A SUGGESTED GUIDE FOR THE SCHOOL ADMINISTRATION IN PLANNING A FLEXIBLE SCHOOL AUDITORIUM FOR COMMON SCHOOL DISTRICT #56 IN JOINT MARSHALL AND NEMAHA COUNTIES, KANSAS

by

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INTRODUCTION

Common School District #56 of joint Marshall and Nemaha Counties, Kansas is situated in the northeast corner of Marshall County which lies in the northern tier of counties in northeast Kansas. The District borders Nemaha County and extends for a short distance into that county.

The District is a common school district which operates 12 grades of schooling. Those 12 grades are housed in one central building under the jurisdiction of one school board and their executive officer, the superintendent. The building is located in the city of Axtell, an incorporated city with a population of approximately 550 persons.

Accomplishing dramatic work of any consequence in District #56 constitutes a definite problem due to the restrictions placed upon the scope of those activities by the physical facilities.

The realization of the reality of this problem was brought most forcibly to the writer's attention during his four years' experience of working with those facilities in attempting to handle and direct the dramatic activities for District #56. He was constantly confronted with the necessity of restricting the versatility of the dramatic work due primarily to the existent limited physical facilities. The lighting was not adequate. The backstage was not large enough to handle set changes. The acoustics were poor. The audience seating area did not allow the audience to see. The participants in the activity were allowed no circulation to other areas except through the audience. The physical facilities were serving so many multiple activities that scheduling conflicts resulted. Those were the factors which brought the problem

into serious consideration as the subject of this thesis.

The objectives of this thesis were to define the problems of District #56, to determine the existing situation in comparable school systems in the same area of Kansas in which District #56 was situated, to establish from existing literature in the field recommended standards of stage and auditorium planning, and to evaluate the information received and from this source to propose a satisfactory and financially possible solution to the problems of District #56 from the standpoint of its dramatic activities.

THE PROBLEM

The Problem of District #56

The Educational Objectives. The educational objectives of District #56 were stated in general terms in the Philosophy of Axtell Public Schools.

> We are attempting to provide a place where each student can live and function as an individual, a place where, with supervision, he is able to adjust and develop socially, morally, mentally, and physically to the best of his potentiality, so that in later years the individual can provide for himself and become a beneficial member of his community, his country, and the world. This we feel is the ultimate purpose of our secondary school, but in the process of reaching this goal we feel that the following objectives are essential:
>
> 1. We believe that the pupils should have teachers who are well trained and who believe in sound educational teaching methods.
>
> 2. We believe that the curriculum should provide opportunities for participation of all students according to their needs and abilities.
>
> 3. We believe that the educational experiences for the students should take place in an environment which is pleasant and suitable.
>
> 4. We believe the school is a product of the community and the people of that community should assume an active part in the development of the total school program. We

believe that the school should keep the community informed of its problems and progress.

5. We believe that the school is the most important factor in the promotion and preservation of ideals of American democracy.[1]

In the Spring of 1954 Axtell Public Schools became a member of the North Central Association of Secondary Schools and Colleges. In order to qualify for admittance, the school had to subscribe to the standards established by that organization, and be able to meet those standards to an acceptable degree. The faculty and staff, during the forepart of the school year 1953-1954, submitted themselves and the school to a rigorous self-examination of all phases of the total educational program. This examination was based upon detailed printed objectives furnished by the North Central Association. Later the faculty and staff were checked upon their degree of attainment of those printed objectives by a number of qualified representatives of the North Central Association. Upon successfully meeting the minimum standards for the sum total of the educational program, the school was admitted to the North Central Association and is attempting today to keep abreast and beyond those standards.

The statement of guiding principles of the pupil activity program of the North Central Association stated, "Experiences in the pupil activity program are designed to help meet the leisure, recreational, and social interests and needs of the pupils".[2]

Those experiences were a portion of the total goal, as stated in the General Philosophy of Axtell Public Schools, of providing an educational

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[1] School Board Policy, Axtell Public Schools, Axtell, Kansas.

[2] Pupil Activity Program (Section E of Evaluative Criteria, 1950 Edition), Cooperative Study of Secondary School Standards, Washington 6, D.C., p. 193.

institution where the individual student could develop his potentialities and become a beneficial member of society.

Specifically, a partial attainment of this goal was translated into the concrete action of Axtell Public Schools providing a program of dramatic and music activities for its students.

In order to be able to present specific activities or experiences in music and drama, a school will need physical facilities.

In their statement of guiding principles on the school plant, the North Central Association recommended that

> the school plant, consisting of the site, building, equipment, and services, is a major factor in the functioning of the educational program. The plant, as planned and equipped, is more than a place of instruction. It is, during school time, the physical environment which assists or limits pupil achievement of desirable learning outcomes.
>
> The school plant must provide the physical facilities to conduct a program designed to meet the educational needs of youth of secondary-school age. This necessitates provisions for a variety of...extra-curricular or extraclass activities, and recreational and community activities.
>
> ...the building should provide for flexibility in use...The interior and exterior of the building should be attractive and appropriate in design so that aesthetic quality is evident...The school plant should be an integral part of a community planning program. The entire plant should stimulate pupils to use its facilities to maximum effectiveness.[1]

The North Central Association recommended, as a portion of the school plant, an auditorium with these features.

> The auditorium is located on the ground floor...The auditorium is provided with aisles of sufficient width and number...Seating capacity is provided to meet reasonable educational and community requirements. Comfortable seats are provided in the auditorium. The auditorium is attractively

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[1] School Plant (Section H of Evaluative Criteria, 1950 Edition), Co-operative Study of Secondary-School Standards, Washington 6, D.C., 1950, p. 237.

> designed and decorated. The acoustics of the auditorium are satisfactory. The air in the auditorium is kept in a satisfactory condition. The stage is of sufficient size to meet needs of pupil activity program. Stage lighting equipment is available. Auditorium lights and stage lights are available for stage properties. Dressing rooms are adjacent to the stage. Dressing rooms are equipped with lavatories...Toilet and lavatory facilities for each sex are easily accessible from the auditorium.[1]

The North Central Association further recommended that the physical facilities necessary for music were of a rather special nature. Special rooms should be assigned for music activities. Music rooms should be soundproofed to such an extent or so located that they did not interfere with the conduct of other classes. The needs of the music department should be recognized in the scheduling of activities in the auditorium. Provision should be made to meet individual practice requirements. Storage facilities for equipment and materials should be provided.[2]

The Present Facilities of District #56. The present facilities of District #56 provided that the majority of the activities of the music and drama departments were conducted in a combination gymnasium-auditorium which was incorporated as a part of the central school plant.

Actually the term, auditorium, was almost a misnomer. That part of the school plant provided for music and drama activities was designed primarily for gymnasium purposes. The floor was flat. Permanent seating, bleacher style, was provided only along the sides of the room facing the

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[1]Ibid., p. 244.

[2]Music (Section D-12 of Evaluative Criteria, 1950 Edition), Cooperative Study of Secondary-School Standards, Washington 6, D.C., 1950, p. 155.

floor and at right angles to the front of the stage. This seating was designed obviously for onlookers at athletic contests. At one end of the room a wall with a proscenium opening was erected. The space from this wall to the end of the building served as a stage area for the room. It was 15 feet in depth. The proscenium opening was 28 feet in width. The total width of the auditorium-gymnasium was 56 feet. Three feet from each edge of the proscenium opening the remaining space of the stage area was enclosed by walls into two rooms which were to serve as dressing rooms. One of those rooms was on each side of the proscenium opening. Thirteen and one-half square feet of space inside each of those rooms was occupied by heating ducts. The only opening to any point outside of the stage area was by two doors which led from the dressing rooms directly into the audience.

The ceiling above the stage proper was within four feet of the top of the proscenium arch, thereby allowing virtually no room for a loft for handling stage properties. Included in this space was a single row of open trough border lights arranged on three circuits and a single overhead work light. There was also a row of open trough footlights at the front edge of the stage, which was 3½ feet above the gymnasium floor level. The footlights were on three separate circuits. All lights in the gymnasium-auditorium were controlled by snap switches. No provision was made for any control of the intensity of the lights. Seating for audiences witnessing activities upon the stage was provided by placing folding chairs upon the flat area that was normally the gymnasium floor. No provision was made for acoustics. All walls were of a hard, smooth plaster surface. The floor was hardwood, including the stage floor. A voice was hardly understandable by the time it reached the audience. The

heating system interfered with hearing by the noise it produced when running. It was obvious that the physical facilities did not meet with the recommendations of the North Central Association.

Activities and Events. In the gymnasium-auditorium the following activities and events occurred in a school year: Two daily physical education classes of either boys or girls; daily rehearsal of the band, plus the public concerts given by it; daily athletic practice by the basketball teams, excluding nights of games, during the season of December through February; occasional rehearsal and all public performances of the vocal music; daily use of the dressing rooms for individual instrumental practice; recess area for the grade school during inclement weather; play area for the entire student body during noon hour on inclement days; most rehearsal and all performances of dramatic activities; home scheduled athletic (basketball) contests of the junior high and high school during the season; pre-enrollment of students at beginning of school term; Parent-Teachers' Association meetings throughout the year; dental check of student body; lyceums; senior pictures; Pep club meetings; adult education meeting; community hospital meeting; annual R.E.A. meeting; open house; Junior-Senior prom; Mother-Daughter Tea; assemblies from other schools; baccalaureate; commencement; alumni banquet; town team basketball; school assemblies for general information; Blue Triangle meetings; school parties for entire student body; occasional class parties; and annual school meeting. This totaled to the use of the gymnasium-auditorium for 34 separate activities, and the room was used at least 832 times for those combined activities.[1]

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[1]Based upon the Axtell Public Schools' calendar of events for the school year 1956-1957.

Conflicts. The intense activity in the gymnasium-auditorium brought about numerous conflicts in the scheduling of events and necessitated limiting or eliminating activities that were desirable. For instance, it might be desirable for girls' physical education class and band rehearsal to be held at the same hour of the day, but they both used the same physical facilities. Consequently, the entire schedule of classes had to be rearranged to resolve the conflict, and an advanced home economics class had to be dropped completely as the result.

Such limitation or elimination of activities, whether they were dramatic, musical, or otherwise, brought about an impairment of the effectiveness of those activities to serve the purpose for which they were designed. Consequently, this caused the inability of the District to meet its educational goals in full measure.

Financial Status. For the fiscal year of 1956-1957, District #56 had an assessed valuation of $1,969,817.00 in Marshall County and $221,310.00 in Nemaha County. This made a total valuation of $2,191,127.00 for the entire district. This was the tax base upon which the District could and did levy taxes for the support of its educational program. For the fiscal year 1956-1957 the District budgeted $66,032.00 for the general fund, $4,200.00 for the building fund, and $4,200.00 for the transportation fund. In addition, the District was retiring its bonded indebtedness on the present building. To raise the money for those funds, 12.99 mills for the general fund, 1.72 mills for the building fund, 1.83 mills for the transportation fund, and 1.68 mills for the bonded indebtedness were levied. This made a total of 18.22 mills which was levied on the assessed valuation during

the fiscal year of 1956-1957.[1]

The future financial picture of District #56 appeared to be somewhat stable. The District had reached evidently a point of stabilization, unless extensive consolidation of already existing rural high school districts should materialize. This did not seem very likely, with all of the five surrounding districts having built already, or building, entirely new school plants. The assessed valuation was based primarily upon rural land, improvements, and equipment. Although a conservative form of tax base, it was a steady one. It should remain relatively close to its present ability to support the educational plan of the school, even though the cost of living should fluctuate either upward or downward. In either event, the assessed valuation would vary probably the same way. The District was nearing the completion of its bonded indebtedness. It had three more years of payments to make. At that time the District would be debt free. Also, the year, 1957, marked the discontinuance of its 1.72 mills building fund levy. Barring unexpected and catastrophic events, the future financial picture of District #56 was a sound one.

It appeared that the physical facilities of the District did not meet the recommended requirements of the North Central Assoication. It appeared that the multiple uses of the facilities caused conflicts in scheduling which in turn prohibited the District in the fulfillment of its subscribed educational goals. It appeared that the financial base of District #56 was sound.

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[1]School Directory, Public Schools of Marshall County, Kansas, Joseph F. Swoboda, County Superintendent, Marysville, Kansas, 1956-1957, p. 21.

The Problem in Comparable Schools in the Same Geographical Area

Questionnaire. In order to determine the existing situation in regard to the physical facilities of schools comparable to District #56, the questionnaire in Appendix A was devised.

Area Surveyed. The questionnaire was sent to every school in northeast Kansas with a school population of 45 to 145 pupils in grades 9 through 12 which lay within an area bounded on the north by the Nebraska line, on the east by the Missouri line, on the south by the Kansas River, and on the west by the Blue River. Whenever a county crossed one of those rivers, then the entire county was included, and a questionnaire was sent to each school in that county which met the population requirements.

