

PROBLEMS IN THE ADMINISTRATION
OF SMALL KANSAS HIGH SCHOOLS

by

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INTRODUCTION

With the greatly increased complexity of the functions of secondary education has come an increasingly vast number of administrative problems which every principal and superintendent is facing at the present time or will be facing sooner or later. Some of these problems have been studied by research in education during the past few years. However, there is still a discouragingly small amount of data yielded by scientific research. There is an especially small amount of data applicable for the smaller secondary schools. By the small school we mean that with an enrollment below 100. The fact that the small school has been unable to cope with these problems successfully has handicapped progress greatly. A few educators have written articles on the small school, discussing its size, its nature, and its problems, but all in all practically no research studies have been carried on relative to the small school and its problems.

Henzlik (8, p. 214) points out the persistence of the small school, and he says it will continue to exist in spite of the neglect it has had in the past. He lists a number of the problems facing the small school and indicates a definite need for attacking those problems in a

different manner than could be done in the larger secondary schools of the country. Corning (3, p. 207) in his comment and study of smaller school systems says,

"The small school, indeed, is a neglected institution. Although extensive studies have been conducted and reported on practically all phases of city school administration, the professional literature provides but meager assistance to the administrators of smaller school systems.....It is fitting, therefore, that the American Association of School Administrators, through the 1939 Yearbook, recognize the need for a study of the small school and the problems peculiar to it."

Reavis (18, p. 206) states that approximately half the population in the United States is served by the small high school. Langfitt, Cyr, and Newsom (13, p. 645) say that approximately half of the present number of high schools in the United States enroll fewer than 100 pupils. A comparison was made in Kansas by using the Kansas Educational Directory, and it was found that there are over 60 per cent of all the high schools in Kansas with an enrollment of fewer than 100 pupils. Because of the popularity of this type of school, the problem of the small secondary school becomes the problem of the nation, for

Reavis says that out of these schools come a considerable portion of the nation's leaders.

Further studies of the small school problem have been made by Hunkins (11, p. 229) who is a real champion for the cause of smaller schools. He states that educators have no conception of what smaller schools are. He continues, in reference to educators, they think of smaller schools as those in the lower range of the upper two per cent of the communities of the United States. Who shall be responsible for the progress of the schools for the other 98 per cent of the communities?

There must be a real conversion of our educational leaders to the cause of small schools. They must begin by comprehending what small schools really are. They must appreciate the tremendous importance of these schools to the nation. Our schoolhouse must not remain divided against itself, part large and respected and part small and despised.

In the light of the foregoing statement it seems that there is a real need for studying small school problems. It is the purpose of this study to investigate and analyze some of the conditions now existing in a group of the typically small schools of Kansas. The writer is primarily

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interested in studying schools within a limited enrollment range (from 30 to 70) since it is with this size of school that he has been affiliated during the past few years.

It is not to be expected that this study can begin to touch upon all the problems of small secondary schools, but it is hoped that some of the present practices may be brought to light, and a few suggestions and recommendations offered which might aid in the solution of some of these problems.

In order that the study of the problems might be systematized, they were grouped for discussion under four headings: those pertaining to Organization, to School Plant, to the Teaching Staff, and to Supervision and the Administration of the Budget.

METHOD OF INVESTIGATION

In order to secure data necessary for making a study of the problems of small high schools in Kansas, a questionnaire was sent to 132 high schools in Kansas cities of the third class ranging in enrollment from 30 to 70 students. This group of questions was to be answered by the administrator, principal or superintendent, of each school concerned, since this represents the most reliable source from which information concerning high schools might

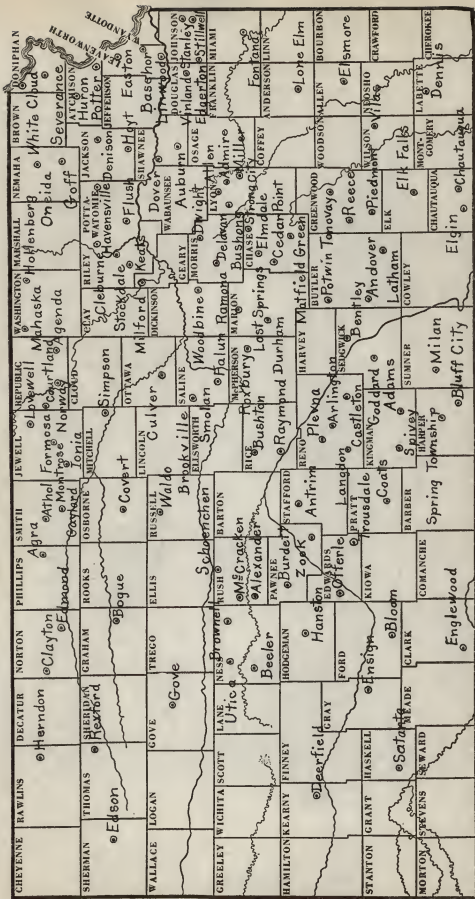


Figure 1. Map of Kansas showing location of the 109 small high schools in cities of the third class, ranging in enrollment from 50 to 70, being used in this study.

come. Of the 132 questionnaires sent out, 109 were returned completed; and it is largely upon these 109 answers that this study is based. From the Kansas Educational Directory, 1937-38 (15), it was found that there are 248 high schools in cities of the third class enrolling from 30 to 70 students, and it was from this total number that 132 schools were carefully selected for this study. As nearly as possible these 132 schools were picked from every county of the state of Kansas so that a representative sampling might be obtained. These results were used as typical of most of the small schools because they are uniform in size and are so distributed over Kansas that they represent nearly every section of the state rather than being limited to localities. The map of Kansas, figure 1, pictures the distribution and location of the schools cooperating in this study. The sampling was not limited as to type of school organization, as to region in the state, as to class of administration, as to school levy, nor as to number of teachers, since all of these factors contribute their share of difficulties in the administration of small schools, but was based altogether on the size of the school enrollment.

Table 1 shows the number of high schools in the

Table 1. Number and percentage of the 109 small Kansas high schools being used in this study grouped according to enrollments.

School Enrollment Interval	Number of Schools	Percentage
Less than 40	10	9.2
40-49	43	39.4
50-59	27	24.8
60-70	29	26.6
Total	109	100.0

different enrollment groups being studied. It will be noticed the greater percentage, 64.2 per cent, of the enrollments were between 40 and 60, that range being the one with which this study was most interested.

PROBLEMS RELATING TO ORGANIZATION

The purpose in making a study of the types of organization under which this group of small schools is operating was to find out to what extent any reorganization program, even in the secondary small schools, was being conducted.

By table 2 it is seen that 98 or 89.8 per cent of these schools are operating under the 8-4 plan. Engelhardt (5, p. 258) says secondary education has come to include the school work offered in the various types of administrative units into which grades 7 to 14 are organized. He continues to say that the aim of secondary schools is to supply to the young people between the ages of 12 and 20 the educational service best suited to their needs. He points out that many educators believe that the hope of the small school lies ultimately in the development of larger administrative units.....The six-year secondary school closely articulated with a non-graded elementary school may make possible larger classes

Table 2. Number and percentage of the 109 small high schools which are employing the given types of school organization.

