working closely with interested personnel, should be able to translate the philosophy, teaching methods, functions, and space requirements

¹George W. Redia, "Trends in Schoolhouse Construction," Kansas Elementary School Principal, VIII (Fall 1965), p. 15.

of the educational program into this high type of educational specifications for the proposed project.¹

The provision for "housing" the total school program is very important and the administration and interested persons in the community should be fully cognizant of all recent trends in school plant planning and construction. As new trends in school buildings are being discussed, it is well to keep the thought foremost in mind that the educational function of the building still demands prime consideration. The design or style of architecture of a building will not in, or of itself, assure the best educational program.² Mr. MacConnell agrees that a good design for any school is one that is derived from successful interpretation of good educational specifications.³

The process of translating the educational specifications into proper monetary figures for housing requires precisely parallel steps as are appropriate in preparing a budget. The plan of procedure as suggested by Dr. Young is in the form of an equilateral triangle, with the educational plan, a definite statement of educational policies and program, as the base, a spending plan - a translation of the accepted policies into proposed

¹Suggestions for Developing Educational Specifications, (Topeka: Kansas State Department of Public Instruction, 1963), p. 5.

²James D. MacConnell, Planning for School Buildings, (Englewood Cliffs: Prentice Hall Inc., 1957), p. 15.

³George W. Reida, "Trends in Schoolhouse Construction," Kansas Elementary School Principal, VIII (Fall, 1965), p. 15.

expenditures - as one side, and a financing plan - a proposed means of meeting the cost of educational needs - as the final and completing side.¹

Educational facilities expenditures are limited by state law to an aggregate maximum bonded indebtedness of seven percent of the assessed valuation of a district at any given time.² Mr. Murle Hayden of the Kansas State Finance Section advises however, that if conditions warrant, this limitation can be waived by state action.

Also extending beyond the seven percent limit, another finance source available for alleviation of school plant problems is the levy of four mills allowable by school law and contingent on publication extended over a five year period in the budgetary category of capital outlay for construction, reconstruction, repair, remodeling, addition to, furnishing and equipping of school buildings and other related expenses.³

Before a final stamp of acceptance is placed on any plans, consideration should be given as to the period of time that the district in its present boundaries or in future areas might be able to utilize the proposed

¹ Chris A. DeYoung, Budgeting in Public Schools, (Chicago: J. S. Swift, 1946), p. 7.

² Adel F. Throckmorton, State Laws of Kansas, (Topeka: Kansas State Department of Public Instruction, 1965 Supplement), p. 100.

³ *Ibid.*, p. 123.

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improved or new structures as education is in a constant state of change. The official publication of the Kansas State Department of Instruction, Kansas Schools, attests to this fact as it hints that unification is far from complete as is noted in the following editorial.

The consolidation of unified districts may be the next major step in the unification process. Across the state, unified district boards and administrators are aware of the need and have held meetings to consider consolidation. In some cases citizen study committees have been appointed to make surveys of the districts under consideration.¹

¹"Unification Continues" Kansas Schools, XXIII (February, 1967), pp. 6-7.

THE SURVEY

Recommendations for improvement of school physical plants, if significant, are based on school population trends, a plant survey taking into consideration the housing requirement of the present and/or future curricular and extracurricular activities of the district and the financial ability of the supporting area to implement suggested change.

School population trends. Predicting school enrollment is not dissimilar to other kinds of prophecies in that unforeseeable change makes probable some degree of error. Nevertheless, birth rate, in and out migration, population history, distribution of population, and school enrollment history provide a methodical process of analysis by which enrollment prediction can be made with a low probability of error. It is important that such predictions be constantly compared with actual future enrollments so that corrections and new predictions can be ascertained.

The figures for developing Table I were based primarily on school census; however, in arriving at these figures, consideration was given to past ratios of census enumeration to actual enrollment, and to compliance of state statutes that delays the enrollment

TABLE I

NUMBER OF ACTUAL AND PROJECTED PRE-SCHOOL CHILDREN
RESIDING IN UNIFIED SCHOOL DISTRICT NO. 334

Year of Birth	Number of Children	Year to Enter Kindergarten
1962	30	1967
1963	41	1968
1964	38	1969
1965	39	1970
1966	27	1971

one month per class unit for the next three years.

It cannot be predicted whether more or fewer children will actually enroll at age five or will remain in the school's attendance centers throughout their first thirteen years education, but a comparison of past census-enrollment figures indicate a somewhat static ratio. This fact can probably be attributed to the area being largely a rural population as is indicated on the dsitric map in Plate I, Appendix.