The area covered by the survey was restricted to this portion of Kansas in order that a sample would be obtained from schools which lay in the same geographical portion of the State in which District #56 lay. That gave a comparison between schools which had like features, such as the population density of the district and the geographical size of the district.

The survey was restricted to schools with a student population of 45 to 145 in the grades 9 through 12. Those were schools with a school population comparable to that of District #56, which had 72 students in the top 4 grades.

Fifty-two schools met the above qualifications. A drama questionnaire was sent to the dramatic director in each school, and a music questionnaire was sent to the music director in each school. Each of those questionnaires was sent under separate cover.

A list of the specific schools to whom the questionnaire was sent will be found in Appendix B.

Results of the Survey. Of the 104 questionnaires which were mailed, 71 were completed and returned. One music questionnaire was returned blank with the comment that the school had no organized music program. Overall this made a 70 per cent return of the questionnaires.

Of the 104 questionnaires, 52 were drama questionnaires which went to the dramatic director of the schools. Of those 52, 28, or 54 per cent were returned. Of the 52 music questionnaires mailed to the music directors in the 52 schools, 43 were returned completed and one was returned blank. This made an 83 per cent return for the completed ones or an 85 per cent return, if the incompleted returned one was considered.

Of the 52 schools, 24 or 46 per cent, returned both the music and the drama questionnaires.

The vast difference in the percentage of returns of the drama questionnaires, 54 per cent, and the music questionnaires, 85 per cent, lay in the fact that the State required a school to retain a qualified, professional music director if it was going to offer organized music to any extent. In comparison, the dramatic director, to whom the questionnaire was addressed, could very likely be, and quite often was, a teacher who was delegated the extra-curricular responsibility of directing whatever dramatic activities the school offered.

The results of the survey were analyzed by deciding first what comparisons it would be necessary to make in order to achieve a satisfactory breakdown of the information received.

It was decided to compare, on all items on the drama questionnaire, those schools with combination gymnasium-auditorium facilities with those schools with separate auditorium facilities with those schools with facilities which were somehow different from either of these. For instance, a

school might have had just a study hall or library with a stage at the end or side, or it might have used downtown facilities which did not belong to the school.

Of the 28 schools which returned only the drama questionnaire, there were 18, or 64 per cent, with combination auditoriums-gymnasiums, 4, or 14 per cent, with separate auditoriums, and 6, or 22 per cent, with other types of facilities.

It was decided to compare for items 6 through 18 on the drama questionnaire the music director's opinion, items 11 and 12 on the music questionnaire, as to whether the space upon the stage was adequate to hold performers for the instrumental and vocal rehearsals and performances that his school held. That could only be done for those schools which returned both their drama and music questionnaires. There were 24 schools which did.

Table 1. Was space upon stage adequate to hold performers for vocal rehearsals and performances?

	Aud.-Gym.	Aud.	Other
adequate	6	2	3
stage depth	15'-over 25'	20'-25'	10'-19'
stage width	20'-over 40'	30'-40'	20'-40'
sometimes	2	0	0
stage depth	15'-19'		
stage width	30'-34'		
not adequate	0	2	1
stage depth		15'-19'	10'-14'
stage width		20'-29'	under 20'
total	8	4	4

Table 2. Was space upon stage adequate to hold performers for instrumental rehearsals and performances?

	Aud.-Gym.	Aud.	Other
adequate	2	3	2
stage depth	15'-25'	15'-25'	10'-19'
stage width	25'-over 40'	25'-40'	20'-40'
sometimes	2	0	0
stage depth	15'-19'		
stage width	30'-34'		
not adequate	4	1	2
stage depth	15'-over 25'	15'-19'	10'-19'
stage width	20'-34'	20'-24'	under 20'-34'
total	8	4	4

Tables 1 and 2 concerned only 16 of the 24 schools which returned both the drama and music questionnaire. Eight schools failed to report on the music questionnaire as to whether they considered the space upon the stage adequate to hold performers for either vocal or instrumental performances and rehearsals. Therefore, they were not included in the tables.

The dramatic director's opinion, item 24, on whether his school's stage lighting was reasonably adequate was another comparison that was made for items 19 through 24.

Table 3. Stage lighting adequate

	no. of schools	border lights	foot lights	spot lights	flood lights	sufficient electrical outlets
aud.-gym.	12	6	11	6	4	11
aud.	3	2	3	0	0	2
other	4	4	4	1	2	2
total	19					

Table 4. Stage lighting not adequate

	no. of schools	border lights	foot lights	spot lights	flood lights	sufficient electrical outlets
aud.-gym.	6	3	6	1	2	2
aud.	1	0	1	0	0	0
other	2	1	2	1	0	0
total	9					

A comparison was made of the dramatic directors' and the music directors' opinions about the acoustics of their buildings. There were 4 questionnaires which were not shown on the following table because of the failure of the questionee to answer either the drama acoustics or the music acoustics item.

Table 5. Dramatics directors' opinions on acoustics

	no. of schools	excellent	satisfactory	poor
aud.-gym.	13	1	3	9
aud.	3	0	2	1
other	4	2	2	0
total	20			

Table 6. Music directors' opinions on acoustics

	no. of schools	excellent	satisfactory	poor
aud.-gym.	13	1	4	8
aud.	3	0	2	1
other	4	0	4	0
total	20			

The music questionnaire returns were taken separately, and the gymnasiums-auditoriums, separate auditoriums, and other types of facilities were compared. There were 43 returned music questionnaires. Twenty-eight, or 65 per cent, of the schools had combination auditorium-gymnasiums, 8, or 19 per cent, of the schools had separate auditorium facilities, and 7, or 17 per cent, of the schools had other types of facilities.

A breakdown was made of the music directors' opinions as to whether space upon the stage was adequate to hold performers for the vocal performances and rehearsals which their schools held. Eight schools gave no information for the item, item 11.

Table 7. Was space upon the stage adequate to hold performers for vocal performances and rehearsals?

	no. of schools	adequate	sometimes	not adequate
aud.-gym.	21	14	5	2
aud.	8	5	1	2
other	6	4	0	2
total	35			

A similar breakdown was made of the music directors' opinions as to whether space upon the stage was adequate to hold performers for the instrumental performances and rehearsals which their schools held.

Table 8. Was space upon the stage adequate to hold performers for instrumental performances and rehearsals?

	no. of schools	adequate	sometimes	not adequate
aud.-gym.	21	12	4	5
aud.	8	6	0	2
other	6	2	0	4
total	35			

Twenty-eight schools returned the drama questionnaire. Eighteen had combination auditoriums-gymnasiums. Those 18 showed an intensive use of their auditoriums-gymnasiums for a myriad of activities. Refer to Table 9.

The survey showed only a small minority of the schools, 19 per cent, with separate auditorium facilities. Evidently, district after district of this size had fallen for the lure of a false economy and had attempted to combine too many activities into one type of housing and thereby provided physical facilities which served none of the activities satisfactorily.

Table 9. Uses of combination auditoriums-gymnasiums

uses	no. of schools which used it: daily	tri-weekly	15-40 times	3-15 times	1-3 times
senior high athletic contests			3	14	
junior high athletic contests			5	10	
boys' athletic practice	13	1	2		
girls' athletic practice	4	4	3		
boys' physical education	4	7	4		
girls' physical education	2	11	2		
high school recess or breaks	3		4	1	
grade school recess	4		1		
three act play rehearsal		1	11	4	
three act play performance		2	1	14	
other dramatic activities			1	5	3
music rehearsals	3		3	6	1
music performances			1	5	8
other musical activities				2	3
junior-senior banquets					8
athletic banquets					7
other banquets					7
school assemblies			4	5	4
noon lunch	3			2	1
dances and school parties			1	7	7
school meetings				1	8
P.T.A. meetings				3	2
teachers' meetings					3
other purposes				2	2

The author tended to distrust the reliability of the opinion question, item 24, on the drama questionnaire. That item concerned the adequacy of stage lighting. The distrust was based upon the contention, stated before, that the person who answered the item quite often had had little or no training in dramatics. The author felt that their answers were honest, but that they were amateur opinions and not professional in nature.

The question on acoustics, which appeared on both questionnaires, was the one question which brought the most unanimous agreement. Apparently everyone could tell whether they could hear and understand what they heard. This was also the question which elicited the most comment, especially from the music directors. "Acoustics should be good from any position in the audience.", "Acoustics are of the utmost importance.", "The big thing I would want in an auditorium is good acoustics.", and "Should be built to reduce reverberation of sound." were a few of the comments. One dramatic director commented, "If you could only tell us what to do so we could hear in this kind of auditorium" (combination auditorium-gymnasium). The comments illustrated the importance placed upon the acoustical qualities of the physical facilities.

Written comments of the music directors were quite numerous, instructive, and often of a full page in length. The comments were solicited and they showed a wide dissatisfaction of directors in the area surveyed with the physical facilities in which they were working. Many of them objected strongly to interrupted rehearsals and limited space. Assorted remarks were also made upon the inadequacies of stage lighting, over-emphasis on athletics to the detriment of other activities, limited or no storage space for music and instruments, inadequate stage equipment, poor atmosphere for art work, no scenery, no permanent seating, and flat audience floors. In contrast, comments of the dramatic directors pertinent to the situation were almost non-existent. One director said, "There is a sad lack of any real stage equipment." His stage was in a combination auditorium-gymnasium. One said, "We have very good acoustics, and the stage is very sufficient in size." That was also in a combination auditorium-gymnasium. A third director wrote a page and a half letter criticizing the facilities and

neglected then to return the questionnaire.

One received the impression from looking over the questionnaires and the remarks upon them that the music directors had a far better affinity for the needs of the physical facilities than the dramatic directors did. On the part of the people who used them, there was certainly much dissatisfaction with the existing physical facilities in the area surveyed.

For a detailed breakdown of the questionnaire returns, item by item, the reader should consult the tabulated results in Appendix C.

Summary of the Problem

These problems were isolated and found to be common to District #56 and comparable schools in the same geographical area.

District #56 was burdened with a combination auditorium-gymnasium. Of the districts in the area, 65 per cent had combination auditoriums-gymnasiums.

District #56 had insufficient room upon the stage. It was found that in the area there was a wide variety of stages. Still, 68 per cent of the districts had stages less than 20 feet in depth, and 21 per cent had stages 25 feet or under in depth. Eleven per cent had prosceniums under 20 feet in width, and 25 per cent had prosceniums under 25 feet in width. Offstage right space was less than 11 feet for 89 per cent, and offstage left space was less than 11 feet for 93 per cent.

District #56 had no fly loft. Forty-six per cent of the districts in the area indicated that they had no fly loft.

District #56 had a hardwood floor upon the stage. Seventy-nine per cent of the other districts had hardwood floors upon the stage.

District #56 did not have an exit from the backstage area without going through the audience, and 14 per cent of the other districts were similar. Forty-three per cent of the districts did not have adequate, wide enough

stage doors.

District #56 had no spotlights, and 68 per cent of the other districts had none. District #56 had no floodlights. Seventy-one per cent of the other districts had no floodlights. District #56 did not have sufficient electrical outlets in the backstage area, and 39 per cent of the other districts did not consider that they had sufficient electrical outlets.

District #56 had poor acoustics in the auditorium-gymnasium. Fifty per cent of the other districts considered the acoustics poor, while 39 per cent just considered them satisfactory.

District #56 had a flat floor for the seating area, and 71 per cent of the other districts had flat floors.

District #56 was hindered with the multiple uses of the physical facilities by widely varying types of activities. That aspect was common in the other districts of the area.

District #56 used the auditorium-gymnasium for the activities of its instrumental and vocal groups. Thirty-four per cent of the other schools' instrumental groups conducted the majority of their rehearsals in the auditorium. Twenty-six per cent of the schools' vocal groups conducted the majority of their rehearsals in the auditorium. Eighty-four per cent of the schools' instrumental groups presented the majority of their performances in the auditorium. Eighty-one per cent of the schools' vocal groups presented the majority of their performances in the auditorium.

District #56 did not have adequate storage space for instruments and music. Forty-six per cent of the other schools said that no space was provided for adequate and efficient storage handy to the performance and rehearsal area of the auditorium.

District #56 did not have adequate space upon the stage to hold

performers for its instrumental rehearsals and performances. The same held true for 31 per cent of the other districts.

District #56 had conflicts in scheduling musical activities due to the multiple uses of the auditorium-gymnasium. Forty-one per cent of the other districts were faced with that difficulty.

In District #56 the auditorium-gymnasium area assigned for music rehearsals was unsatisfactory for uninterrupted music rehearsals. That was true for 31 per cent of the other districts.

The reader should remember that the above percentage figures were based on physical facilities of all types, whether gymnasium-auditorium, separate auditorium, or other types.