Types of Organization	Number of Schools	Percentage
3-6	7	6.5
6-3-3	1	0.9
6-2-4	3	2.8
6-4	98	89.8
Total	109	100.0

and a better utilization of the time of the available teaching staff. To reorganize the high schools of these small towns will of necessity force a change in the ungraded one-room schools, from which a large number of the students come. Whatever change is made may be the means of bringing about a more rapid improvement of the rural schools. According to Engelhardt's study, the six-year high school will probably represent the most satisfactory organization for grades 7 to 12 in the majority of smaller school districts.

The State of Kansas Department of Education (14, p.31) in promoting and realizing the main objectives of education also seems to favor the 6-6 system over the 6-3-3, especially for the small secondary schools. This study revealed that seven schools (6.5 per cent) were organized under the 6-6 plan; one (0.9 per cent) was trying the 6-3-3 plan; three (2.8 per cent) were using the 6-2-4 system. In spite of the large number of schools still operating under the old 8-4 plan, it is significant to point out that the administrators in 10.2 per cent of these small schools are making some effort toward reorganization into more efficient and progressive schools.

School Board and Administrative Staff

School Board. Another difficulty which presents itself in many Kansas high schools is the fact that most small school systems are under the jurisdiction of two boards of education. By two boards of education it is meant that one is elected for the elementary school and another for the secondary school. There were only 17 (15.6 per cent) of the 109 schools used in this study that had only one board for both the elementary and secondary systems, while 92 (84.4 per cent) were governed by separate boards of education. It seems logical to believe that as long as the different local systems of education are divided into two parts with each part being governed by a separate and distinct group of laymen and a separate administrator, the coordination of education in the small community certainly will tend to be diminished.

As to size of school boards, nearly 100 per cent of them in this study had only three members: a director, a treasurer, and a clerk. Engelhardt (5, p. 78-80) says,

"At the present time the typical American school board is composed of six members."

Langfitt, Cyr, and Newsom (13, p. 35) say that the boards of education in small high schools usually consist

of from three to five members. Since this study indicates a predominance of the three-member board and a division of authority, there seems to be a need to enlarge boards to five members and give them full authority over all of the local educational program in each of the small villages.

There are difficulties, no doubt, that would tend to discourage the unifying of elementary and secondary schools since both usually represent separate territorial districts having different boundaries; however, it is not impossible to combine the two boards into one which could act as a single unit and could give better understanding and greater sympathy toward the problems that are common to both schools, thereby correlating to a larger degree work studied in the two schools.

One school in this study which might serve as a good illustration of intelligent board procedure is Lost Springs, a small school operating under the 8-4 plan. This school system is controlled by two boards, each having the same director, but they act as one board of five members for transacting business. Two members are elected from the grade school district and two from the high school district, while the director is elected to represent both districts. This arrangement eliminates the 2-1 majority which has a tendency so many times to

become dictatorial with the three-member boards. It seems this plan of operation is a step in the right direction and could well be tried in other small secondary schools no matter what the type of organization used. However, this school has an enrollment of only 56 pupils, and it hires a principal for each the elementary and the secondary school. This seems to be an unnecessary division of supervision for so small an enrollment.

Langfitt, Cyr, and Newson (13, p. 650) say that in the small school of the future the principal will have complete supervision of all 12 grades. In reality the small secondary school of the future will be a part of a continuous 12-year school.

A great many superintendents and principals see the need of combining supervision and control of the schools, as was shown by their answers to the questionnaire. Of the 71 administrators who felt qualified to answer as to whether or not it would be better to have only one board of education over the whole system, 56, or nearly 79 per cent answered, "Yes".

Administrative Staff. Also affecting the degree of centralization of the elementary schools and secondary schools is the type and nature of professional administration in use.

Of the 109 schools, 81 (74.3 per cent) were supervised by principals and 28 (25.7 per cent) by superintendents. This means that in 81 schools (nearly three-fourths of all studied) there is a principal for the elementary school and another principal for the secondary school, having very little, if any, relationship to each other. Eighteen, (64.6 per cent) of the above 28 superintendents served as principal of the high school as well as superintendent of the whole educational system; so there are only ten schools (9.2 per cent) of all the schools studied that employ both a superintendent and a principal for the high school. Twenty of the 28 superintendents (71.4 per cent) also have supervision over the elementary school. Markham (14, p. 72) in making some suggested economies writes,

"The practice in many of the small communities in placing all administrative responsibilities into the hands of one administrator should lead to greater efficiency and economy. It should result in better articulation of the units of organization."

Even though it might be financially impossible for a little school to employ both a superintendent and a principal for each school, it does seem that they should

designate full authority over the whole system to some one who is qualified for that position.

Length of Class Periods

In considering the length of class periods used in the small schools, we find them quite equally divided into three groups. The results indicate that 52 schools out of the 109, or approximately 47.7 per cent, are still using the straight 40-minute plan. In this plan, as suggested by Markham (14, p. 57), all recitations run for 40 minutes except laboratory periods which must run for two of the 40-minute lengths, or 80 minutes. Twenty-three schools, which represent 21.1 per cent of the total 109 schools, are employing the supervised study plan throughout the school program - that is, organizing the school day into six periods, each 60 minutes in length. In this plan recitation and laboratory periods run for the same length of time. Part of the time of the classes in recitation is then used for supervised study. Markham (14, p. 57) recommends that special provision be made for directed study. He states that the use of the lengthened period, 60 minutes, is very satisfactory where it is possible to use it. Thirty-four of the schools, 31.2 per cent, are using a combination of the straight 40-minute plan and

the supervised study plan. This plan must have originated with school administrators since there seems to be no such setup recommended for secondary schools of Kansas by Markham (14).

In this combination plan all recitations are held for the short periods, 40 minutes, while laboratories continue for the lengthened period, or 60 minutes. Douglass (4, p. 331) states that under the 40-minute plan it was possible to carry out eight periods during the school day; while the adoption of the 60-minute plan will tend to reduce the number to six. He says,

"For most schools little increase in costs results from the introduction of the lengthened period. The load in the number of classes assigned to most teachers is usually decreased, but a larger number may be assigned to those whose classes involve but one period daily under the new plan as compared to two daily with the shorter period. In addition, because of the opportunity for individual contacts in the supervised study period, it is probable that larger classes may be taught with more than equal effectiveness."

The adoption of the supervised study plan in small schools would tend to relieve teachers of the unreasonably heavy teaching loads which have been found to exist

in our small schools by Shellenberger (20, p.57) in his study of the training of Kansas science teachers. In one of his conclusions he has found that teachers in the smaller schools carry the heaviest loads and are least prepared to do so. According to the results found in this study, about half of the administrators felt that teacher loads were excessive; the other half thought teachers were not overloaded.

Henzlik (8, p. 214) states that the small school is entirely too ambitious in its offerings. He says the small school prides itself on the number of procedures it can carry on which are similar to those employed by larger schools. The supervised plan would tend to cut down the number of periods per day and would therefore cut down the number of subject offerings in the small school. This procedure might tend to produce a smaller program, but a much higher grade of work because of the opportunity afforded the teacher in giving more individual help.

It is encouraging to know that nearly one-fourth of these small secondary schools being studied are using the straight 60-minute plan, and are finding it of more benefit in many respects for guidance than the old short period. Those schools using the combination plan

have a good start toward the supervised study idea, and possibly they will convert, sooner or later, to the long period when they see its possibilities.