Table II shows the September 15, school enrollment by grade in each of the attendance centers located within Unified School District #334 between the years 1958 and 1966. These figures and the figures

TABLE II

ACTUAL ENROLLMENT BY GRADE FOR EACH COMPONENT OF
UNIFIED DISTRICT #334, BEGINNING 1959 AND ENDING 1967

		'58	'59	'60	'61	'62	'63	'64	'65	'66
Kindergarten	M	14	19	19	17	14	24	19	22	13
	G	28	20	33	25	31	20	23	33	17
Grade One	M	21	16	17	22	19	13	24	20	22
	G	30	31	24	32	21	30	19	22	33
Grade Two	M	16	20	15	21	22	18	13	25	24
	G	31	29	35	27	36	20	27	18	17
Grade Three	M	21	15	25	15	20	21	20	13	21
	G	22	32	18	30	32	34	20	26	19
Grade Four	M	16	24	14	34	16	21	18	20	17
	G	21	25	31	29	30	29	32	22	25
Grade Five	M	9	15	24	19	23	15	20	21	23
	G	21	21	26	27	32	29	26	29	23
Grade Six	M	14	10	16	26	20	22	15	18	22
	G	20	25	22	25	30	30	28	26	26
Grade Seven	M	20	17	11	16	28	20	20	15	22
	G	26	20	21	21	26	32	28	28	29
Grade Eight	M	16	21	15	13	16	29	20	19	16
	G	21	24	19	20	26	23	23	26	28
Grade Nine	M	22	24	21	22	15	19	27	26	25
	G	21	22	22	20	22	26	22	32	29
Grade Ten	M	23	26	23	20	21	13	20	25	27
	G	19	23	24	21	21	24	31	23	38
Grade Eleven	M	27	23	22	24	21	21	13	18	26
	G	27	17	22	21	20	22	21	26	20
Grade Twelve	M	20	29	25	21	23	20	19	17	19
	G	23	24	17	20	21	20	23	21	30
Total		549	572	571	577	606	594	571	591	608

of projected kindergarten enrollment in Table I were used in Tables III through VIII to develop predicted enrollments by grade for the Unified School District.

Tables III, IV, V, VI, VII, and VIII have been prepared by assuming that all children would enter school as scheduled, and unless some additional industries, or some political or economic situation should develop that would cause an increase in enrollment trends, the district can expect a gradual but constant decline in enrollment.

Tables III, IV and V are projected on the traditional K3-4 type of organization which the district was currently using. Table III projects enrollment trends for Miltonvale Attendance Center, Table IV the separate Glasco Attendance Center, and Table V, a combine grouping for the entire district. As is shown by the tables there is an expected total enrollment of five hundred ninety four for the 1967-68 year, but only five hundred thirty for the school term of 1971-72. This is a decrease of sixty-four students.

Tables VI, VII and VIII are projected on a K6-6 type of organization, a type that might be practical to reduce excessive construction at the elementary school level, and allow for all additional construction to be carried out on one site.

TABLE III
 PROJECTED SCHOOL ENROLLMENTS BASED ON A K8-4 PLAN
 MILTONVALE ATTENDANCE CENTER OF UNIFIED
 SCHOOL DISTRICT NO. 334

School Year	GRADES												Total for 9-12	Total for System		
	K	1	2	3	4	5	6	7	8	Total K-8	9	10			11	12
1967-68	18	15	22	24	21	17	23	22	22	184	16	25	27	26	94	278
1968-69	20	18	15	22	24	21	17	23	22	182	22	16	25	27	90	272
1969-70	22	20	18	15	22	24	21	17	23	182	22	22	16	25	85	267
1970-71	22	22	20	18	15	22	24	21	17	181	23	22	22	16	83	264
1971-72	16	22	22	20	18	15	22	24	21	180	17	23	22	22	84	264
1972-73	..	16	22	22	20	18	15	22	24	...	21	17	23	22	83	...
1973-74	..	..	16	22	22	20	18	15	22	...	24	21	17	23	85	...
1974-75	..	..	..	16	22	22	20	18	15	...	22	24	21	17	84	...
1975-76	..	..	..	..	16	22	22	20	18	...	15	22	24	21	82	...
1976-77	..	..	..	..	..	16	22	22	20	...	18	15	22	24	79	...
1977-78	..	..	..	..	..	..	16	22	22	...	20	18	15	22	75	...
1978-79	..	..	..	..	..	..	..	16	22	...	22	20	18	15	75	...
1979-80	..	..	..	..	..	..	..	..	16	...	22	22	20	18	82	...
1980-81	..	..	..	..	..	..	..	..	..	...	16	22	22	20	80	...