The above problems showed that existing facilities in District #56 and comparable districts hindered the attainment of educational objectives and did not serve the activities housed in them in a satisfactory manner. It was necessary to solve the above problems in order to reach the main objective of proposing a satisfactory solution to the problem of District #56.

STANDARDS AND PROPOSAL

Standards of Stage and Auditorium Planning

To determine a solution to the problems just listed, an investigation was made of the standards of stage and auditorium planning as proposed by recognized authorities in the field.

General. Lack of foresight and ignorance of the possible and probable uses of a school auditorium will be fatal limitations in anyone

connected with the planning of a school auditorium.[1]

It will be of especial importance to define first the activites the building will serve. The mistake of the economically limited district will be the tendency of attempting to include multiple and often conflicting activities in the same housing. Possibly compromises will have to be made, but those responsible should beware of compromising the housing into a completely ineffectual edifice that will serve no activity satisfactorily. Dramatics and music will be compatible activities, but athletics will not be compatible with either of them.[2] Alice Barrows stated, "It is practically impossible to make a satisfactory auditorium of a combined auditorium-gymnasium".[3] Also, the American Association of School Administrators commented, "It is generally agreed that the combined gymnasium-auditorium is undesirable, and that when such a combination is made, neither facility can be of maximum usefulness".[4] "Half a theatre is as bad pedagogically as half a play."[5] Once these activities are defined concretely the architect then will be able to work toward the planned objectives.

> The change and development in the form of school auditoriums is not primarily a problem of building technology. More, it is the clear, concise definitions of the functions an auditorium must fulfill...An architectural form can be devised to meet every need, as long as you foresee that need.[6]

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[1]Richard Southern, Proscenium and Sight-Lines, p. 25.

[2]A. S. Gillette, Planning and Equipping the Educational Theatre, National Thespian Society, p. 6-7.

[3]Alice Barrows and Lee Simonson, The School Auditorium as a Theatre, p. 33.

[4]American School Buildings, 27th Yearbook, American Association of School Administrators, p. 117.

[5]Harold Burris-Meyer and Edward C. Cole, Theatres and Auditoriums, p. 9.

[6]Irvin W. Blundell and Lawrence B. Perkins, "The School Auditorium-Its Purpose and Design", American School and University, 1953-'54, 25:276.

What will be the purpose of auditoriums or theatres? "Theatre is the gathering together of a group of people to witness a planned performance. It is materially non-productive, its values being entirely spiritual or cultural."[1] Therefore will be brought together two groups of complimentary people, the actors and the audience. The relationship between them will be simple. The audience will be there to see and hear what the actors perform. "The building affects directly and vitally the relationship between these two groups."[2] If the building will not allow, or will hinder greatly the audience to see and hear the performance, whether it will be a play or a musical presentation, then the entire purpose of the building will be defeated. The usefulness of the auditorium will be destroyed.

Standard 1. The uses of the auditorium must be clearly stated.

Standard 2. The purpose of the auditorium will be for the audience to see and hear the performance.

Front of the House. A sidewalk could lead up to a door in rear or the side of the audience area. Through this simple entrance the audience could come and go. Generally it will be desirable to have some sort of lobby or foyer, usually referred to as the front of the house, which will serve as an intermediate point between the outdoors and the seating area. It will be here that the audience will remove its wraps, purchase tickets, quench its thirst, or relax. The lobby should be attractive. Carefully designed, it can serve as a showroom for exhibitions.[3]

Standard 3. An entrance point, known as the front of the house, will be desired generally.

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[1]Burris-Meyer and Cole, op. cit., p. 1.
[2]Richard Leacroft, Civic Theatre Design, p. 38.
[3]Barrows and Simonson, op. cit., p. 48.

Audience Area. The number of audience seats that will be placed in the auditorium will be important. The smaller the number of seats, to a certain point, the more intimate and effective the auditorium will be. They will affect the cost of the auditorium. They will affect the size of the auditorium, and they will affect the acoustics of the auditorium. Most of those experienced with auditoriums recommended limited audience seating. Simonson recommended that the auditorium capacity should seat 500 or less to 750.[1] The American Association of School Administrators recommended a 300 to 500 seating capacity.[2] Leacroft stated that 700 should be the capacity limit.[3] Blundell and Perkins recommended around 500 as the maximum.[4]

The people occupying the seats will want to be able to see and see easily. A flat floor will be absurd.[5] The floor should be either ramped or tiered. The seats could be possibly either permanent or portable. There will be disadvantages to both. Portable seats would take some provision for storage immediately adjacent. Permanent seating will restrict the flexibility of the audience area. A ramped floor will be of little use with the seating removed from it. A tiered floor, particularly in the aisles, will constitute a hazard to safety.[6] If permanent, seating should be staggered so that one seat will not be directly behind another. Seating should not be too wide so that sightlines from the side will carry back into the wings.

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[1]Barrows and Simonson, op. cit., p. 40.
[2]American School Buildings, op. cit., p. 114.
[3]Leacroft, op. cit., p. 76.
[4]Blundell and Perkins, op. cit., p. 273.
[5]Marian Parsons Robinson, "Don'ts for Theatre Builders", Educational Theatre Journal, October 1951, 3:249-254.
[6]Gillette, op. cit., p. 8.

Caution should be exercised in the placement of aisles. A center aisle was definitely not recommended. Those will be the best seats in the house. An auditorium of limited seating capacity may allow the seating to stand as a block with the only aisles down the sides. Other alternatives will be continental seating and radial aisles.[1]

Carpeting, inexpensive though it may be, should be placed upon the aisles to aid acoustics and eliminate annoyance and distraction to the audience.

Audience comfort will be of prime importance. Not only will the audience want to see and hear easily. It will want to do so from a comfortable seat. Those responsible should allow adequate room between rows of seating, and allow adequate width in each seat. If portable seating will be used, those responsible should avoid the traditional "hard-as-a-rock" folding chair. "A dimension of 32 inches from back to back of chairs is a minimum for comfort and safety. Seat widths usually average 19 or 20 inches."[2] Gillette recommended 42 inches from back to back of chairs as the most useable.[3]

The distance from the back row of seats to the acting area should not be made too great. "Details of actor's make-up and facial expression are not plainly recognizable at distances of more than 50 feet from the stage."[4]

The seating area should be on the ground floor and as near the ground level as possible. This will allow easy accessibility and will

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[1]Burris-Meyer and Cole, op. cit., p. 34.
[2]American School Buildings, op. cit., p. 115.
[3]Gillette, loc. cit.
[4]Burris-Meyer and Cole, loc. cit.

be also a safety factor.[1]

Standard 4. Audience seating should be limited to 700. This will be a maximum. If the capacity can be reduced to 300 or 400, the auditorium will function more effectively.

Standard 5. The audience floor should be inclined either by ramping or tiering. Ramping will be much more preferable.

Standard 6. The audience seating should not be too wide. This will be necessary to avoid poor sight-lines.

Standard 7. Center aisles should be eliminated. If possible, all aisles should be eliminated and the seating left in a block.

Standard 8. Aisles should be carpeted.

Standard 9. Comfortable seating should be provided. Optimum width from back to back of seats was recommended to be 42 inches. Seat width should be 19 to 20 inches.

Standard 10. The distance from the back row of seats to the stage should not exceed 50 feet.

Standard 11. The audience seating should be on the ground floor.

Proscenium Wall Area. The physical link between the stage and the audience will be a very important matter. That will be one of the most crucial elements in the auditorium.[2] It will be common to think of it in terms of a raised stage level and its corresponding apron and a fixed proscenium wall with an opening covered with a curtain. This was not always so.

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[1] American School Buildings, loc. cit.
[2] Leacroft, op. cit., p. 64.

> History shows twenty-four centuries in which the picture frame was either non-existent or modified by the use of acting areas in front of it, against the last century and a quarter during which the proscenium developed in prominence.[1]

For example, English plays of the Elizabethan period were originally played with the audience seated on three sides of the stage and with the proscenium wall in the back. It was suggested that those concerned with the planning of an auditorium take note of the styles of production which have existed in the past and those which are coming into prominence today, such as theatre-in-the-round and horseshoe staging where the audience completely or partially surrounds the performers.[2] Many of those will call for some architectural contact between the audience and the stage more versatile than the fixed proscenium wall.[3] Serious consideration should be given to a flexible proscenium wall. With recommendations calling for a proscenium opening with a maximum of 32 feet in width and a minimum of 24 feet and a maximum of 20 feet in height, a flexible proscenium wall would allow the opening to be varied to suit the particular need.[4] This would allow also the entire proscenium wall to be swept aside and the entire open space used if it should be so desired. This also would suit many of the requirements of musical presentation, for instance, allowing space for massed bands i concert. "A proscenium which is variable according to requirements of several production types renders the auditorium more useful" to all concerned with its use.[5]

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[1]Burris-Meyer and Cole, op. cit., p. 79.
[2]Walden P. Boyle, Central and Flexible Staging, 117 p.
[3]Burris-Meyer and Cole, op. cit., p. 6.
[4]Barrows and Simonson, op. cit., pp. 40-43.
[5]Burris-Meyer and Cole, op. cit., p. 79.

Perhaps one way to accomplish a flexible proscenium would be with a series of sliding doors of the airplane hangar type.[1]

Whether it will be a fixed proscenium wall or a flexible proscenium wall, care should be taken that it, while aesthetically pleasing, is not over-elaborate in design so that it will vie with the performers for the audience's attention. Instead, the wall should center the attention of the audience upon the performer.

Stage height should be kept low. Perhaps it would be justifiable and desirable to reduce it to near to the floor level of the first row of audience seating. An orchestra pit should not be recommended. It will impose too great a barrier upon the intimacy necessary between the audience area and the stage area.[2]

Standard 12. The proscenium wall should be flexible in order that it may be changed to fit any style of production. If rigid, the proscenium opening should not be less than 24 feet in width.

Standard 13. Whether flexible or fixed, the proscenium wall should center the audience's attention upon the performance.

Standard 14. Stage height should be kept low.

Standard 15. An orchestra pit was not recommended in the auditorium of a small school district.

Stage Area. This will be the area where the performers execute what the audience attends to see and hear. The one word, which should always

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[1]Blundell and Perkins, op. cit., p. 276.
[2]American School Buildings, op. cit., p. 116.

be kept in mind when planning the stage area, will be space, free and unobstructed space. It will be imperative for a successful and useable auditorium. This point was repeated in the author's reading numerous times. For example: "The main point for any architect to bear always in mind is that the....most urgent requirement is uninterrupted and unlimited space, and then more uninterrupted space",[1] and another example:

> What we need in the theatre is a space for actors to act in, a space reserved for them where they may practice their immemorial art of holding the mirror up to nature. They will be able to move with ease to and from this space, they will be able to make their appropriate exits and entrances.[2]

The ideal shape for this space will be a flat rectangular surface free of any architectural features.[3] It will be upon this that the band or orchestra will assemble for concert, perhaps also for rehearsal. It will be upon this space that the vocal performers will assemble for rehearsals and performances. People, chairs, and instruments will take space. This will be the area where dramatic work will occur. Actors, props, and scenery will take space.

> However abstract staging may have occasionally become, no one has yet devised an abstract substitute for the tables, benches, couches, or chairs which players act on, in addition to all the other solid objects they handle, or act against.[4]

These things will occur in the shifting of scenery.

> The scenery space must be cleared of one set before the other can be brought into it. There must be storage space to accomodate all the sets. Paths of movement of scenery must be direct and clear of obstacles. The fewer the pieces into which

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[1]Leacroft, op. cit., p. 28.
[2]Robert Edmund Jones, The Dramatic Imagination, pp. 143-144.
[3]Leacroft, op. cit., p. 41.
[4]Barrows and Simonson, op. cit., p. 41.

> a set must be divided to strike it, and the fewer parts which must be fitted and joined to assemble it, the more rapid may be the scene shift and the better may be the scenery. Scenery occupies space when stored.[1]

The scenery storage referred to here was not a storage out of sight in some room or closet, but rather a simple leaning of scenery flats against the wall, a shoving of a sofa into a corner, and a rolling of a rug and placing it against a wall. The storage will have to occur outside of the acting area of the stage area. Performers, including musical, dramatic, and general program performers, will have to assemble out of the acting area and await their turn onstage. Space will rapidly become a premium commodity. It will not be a waste of finances to provide this space, which may appear to the non-initiated as unnecessary. It will be a vital necessity to the usefulness of the auditorium. An auditorium without it will be essentially more annoying than no auditorium at all.