Teacher-Pupil Ratio

Another problem confronting the small schools today is that of the small number of teachers in force per school and the small number of students in the classes to be taught. In order that a more comprehensive study of this problem might be made, table 3 has been prepared to show the teacher-pupil relationship existing in these schools. From these figures it will be noted that the teacher-pupil ratio in the schools with enrollments of less than 40 pupils is 8.7, and as the enrollment increases toward 70 that average increases to 12.9.

The average number of teachers, counting also the administrator, employed in those schools with fewer than 40 students is 3.75, and this average increases to 5.16 for those schools enrolling from 60 to 70 students. The results of the study showed a balance between female and male teachers in the small schools of Kansas, since, as shown in table 3, the percentage of men teachers employed in all the schools studied exceeded the percentage of women teachers by only 1.8.

Table 3. A relationship of teachers to enrollment in 109 small Kansas high schools in cities of the third class.

Enrollment Interval	Per cent of Teachers		Average Number Teachers Per School	Average Pupil- Teacher Ratio	Number of Schools in this Study
	Male	Female			
Less than 40	48.0	52.0	3.75	8.7	10
40-49	52.4	47.6	4.28	10.5	43
50-59	50.4	49.6	4.51	12.1	27
60-70	50.5	49.5	5.16	12.9	29
Average for all schools	50.9	49.1	4.45	11.2	109

From the low teacher-pupil ratio in these small schools, it follows that classes will tend to be very small. Some writers have pointed out that the ideal conditions for progress are found in small classes such as exist in almost all small schools, and they attempt to justify small classes on that basis. However, others contend that from recent studies there is little difference in the progress of small classes over larger classes providing the classes are under the guidance of efficient teachers. With the organization of class instruction under the newer methods of unit study it would seem that possibly size of class, after all, does not make as much difference as was formerly believed.

Douglass (4, p. 122) says the traditional belief that much better results can be made in small sections than in larger ones has not been verified by recent careful studies made by Stevenson, Davis, Hudelson, and others to determine the relation of size of classes to the effectiveness of instruction. Whatever may be said of the possibilities afforded for better adapting instruction to individual needs and abilities, the general trend of conclusions from experimental studies is clear and marked; namely, that, as measured by teachers' marks or objective tests, the results obtained in small classes are on the

whole very little if any greater than in larger sections. By no freak of chance could the results so uniformly fail to favor small classes if smaller sections were actually superior in proportion to the increase in cost of instruction and in teaching load that is necessary to make small sections possible. Not only do marks and test scores indicate that no better results are achieved in small sections, but also more teachers prefer to teach sections of medium than of small size. Douglass says that the North Central Association of Secondary Schools and Colleges for a number of years set 25 pupils as a "norm" for the size of class sections. The small school should attempt to build up classes until this size at least could be attained.

PROBLEMS RELATING TO THE SCHOOL PLANT

Until recent years pupils were sent to school with the idea in mind that adequate teaching and sufficient study were all that were necessary to gain an education. Now, however, leading educators are studying more and more the exterior factors which affect learning. They are realizing the vast importance of correct temperatures, adequate light, sufficient room, good equipment, libraries, and health safety through sanitation. Langfitt, Cyr, and

Newson (13, p. 567) say,

"Clean, well lighted, well ventilated, and comfortably heated buildings not only promote good instruction but help preserve the plant."

Goodier and Miller (7, p. 165) say, "Caring for the health needs of the pupils is one of the newer obligations which are being accepted by the modern school.....If the school is to do its full duty to these in its charge, it will have to give strict attention to their physical needs." Strayer and Engelhardt (21) have published a score card on standards for judging high school buildings. Many authors of books on school administration include in their books whole chapters on housing.

Acreage of School Site

Langfitt, Cyr, and Newson (13, p. 573) say that the minimum size for the school site in small communities should be ten acres. They also say a site of from ten to 15 acres which will contain adequate play areas ought to be possible in most small communities. Ferriss (6, p. 85) found in a national survey that less than one-third of the small high schools have a site of more than five acres. Only 32 of the schools used in this study (four schools did not report) have a site of at least five acres, the

national average; four schools have a site of at least ten acres, the minimum suggested by Langfitt, Cyr and Newsom (13, p. 573), and two schools have a site of at least 15 acres, the amount considered adequate and within the possibility of the small high school by Langfitt, Cyr and Newsom.

Table 4 shows the approximate acreage per enrollment of the schools used in this study. This amount varies from one-eighth of an acre to 20 acres, with the average acreage of the schools with enrollments from 30 to 39 being 2.35 acres; the schools with enrollments from 40 to 49, 3.91 acres; those with enrollments from 50 to 59, 4.44 acres; and those with enrollments from 60 to 70, 4.16 acres.

School Building

In order to learn to what extent the smaller high schools of this state have endeavored to improve the external influences affecting education, several groups of questions were asked concerning the school plant.

1. Are the grades and high school housed in separate buildings? (Answers: Yes, 67; No, 40)

2. Do you feel that the advantage gained by having separate buildings is great enough to justify

Table 4. Approximate acreages of the school sites, studied according to enrollments, of 109 small Kansas high schools.*

Enrollment Groups					
30-39		40-49		50-59	
Number of Schools	Average Acreage	Number of Schools	Average Acreage	Number of Schools	Average Acreage
1	$\frac{1}{2}$	1	$1\frac{1}{8}$	1	$\frac{1}{2}$
1	1	2	1	2	1
1	$1\frac{1}{2}$	2	$1\frac{1}{2}$	5	2
1	$1\frac{1}{2}$	5	2	1	$2\frac{1}{2}$
1	2	1	$2\frac{1}{2}$	3	3
4	3	16	3	6	4
1	$3\frac{1}{2}$	2	4	5	5
		2	5	1	6
		3	6	1	7
		1	6.2	2	10
		1	7	3	15
		1	10		
		1	20		
10	Ave. 2.35	40	Ave. 3.91	27	Ave. 4.64
				23	Ave. 4.11
Total Schools: 106; All School Average: 3.96					

*Four schools failed to report.

the increased cost of separate maintenance? (Answers: Yes, 52; No, 48)

3. If both schools are in the same building, do you lack sufficient room for instructional purposes? (Answers: Yes, 21; No, 19)

There are, of course, both advantages and disadvantages in having both the grades and high school housed in the same building. From the financial standpoint, the expense is less when they are in the same building because of decreased cost of janitorial service, heat, and upkeep. Then too, the two school systems, the elementary and the secondary schools, are more closely unified; this helps to eliminate the sudden transition from the grades into the high school. Yet this proximity is a unifying influence only when there is a strong spirit effected by a superintendent over the entire system, a spirit of cooperation between the schools. Sometimes this lack of cooperation is due to influences outside the school such as conflicting boards of education which was mentioned before in this study.

In order to study the answers to the above questions more carefully, the answers were grouped according to the combination of the first two questions. The administrators of 36 of the 67 schools (53.76 per cent) that have separate buildings thought the extra expense justified, while 28 (41.79 per cent) did not. The administrators of

three of the schools with separate buildings did not offer opinions. Probably it is more significant to note the opinions of the administrators of the schools having both schools housed in the same building since they were having the actual experience with the situation. Of the administrators of the 40 schools in this group, four (ten per cent) did not give an opinion. Twenty (50 per cent) said the extra expense was not justifiable, while 16 (40 per cent) said that the extra expense was justifiable.