TABLE IV
 PROJECTED SCHOOL ENROLLMENTS BASED ON A K8-4 PLAN
 GLASCO ATTENDANCE CENTER OF UNIFIED
 SCHOOL DISTRICT NO. 334

School Year	GRADES												Total for 9-12 System			
	K	1	2	3	4	5	6	7	8	Total K-8	9	10		11	12	Total 9-12
1967-68	12	17	33	17	19	25	23	26	29	201	28	29	33	20	115	316
1968-69	21	12	17	33	17	19	25	23	26	193	29	28	29	38	124	317
1969-70	16	21	12	17	33	17	19	25	23	183	26	29	23	29	112	295
1970-71	17	16	21	12	17	33	17	19	25	177	23	26	29	28	106	283
1971-72	11	17	16	21	12	17	33	17	19	163	25	23	26	29	103	266
1972-73	..	11	17	16	21	12	17	33	17	..	19	25	23	26	93	..
1973-74	..	..	11	17	16	21	12	17	33	..	17	19	25	23	84	..
1974-75	..	..	..	11	17	16	21	12	17	..	33	17	19	25	94	..
1975-76	..	..	..	..	11	17	16	21	12	..	17	33	17	19	36	..
1976-77	..	..	..	..	..	11	17	16	21	..	12	17	33	17	79	..
1977-78	..	..	..	..	..	..	11	17	16	..	21	12	17	33	83	..
1978-79	..	..	..	..	..	..	..	11	17	..	16	21	12	17	66	..
1979-80	..	..	..	..	..	..	..	..	11	..	17	16	21	12	66	..
1980-81	..	..	..	..	..	..	..	..	..	..	11	17	16	21	65	..

TABLE V
 PROJECTED SCHOOL ENROLLMENTS BASED ON A K8-4 PLAN
 UNIFIED SCHOOL DISTRICT NO. 334

School Year	GRADES												Total for System			
	K	1	2	3	4	5	6	7	8	Total K-8	9	10		11	12	Total 9-12
1967-68	30	32	55	41	40	42	46	43	51	385	44	54	65	46	209	594
1967-69	41	30	32	55	41	40	42	46	43	375	51	44	54	65	214	539
1969-70	33	41	30	32	55	41	40	42	46	365	43	51	44	54	197	562
1970-71	39	38	41	30	32	55	41	40	42	353	46	43	51	44	169	547
1971-72	27	39	33	41	30	32	55	41	40	343	42	46	43	51	197	530
1972-73	..	27	39	33	41	30	32	55	41	..	40	42	46	43	176	..
1973-74	..	..	27	39	38	41	30	32	55	..	41	40	42	46	169	..
1974-75	..	..	..	27	39	38	41	30	32	..	55	41	40	42	173	..
1975-76	..	..	..	..	27	39	33	41	30	..	32	55	41	40	163	..
1976-77	..	..	..	..	..	27	39	38	41	..	30	32	55	41	153	..
1977-78	..	..	..	..	..	..	27	39	33	..	41	30	32	55	153	..
1978-79	..	..	..	..	..	..	..	27	39	..	33	41	30	32	141	..
1979-80	..	..	..	..	..	..	..	..	27	..	39	33	41	30	143	..
1980-81	..	..	..	..	..	..	..	..	..	..	27	39	38	41	145	..

TABLE VI

PROJECTED SCHOOL ENROLLMENTS BASED ON A K-6 PLAN
 MILTONVALE ATTENDANCE CENTER OF UNIFIED
 SCHOOL DISTRICT NO. 334

School Year	GRADES																		Total for System
	K	1	2	3	4	5	6	Total K-6	7	8	9	10	11	12	Total 7-12				
1967-68	18	15	22	24	21	17	23	140	22	22	16	25	27	26	138	273			
1968-69	20	18	15	22	24	21	17	137	23	22	22	16	25	27	135	272			
1969-70	22	20	18	15	22	24	21	142	17	23	22	22	16	25	125	267			
1970-71	22	22	20	18	15	22	24	143	21	17	23	22	22	16	121	264			
1971-72	16	22	22	20	18	15	22	135	24	21	17	23	22	22	129	264			
1972-73	..	16	22	22	20	18	15	...	22	24	21	17	23	22	129	...			
1973-74	..	..	16	22	22	20	18	...	15	22	24	21	17	23	122	...	
1974-75	..	..	..	16	22	22	20	...	18	15	22	24	21	17	117	...
1975-76	..	..	..	..	16	22	22	...	20	18	15	22	24	21	120	...
1976-77	..	..	..	..	..	16	22	...	22	20	18	15	22	24	121	...
1977-78	..	..	..	..	..	..	16	...	22	22	20	18	15	22	119	...
1978-79	..	..	..	..	..	..	..	...	16	22	22	20	18	15	113	...