A worthwhile experience will be for a person to visit a backstage area as a casual observer. It may be during any school performance or program. The observer could select the evening of open house for instance. Assembled backstage will be 9 students of the first and second grades. They will be demonstrating finger painting. Also this will necessitate easels, large paper sheets, and the colors. There will be 16 pupils of the third and fourth grades. They will have a routine without properties. The same will hold true for 24 fifth and sixth graders. The school band will be backstage with 35 members, each one with an instrument ranging from the tuba and bass drum to a pair of cymbals. In addition there will be music stands and music

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[1]Burris-Meyer and Cole, op. cit., p. 112.

folders. The mixed chorus will perform. Luckily, most of its members may be already assembled for the band. The same will be true for the girls' glee club and the quartette. Perhaps there will be a choral reading by 6 members of an English class. This will be a comparable open house program. There will be around 100 students in this stage area. This will not be the only night observation could be made. The performance of a full length play could be chosen with its assorted properties of chairs, stools, dart boards, buckets, plus the 12 performers and the scenery. Another choice could be the evening of an instrumental concert or a vocal performance. Any such program will serve its purpose. The observer will soon sense the necessity of space outside the acting area itself.

"The acting area of any stage should never be much more than one-third of its total area."[1] If there will be 300 square feet in the acting area, 12 feet by 25 feet, then there should be at least 600 square feet of free space out of this acting area. This will be mandatory. The stage area depth should never be less than 25 feet. The entire stage area width should be at least twice the width of the proscenium opening.[2]

The stage area floor should be completely flat in its entirety. There should be no steps either up or down anywhere upon its surface. Nothing in the form of pillars, radiators, railings, or anything else should be permitted to encroach upon the flatness and unbroken expanse of this stage area.

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[1]Barrows and Simonson, loc. cit.
[2]Ibid., p. 21.

The stage floor should be of soft materials, preferably long grained soft wood. This will be important in order that stage screws may be employed in the use of scenery.[1] Perhaps for maintenance purposes this soft wood may be covered with a neutral toned linoleum. It should be expected, though, that stage screws and perhaps other sharp objects will be driven into this surface. Above all, hardwood or concrete flooring should not be used.

The back wall of the stage area should be a smooth plaster surface free of any obstructions or openings such as radiators or windows. If left that way, it can be painted a light blue and used as a cyclorama. This would eliminate the expense of constructing a separate cyclorama. Both of the side walls should also be left as relatively free of obstructions and openings as possible in order that scenery and properties may be placed against them.[2]

A flying loft will be desirable, possibly not indispensible.[3] This should be decided only after careful consideration of its purpose and possible uses, and its additional cost. The cost may prove to be negligible. It should be studied closely. If it should be decided that it is a necessary asset, then 55 feet should be its absolute minimum in height.[4] Caution should be exercised about architecturally limiting the height of the flying loft. It will be better to build no loft, than to architecturally limit the versatility of it by constructing a partial and limited loft.

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[1] Ibid., p. 43
[2] Southern, op. cit., p. 49-54.
[3] Blundell and Perkins, op. cit., p. 275
[4] Barrows and Simonson, op. cit., p. 44-45.

A stage door should be planned that allows free, easy, and direct passage from the outdoors to the stage area with properties, scenery, portable risers, and any of the other numerous articles which it will be necessary to bring into the building. This door should be at least 6 feet in width and 10 feet in height. It may be situated in either of the side walls or in the backstage wall in either of the corners. It should never be placed toward the center of the backstage wall as this will destroy the uninterrupted sweep of the wall and its usefulness as a cyclorama wall.[1] The stage door should open to the outside onto a platform of standard truck bed level. There should be direct access from the street to this platform with vehicles.

Performers should be able to travel from the stage area to the front of the house without going through the audience area. They should not be boxed into the stage area with no means of escape. The simplest method of providing a route will be the stage door. Although this will be an outdoor route and undesirable in stormy weather, it will be acceptable. But the stage door must be there!

Standard 16. The stage area should be free and unobstructed space.

Standard 17. The space should be a rectangular surface with no architectural obstructions.

Standard 18. The acting area of the stage should never be more than one-third of the total area of the stage.

Standard 19. The stage area depth should never be less than 25 feet.

Standard 20. The stage area width should be at least twice the width

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[1]Ibid., p. 43.

of the proscenium opening.

Standard 21. The stage area floor should be entirely flat.

Standard 22. The stage area floor should be constructed of soft materials, preferably soft wood.

Standard 23. The back wall of the stage should be left unbroken by any architectural features.

Standard 24. The flying loft should never be less than 55 feet in height.

Standard 25. A stage door, at least 6 feet in width and 10 feet in height, should be provided in the backstage area.

Lighting. General visibility illumination in the auditorium should be so controlled that its intensity can be reduced to zero by the use of dimmers.

Adequate stage lighting and its control will be an utmost requirement of the auditorium. Oftentimes, out of a desire to economize, the stage lighting will be reduced to a row of footlights and a row of borderlights controlled by one or two dimmers. "Such a limited layout is almost worse than nothing at all."[1] It will do little more than provide visibility. Stage lighting should do much more than provide visibility. Its other very essential purpose will be to "affect the appearance of all the elements of the stage and by this power it becomes a determining element in the composition of a stage picture."[2] It will be just as important in the picture presented to the audience as the uniforms on the band members or the paint on the scenery.

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[1]Stanley Russell McCandless, A Method of Lighting the Stage, p. 10.
[2]Ibid., p. 11.

It was generally recommended that light should strike the acting area from a position in front of the acting area at an angle of 45 degrees.[1] This will necessitate making provision for positioning the spotlights somewhere immediately above the audience area or to the side, if the building should be narrow enough. In addition this position should be so constructed that changes in the placement and the color of the lights can be made during a performance without observation by the audience.

Floodlights, striplights, and borderlights should also be provided. Footlights would be desirable, but possibly not indispensible. Provision could be made for them by providing a concealable space in the stage floor into which portable striplights could be placed when desired.

Sufficient current outlets should be situated at each position so that individual control of each light may be maintained.[2]

Control of stage lighting is handled by dimmers which allow a change in the intensity of the lights by regulating the amount of current flowing to the lights. Sufficient controls should be provided to allow a wide versatility in the control of the lights. Individual controls, though, will not need to be provided for each light. Modern dimmers will be desired. "Dimmers with noisy snap switches are as primitive as a one-cyclinder motor in an automobile."[3] Dimmers should be of the reactance type as there will be no heat build-up in them and therefore no fire hazard. The control center should be stationed somewhere in front of the acting area so that the operator can see the performance for which he will be controlling the

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[1] Ibid., p. 55.
[2] Ibid., p. 115.
[3] Ibid., p. 11.

lights. This will be important.[1]

Each light should be equipped to handle a gelatin color medium. The gelatin color medium should be easily and quickly changeable on each light. Glass roundels or colored glass were not recommended because they will limit the possible range of colors, will be easily broken, and will be comparatively expensive.

All stage lighting and its controls should be completely and easily portable so that it may be moved about freely to suit the demands of each performance.[2] This will include footlights, borderlights, striplights, spotlights, and the control center. They should not be built into the architectural features of the building under any circumstances. Only space for the positioning of the lights and current outlets reaching this space should be fixed. A stage light or control fixed in position would be comparable to a man in an iron lung. Its usefulness would have been obliterated.[3]

All windows should be eliminated from any position in the stage or audience area. If placed there, they shall simply have to be covered in order to achieve satisfactory light control in the daylight hours. At night they serve no purpose other than ventilation. This can better be acquired by mechanical means. No windows coupled with mechanical ventilation control will prove to enhance the use value of the auditorium.[4]

Standard 26. All lights, including house lights, should be controlled with dimmers.

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[1]Ibid., p. 19-20.
[2]Robinson, op. cit., p. 254.
[3]McCandless, op. cit., p. 14.
[4]Blundell and Perkins, loc. cit.

Standard 27. Light from stage lights should strike the acting area from a position in front of the acting area at an angle of 45 degrees.

Standard 28. Stage lights should be so positioned that they may be handled during a performance without observation by the audience.

Standard 29. Floodlights, striplights, and borderlights should be provided.

Standard 30. Sufficient current outlets should be provided in accessible positions.

Standard 31. All light control should be handled by dimmers of the reactance type.

Standard 32. The control center for the lights should be positioned in front of the acting area.

Standard 33. Each light should be equipped to handle a gelatin color medium that could be quickly and easily changed.

Standard 34. All stage lighting and its controls should be completely and easily portable.

Standard 35. All windows should be eliminated from the audience and stage areas.

Acoustics. The audience will come to the auditorium to hear. They will want to hear without straining. They will want to hear only the performance and not noises from outside sources. Efficient acoustics will be a necessity in the auditorium. Such acoustics can be obtained in an auditorium of the limited seating capacity recommended previously.[1]

Reverberation, the bouncing of the sound from one surface to another,

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[1]Ibid., p. 273.

will be the biggest obstacle to overcome.[1] This will not be solved by modern amplification or loudspeaker systems. Those will merely compound the felony. "There is no satisfactory substitute for a direct unaided voice, effortlessly able to reach every person in the room."[2]

Materials to help throw the performers' voices or instrument sounds should be used at the front of the auditorium. At this position of the room brilliance and high reflectivity of sound will be needed. Deadening or absorbing materials should be used toward the back to stop bounce back toward the performer. Parallel surfaces should be avoided in the auditorium. The floor and ceiling should be sloped at different angles. The back wall should be broken. The side walls of the auditorium should not be parallel. Even if they are only slightly out of parallel, it will be good for the acoustics. The planes of the entire room should not be designed merely to avoid echoes, but rather as a positive aid to the carrying of the performer's voice.[3]

Acoustics will be an elusive problem. A suggestion was given to the author that unconcealed projecting architectural features will often aid the acoustics as well as reducing the total cost of the auditorium.[4] The effect of auditorium seats upon the acoustics should be watched. It is suggested that the available material in the field should be consulted during the planning step of an auditorium. Commercial Buildings, An Archi-

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[1]Robinson, op. cit., p. 252.
[2]Blundell and Perkins, loc. cit.
[3]loc. cit.
[4]Interview with staff member, William and Loebsack, Architects, Topeka, Kansas, June 19, 1957.

tectural Record Book should be read.[1] Therein the reader will find a check list of the steps to be taken in the consideration of acoustics in an auditorium and a discussion of acoustics giving many specific recommendations. It would be wise to consider consultation with an acoustical expert before auditorium designs are started. An auditorium without good hearing properties will not serve its function satisfactorily.

Standard 36. Efficient acoustics should be considered a necessity in an auditorium.

Standard 37. Reverberation of sound should be reduced.

Standard 38. Brilliance and high reflectivity should be provided at the front of the auditorium.

Standard 39. Deadening or absorbing materials should be provided at the back of the auditorium.

Standard 40. Parallel surfaces should be avoided in the auditorium.

Standard 41. An acoustical expert should be consulted in the planning of the auditorium.

Heating and Ventilation. No technical consideration of heating and ventilation will be given. As stated previously, mechanical ventilation will be much more desirable than windows. The essential requirement of heating and ventilation equipment will be that noise produced by its operation must not obtrude in the slightest degree upon the audience area. Nothing will be so distracting to an audience as the sudden beginning of operation of such equipment. It should be kept out of the audience area. Extreme care should be exercised upon this point.[2]

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[1] Commercial Buildings, An Architectural Record Book, p. 382 and 385.
[2] American School Buildings, loc. cit.

Close thought should be given to the possible inclusion of year-round air-conditioning equipment. Few things could contribute more to the audience comfort and the year-round usability of the auditorium. If funds should not be available at the time of the original start of construction of the auditorium, necessary architectural features should be included in order that the equipment may be installed at a later date.

Standard 42. Mechanical ventilation should be provided instead of windows.

Standard 43. Heating and ventilation equipment must operate quietly.

Standard 44. Air-conditioning equipment should be considered.

Scene Shop and Storage. Performances will need scenery and properties. Once again space will be required to house the activity as well as the tools used in the activity. The tools will be simple, usually the basic power tools, such as a power circular saw, a band saw, and a jig saw, and the basic hand tools, such as hammers, screw drivers, braces and bits, pliers, and squares. The primary requirement will be room enough to handle the scenery and properties and the construction thereof. The room should be high enough to accommodate scenery flats standing on end. The tallest flats will usually vary between 12 and 15 feet in height.[1]

Storage space will be necessary for properties and scenery. It will be economically impossible to destroy those. They will continually be remodeled and reused. Often they will be reused without remodeling. Such things as chairs, furniture, flats, portable platforms, risers, and podiums will be bulky. They will take space even while not in use.[2]

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[1]Leacroft, op. cit., p. 93.
[2]Ibid., p. 92.

Provision should be made for the painting and washing of scenery.[1] This will require the space, plus electrical and water outlets. Scene paint will be composed of dry colors mixed with warm water and warm glue binder. After use, these colors will be washed from the scenery to allow their being covered with another color. A floor drain will be necessary for the washing process. The wash area could be stationed outside of the building. However, this will limit its use in inclement weather.