Of the 109 schools used in this study, 21 (19.26 per cent) lacked sufficient room for instructional purposes. This, however, was a little more than half (52 per cent) of the systems housing both schools in one building, so these schools had a problem that needed solving.

Since a gymnasium plays so important a role in the physical education program of a secondary school, it was found to what extent the small schools have proper room for this program. Considering an adequate court size to be 45 feet by 70 feet, which is the regulation size for high schools, 70 per cent of the schools with enrollments of from 30 to 39 did not have regulation sized courts; 39.02 per cent of those whose enrollment was from 40 to 49 did not; and 22.22 per cent of those between 50 and 59 did not; while 48.27 per cent of the last enrollment group

(60 to 70) did not. If all of the schools were taken together, 59.81 per cent of them had regulation sized courts, while 40.18 per cent did not. Two of the schools reported that they had to take their schools to neighboring towns to practice basketball.

Safety and Health. The following questions were asked concerning safety and health:

1. Is your school building fireproof? (Answers: Yes, 47; No, 56)

2. During cold weather is your building kept at an even temperature throughout? (Answers: Yes, 61; No, 48)

3. Do you have a properly operating ventilation system? (Answers: Yes, 46; No, 63)

4. Would you rate your janitor's efficiency as high (46), medium (49), or low (11)?

In regard to fireproof buildings, 47 (43.91 per cent) schools reported their buildings were strictly fireproof; 56 schools (52.33 per cent) were not fireproof; and four schools (3.74 per cent) were semi-fireproof. Two schools did not report. Goodier and Miller (7, p. 274) say,

"Figures show that on an average of five school buildings burn each day in the United States."

Educators are not concerned so much with the types of heating and ventilating systems used in small school systems today; but they are greatly interested in knowing

whether the schools have any type of system which is operating efficiently and giving good results. Certainly the importance of the heating and ventilation of a school cannot be over-emphasized when one considers its relation to the health of pupils and the effectiveness of the educational program. In reference to carbon dioxide content, organic toxins, and disease-bearing bacteria in the air, Chamberlain (2, p. 564) says:

"Recent experiments have shown that all of these three factors are of relatively minor importance in securing healthful conditions in a classroom and that the emphasis needs to be placed, not upon the chemical content of the air which we breathe and in which we work, but rather upon its physical properties. In other words, it appears that good ventilation is conditioned on what takes place on the surface of the body rather than what occurs in the lungs and other internal organs immediately affected by breathing."

During cold weather it is possible to keep 57 per cent of the schools used in this study at an even temperature, and only 42 per cent of the schools have proper ventilating systems. This is, without a doubt, a condition which needs to be improved.

One of the things that Stinson, Kansas State High School Supervisor, notes as he visits the schools of the

state is the care that is taken of the building. On his report is a space devoted to comments on how well that work is done. Table 5 was compiled in order to show in relation to the enrollment of the schools how the janitors of small schools rate in efficiency. This table also shows the number of janitors who attend janitorial school never, sometimes, and regularly.

Of the total of 106 schools that reported, only 46 janitors, or 43.39 per cent, were rated high, while 49, or 46.22 per cent, were rated medium, and 11, or 10.37 per cent were rated low. Eight of the 11 janitors rating low work in schools with enrollments of less than 50, and three work in schools with enrollments between 60 and 70. No janitor rating low attends janitorial school, and only one janitor in the schools with enrollments of less than 40 attends school. More than one-third of the janitors of the schools with enrollments between 60 and 70 attend janitorial school. Twenty-one janitors attend school sometimes, while only six attend regularly. This makes a total of 27 janitors (25.47 per cent) who attend school.

The Library

Oliver (17, p. 36), in quoting Dr. Walter D. Cocking, says, concerning the library, "The library is the universal

Table 8. The quality of the janitorial services of 109 small Kansas high schools as rated by administrators and the frequency of the janitors' attendance at janitor-engineer schools*.

Enrollment Range	Attendance at Janitorial Schools	Rating High	Rating Medium	Rating Low	Total Schools	
					Number	Per Cent
30-39	Never	3	4	2	9	8.49
	Sometimes	0	1	0	1	0.95
	Regularly	0	0	0	0	0.00
40-49	Never	11	12	6	29	27.35
	Sometimes	4	4	0	8	7.84
	Regularly	3	0	0	3	2.83
50-59	Never	8	14	0	22	20.75
	Sometimes	4	0	0	4	3.77
	Regularly	1	0	0	1	.95
60-70	Never	6	10	3	19	17.82
	Sometimes	6	2	0	8	7.84
	Regularly	0	2	0	2	1.89
Total Schools		46	49	11	106	99.98

*Three schools failed to report. The percentages in the last column on the right are figured on the basis of 106 schools who gave information for this table.

laboratory of the school. It is the gateway to the heritage of the past; it provides the horizon for the future. A school, if it is to guide those who enter its doors, must be built about the library."

Table 6 shows the number of volumes in the libraries of 105 of the 109 schools used in this study, grouped according to their enrollments, while table 7 shows the distribution of the approximate amount spent yearly on the libraries.

Probably the easiest way to compare these figures is by studying the summarization, table 6. By a study of these figures, it can be seen readily that the group of schools with enrollments of less than 40 do not spend enough money on their libraries. According to Markham (14, p. 51) the smaller the school, the more volumes per pupil there should be in order that there may be as great as possible a scope for the pupils' research work. The library should afford an opportunity for cooperative learning. Oliver (17, p. 36) suggests that a reasonable minimum amount that should be spent per capita per school year is two dollars in the elementary schools and three dollars in the secondary schools. There are only three schools used in this study that come up to the minimum.

Table 6. The number of volumes in the libraries of 109 small Kansas high schools grouped according to enrollment.*

Number of Volumes	Enrollment				All Schools	
	30-39	40-49	50-59	60-70	Number	Per Cent
200- 274		5	1	1	7	6.54
275- 349	1	2		1	4	3.74
350- 424	2	4	4	1	11	10.27
425- 499			2	1	3	2.80
500- 574	4	10	6	6	26	24.28
575- 649	1	9	3	4	17	15.88
650- 724		1	3	2	6	7.47
725- 799	1		3	1	5	4.67
800- 874	1	6	1	2	10	9.40
875- 949			2		2	1.87
950-1024		1		4	5	4.67
1025-1099		1		1	2	1.87
1100-1174						
1175-1249						
1250-1324			1	2	3	2.80
1325-1399						
1400-1474				2	2	1.87
1475-1549						
1550-1624						
1625-1699						
1700-1774						
1775-1849		1			1	.93
1850-1924						
1925-1999						
2000-2074				1	1	.93
Total Number Schools	10	40	26	29	105	99.99
Median Num- ber Vols.	525	600	500	650		600

*Four of the 109 schools failed to send in a report.

Table 7. The approximate amount spent yearly on libraries in 109 small Kansas high schools on the basis of enrollment.