TABLE VII

PROJECTED SCHOOL ENROLLMENTS BASED ON A K6-6 PLAN
 GLASCO ATTENDANCE CENTER OF UNIFIED
 SCHOOL DISTRICT NO. 334

School Year	GRADES												Total for System			
	Total											Total 7-12				
	K	1	2	3	4	5	6	K-6	7	8	9			10	11	12
1967-68	12	17	33	17	19	25	23	146	26	29	28	29	38	20	170	316
1968-69	21	12	17	33	17	19	25	144	23	26	29	28	29	38	173	317
1969-70	16	21	12	17	33	17	19	135	25	23	26	29	28	29	160	295
1970-71	17	16	21	12	17	33	17	133	19	25	23	26	29	28	150	283
1971-72	11	17	16	21	12	17	33	127	17	19	25	23	26	29	139	266
1972-73	..	11	17	16	21	12	17	..	33	17	19	25	23	26	143	..
1973-74	..	..	11	17	16	21	12	..	17	33	17	19	25	23	134	..
1974-75	..	..	..	11	17	16	21	..	12	17	33	17	19	25	123	..
1975-76	..	..	..	..	11	17	16	..	21	12	17	33	17	19	119	..
1976-77	..	..	..	..	..	11	17	..	16	21	12	17	33	17	116	..
1977-78	..	..	..	..	..	..	11	..	17	16	21	12	17	33	116	..
1978-79	..	..	..	..	..	..	..	..	11	17	16	21	12	17	94	..

TABLE VIII
 PROJECTED SCHOOL ENROLLMENTS BASED ON A K-6 PLAN
 UNIFIED SCHOOL DISTRICT NO. 334

School Year	GRADES												Total for System			
	K	1	2	3	4	5	6	Total K-6	7	8	9	10		11	12	Total 7-12
1967-68	30	32	55	41	40	42	46	206	48	51	44	51	65	46	308	594
1968-69	31	30	32	55	41	40	42	201	46	48	51	44	54	65	308	539
1969-70	30	31	30	32	55	41	40	277	42	46	48	51	44	54	295	562
1970-71	30	33	41	30	32	55	41	276	40	42	46	48	51	44	271	547
1971-72	27	30	33	41	30	32	55	262	41	40	42	46	48	51	269	530
1972-73	..	27	30	33	41	30	32	..	55	41	40	42	46	48	272	..
1973-74	..	..	27	30	33	41	30	..	32	55	41	40	42	46	255	..
1974-75	..	..	..	27	30	33	41	..	30	32	55	41	40	42	240	..
1975-76	..	..	..	..	27	30	33	..	41	30	32	55	41	40	239	..
1976-77	..	..	..	..	..	27	30	..	33	41	30	32	55	41	237	..
1977-78	..	..	..	..	..	..	27	..	30	33	41	30	32	55	235	..
1978-79	..	..	..	..	..	..	..	..	27	30	33	41	30	32	207	..

The enrollment of the total district keeps well within the requirement of a minimum of 400 students as stated in House Bill #377, but the operation of a high school attendance center, grades 9-12, based on a K8-4 plan for each attendance area with approximately one hundred students each seems unjustifiable because small high schools cannot provide a diversified curriculum except at exorbitant expense. The establishment of one central junior-senior high school with a predicted enrollment of two hundred sixty eight would provide a two fold benefit to the district. The first benefit would be the relief of any overcrowded conditions in the elementary schools and secondly would be to provide an upper level school of sufficient size to maintain a curriculum that is sufficiently broad and challenging at a nominal expense, and provide for economical use of the time and effort of the staff.

School plant survey. While the teacher is always regarded to be the center of a well-organized school system, an adequate physical plant is of major importance in either facilitating or curtailing the teacher's effectiveness. It is generally recognized in educational circles that the chief function of the school site and plant is to provide adequate and desirable

space for carrying on the total school program.

School sites. Mr. G. W. Redia, Director of the School Facilities Service Section of the State Department of Public Instruction has defined an adequate school site in the following words.

A school site for a modern educational program is much more than land upon which to erect a building. The site has many educational uses and is a functional part of the school plant. In addition to providing space for the buildings, a good site should include areas for physical education, parking, loading and unloading pupils, outdoor lavatories, drives, walks, recreation and supplemental space such as might be anticipated.¹

The site should have the buildings so located to give a pleasing appearance to the areas, but also provide for a maximum of use of the area for other purposes. It should be so located to be free from disturbing noises, obnoxious odors, and dangerous or unsanitary conditions. Attractive landscaping will build pride in the school.

The attendance center sites of Unified School District #334, as shown in Table IX, generally meet all the requirements, exclusive of size, pertaining to satisfactory areas except the Miltonvale High School Attendance Center which is located quite close to a railroad. Both Glasco Attendance Centers and the Miltonvale High School

¹Kansas State Department of Public Instruction, A Manual for Evaluating School Facilities. (Topeka: Kansas State Department of Public Instruction, 1962) p. 7.

Center have an area below standard as is spelled out for new construction by Bulletins 301, and 201, published by the State Department of Public Instruction, (1966).