The scene shop should be on the same level as the stage area.[2] It should also have direct access to the stage area.[3] This will be advisable for ease in shifting scenery and props from one area to the other. This will be a phenomena which will continually be occurring in the use of an auditorium. Also, if this area is closely allied with the stage area, it may be used for auxiliary offstage space during a performance.

If the scene shop is placed in proximity to the stage area, caution must be exercised about noise interference between the two when both will be in use simultaneously.[4]

Under no conditions should the scene shop or any of the storage area be allowed to encroach in any manner upon the stage area.

Standard 45. Space in the scene shop should be adequate to handle the scenery and properties and the construction thereof.

Standard 46. The ceiling of the scene shop should be high enough to handle flats at least 15 feet in height.

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[1]Leacroft, op. cit., p. 91.
[2]Robinson, op. cit., p. 253.
[3]Blundell and Perkins, op. cit., p. 275-276.
[4]Robinson, loc. cit.

Standard 47. Storage space should be provided in the scene shop for properties and scenery.

Standard 48. Provision should be made in the scene shop for the painting and washing of scenery.

Standard 49. The scene shop should be on the same level as the stage area.

Standard 50. The scene shop should have direct access to the stage area.

Standard 51. Noise interference between the stage area and the scene shop should be eliminated.

Accessibility from Central Building. It will be necessary that the school auditorium be immediately near the central building. Students and faculty will be moving from one to the other for assemblies, programs, and rehearsals. Also janitorial service will be necessary for the auditorium, and its closeness to the central building will aid the custodian in his duties. It will be in this central building that toilet facilities will already exist. Provision should be made, though, for the closing off of the auditorium and central building from each other when desired. The central building is the nerve center of the school system. The more accessible the auditorium is to it, the more the value of the auditorium will be.[1]

Standard 52. The school auditorium should be easily accessible to the central school plant.

Wash and Toilet Facilities. In the event the auditorium cannot be oriented satisfactorily to the central building to provide for the closing

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[1]American School Buildings, op. cit., p. 115.

off of one building from the other and still provide toilet facilities for the auditorium, auxiliary toilet facilities will have to be provided separately in the auditorium. They should be convenient to the audience.[1] It will be desirable to have at least wash facilities in the backstage area for the performers. These should not be situated in the space blocked off for the stage area.

Standard 53. Wash and toilet facilities should be provided for the auditorium.

Exterior and Interior. Since the auditorium will be a house which will be devoted extensively to art work, the exterior and interior appearance of it should be conducive to the promotion of that idea. It should not be overdone, though, so that the building itself will become the show rather than the performance within.

Standard 54. The exterior and interior of the auditorium should be aesthetically pleasing.

A Proposal for District #56

In order to solve the problems of District #56, it was proposed that District #56 should plan to provide eventually a school auditorium to aid in the attainment of the educational objectives of the District.

An auditorium roughly approximating the dimensions of a width of 50 feet and a length of 100 feet would house in the neighborhood of 400 permanent seats. Building costs were such that it should cost between $10.00 and $12.50 per square foot to construct a complete auditorium.[2]

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[1] loc. cit.

[2] Interview with staff member, Williamson and Loebsack, Architects, Topeka, Kansas, June 19, 1957.

This was the total construction cost of a finished building, including heating and plumbing. This would make a total area of 5000 square feet. This area would include roughly just the audience area and the acting area. No provision was made for a music room or a scene shop off to the side of the auditorium. Those perhaps would be somewhat cheaper to construct than the auditorium proper. This 5000 square feet of area was composed of housed, unobstructed space, except for whatever provision was made for a proscenium wall. This made the cost vary from $50,000.00 at $10.00 per square foot to $62,500.00 at $12.50 per square foot for the finished auditorium. If, with long range planning, the 2 mill building levy, which the state law allows, was levied against the present assessed valuation of $2,191,127.00, a yearly sum of $4,382.25 could be accumulated. It would take 15 years to raise $65,733.75, 14 years to raise $61,351.50, 12 years to raise $52,587.00, or 11 years to raise $48,204.75. In other words, the maximum total amount needed could be raised in 15 years at the most. There were two variables which should be taken into consideration. Assessed valuation could fall off and building costs could rise. Of course, the opposite could be possible, also. It was proposed that a school auditorium was financially feasible for District #56. It was proposed that long range financial planning be instituted to provide for the eventual construction of the auditorium.

For the school year 1956-1957, there were 72 students in the top four grades of District #56.[1] There were 295 persons in the entire

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[1] School Directory, loc. cit.

District from age 1 through age 17.[1] Those 295 persons, spread over a division of 17 grades, gave a little over 17 persons in each grade of school. Projecting those figures into the future showed that for the school year 1969-1970, or 12 years from 1957, there would be 68 pupils in the top four grades. That figure, of course, assumed that there would be no sudden influx of students from outside sources or no sudden loss of the persons appearing on 1957's census. It was impossible to project the student population beyond that point without pure prediction. With the 1969-1970 school year being only 4 less than the 1955-1957 school year, the figures indicated that the student population would remain relatively stable. It was proposed that, if the District wished to maintain its present educational standards, the future student population would justify the erection of a school auditorium.

It was proposed that the auditorium should be designed in accordance with the standards of stage and auditorium planning.

General. It was proposed that the uses of the auditorium must be clearly stated. The problem illustrated the multiplicity and diversity of uses of the combination auditorium-gymnasium. This was undesirable. It was proposed that musical activities and dramatic activities were compatible and should be provided physical facilities separate from gymnasium activities.

It was proposed that the auditorium should be designed so that the audience could see and hear the performance with ease.

Front of the House. It was proposed that an entrance point, simple in design, be provided for the auditorium.

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[1] School Census of District #56, Marshall County, Kansas, as of June 30, 1957.

Audience Area. The survey showed that 50 per cent of the schools' largest audience at any one time during the school year (excluding athletic events) was under 400 people. Twenty-five per cent of the schools' largest audience was under 500 people. Also, 82 per cent of the schools indicated that there were no events which could not be presented on successive days or nights if the audience size warranted it. District #56 was in an advantageous position on this point. Not only could the audience seating be small, but the limited size would still handle the number of people at any given event. It was proposed that the audience seating be limited to 400 seats, possibly even less. It should be remembered that popular events could be presented on more than one day or evening.

It was proposed that the audience area floor should be ramped with permanent seating installed upon it.

It was proposed that the audience seating should not be too wide.

It was proposed that the center aisles should be eliminated. The seating should be left in a block if possible.

It was proposed that the aisles should be carpeted with inexpensive, easily maintainable material.

It was proposed that comfortable seating should be provided with a width of 42 inches from the back of one seat to the back of the seat directly behind and in front of it. Seat width should be 20 inches.

It was proposed that the distance from the back row of seats to the stage should not exceed 50 feet.

It was proposed that the audience seating should be on the ground floor.

Proscenium Wall Area. It was proposed that the proscenium wall should be flexible.

It was proposed that the proscenium wall should not distract the audience's attention but should center it upon the performance.

It was proposed that the stage height above the audience area floor should be kept low.

While an orchestra pit would be a very useable feature at times, it was proposed that an orchestra pit should not be provided.

Stage Area. It was proposed that the stage area should be a flat, rectangular surface composed of free space without any architectural obstructions.

It was proposed that the stage area depth should be at least 30 feet.

It was proposed that the stage area width should be at least 60 feet.

It was proposed that the stage area floor should be completely flat for its entire width and for its entire depth.

It was proposed that the stage area floor should be constructed of soft wood.

It was proposed that the back wall of the stage area should be left unbroken by any architectural features.

It was proposed that a flying loft should be provided if it was at all financially possible.

It was proposed that a stage door, at least six feet in width and ten feet in height, should be provided in the backstage area.

Lighting. It was proposed that all lights, including house lights, should be controlled with dimmers.

It was proposed that the light from stage lights should strike the acting area from a position in front of the acting area at an angle of 45 degrees.

It was proposed that all stage lighting should be so positioned that it could be handled during a performance without observation by the audience.

It was proposed that floodlights, striplights, and borderlights should be provided. Concealable space should be provided on the forestage for the positioning of portable striplights.

It was proposed that sufficient current outlets should be provided in accessible positions.

It was proposed that all light control should be handled by dimmers of the reactance type.

It was proposed that the control center for the lighting should be positioned in front of the acting area. This could be accomplished with a portable light control board.

It was proposed that all stage lighting should be equipped to handle a gelatin color medium that could be quickly and easily changed.

It was proposed that all stage lighting and its controls should be completely and easily portable.

It was proposed that all windows should be eliminated from the audience and stage areas.

The conditions, which were stated for the stage lighting, were demanding. They could be met, though, if they were recognized. It was urgently requested, that if finances were not available at the time of the construction of the auditorium to supply the lighting equipment, that the lighting layout should not be compromised. It was proposed that it would be far better to completely plan an adequate lighting layout and to include the necessary features of that layout in the design of the auditorium. The equipment that

was to be utilized in that layout could be purchased at a later date.[1] In that manner the auditorium would eventually have a proper stage lighting layout.

Acoustics. It was proposed that efficient acoustics should be provided in the auditorium.

It was proposed that brilliance and high reflectivity should be provided at the front of the auditorium.

It was proposed that deadening or absorbing materials should be provided at the rear of the auditorium.

It was proposed that parallel surfaces should be avoided in the auditorium.

It was proposed that an acoustical expert should be consulted during the planning of the auditorium.

Heating and Ventilation. It was proposed that mechanical ventilation should be provided instead of windows.

It was proposed that heating and ventilation equipment must operate quietly.

It was proposed that air-conditioning equipment should be considered, and provision should be made for it in the architectural features of the auditorium.

The topics, audience area, proscenium wall area, stage area, lighting, acoustics, and heating and ventilation, were all essential features of a school auditorium. The topic, front of the house, was excluded. Coalesced into an architectural form they represented the heart of a school

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[1]Barrows and Simonson, op. cit., p. 48

auditorium. They could be varied according to the size of the building, but they should never be compromised. An architectural form, given those features under the conditions described, would serve the basic function of an auditorium, to assemble an audience in comparative comfort for the witnessing of a planned performance. It would allow the performance to be of a wide variety, musical, general program, or dramatic. It would allow the performance to be presented in the manner that was peculiar to it. Given those features, and nothing more, the auditorium would serve very effectively.

The following topics were auxiliary features, desirable, but not mandatory. It was proposed that great care should be taken that they did not infringe upon the space already requested and destroy the effectiveness of that space.

Scene Shop and Storage. It was not only economically wise, but also educationally wise, if the students built the scenery and properties themselves. Therefore, it was proposed that a scene shop be provided for the auditorium.

It was proposed that the space in the scene shop should be adequate to handle the scenery and properties and the construction thereof.

It was proposed that the ceiling of the scene shop should be high enough to allow the upright handling of scenery flats of 15 feet in height.

It was proposed that space should be provided in the scene shop for the storage of scenery and properties.

It was proposed that space should be provided in the scene shop for the painting and washing of scenery.

It was proposed that the scene shop should be on the same level and

have direct access to the stage area.

It was proposed that noise interference between the stage area and the scene shop should be eliminated.

Possibly the school shop could serve as the scene shop of the auditorium. However, this could prove to be unsatisfactory. Interference with regularly scheduled shop classes, inaccessibility to the stage area, difficulty and awkwardness in shifting properties due to different levels, and no storage space could be some of the difficulties that would be encountered. It was realized, though, that until funds were available, this might have to suffice.

Accessibility from Central Building. It was proposed that the school auditorium should be easily accessible to the central school plant.

Wash and Toilet Facilities. It was proposed that wash and toilet facilities should be provided for the auditorium.

Exterior and Interior. It was proposed that the appearance of the exterior and the interior of the auditorium should be conducive to art work.

Special Requirements of Music. The results of the survey showed that the problems of the music activities of District #56 were identical in nature with the problems of the other districts in the area. An overwhelming percentage of the performances of instrumental and vocal groups were held in the auditorium-gymnasium. All band rehearsals were held in the auditorium-gymnasium. Some vocal rehearsals were. Storage space was at a premium. Acoustics were poor. Music rehearsals were often interrupted or sometimes discontinued so that other uses could be made of the facilities There was barely room enough on the stage for band performances, although it was crowded upon there for rehearsals. All in all, the facilities were

unsuitable.

A school auditorium built upon the proposals stated above would be one solution to the problem. The flexible proscenium wall would solve the problem of space upon the stage for the performers. The hearing difficulties would be solved by proper acoustical treatment. The problem of storage and the rehearsal area remained.

Since it was highly debatable whether rehearsal in the auditorium area proper would be suitable or workable, it was proposed that a closely adjacent rehearsal room or rooms should be provided.

It was proposed that the room should be closely allied with the stage area for ease in moving to the stage area for dress rehearsal and performance.

It was proposed that space should be provided within the rehearsal room for adequate and efficient storage of instruments and music.