Amount Spent (Dollars)	Enrollment				Total Schools	
	50-59	40-49	50-59	60-70	No.	Per Cent
0- 9	1		1		2	1.87
10- 19		1			1	.93
20- 29	6	14	7	6	34	31.78
30- 39		3	3	1	8	7.47
40- 49		3	2		5	4.67
50- 59	2	8	6	4	20	18.70
60- 69		1			1	.93
70- 79		3	2	6	12	11.22
80- 89						
90- 99						
100-109		6	3	10	19	17.76
110-119						
120-129		1		1	2	1.87
130-139						
140-149						
150-159			2		2	1.87
160-169						
170-179						
180-189						
190-199						
200-209				1	1	.93
Total Schools	10	40	26	29	105	100.00
Median Amount Spent Annu- ally	\$25	\$55	\$45	\$75	\$50	

* Four of the 109 schools failed to send in a report.

Table 8. A summarization showing the average and median number of volumes and the average and median yearly expenditure for libraries in 109 small Kansas high schools*.

Enrollment	Schools Reporting		Average Number of Volumes and Median	Average Amount Spent per year (Dollars)
	Number	Per Cent		
30-39	10	9.17	Ave. 556 Med. 525	30.00 25.00
40-49	40	37.39	Ave. 586 Med. 600	48.51 55.00
50-59	26	24.30	Ave. 607 Med. 500	57.88 45.00
60-70	29	27.10	Ave. 724 Med. 650	87.93 75.00
Total	107	100.00		
Average for All Schools			Ave. 625	56.12
Median for All Schools			Med. 600	50.00

* Four schools in this study did not give the information needed for this table.

Committees which have been studying the high school library situation for some time have come to an agreement upon the following suggestions (Markham, 14, p. 51):

(a) For a high school of 50 pupils or less, an annual appropriation of \$50 should be made.

(b) For 51 to 150 pupils, an annual appropriation of \$100 should be made.

Of the schools with enrollments of 50 or less in this study, 52 such schools in all, as many as 30 schools spent less than \$50 during the past year on the library. Of all the 107 schools reporting on this subject, there were 50 which spent less than \$50. Of 55 schools in this study with enrollments from 51 to 70, which group should spend \$100 according to the Kansas standard suggested above, 17 were spending that amount or more. Of all the 107 schools, 24 spent \$100 or more last year on building up the library.

The arrangement of the library is very important. Oliver (17, p. 56) says, "The library is the heart of the school." The library should be located centrally and should be available at all times.

The following two questions were asked in order to gain some information on the location of libraries and the opinions of experienced administrators as to the best location for them:

1. Is your library separate from the study hall? (Answers: Yes, 86; No, 81)

2. Do you think it better to have them separate? (Answers: Yes, 47; No, 54; No answer, 8)

As will be seen by these answers, the opinion is about equally divided on the second question above. It must be remembered, however, that because the schools used in this study are small, it is for most of them impossible to arrange for a regular librarian, and a teacher must supervise the library.

Science and Laboratory Equipment

One of the problems that face the small school, as given by Menulik (8, p. 214), is, "How to secure adequate library, laboratory, and instructional equipment, supplies, and facilities". This study proposed to find the adequacy of science and laboratory equipment for present educational purposes in the small schools and the extent to which it is kept in good condition for use.

Administrators of 62 schools, 57.9 per cent of all studied, consider the science and laboratory equipment which they have in their schools to be adequate for carrying out a good instructional program, while 45, 42.1 per cent, frankly admitted their equipment was not adequate. Two schools did not send in a report.

In order to find out just what the condition of the equipment was in the schools, administrators were asked to rate the laboratory equipment according to its present condition and usefulness by designating it good, fair, or poor. Thirty-two small schools, 29.9 per cent, rated their equipment good; 63 schools, 58.9 per cent, gave a rating of fair; and 12 schools, 11.2 per cent, rated their equipment as poor. From the above data one would conclude that science and laboratory equipment in these schools needs some attention. The fact that 45 schools do not have enough equipment means that those schools need to spend a little more money in building up this department. Since about 70 per cent of the schools reported the equipment they had as not in good condition, there seems to be a great need for good maintenance by those who are responsible for the upkeep of laboratory equipment. Surely good maintenance through repairs, replacements, and improvements offsets obsolescence. Most laboratory equipment represents expensive facilities that are easily destroyed and whose value depreciates rapidly unless given proper care. Administrators should not find it impossible to solve this part of the laboratory problem, since it requires mainly a closer check-up on condition of equipment.

Some data were obtained relative to the amount spent annually on science and laboratory equipment in order to see just what effort is being put forth by the schools to make the above more adequately suited to present day educational requirements.

The average annual expenditure made by those schools enrolling 30 to 39 students was \$32.78; those with 40 to 49 students spend on the average of \$42.63; schools with 50 to 59 spend \$56.73; and those with 60 to 70 students spend \$62.78. This seems to indicate the larger the school the larger the amount spent on science and laboratory equipment each year. One school stated that it had spent nothing for the past five years on its laboratory. There were six schools which annually spent less than ten dollars; 14 schools which spent less than 20 dollars; and 42 schools which paid out less than 30 dollars for such equipment. Three of the schools were spending as much as \$200 or more annually for building up laboratory needs. Table 9 was constructed to show more clearly just what the small schools are spending each year, approximately, for laboratory equipment.

This study shows that those schools whose equipment was rated good spent more money annually on science and laboratory equipment than either those who rated fair or

Table 9. A distribution of the yearly expenditures for laboratory equipment made by 109 small Kansas high schools on a basis of enrollment*.

Yearly Expenditures (Dollars)	Enrollment				Total Schools	
	30-39	40-49	50-59	60-70	Number	Per Cent
0- 9	1	2	1	2	6	6.00
10- 19	1	4	2	1	8	8.00
20- 29	3	14	6	5	28	28.00
30- 39		3			3	3.00
40- 49	1	1	1	2	5	5.00
50- 59	2	6	9	6	27	27.00
60- 69		1	1	1	3	3.00
70- 79	1	1		1	3	3.00
80- 89		2			2	2.00
90- 99						
100-109			4	3	7	7.00
110-119						
120-129						
130-139						
140-149						
150-159		1	1	3	5	5.00
160-169						
170-179						
180-189						
190-199						
200-209		1	1	1	3	3.00
Total Schools	9	36	26	27	100	100.00

*Nine of the 109 schools failed to report their yearly laboratory expenditures.

Table 10. The approximate average yearly expenditure made by 109 small schools for laboratory equipment according to the administrators' rating of the condition of the equipment*.

School Enrollment	Equipment Rated Good		Equipment Rated Fair		Equipment Rated Poor	
	Number of Schools	Average Spent	Number of Schools	Average Spent	Number of Schools	Average Spent
30-39	1	No Report	5	\$42.00	4	\$21.25
40-49	11	\$59.41	23	\$47.50	4	\$46.25
			1	No Report	2	No Report
50-59	10	\$45.00	15	\$85.00	1	\$50.00
			1	No Report		
60-70	8	\$86.25	13	\$55.83	1	\$ 0.00
	2	No Report				
Total Schools	52	\$56.55	65	\$62.53	12	\$32.50
	(29.9%)		(98.9%)		(11.2%)	(100%)

*Two schools failed to return any information concerning either the amount spent on equipment or condition of the same. The schools opposite "No Report" did report on condition of equipment but did not give yearly expenditure.

those rated poor. It seems that the reverse condition should be true. As one will notice by table 10, 32 schools, 29.9 per cent, which were rated good on condition of equipment, spent an average of \$56.55 each year on equipment; 63 schools, 58.9 per cent, which were rated fair, spent an average of \$32.56; and 12 schools, 11.2 per cent, which were rated poor, spent only an average of \$32.50 annually.