Elementary sites are to contain a minimum of five acres plus an acre for each one hundred students.¹

Junior High and Senior High Schools should have twenty and thirty acres respectively plus one acre for each one hundred students.²

TABLE IX

AREA, LOCATION, AND OVERALL RATING OF PLANT SITES OF ATTENDANCE CENTERS OF UNIFIED SCHOOL DISTRICT #334

School Site	Area	Location	Overall Rating
Glasco Grade	2.8 Acres	Excellent	Fair
Miltonvale Grade	8 Acres	Excellent	Excellent
Glasco High	4 Acres	Excellent	Fair
Miltonvale High	5.5 Acres	Poor	Poor

The two Glasco Centers are located in such close

¹State Department of Public Instruction. Rules, Regulations, Standards and Procedures for Accrediting Elementary Schools. (Topeka: Kansas State Department of Public Instruction, 1966) p. 1.

²State Department of Public Instruction. Rules, Regulations, Standards and Procedures for Accrediting Secondary Schools. (Topeka: Kansas State Department of Public Instruction, 1966) p. 13.

proximity that either school center could use the entire site area thereby alleviating the area problem considerably. If construction of new high school facilities is carried out in another location, a sufficient area would then be available for Glasco Grade School use.

School structures. The buildings of the district are not centralized but comprise two groups located at the east and west ends of the district, twenty one miles apart, and almost equally distant from the north and south boundaries. The Glasco Grade and the Glasco High School facilities are situated in close proximity to each other, but approximately two blocks separate the Miltonvale Grade and High School plants. Table K is a listing of the various buildings, their site location, their use, the grades they house, and the date of construction.

It is generally recognized that the chief function of the school plant is to provide adequate and desirable space for carrying on the total school program. School plants must also provide for the health and safety of pupils and teachers using them. Factors which affect safety features of school buildings include kinds of construction materials used, arrangement and location of various areas within a building, provision for easy circulation of students, exit facilities, kind and location of stairway, and the repair and

TABLE X
 LOCATION, USE, GRADES HOUSED, AND DATE OF
 CONSTRUCTION OF THE PRESENT SCHOOL
 BUILDINGS OF UNIFIED SCHOOL
 DISTRICT #334

School	Building	Grades Housed	Date of Construction
Glasco Grade	Main	K-8	1950
Miltonvale Grade	Main	K-8	1953
Glasco High	Main	9-12	1921
	Shop	9-12	1961
	Band	9-12	1961
Miltonvale High	Main	9-12	1916
	Shop	9-12	1950
	*Gymnasium	9-12	1950

(*This building is an addition to the main building) maintenance program.

An inspection of the structures of the school plants of Unified School District #334 reveals that all buildings are constructed of brick or non-combustible materials. Exterior inspection suggests that all outside walls are in excellent repair except the Miltonvale High School which shows cracks and deterioration with only minor repair having been carried out. The interiors of both grade schools are well arranged on

one level eliminating the necessity of stairways, but, the older type multi-story high school structures have small rooms poorly located, a minimum of fire exit facilities, and open stairways which are a definite hazard to safety. The Miltonvale High School main building is definitely unsafe as is shown by the aforesaid open staircases, and also by the April 1967 deficiency report of Kansas State Fire Inspector, Mr. Wooten and requirement of complete new electrical wiring by the insurance company that holds fire insurance on the structure, if insurance coverage is to be maintained. It has been quite commonly discussed in the community that the building has been condemned by the Kansas State Department of Public Instruction; however, no official record of this action was located. Use of this structure should be terminated or the condition of the building corrected after a thorough check by safety engineers. Glasco High School, while an old structure, has been kept in good repair and could serve the district for many years to come.

Provision of adequate and desirable space for carrying on the school program as is shown in Table XI is excellent in the Glasco Grade School, with space for all activities except possibly an area to serve as guidance rooms. The Miltonvale Grade School structure with excellent condition and sufficient capacity ratings

TABLE XI

NUMBER AND AVERAGE AREA OF CLASSROOMS, STUDENT
CAPACITY AND GENERAL CONDITION
OF SCHOOL FACILITIES

Attendance Center	Number of Classrooms	Area of Classrooms	Student Capacity	General Condition
Glasco Grade	11	1080 sq.ft.	230	Excellent
Miltonvale Grade	9	810 sq.ft.	175	Excellent
Glasco High	14	525 sq.ft.	125	Fair
Miltonvale High	8	455 sq.ft.	100	(Condemned)

falls slightly below standard in room size and is definitely deficient in the number of rooms to carry out a total school program for grades K-3. Areas definitely needed are: lunch room hall enlarged, central library space, music rooms, an enlarged gymnasium, guidance service suite, and custodial storage areas and work room. The use of the building for a K-6 program instead of a K-3 program would make it a desirable facility by making available classroom area for other activities even though the rooms are slightly sub-standard in size. (The State of Kansas recommends 900 square feet in classrooms for grades 1-3).¹

¹State Department of Public Instruction, Rules, Regulations and Procedures for Accreditation Elementary Schools. (Topeka: State Department of Public Instruction, 1966) p. 1.