SUMMARY AND CONCLUSION

Summary

It was stated in the introduction to this thesis that attempting to do dramatic work of any consequence in District #56 was a definite problem due to the restrictions placed upon the scope of those activities by the existing physical facilities.

One objective of this thesis was to define specifically and clearly the problems of District #56. This was done. It was stated that District #56 was not able to meet its educational objectives in full measure due to the limited physical facilities of its gymnasium-auditorium.

An objective of this thesis was to determine the existing situation in comparable school systems in the same area of Kansas as District #56.

This objective was met by mailing a questionnaire to all of the school districts of comparable size in an area of northeastern Kansas roughly north of the Kansas River and east of the Blue River. The rivers were crossed in areas where the counties lay on both sides of the river. From the results of the survey it was found that the problems that applied to District #56 applied to many of the other districts.

Another objective was to establish from the existing literature in the field recommended standards of stage and auditorium planning. The purposes and functions of the various parts of the stage and auditorium were discussed, and fifty-four standards were established.

The final objective was to evaluate the information received and to propose a satisfactory and financially possible solution to the problems of District #56 from the standpoint of its dramatic activities. This evaluation led to the proposal of long range planning leading to the future construction of separate auditorium facilities designed in accordance with the established standards of stage and auditorium planning.

Conclusion

Perhaps other solutions to the problems of District #56 were feasible. If so, no attempt was made to explore them in this thesis.

It was fervently hoped that the thesis would serve the practical purpose, suggested in the title, of serving as a guide for the school administration in planning a flexible school auditorium for District #56. Regardless of the fulfillment of that purpose, the thesis did serve to establish for the author estimable knowledge in the field of auditorium planning, and perhaps more importantly, invaluable training in the

methodology of a systematic procedure toward the solution of a problem.

ACKNOWLEDGMENT

The author wishes to acknowledge the help and guidance rendered to him by his major instructor, Donald Hermes. His assistance will always be highly appreciated.

Thanks is extended to John Keltner, Forest Whan, and Charles Goetzinger for their aid.

Credit and thanks is directed to the author's wife, Barbara, for her help in the preparation and the typing of this thesis.

LITERATURE CITED

Books

American School Buildings, 27th Yearbook. Washington, D.C.: American Association of School Administrators, Dept. of N.E.A., 1949.

Boyle, Walden P. Central and Flexible Staging. Berkeley and Los Angeles: University of California Press, 1956.

Burris-Meyer, Harold and Edward C. Cole. Theatres and Auditoriums. New York: Reinhold, 1949.

Jones, Robert Edmund. The Dramatic Imagination. New York: Duell, Sloan and Pearce, 1941.

Leacroft, Richard. Civic Theatre Design. London: Dennis Dobson, 1949.

Lopez, Frank G., editor. Commercial Buildings, An Architectural Record Book. New York: F. W. Dodge, 1953.

McCandless, Stanley Russell. A Method of Lighting the Stage. Second edition. New York: Theatre Arts, 1939.

Southern, Richard. Proscenium and Sight-lines. London: Faber and Faber Limited, 1950.

Booklets

Evaluative Criteria, Cooperative Study of Secondary-School Standards, Sections D-12, E, and H. 1950 edition. Menasha, Wisconsin: George Banta Publishing Co., 1950.

Gillette, A. S. Planning and Equipping the Educational Theatre. Cincinnati: National Thespian Society, 1945.

Government and State Publications

Barrows, Alice and Lee Simonson. The School Auditorium as a Theatre. United States Department of the Interior Bulletin 4. Washington: Government Printing Office, 1939.

Swoboda, Joseph F., co. supt. School Directory, Public Schools of Marshall County, Kansas 1956-1957. Marysville, Kansas.

Periodicals

Blundell, Irvin W. and Lawrence B. Perkins. "The School Auditorium - Its Purpose and Design." American School and University, American School Publishing Corp., 1953-1954, 25:271-276.

Robinson, Marian Parsons. "Don'ts for Theatre Builders." Educational Theatre Journal, October 1951, 3:249-254.

APPENDIX

APPENDIX A

Questionnaire

Questionnaire (Music)

I. GENERAL

1. Name of the school _____ 2. County _____
3. Type of school district: (check) Rural High ___; Common ___; County-Community ___; 2nd Class City ___.

II. EXISTING AUDITORIUM FACILITIES

4. Type of auditorium facilities school district has: (check)
   Regular auditorium with permanent seating ___.
   Combination auditorium-gymnasium designed primarily for gym purposes with stage at end or side ___.
   Study hall or library with stage at end or side ___.
   Permanent auditorium seating with stage and gym floor incorporated as one ___.
   School uses facilities not belonging to the district ___;(Please explain.) _____
   _____.
   None available ___.
   Other ___; (Please explain.) _____.

III. MUSIC ACTIVITIES

5. The school has: (check) Band ___; Number of members ___. Orchestra ___; Number of members ___. Choral ___; Number of members ___. Operetta ___; Number of members ___.

IV. MUSIC FACILITIES

6. The school's instrumental groups conduct the majority of their rehearsals in the auditorium. Yes ___; No ___.
7. The school's vocal groups conduct the majority of their rehearsals in the auditorium. Yes ___; No ___.
8. The school's instrumental groups present the majority of their performances in the auditorium. Yes ___; No ___.
9. The school's vocal groups present the majority of their performances in the auditorium. Yes ___; No ___.

(IF THE ANSWER TO ANY ONE OF THE ABOVE FOUR QUESTIONS IS "YES", PLEASE ANSWER THE FOLLOWING.)

10. Space is provided for adequate and efficient storage of instruments and music handy to the performance and rehearsal area of the auditorium. Yes ___; No ___; Sometimes ___.
11. Space upon the stage area is adequate to hold performers for the vocal performances and rehearsals which your school holds without crowding the performers. Yes ___; No ___; Sometimes ___.
12. Space upon the stege area is adequate to hold performers for the instrumental performances and rehearsals which your school holds without crowding the performers. Yes ___; No ___; Sometimes ___.
13. For rehearsals the acoustics are excellent ___; satisfactory ___; poor ___.
14. For performances the acoustics are excellent ___; satisfactory ___; poor ___.
15. Do you have conflicts in scheduling your musical activities due to the multiple uses of your auditorium? Yes ___; No ___.
16. According to your judgment, is the auditorium area assigned to you satisfactory for uninterrupted music rehearsals? Yes ___; No ___.

(IF THE ANSWER TO THE PRECEDING QUESTION IS "NO", PLEASE EXPLAIN SOME OF THE LIMITING FACTORS ON THE BACK OF THIS SHEET.)

V. ALSO ON THE BACK OF THIS SHEET PLEASE COMMENT UPON ANY ITEMS THAT YOU WOULD CONSIDER NECESSARY IN A SCHOOL AUDITORIUM DESIGNED PRIMARILY FOR MUSIC AND DRAMATIC REHEARSALS AND PERFORMANCES AND GENERAL PROGRAM PRESENTATION TO AN AUDIENCE. THANK YOU VERY MUCH FOR YOUR TROUBLE.

RETURN TO:
Wayne Fernkopf
Box 66
Axtell, Kansas

Questionnaire (Drama)

I. GENERAL

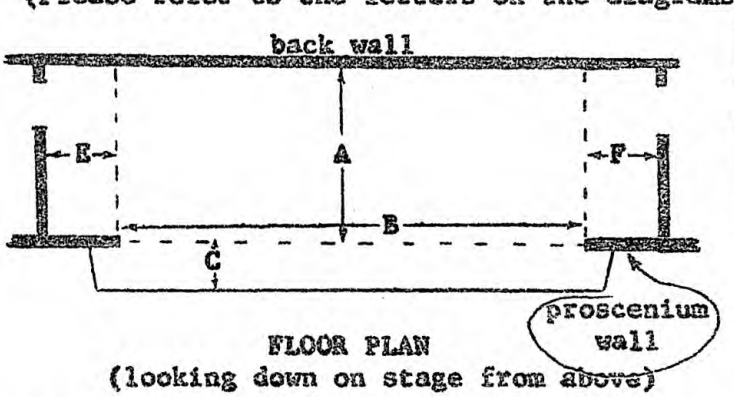
1. Name of the school _____ 2. County _____
3. Type of school district: (check) Rural High ___; Common ___; County-Community ___; 2nd Class City ___.
4. Number of students enrolled in upper four (9 thru 12) grades on Sept. 15, 1956: _____.

II. EXISTING AUDITORIUM FACILITIES

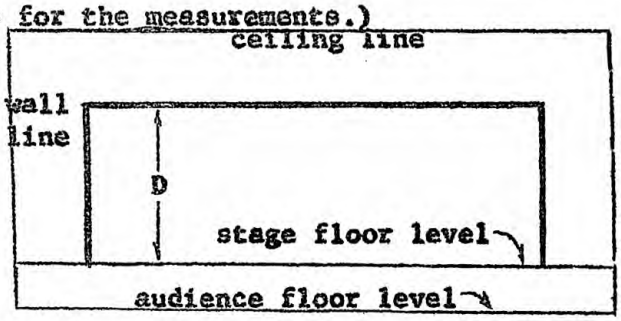
5. Type of auditorium facilities school district has: (check)
   Regular auditorium with permanent seating ___.
   Combination auditorium-gymnasium designed primarily for gym purposes with stage at end or side ___.
   Study hall or library with stage at end or side ___.
   Permanent auditorium seating with stage and gym floor incorporated as one ___.
   School uses facilities not belonging to the district ___;(Please explain)_____
   _____.
   None available ___.
   Other ___;(Please explain) _____.

III. STAGE AREA

(Please refer to the letters on the diagrams for the measurements.)



FLOOR PLAN
(looking down on stage from above)



ELEVATION
(looking at stage opening from audience)

6. Depth of stage: (line A) ___ft.
7. Width of stage: (line B) ___ft.
8. Depth of apron: (line C) ___ft.
9. Height of proscenium arch: (line D) ___ft.
10. Offstage space on stage right: (line E) ___ft.
11. Offstage space on stage left: (line F) ___ft.
12. Is there a front curtain? Yes ___; No ___.
13. Is there a back curtain? Yes ___; No ___.
14. Are the curtains, except the front curtain, easily adjustable upwards so that their full length (line D) can be drawn above the audience's sight? Yes ___; No ___.
15. The stage floor is constructed of (check) softwood ___; hardwood ___; other soft materials ___; other hard materials ___.
16. The back wall of the stage is a smooth surface: (Answer "No" if wall is obstructed with window or door openings or radiators, etc. upon it.) Yes ___; No ___.
17. There are exits from the backstage area without going through the audience: Yes ___;No ___
18. There are adequate, wide enough doors provided to reach the backstage area with physical properties from the outdoors.: Yes ___; No ___.

IV. STAGE LIGHTS

(Check the ones you have and then the other things about them that apply.)

19. Border lights ___: Open trough ___; Individual ___; Can be covered easily with a colored gelatin ___; Use colored glass ___; Controlled with snap switch panel ___; or fixed dimmers ___; or portable dimmers ___.
20. Foot lights ___: Open trough ___; Individual ___; Can be covered easily with a colored gelatin ___; Use colored glass ___; Controlled with snap switch panel ___; or fixed dimmers ___; or portable dimmers ___.
21. Spot lights ___: Hung on stage ___; Hung in auditorium ___; Equipped to handle colored gelatin ___; Equipped with irises to control the size of the light ___; Portable ___; Not portable ___; Controlled with snap switch panel ___; or fixed dimmers ___; or portable dimmers ___.
22. Flood lights ___: Hung on stage ___; Hung in auditorium ___; Equipped to handle colored gelatin ___; Portable ___; Not portable ___; Controlled with snap switch panel ___; or fixed dimmers ___; or portable dimmers ___.
23. Are there sufficient electrical outlets in the backstage area? Yes ___; No ___.
24. Do you consider the lighting equipment reasonably adequate for the uses that the school might make of lighting? Yes ___; No ___.

V. ACOUSTICS

25. The auditorium is acoustically treated by the use of soundproofing materials. Yes ___; No ___: It has baffles ___; drapes ___; other extensive soundproofing measures ___.
26. The acoustics of the building are efficient enough so that any voice, reasonably projected, can be heard easily in any part of the audience. Yes ___; No ___.
27. Do you consider the acoustics excellent ___; Satisfactory ___; Poor ___?

VI. AUDIENCE AREA

28. Are the audience seats permanent ___; portable ___; or a combination ___?
29. Is the floor of the audience seating area flat ___; ramped ___; tiered ___?
(ANSWER THE FOLLOWING QUESTIONS ONLY IF SEATING IS PERMANENT.)
30. Is the seating straight ___; staggered ___?
31. Is it as easy for the person in the middle or the back of the audience to see the stage as the person in the front? Yes ___; No ___.
32. Are the rows too close together for comfort? Yes ___; No ___.
33. Are the seats too close together for comfort? Yes ___; No ___.
34. Are the sightlines from the outside, front edge of the seating too wide so that it is difficult to keep the audience from seeing into the backstage area? Yes ___; No ___.