PROBLEMS RELATING TO THE TEACHING STAFF

Selection

Maxwell and Kilzer (16, p. 472) in discussing who should have the responsibility of selecting the teachers say that the principal or superintendent should make recommendations to the board concerning the teachers to be hired or rehired, since they are best qualified to judge the desirability of hiring the teacher.

The hiring of the teachers in 90 of the schools used in this study was found to be dependent upon the administrators' recommendations; in 11 schools the hiring was independent of the administrators' recommendations; eight schools did not answer.

This means that school boards in 82.57 per cent of the 109 schools in this study consulted with their

administrators when hiring teachers.

Maxwell and Kilzer (16, p. 472) suggest five different means of securing new teachers: (a) placement bureaus and teachers' agencies, (b) applications, (c) visiting the candidate in his present position, (d) application blanks, (e) tests.

Douglass (4, p. 92) says that visiting a candidate in his present position is the most valid means of securing a new teacher. However, this method is impracticable for the selection of teachers in small schools since the administrators in most cases have full teaching schedules.

Figure 2 shows the percentage of schools using the following methods of selecting teachers: (a) private agencies; (b) college agencies; (c) unsolicited applicants; (d) schools using a combination of private agencies and college agencies; (e) schools using a combination of college agencies and unsolicited applicants; (f) those schools using all three means of securing new teachers.

There was one school (0.92 per cent) of the 109 schools that designated the source of their selection of teachers as private agencies; 42 schools (38.53 per cent) used college agencies exclusively; and four schools (3.6 per cent) used applicants affiliated with neither private nor college agencies. It was found that 49 schools

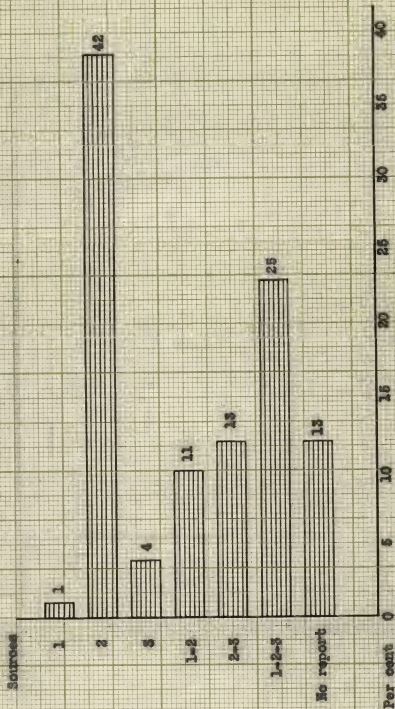


Figure 2. Number and percentages of schools employing one source or more than one source in selecting teachers.

1. Private agencies
2. College agencies
3. Unsolicited applicants

(44.95 per cent) used a combination of two or all of the above mentioned sources; 11 schools (10.09 per cent) used both private and college agencies; 13 schools (11.93 per cent) used college agencies and unsolicited applicants; while 23 schools (22.93 per cent) used all three sources for securing teachers. Thirteen schools did not report on the selection of teachers.

Professional Advancement

Ashbaugh (1, p. 154) says that in 1927 only 12 states required the completion of a four-year college course for the lowest grade certificates for teaching in high school. At that time teachers of special subjects such as music, art, and physical education were permitted to teach in senior high schools without graduation from college.

Langfitt, Cyr and Newson (13, p. 395) say that the trend at present, however, is to require college graduation of all teachers in junior and senior high schools. In a study made by Ferriss et. al. (6, p. 71) it was found that a little more than seven per cent of the teachers in small high schools held a Master's degree. In comparison, 14.73 per cent of the teachers in the schools used in this study have Master's degrees. Since this is an average of 1.6 teachers for each school, that percentage will be

increased shortly because of Kansas' setting of higher requirements for high school administrators. An average of 2.02 teachers per school or 45.41 per cent of all of the teachers in this study have done work additional to their bachelors' degrees.

Professional advancement may be gained in other ways besides through graduate study, for example, through attendance at local, county, and state teachers' meetings; through membership in the N. E. A. and through the reading of professional books and magazines.

Although 99 (90.81 per cent) of the schools studied hold local teachers' meetings, only 43 of the schools (39.45 per cent) hold regular meetings. The teachers of only 43 of these schools met for professional improvement. The teachers of 12 schools met weekly; of nine, bi-weekly; and of 22, monthly.

Of all of the teachers used in this study, 76.77 per cent were faithful in attending county and state teachers' meetings, and 12.64 per cent of the teachers were members of the N. E. A.

In 84 schools (77.06 per cent) the teachers were given special encouragement to read professional books and magazines.

Tenure

Langfitt, Cyr and Newsom (13, p. 402) state that teachers may reasonably expect to render their best service when the period of tenure is sufficiently long to enable them to become thoroughly acquainted with the requirements of the community and the aims of the school program. The service rendered by an administrator is especially dependent upon the length of tenure since he must plan his work over a period of years. Chamberlain (2, p. 194) says that a large per cent of turnover is certain to produce a poorer educational product than would result if the teaching staff remained relatively stable.

The average tenure of the principals of all of the cities of the third class of Kansas, as taken from Markham (15), is 4.15 years, while the average tenure of the principals of the schools used in this study is 3.7 years.

Figure 3 makes a comparison of the schools used in this study with the schools of all the cities of the third class of Kansas in respect to the percentage of administrators having stayed in their present positions from one to 22 years inclusively. For instance, 28.05 per cent of the administrators of all of the cities of the third class

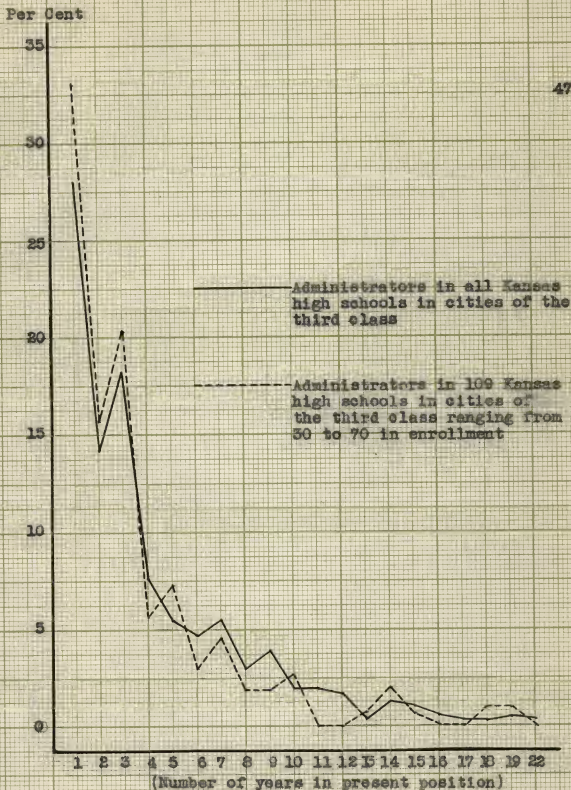


Figure 3. A comparison of tenure of administrators in all Kansas high schools in cities of the third class with 109 Kansas high schools in cities of the third class ranging in enrollment from 30 to 70.

of Kansas are serving in their first year at their present position, while 33.02 per cent of the 109 administrators are serving in the first year of their present position. It will be noted that there are approximately five per cent fewer administrators who are in their respective positions for the first year among the administrators of all of the cities of the third class than in the cities of this study; one per cent fewer, for the second year; and two per cent fewer for the third year. At this point there is a change, and, gradually, as the number of years grows larger until the twelfth year is reached, there is a greater percentage of administrators in the larger group and a smaller percentage of administrators in the group of schools in this study.