The Glasco High School buildings contain very limited size rooms, with use of some in the basement. The utilization of the basement areas and the addition of a music and vocational agriculture building, accompanied with much repair and face lifting make it a plant that could continue in use for a number of years, either in its present senior high capacity or as a junior high school. Addition of partitions to enclose the staircases should be considered to make it safe.

The Miltonvale High School building is lacking in number of rooms, as well as room size. Rooms in the basement are used, and with the unsatisfactory condition of the main building, it should not be used as a school facility.

The gymnasium could be utilized for grade student activities as it has been improved in the last year, and the vocational agriculture building, a quonset type structure, would provide bus maintenance and storage areas.

School programs. The grade school provides the basis on which all later schooling draws. It should emphasize reading, writing, arithmetic, speaking, and listening--the basic skills of the civilized person. It helps pupils to acquire ideas, information, understanding and skills in social studies, science, music

and art. It teaches the essentials of safety and personal health and promotes physical coordination and development of skills.

The grade school attendance centers of Unified School District #334; namely, Glasco Grade School and Miltonvale Grade School, do provide an excellent basic present day program in comparison to the former statement; however, to meet the demands of a rapidly changing society, educational experimentation must be constantly on the move.

The grade school administrators believe that this district's desires and most urgent needs for the future are special education services, additional audio-visual instruction, and the influence of special guidance personnel. The employment of a trained librarian and enlargement of the central and individual classroom contained libraries also rate a high priority.

Extra curricular activities of the two grade schools seemingly meet the present, as well as, future anticipations.

The secondary school, which should continue the educational spiral upwards, should also begin a broadened type curriculum to more precisely meet the needs of children in their varied areas of interest, and also become more adaptive to individual intellectual differences.

TABLE XII
 COURSE OFFERINGS OF HIGH SCHOOLS
 IN USD NO. 33¹, COMPARED WITH
 A COMPREHENSIVE HIGH SCHOOL
 1966-67

SUBJECT	¹ COMPRE- HENSIVE	GLASCO	+OR-	MILTON- VALE	+OR-
English	6	5	-1	5	-1
Social Science	5	5		5	
Mathematics	5	5		4	-1
Science	4	4		3	-1
Health and Phys. Ed.	2	2		3	+1
Foreign Language	5	2	-3	2	-3
Business Education	6	5	-1	4	-2
Fine Arts	5	1	-4	2	-3
Practical and Voc- ational Education	12	7	-5	9	-3
TOTALS	50	36	-14	37	-13

The two high school attendance centers of the district are deficient in course offering as is stan-

¹State Department of Public Instruction, Rules, Regulations, Standards and Procedures for Accrediting Elementary Schools. (Topeka: Kansas State Department of Public Instruction, 1966) p. 1.

standard for the comprehensive high schools of Kansas. Table XII compares the course offerings of the high schools of Unified District #334 with the standard of fifty offerings required by the Kansas State Department of Public Instruction. Also noted on this Table are the deficiencies of course offerings and also offerings in excess of the standard.

The administrators of the high school attendance centers believe that this district desires to provide a comprehensive school program and this can only be accomplished by providing classroom areas and additional staff members. The administrators also believe that co-curricular activities are offered in sufficient numbers, but their activities are somewhat curtailed due to lack of desirable or absence of facilities.

Shortage of as many as six to eight classrooms in instructional areas, in addition to, need for renovation of unsatisfactory rooms presently in use is the district's largest problem even to meet the present needs, if school programs are to continue in their present attendance centers. Lack of adequate housing for the high schools to offer an acceptable program seemed the most pressing educational problem facing the district.

Finance. A limiting aspect of providing modern well equipped facilities in a school district is the ability and willingness of the district to provide financial support. Many times there are finances available to provide excellent school plants, but their use is withheld by the community because of poor communication between lay people and educators. All too often school personnel exclude lay persons in their planning, and this exclusion is disasterous in a bond election. The School Committee of the American Institute of Architects, National Council on Schoolhouse Construction cites the need of close cooperation between educators and the community in the following statement.

The construction and finance of a school plant or any part of a school plant is primarily the responsibility of the community it is to serve.¹

Communication relative to the need of improved facilities in Unified School District #334 is being carried to the public through a Citizen's Committee, composed of lay personnel and educators. Each component of the unified district had proved its desire

¹School Committee of the American Institute of Architects, National Council on Schoolhouse Construction, "Planning and Designing a School Plant," The School Executive, December 1952, p. 58.

for improved plants as was attested by the building of new grade schools and other facilities in the not too distant past. The future problem will concern solving the supplying of a plant or plants for school use, that will be acceptable to both previous rival components of the district.