VII. USES OF THE AUDITORIUM

(Please check below the activities and performances which occur in your auditorium during the school year. Some of these may not occur each year but please check them if they are apt to occur once every three years.)

	Is Used For	NUMBER OF TIMES PER YEAR SO USED: Daily	Tri-Weekly	15-40 Times	3-15 Times	1-3 Times
ATHLETIC CONTESTS						
35. Senior high basketball	___	___	___	___	___	___
36. Junior high basketball	___	___	___	___	___	___
37. _____	___	___	___	___	___	___
38. _____	___	___	___	___	___	___
ATHLETIC PRACTICE						
39. Boys'	___	___	___	___	___	___
40. Girls'	___	___	___	___	___	___

(CONTINUED ON PAGE 3.)

VII. USES OF THE AUDITORIUM (Continued)

	Is Used For	NUMBER OF TIMES PER YEAR SO USED				
		Daily	Tri-Weekly	15-40 Times	3-15 Times	1-3 Times
PHYSICAL EDUCATION						
41. Boys' classes	___	___	___	___	___	___
42. Girls' classes	___	___	___	___	___	___
RECESS OR BREAK PERIODS ON INCLEMENT DAYS (Include noon hour)						
43. High School	___	___	___	___	___	___
44. Junior High School	___	___	___	___	___	___
45. Grade School	___	___	___	___	___	___
THREE ACT PLAYS						
46. Rehearsal periods	___	___	___	___	___	___
47. Performances	___	___	___	___	___	___
Other dramatic activities:						
48. _____	___	___	___	___	___	___
MUSIC						
49. Rehearsals	___	___	___	___	___	___
50. Performances	___	___	___	___	___	___
Other music activities:						
51. _____	___	___	___	___	___	___
BANQUETS						
52. Junior-Senior	___	___	___	___	___	___
53. Athletic	___	___	___	___	___	___
54. _____	___	___	___	___	___	___
OTHER						
55. School assemblies	___	___	___	___	___	___
56. Noon hour lunch	___	___	___	___	___	___
57. Dances and school parties	___	___	___	___	___	___
58. Annual school meetings	___	___	___	___	___	___
59. PTA meetings	___	___	___	___	___	___
60. Teachers' meetings	___	___	___	___	___	___
Other uses (Please explain):						
61. _____	___	___	___	___	___	___
62. _____	___	___	___	___	___	___

VIII. SIZE OF AUDIENCE

63. Please estimate the largest number of people that have congregated in your auditorium at any one time in the school year. (Exclude athletic events) ____ people.
64. Please estimate the largest number of people that have congregated in your auditorium at any one time in the school year for a play performance. ____ people.
65. Please estimate the largest number of people that have congregated in your auditorium at any one time in the school year for a musical performance. ____ people.
66. Are there any events (exclude athletic) that occur in your auditorium that could not be presented on successive nights or days if the audience size warranted it. Yes _;No _.
67. If you answered the last question "Yes", please name those events below.

_____ _____ _____

PLEASE MAKE ANY COMMENTS THAT YOU WISH. THANK YOU VERY MUCH!

RETURN TO:

Wayne Fernkopf
Box 66
Axtell, Kansas

APPENDIX B

Schools Receiving Questionnaire

School	County	School	County
Auburn	Shawnee	Linwood	Leavenworth
Baileyville	Nemaha	Mayetta	Jackson
Basehor	Leavenworth	McLouth	Jefferson
Beattie	Marshall	Meriden	Jefferson
Bern	Nemaha	Netawaka	Jackson
Berryton	Shawnee	Nortonville	Jefferson
Blue Rapids	Marshall	Onaga	Pottawatomie
Centralia	Nemaha	Oskaloosa	Jefferson
Circleville	Jackson	Perry	Jefferson
Corning	Nemaha	Piper	Wyandotte
Denison	Jackson	Powhattan	Brown
Denton	Doniphan	Reserve	Brown
Dover	Shawnee	Robinson	Brown
Easton	Leavenworth	Rossville	Shawnee
Elwood	Doniphan	St. Benedict	Nemaha
Everest	Brown	St. George	Pottawatomie
Fairview	Brown	St. Mary's	Pottawatomie
Frankfort	Marshall	Seneca	Nemaha
Havensville	Pottawatomie	Silver Lake	Shawnee
Highland	Doniphan	Soldier	Jackson
Horton	Brown	Tonganoxie	Leavenworth
Hoyt	Jackson	Troy	Doniphan
Lansing	Leavenworth	Vermillion	Marshall

School	County	School	County
Waterville	Marshall	Wetmore	Nemaha
Wathena	Doniphan	Whiting	Jackson
Westmoreland	Pottawatomie	Winchester	Jefferson

APPENDIX C

Tabulation Sheets

	2 Gym	4 Gym	2 Gym	1 Aud[1]	1 Aud	2 Aud	2 Oth[2]	1 Oth	1 Oth	12 All Types[5]	28 Total
stage room adequate to hold vocal performers	yes	yes	som[4]	no	no	yes	yes	yes	no	no info	
stage room adequate to hold instrumental perf.	yes	no	som	no	yes	yes	yes	no	no	no info	
questionnaire item											
6. Stage depth											
10'-14'							1		1	4	6
15'-19'	1	2	2	1	1		1	1		4	13
20'-25'	1					2				3	6
over 25'		2								1	3
no info[3]											0
7. Stage width											
under 20'									1	2	3
20'-24'		2		1			1			3	7
25'-29'	1	1			1					1	4
30'-34'		1	2			1		1		2	7
35'-40'						1	1			3	5
over 40'	1									1	2
no info											0
8. Apron depth											
0'-11"			1							1	2
1'-1'11"	1					1				3	5
2'-2'11"		1					1	1		2	5
3'-3'11"	1	2	1	1	1	1			1	3	11
4'-6'		1					1			3	5
no info											0
9. Proscenium height											
under 10'		1	1						1	1	4
10'-14'	1	1				1	1	1		7	12
15'-20'	1	1	1		1	1				1	6
over 20'		1					1			1	3
no info				1						2	3

[1] Auditorium
[2] Other types of facilities
[3] Information
[4] Sometimes
[5] There were 12 schools, 10 gyms, 2 other, which either did not return a music questionnaire, 4, or gave no answer as to vocal adequacy or instrumental adequacy, 8.

	2 Gym	4 Gym	2 Gym	1 Aud	1 Aud	2 Aud	2 Oth	1 Oth	1 Oth	12 All Types	28 Total
stage room adequate to hold vocal performers	yes	yes	som	no	no	yes	yes	yes	no	no info	
stage room adequate to hold instrumental perf.	yes	no	som	no	yes	yes	yes	no	no	no info	
questionnaire item											
10. Offstage space, stage right											
under 2'		1									1
2'-4'	1	2	1	1		1				6	12
5'-10'	1	1	1		1	1	1	1		5	12
over 10'							1		1		2
no info										1	1
11. Offstage space, stage left											
under 2'		1									1
2'-4'	1	2	1	1		1				6	12
5'-10'	1	1	1		1	1	1	1	1	5	13
over 10'							1				1
no info										1	1
12. Front stage curtain											
yes	2	4	2	1	1	2	2	1	1	12	28
no											0
no info											0
13. Back curtain											
yes	2	4		1	1	1	1	1		10	21
no			2			1	1		1	2	7
no info											0
14. Adjustable upward for full length											
yes	2	2		1		2	2	1		5	15
no		2	2		1				1	7	13
no info											0
15. Type of stage floor material											
softwood			1		1				1	2	5
hardwood	1	4	1	1		2	2	1		10	22
other soft											0
other hard	1										1
16. Backstage wall is a smooth surface											
yes	2	1	1		1		1	1		4	11
no		3	1	1		2	1		1	8	17
no info											0
17. Exits from backstage area											
yes	2	4	1			2	2	1		12	24
no			1	1	1				1		4
no info											0
18. Adequate, wide enough doors to reach backstage from outdoors											
yes	1		1			2	1	1		10	16
no	1	4	1	1	1		1		1	2	12
no info											0

	12 Gym	6 Gym	3 Aud	1 Aud	4 Oth	2 Oth	28 Total
lighting equipment reasonably adequate	yes	no	yes	no	yes	no	
questionnaire item							
19. Had borderlights	6	3	2	0	4	1	16
open trough	3	2	2	0	3	1	11
individual	1	0	0	0	1	0	2
used colored gelatin	1	0	0	0	0	0	1
used colored glass	3	0	0	0	2	0	5
had snap switches	5	2	2	0	3	1	13
had fixed dimmers	1	0	0	0	1	0	2
had portable dimmers	0	0	0	0	0	0	0
20. Had footlights	11	6	3	1	4	2	27
were open trough	8	3	3	1	4	2	21
were individual	1	0	0	0	0	0	1
used colored gelatin	1	0	0	0	1	0	2
used colored glass	3	1	0	1	2	0	7
had snap switches	10	5	2	1	3	1	22
had fixed dimmers	1	0	0	0	1	0	2
had portable dimmers	0	0	0	0	0	0	0
21. Had spotlights	6	1	0	0	1	1	9
hung on stage	4	1	0	0	1	1	7
hung in auditorium	0	0	0	0	0	0	0
used colored gelatin	1	0	0	0	0	0	1
had irises	0	0	0	0	0	0	0
were portable	2	0	0	0	0	0	2
were not portable	0	0	0	0	1	0	1
had snap switches	1	1	0	0	0	0	2
had fixed dimmers	1	0	0	0	1	0	2
had portable dimmers	0	0	0	0	0	0	0
22. Had floodlights	4	2	0	0	4	0	8
hung on stage	3	1	0	0	2	0	6
hung in auditorium	0	0	0	0	0	0	0
used colored gelatin	1	0	0	0	0	0	1
were portable	1	0	0	0	0	0	1
were not portable	1	0	0	0	2	0	3
had snap switches	3	2	0	0	0	0	5
had fixed dimmers	1	0	0	0	1	0	2
had portable dimmers	0	0	0	0	0	0	0
23. Sufficient electrical outlets yes	11	2	2	0	2	0	17
no	1	4	1	1	2	2	11
no info	0	0	0	0	0	0	0
24. Lighting equipment adequate yes	12	0	3	0	4	0	19
no	0	6	0	1	0	2	9
no info	0	0	0	0	0	0	0

	1 Gym	2 Gym	1 Gym	3 Gym	6 Gym	1 Aud	1 Aud	1 Aud	2 Oth	2 Oth	8 All Types[4]	28 Total
drama acoustics	E[1]	S[2]	S	P	P	P	S	S	E	S	no info	
music acoustics	E	P[3]	S	S	P	S	P	S	S	S	no info	
questionnaire item												
25. The auditorium is acoustically treated												
yes	0	0	1	2	1	0	0	0	1	1	2	8
it had baffles	0	0	0	0	1	0	0	0	0	0	1	2
drapes	0	0	0	0	1	0	0	0	0	0	2	3
other material	0	0	1	2	0	0	0	0	0	0	0	3
no	1	2	0	1	5	1	1	0	0	1	6	18
no info	0	0	0	0	0	0	0	1	1	0	0	2
26. Acoustics were efficient												
yes	1	0	1	0	1	0	1	1	2	2	5	14
no	0	1	0	3	5	1	0	0	0	0	2	12
no info	0	1	0	0	0	0	0	0	0	0	1	2
27. Acoustics were												
excellent	1	0	0	0	0	0	0	0	2	0	0	3
satisfactory	0	2	1	0	0	0	1	1	0	2	4	11
poor	0	0	0	3	6	1	0	0	0	0	4	14

questionnaire item		18 Gym	4 Aud	6 Other	28 Total
28. Audience seats were	permanent	0	4	3	7
	portable	9	0	2	11
	combination	9	0	1	10
29. Audience seating area floor was	flat	17	0	3	20
	ramped	0	4	1	5
	tiered	0	0	1	1
	no info	1	0	1	2
30. Seating was	straight	3	2	3	8
	staggered	0	1	1	2
	no info	15	1	2	18
31. Person in middle of back of audience could see easily.					
	yes	3	2	3	8
	no	2	2	1	5
	no info	13	0	2	15
32. Rows were too close together for comfort.	yes	1	0	1	2
	no	3	4	3	10
	no info	14	0	2	16

[1]Excellent
[2]Satisfactory
[3]Poor
[4]There were four schools which failed to answer either the drama acoustics question or the music acoustics question. There were four schools which did not have a music questionnaire which corresponded with the drama questionnaire.