Figure 4 shows a comparison of the tenure of administrators of all of the cities of the third class of Kansas with the tenure of the administrators of the cities used in this study in respect to the total percentage having held their present positions for at least one year up to at least 22 years. As an example, 73.58 per cent of the whole group of administrators have held their positions for at least two years, while only 66.92 per cent of the small group have held their positions for at least two years. To continue the comparison, 59.55 per cent of the larger

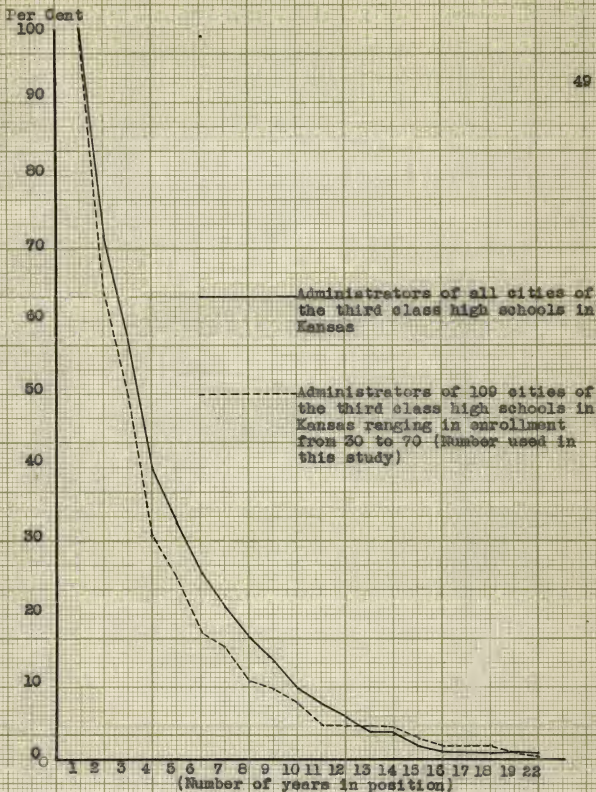


Figure 4. An accumulative comparison of the tenure of administrators in all high schools in cities of the third class in Kansas with that in 109 Kansas high schools ranging in enrollment from 30 to 70.

group have held their positions for at least three years; and 51.32 per cent of the smaller group for at least three years. This means that only about two-thirds of the administrators of the cities used in this study have held their positions for at least two years, and only about one-half of them for at least three years.

Standardization of Teaching Combinations

An effort was made to learn what teaching combinations it is most difficult to find qualified teachers to fill. From the 98 schools answering the question relative to this problem, 44 different combinations were mentioned. Table 11 shows these combinations with the number and percentage of schools reporting. The greatest number of schools reporting any one combination (11 schools or 10.09 per cent) was for the domestic science-commerce combination. Eight schools (7.34 per cent) reported commerce, while six schools (5.50 per cent) reported English-music, and six schools (5.50 per cent) reported domestic science-music. There were 22 (20.18 per cent) combinations, each of which was reported by one school only.

In a study made by Shellenberger (20, p. 60) it was found that in 1937, 554 Kansas science teachers were required to teach 83 different subject combinations,

Table 11. A list of the teaching combinations for which administrators find it hard to find qualified and competent teachers, and number and percentage of schools reporting.

Subject Combinations	Number of Schools Reporting	Percent- age
Commerce	8	7.34
Commerce-Coaching Athletics	1	0.92
Commerce-Industrial Arts	2	1.83
Commerce-Mathematics	5	4.59
Commerce-Music	2	1.83
Commerce-Social Science	1	0.92
Commerce-Science	3	2.75
Coaching Athletics and Any Combination	2	1.83
Domestic Science	1	0.92
Domestic Science-Commerce	11	10.09
Domestic Science-Commerce-Music	0	0.00
Domestic Science-Foreign Language	1	0.92
Dom. Science-For. Language-Music	1	0.92
Domestic Science-Mathematics	1	0.92
Dom. Science-Math.-Foreign Language	1	0.92
Domestic Science-Music	6	5.50
Domestic Science-Social Science	1	0.92
Domestic Science-Science-Mathematics	1	0.92
English and Any Combination	1	0.92
English-Commerce	3	2.75
English-Commerce-Music	1	0.92
English-Domestic Science	4	3.66
English-Domestic Science-Music	2	1.83
English-Foreign Language	2	1.83
English-Foreign Language-Music	3	2.75

(continued on next page)

Table 11. (Cont.)

Subject Combinations	Number of Schools Reporting	Percent- age
English-Music	6	5.50
English-Music-Dramatics	1	0.92
English-Normal Training	1	0.92
Industrial Arts	2	1.83
Industrial Arts-Coaching Athletics	2	1.83
Industrial Arts-Science-Mathematics	1	0.92
Industrial Arts-History	1	0.92
Industrial Arts-Science-Coaching Ath.	2	1.83
Foreign Languages	1	0.92
Foreign Languages-Music	2	1.83
Mathematics-Music	1	0.92
Music and Any Combination	4	3.66
Music-Dramatics	1	0.92
Music-Science-Commerce	1	0.92
Social Science	1	0.92
Science-Coaching Athletics	3	2.75
Science-Indus. Arts-Coaching Athletics	2	1.83
Science-Foreign Languages	1	0.92
Science-Music	1	0.92
No Combination Hard to Fill	5	4.59
Number of Schools Not Reporting	6	5.50
Totals: Number of Combinations 44	109	99.97

63.8 per cent of which occurred so infrequently that they did not justify deliberate preparation for teaching them.

These figures make it evident that there should be a standardization of teaching combinations if teaching positions are to be filled adequately.

Table 12 shows the number of times that specific subject fields were mentioned in the subject combinations studied. According to this table, good commerce, music, domestic science, and English teachers are most difficult to find, especially in the very small high schools of Kansas.

PROBLEMS RELATING TO SUPERVISION AND TO THE ADMINISTRATION OF THE BUDGET

Although the organization of the school, the school plant, and the problems of the teachers are all problems of the administrator, he has still another group of problems that are even more directly his. These are the problems of the administration of the operation of his school, and they include the distribution of his time, the making of the school budget, and pupil accounting and guidance. The findings on these problems follow.

Table 12. The number of times that specific subject fields were mentioned in the subject combinations studied.