House Bill #337 required concurrence with two of its three regulations for an area to be designated a unified school district; therefore, current valuation must be based on the value of a minimum of two hundred square miles and \$2,000,000.00.

Kansas School Law (1965 Supplement) places a limit on the amount of bonds that a district may issue by article 72-6761.

The aggregate amount of bonds of a board outstanding at any time (exclusive of bonds specifically exempt from statutory limitations) shall not exceed seven percent of the assessed valuation of the tangible property within the district except as herein after provided.¹

The financial ability of Unified School District #334 is seven percent (7%) of its total valuation of \$11,298,086.00 or \$790,866.02. This potential is exempt from the present bonded indebtedness of \$178,000. (Glasco Grade School building, \$56,000., matures 1969,

¹Adel F. Throckmorton, School Laws of Kansas, (Topeka: Kansas State Department of Public Instruction, 1965 Supplement) p. 100.

and Miltonvale Grade School building, \$122,000.00, matures 1977) because a unified district is not responsible for bonded indebtedness of its pre-unification areas. Available to the district financial potential also, is a four mill levy for capital outlay, taxable for a five year period. This fund is contingent on publication and may be used to construct or equip new structures or for improving or repairing present facilities as is stated by Kansas Statute (1965 Supplement), article 72-67112.

The board of any unified district established under any of the school unification acts is authorized to make an annual tax levy, for a period of not to exceed five years in an amount not to exceed four mills upon all tangible property in such unified district for the purpose of construction, reconstruction, repair, remodeling, addition to, furnishing and equipping of school buildings, architectural expenses incidental thereto, the acquisition of school building sites and the acquisition of school buses.

The capital outlay yield would add \$45,192.34 annually, making an additional \$225,961.70 available in the allowable five year period. This would provide an overall financial potential, without state appeal, of \$1,016,827.72, and Mr. Lee Foster, Consultant, Kansas State Facilities Section of the State Department of Public Instruction stated during a telephone interview that he believed, "a district of this area could provide an adequate and suitable secondary plant for one million dollars."

¹Ibid., p. 123.

SUMMARY AND RECOMMENDATIONS

Summary. Future enrollment of Unified School #334 should continue to show a slight but steady decline. High school enrollment for the entire district could decline as much as twenty five to thirty percent during the next twelve years, leaving too small a number to warrant operation of two attendance centers.

The study of the four attendance center facilities indicates that both grade school facilities, with minimum improvement at the Miltonvale Grade School, are generally adequate for immediate and future needs but the two high school structures are both inadequate to house the present educational desires and specifications of the district, and the Miltonvale High School building has been termed structurally unsound, as well as inadequate in safety features.

Curricular offerings are deficient in both high school centers to meet the standards set for a Comprehensive High School due to a shortage of available classroom areas, and an insufficient number of enrollees. Operation of two high school attendance areas within the district divides the students into small groups, insufficient in size to maintain a

curriculum sufficiently broad and challenging without exorbitant expenses.

Finances are available to construct a new single high school plant with adequate facilities to accommodate a sound and comprehensive secondary program, with additional resources remaining to improve the deficiencies in the Miltonvale Grade School facilities.

Recommendations. Unified School District #334 should embark immediately on the following plans to provide the educational facilities for carrying out its educational desires, while promoting safety for the students and building pride and respect in the schools and throughout the entire district.

Recommendation 1. Begin immediately to formulate educational specifications for a new single high school plant.

Recommendation 2. Inform the public of the need for such a building program.

Recommendation 3. Purchase a site of sufficient size to accommodate junior and senior high school facilities approximately midway between the present attendance centers.

Recommendation 4. Construct a new single secondary facility grades 9-12 with area and facilities

sufficiently adaptable to present day, as well as, future specifications, at the earliest possible date on the new site.

Recommendation 5. Activate this facility at the earliest possible time.

Recommendation 6. Improve the Miltonvale Grade School facilities as soon as practical.

Recommendation 7. Utilize the new music and F.F.A. building at the Glasco High School as a music and industrial arts facility for the Glasco Grade School.

Recommendation 8. Carry out additional studies to ascertain if conditions warrant, and finances are available, to construct a junior high school facility to alleviate a possible reversal of school population trends in the future.

Recommendation 9. Carry on a continual program to enhance cooperation and good will between the two pre-nification segments of the district.