questionnaire item		18 Gym	4 Aud	6 Other	28 Total
33. Seats were too close together for comfort.	yes	0	0	1	1
	no	3	4	3	10
	no info	15	0	2	17
34. Sightlines were too wide.	yes	1	3	1	5
	no	3	1	3	7
	no info	14	0	2	16
35. Auditorium used for senior high basketball	daily	0	0	0	0
	tri-weekly	0	0	0	0
	15-40 times per year	3	0	1	4
	3-15 times per year	14	0	2	16
	1-3 times per year	0	0	0	0
36. Auditorium used for junior high basketball	daily	0	0	0	0
	tri-weekly	0	0	1	1
	15-40 times per year	5	0	0	5
	3-15 times per year	10	0	0	10
	1-3 times per year	1	0	0	1
37. Auditorium used for other athletic contests	daily	0	0	0	0
	tri-weekly	0	0	0	0
	15-40 times per year	0	0	0	0
	3-15 times per year	2	0	1	3
	1-3 times per year	1	0	0	1
39. Auditorium used for boys' athletic practice	daily	13	0	3	16
	tri-weekly	1	0	0	1
	15-40 times per year	2	0	0	2
	3-15 times per year	0	0	0	0
	1-3 times per year	0	0	0	0
40. Auditorium used for girls' athletic practice	daily	4	0	2	6
	tri-weekly	4	0	0	4
	15-40 times per year	3	0	0	3
	3-15 times per year	0	0	0	0
	1-3 times per year	0	0	0	0
41. Auditorium used for boys' physical education	daily	4	0	3	7
	tri-weekly	7	0	0	7
	15-40 times per year	4	0	0	4
	3-15 times per year	0	0	0	0
	1-3 times per year	0	0	0	0
42. Auditorium used for girls' physical education	daily	2	0	3	5
	tri-weekly	11	0	0	11
	15-40 times per year	2	0	0	2
	3-15 times per year	0	0	0	0
	1-3 times per year	0	0	0	0
43. Auditorium used for high school recess	daily	3	0	3	6
	tri-weekly	0	0	0	0
	15-40 times per year	4	0	0	4
	3-15 times per year	1	0	0	1
	1-3 times per year	0	0	0	0

questionnaire item		18 Gym	4 Aud	6 Other	28 Total
44. Auditorium used for junior high recess	daily	1	0	0	1
	tri-weekly	0	0	0	0
	15-40 times per year	1	0	0	1
	3-15 times per year	0	0	0	0
	1-3 times per year	0	0	0	0
45. Auditorium used for grade school recess	daily	4	0	0	4
	tri-weekly	0	0	0	0
	15-40 times per year	1	0	0	1
	3-15 times per year	0	0	0	0
	1-3 times per year	0	0	0	0
46. Auditorium used for three-act play rehearsal	daily	0	1	0	1
	tri-weekly	1	0	0	1
	15-40 times per year	11	3	5	19
	3-15 times per year	4	0	0	4
	1-3 times per year	1	0	1	2
47. Auditorium used for three-act play performance	daily	0	0	0	0
	tri-weekly	0	0	0	0
	15-40 times per year	2	0	0	2
	3-15 times per year	1	2	2	5
	1-3 times per year	14	1	4	19
48. Auditorium used for other dramatic activities	daily	0	0	0	0
	tri-weekly	0	0	0	0
	15-40 times per year	1	1	1	3
	3-15 times per year	5	0	0	5
	1-3 times per year	3	1	1	5
49. Auditorium used for music rehearsals	daily	3	2	3	8
	tri-weekly	0	0	0	0
	15-40 times per year	3	0	0	3
	3-15 times per year	6	0	3	9
	1-3 times per year	1	1	0	2
50. Auditorium used for music performances	daily	0	0	0	0
	tri-weekly	0	0	0	0
	15-40 times per year	1	0	0	1
	3-15 times per year	5	2	3	10
	1-3 times per year	8	1	3	12
51. Auditorium used for other music activities	daily	0	0	0	0
	tri-weekly	0	0	0	0
	15-40 times per year	0	0	0	0
	3-15 times per year	2	0	0	2
	1-3 times per year	3	0	1	4
52. Auditorium used for junior-senior banquets	daily	0	0	0	0
	tri-weekly	0	0	0	0
	15-40 times per year	0	0	0	0
	3-15 times per year	0	0	0	0
	1-3 times per year	8	0	3	11

questionnaire item		18 Gym	4 Aud	6 Other	28 Total
53. Auditorium used for athletic banquets	daily	0	0	0	0
	tri-weekly	0	0	0	0
	15-40 times per year	0	0	0	0
	3-15 times per year	0	0	0	0
	1-3 times per year	7	0	3	10
54. Auditorium used for other banquets	daily	0	0	0	0
	tri-weekly	0	0	0	0
	15-40 times per year	0	0	0	0
	3-15 times per year	0	0	0	0
	1-3 times per year	7	0	0	7
55. Auditorium used for school assemblies	daily	0	0	1	1
	tri-weekly	0	0	0	0
	15-40 times per year	4	1	1	6
	3-15 times per year	5	2	2	9
	1-3 times per year	4	0	0	4
56. Auditorium used for noon-hour lunch	daily	3	0	0	3
	tri-weekly	0	0	0	0
	15-40 times per year	0	0	0	0
	3-15 times per year	2	0	0	2
	1-3 times per year	1	0	0	1
57. Auditorium used for dances and school parties	daily	0	0	0	0
	tri-weekly	0	0	0	0
	15-40 times per year	1	0	1	2
	3-15 times per year	7	0	1	8
	1-3 times per year	7	0	2	9
58. Auditorium used for annual school meetings	daily	0	0	0	0
	tri-weekly	0	0	0	0
	15-40 times per year	0	0	0	0
	3-15 times per year	1	0	0	1
	1-3 times per year	8	2	3	13
59. Auditorium used for P.T.A. meetings	daily	0	0	0	0
	tri-weekly	0	0	0	0
	15-40 times per year	0	0	0	0
	3-15 times per year	3	1	1	5
	1-3 times per year	2	0	0	2
60. Auditorium used for teachers' meetings	daily	0	0	0	0
	tri-weekly	0	0	0	0
	15-40 times per year	0	0	0	0
	3-15 times per year	0	0	2	2
	1-3 times per year	3	0	1	4
61. Auditorium used for other uses	daily	0	1	0	1
	tri-weekly	0	0	0	0
	15-40 times per year	0	0	2	2
	3-15 times per year	2	0	0	2
	1-3 times per year	2	0	0	2

questionnaire item		18 Gym	4 Aud	6 Other	28 Total
63. Largest audience congregated at any one time was					
	below 200	1	0	0	1
	200-299	5	1	1	7
	300-399	4	1	1	6
	400-500	5	1	1	7
	above 500	2	0	3	5
64. Largest audience congregated at any one time for a play performance was					
	below 200	4	0	1	5
	200-299	7	1	1	9
	300-399	6	1	1	8
	400-500	1	1	1	3
	above 500	0	0	2	2
65. Largest audience congregated at any one time for a musical performance					
	below 200	9	0	0	9
	200-299	4	3	2	9
	300-399	1	0	2	3
	400-500	1	0	2	3
	above 500	0	0	0	0
66. Were there any events occured in the auditorium that could not be presented on successive nights or days if audience size warranted it?					
	yes	2	1	2	5
	no	16	3	4	23

		10 Gym	4 Gym	1 Gym	1 Gym	4 Gym	1 Gym	4 Aud	1 Aud	1 Aud	1 Aud	1 Aud	2 Oth	2 Oth	2 Oth	8 All Types	43 [1]Total
stage room adequate to hold vocal performers		yes	yes	no	no	som	som	yes	yes	som	no	no	yes	yes	no	no info	
stage room adequate to hold instr. performers		yes	no	yes	no	som	yes	yes	no	yes	yes	no	no	yes	no	no info	
questionnaire item																	
5. School has band	yes	9	4	1	1	4	1	4	1	1	1	1	2	2	2	4	38
	no	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5
No. of members	under 20	2	0	0	0	0	0	1	0	0	0	0	0	1	0	0	4
	20-29	2	1	1	1	1	1	0	0	1	1	1	0	0	1	0	11
	30-39	1	1	0	0	3	0	1	0	0	0	0	0	1	1	3	11
	40-50	3	1	0	0	0	0	2	0	0	0	0	0	0	0	1	7
	over 50	1	1	0	0	0	0	0	1	0	0	0	2	0	0	0	5
School has orchestra	yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	no	10	4	1	1	4	1	4	1	1	1	1	2	2	2	8	43
School has choral group	yes	10	4	1	1	4	1	4	1	1	1	1	2	2	2	8	43
	no	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No. of members	under 20	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
	20-29	1	0	1	0	1	0	0	0	0	0	0	0	0	1	0	4
	30-39	1	0	0	1	2	0	0	0	0	0	0	0	0	1	1	6
	40-50	5	3	0	0	1	0	2	0	1	1	0	2	1	0	4	20
	over 50	3	1	0	0	0	1	2	1	0	0	1	0	0	0	2	11
School has operetta	yes	2	0	0	0	1	0	0	0	1	0	0	0	0	0	2	6
	no	8	4	1	1	3	1	4	1	0	1	1	2	2	2	6	37
No. of members	30-38	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
	39-45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
	100-112	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2

[1]Eight schools gave no information as to whether they considered space upon their stage adequate to hold performers for their vocal or instrumental activities.

questionnaire item		28 Gym	10 Aud	5 Other	43 Total
6. School's instrumental groups conducted the majority of their rehearsals in the aud.	yes	8	3	2	13
	no	14	7	3	24
	no info	6	0	0	6
7. School's vocal groups conducted the majority of their rehearsals in the aud.	yes	4	5	2	11
	no	21	5	3	29
	no info	3	0	0	3
8. School's instrumental groups presented the majority of their performances in the aud.	yes	20	9	3	32
	no	3	0	2	5
	no info	5	1	0	6
9. School's vocal groups presented the majority of their performances in the aud.	yes	23	9	3	35
	no	5	0	2	7
	no info	0	1	0	1
10. Handy space was provided for storage of instruments and music.	yes	9	6	2	17
	no	11	3	2	16
	sometimes	2	0	0	2
	no info	6	1	1	8
11. Stage room was adequate to hold vocal performers.	yes	16	7	2	25
	no	2	2	2	6
	sometimes	5	1	0	6
	no info	5	0	1	6
12. Stage room was adequate to hold instrumental performers	yes	12	8	0	20
	no	5	2	4	11
	sometimes	4	0	0	4
	no info	7	0	1	8
13. For rehearsals the acoustics were	excellent	0	0	0	0
	satisfactory	7	8	1	16
	poor	19	2	3	24
	no info	2	0	1	3
14. For performances the acoustics were	excellent	1	0	0	1
	satisfactory	8	9	3	20
	poor	16	1	1	18
	no info	3	0	1	4
15. Multiple uses of auditorium caused conflicts in scheduling musical activities.	yes	14	0	1	15
	no	9	10	3	22
	no info	5	0	1	6
16. Aud. area assigned was satisfactory for uninterrupted music rehearsals.	yes	13	9	3	25
	no	10	0	1	11
	no info	5	1	1	7

A SUGGESTED GUIDE FOR THE SCHOOL ADMINISTRATION IN PLANNING A FLEXIBLE SCHOOL AUDITORIUM FOR COMMON SCHOOL DISTRICT #56 IN JOINT MARSHALL AND NEMAHA COUNTIES, KANSAS

by

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Common School District #56 of joint Marshall and Nemaha Counties, Kansas was confronted with the problem of limited auditorium facilities which did not adequately serve the multiple school activities which were housed therein. The purpose of this thesis was to present a satisfactory solution to that problem from the standpoint of the dramatic activities.

A statement was made of the limited auditorium facilities of District #56 and of the difficulty those facilities placed upon the attainment of the educational goals of District #56 in order to determine the problems which it would be necessary to overcome.

A survey was made of comparable school districts in the same area of Kansas. The area surveyed was that portion of Kansas lying north of the Kansas River and east of the Blue River. Counties which overlapped those rivers were surveyed in their entirety. The survey was made to determine if the problems of District #56 were identical with other comparable districts.

The existing literature in the field was examined to determine standards of stage and auditorium planning.

A study of the limited auditorium facilities of District #56 and the multiple activities in those facilities showed that the District was greatly hindered in the full attainment of its educational goals.

From the survey, it was found that the comparable schools in the same area of Kansas were also, in varying degrees, operating with the burden of limited auditorium facilities serving multiple and often conflicting purposes.

Standards of stage and auditorium planning were established for the front of the house, audience area, proscenium wall area, stage area,

lighting, acoustics, heating and ventilation, scene shop and storage, accessibility from the central building, and wash and toilet facilities. The standards were drawn from existing literature in the field.

From the evaluation of the information received, it was proposed, as one solution to the problem of the District, that District #56 plan eventually to provide separate auditorium facilities to aid in fulfilling its educational objectives. It was proposed that the separate auditorium facilities should be based upon the established standards of stage and auditorium planning.