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REFERENCES

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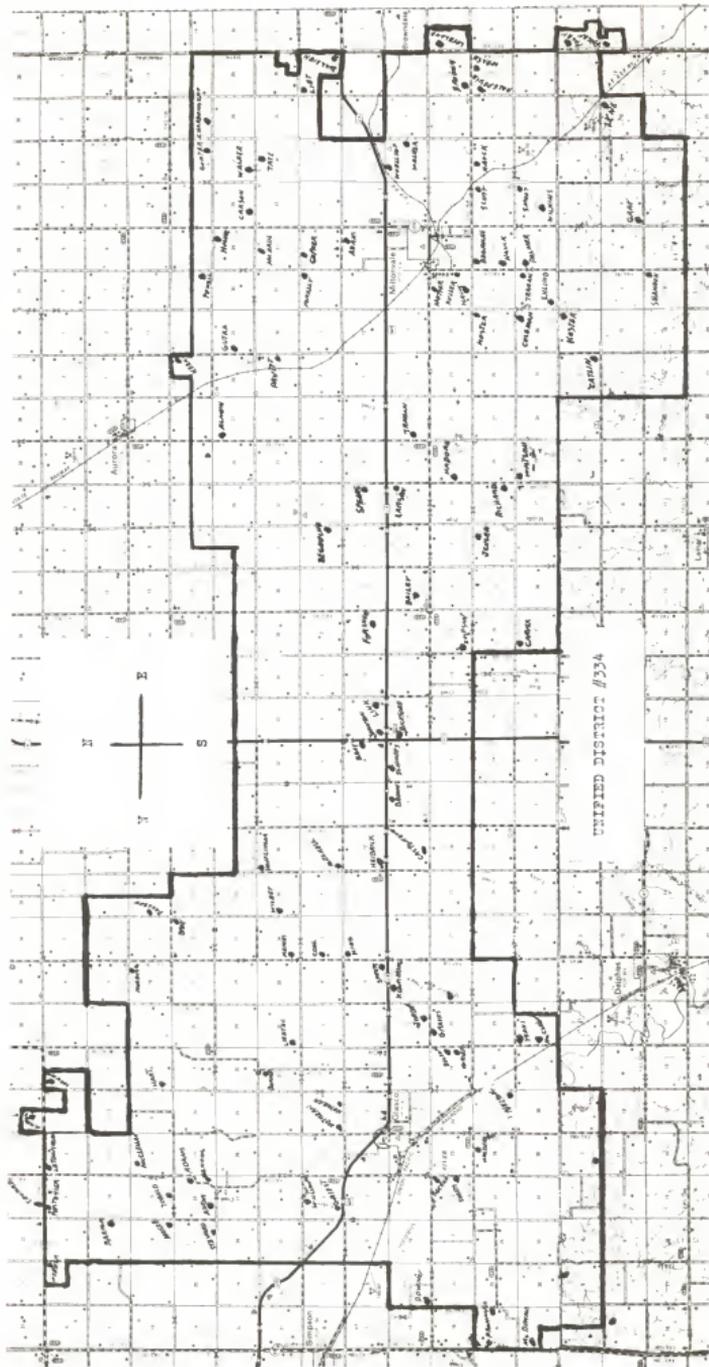
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APPENDIX

PLATE I



RECOMMENDED IMPROVEMENTS IN THE PHYSICAL PLANT
OF KANSAS UNIFIED DISTRICT #334

by

ELTON EUGENE SMITH

B. A., Kansas Wesleyan University, 1960

AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the
requirements for the degree

MASTER OF SCIENCE

College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1967

ABSTRACT

The objective of the study was to survey the physical facilities of Unified School District #33 , State of Kansas, determine what deficiencies did exist, and make recommendations for improvements of the physical plants.

Research was completed by a review of literature, survey of the present school plants, personal interview of fellow administrators, board of education, and lay personnel, a study of school records, and personal observation.

The significance of the study was based on school population trends, ability of the plant to house a desirable educational program in a safe and healthy atmosphere, and the financial ability of the supporting area to implement change.

Data accumulated in the survey indicated: (1) A slow but continual declining school population can be expected, (2) Grade school facilities were relatively new plants and were acceptable for present use and with only minor improvement would meet the demands of the future, (3) Both high school facilities were of the early twentieth century vintage, with small rooms and inadequate safety features, (4) The Miltonvale High

School main building had been termed structurally unsound, (5) The attendance of the senior high school group in two attendance centers made each group too few in number to be offered an economical and comprehensive total school program, and (6) The supporting area did have the financial potential to provide new or improved facilities for the district.

Recommendations, based on findings of the survey, and with a hope that Unified District #334 desires to provide the educational facilities to carry on a high type educational program, while promoting safety for the students, and pride and respect in the schools and entire district, should include the following: (1) Formulate educational specification for a new single high school plant to serve the entire district, (2) Inform the public of this educational need, (3) Purchase a site of thirty to forty acres, approximately at the mid point of the district, (4) Construct a new single secondary facility, grades 9-12, with adequate dimensions to meet present and anticipated needs, (5) Improve the grade school facilities as soon as is practical, (6) Utilize school areas and usable structures vacated by senior high schools for purposes to which they are suited, (7) Carry out additional studies to ascertain the advisability of

later construction of junior high school facilities,
and (3) Carry on a continual program to enhance
cooperation and promote goodwill between the two pre-
unification rival segments of the district.