Specific Fields	Number of Times Mentioned
Commerce	38
Music	32
Domestic Science	30
English	24
Science	15
Foreign Languages	12
Industrial Arts	12
Coaching Athletics	12
Mathematics	10
Social Science	3
Dramatics	2
History	1
Normal Training	1

Distribution of the Administrator's Time

Table 13 shows the average number of hours spent daily by the administrators in this study for the following professional duties: teaching (4.04 hours), administration (1.19 hours), clerical work (1.14 hours), supervision (1.16 hours), study (0.96 hours), and public service (0.75 hours). By adding these averages, it will be found that the administrator's average day is 9.24 hours. The percentages of time spent on each of the above duties were figured on the basis of a 9.24-hour day. The resulting percentages are found in table 13.

A theoretical percentage of the distribution of the administrator's time in the order of time spent has been set up by 58 university professors, according to Hughes (10, p. 48), as follows: supervision, 31 per cent; administration, 23 per cent; teaching, 15 per cent; study, 12 per cent; public service, 11 per cent; and clerical work, 10 per cent.

Hughes (9, p. 40) has made a study of the distribution of the administrator's time in 56 small city schools, and he has found the following percentages, which are arranged according to the amount of time spent on each: teaching, 33.1 per cent; administration, 21.7 per cent; clerical

Table 13. The average number of hours spent daily by administrators of 109 small Kansas high schools in professional duties.

Professional Duties	Average Number of Hours (per day)	Percentage
Supervision	1.16	12.5
Administration	1.19	12.9
Teaching	4.04	43.7
Professional Study	.96	10.4
Community Leadership	.75	8.1
Clerical Work	1.14	12.4
Totals	9.24	100.0

work, 13.2 per cent; supervision, 12.7 per cent; study, 10.9 per cent; and public service, 8.3 per cent. The time spent on professional duties of the administrators used in this study ranks as follows: teaching, 43.7 per cent; administration, 12.9 per cent; supervision, 12.5 per cent; clerical work, 12.4 per cent; study, 10.4 per cent; and public service, 8.11 per cent. A comparison of these figures will be found in table 14, along with the ranking of the administrator's duties in the order of the length of time spent on each.

There is not a great range of difference in the amount of time spent in theory and in practice on study (12 per cent - 10.4 per cent), on public service (11 per cent - 8.11 per cent) and on clerical work (10 per cent - 12.4 per cent). In practice there is not so much time spent on study and on public service as is recommended in theory; there is more time spent in practice on clerical work than in theory. The greatest difference in the range of time spent is in teaching. In theory 13 per cent should be spent in teaching. In Hughes' study (9) 33.1 per cent was spent in teaching; while in the schools of this study the per cent was 43.7. This time is taken in the schools of both Hughes' study and this study from the time the administrators should be using for supervisory and administrative

Table 14. A comparison and ranking of the distribution of the time spent by administrators in 109 small Kansas high schools with two other studies made by Hughes (9, 10).

Duties of Administrators	Desirable distribution of administrators' time in small schools as judged by 68 university professors. (Study by Hughes)		Distribution of administrators' time in 66 small city schools as found by Hughes.		Distribution of administrators' time in 109 small Kansas high schools used in this study.	
	Percentage	Theoretical Rank	Percentage	Rank in Practice	Percentage	Rank in Practice
Supervision	31	1	12.7	4	12.5	3
Administration	23	2	21.7	2	12.9	2
Teaching	13	3	33.1	1	43.7	1
Professional Study	12	4	10.9	3	10.4	3
Public Service and Leadership	11	5	9.3	5	9.11	5
Clerical Work	10	6	13.2	3	12.4	4

duties. Only 12.3 per cent of the time of the administrators of this study is used for supervision and 12.9 per cent for administration, while theoretically 31 per cent should be used for supervision and 23 per cent for administration.

Markham (14, p. 57) suggests, that, as one of the standards for secondary schools of Kansas, the superintendent and principal should devote considerable time to supervision of instruction. It is recommended that 20 to 40 per cent of their time be for supervision of instruction, depending upon the size of the school.

The amount of time spent on supervision in the small high schools of Kansas used in this study is far below the above standard.

Administration of the High School Budget

The modern high school administrator faces a real responsibility in reference to the preparation of the annual school budget. Many outstanding educators seem to be agreed on the fact that the administrators in all high schools should participate in making the financial budget. Engelhardt (5, p. 489) says the budget should be prepared in the central office. In a well-organized system teachers, supervisors, and principals will have participated in determining the standards for quality, quantity,

and use for all materials and supplies. Douglass (4, p. 441) says that the administrator should take the initiative in preparing the budget.

It is logical to believe that a budget prepared by the board of education apart from the advice and help of the administrator can only result in an ill-planned and unbusiness-like procedure. Engelhardt (5, p. 488) says that the educational program, both present and future, must be determined and approved by the administrator before a financial statement estimating the future income and disbursements can be prepared. The school administrator certainly is the only school official who is thoroughly familiar with the local educational program, the planning of which requires professional knowledge, skill, and leadership.

In this study of 109 small Kansas high schools, only one administrator, less than one per cent of all studied, takes practically the full responsibility in preparing the school budget preliminary to the criticism and acceptance by the board of education.

In 35 schools, 52.18 per cent of all studied, the school board takes all authority and responsibility for the preparation of the budget. In 73 schools, 66.95 per cent, the financial budget is made by the school board and

the school administrator working jointly.

Administration of the Guidance Program

Wetzel, (22, p. 90) says the need for guidance in the secondary school has always existed, but today it is acute because of the complexity of the situation which confronts the pupil both within and without the school. The time has come when secondary school administrators cannot minimize the importance of some kind of guidance program. Guidance is implied in our philosophy of education. Guidance is an organic part of high school administration and not just something to be added if the school can afford it.

Wetzel (22, 130) summarizes some of the conditions underlying a guidance program: (1) a flexible curriculum; (2) a flexible administration; (3) a cumulative record; (4) a measure of pupil capacity; (5) reliable ratings; (6) norms of achievement at different ability levels.

Realizing the difficulty in fulfilling the first, second, and sixth conditions, especially in small schools, this study was concerned mainly with the other three, learning just what special efforts were being put forth by administrators in trying to carry out any kind of guidance work.

From table 15 it will be observed that 74.3 per cent, or nearly three-fourths of the schools studied kept student

Table 15. Number and per cent of the 109 administrators of small Kansas high schools answering certain questions in reference to a program of guidance.

Questions Asked Administrators	Yes	Per Cent	No	Per Cent	Per Cent Not Reporting
Do you keep a cumulative record of your students?	81	74.3	25	22.9	2.6
If you keep a cumulative record, do you feel that such a record is of great help in guiding the students who are in school?	45	55.6	32	39.5	4.9
Do you keep follow-up records of graduates?	18	16.5	88	80.7	2.8
Do you offer a well organized program of vocational, educational, and personal guidance?	21	19.3	82	75.2	5.5
Do you require all students coming into high school to take intelligence tests?	27	24.8	82	75.2	0.0
Do your teachers use standardized tests for measuring class accomplishment?	80	73.4	29	26.6	0.0
Does your school give special attention to individual differences?	73	67.0	36	33.0	0.0

accumulative records of their students, while 22.9 per cent did not; 2.8 per cent of the administrators failed to give an answer. It was interesting to note that only 55.6 per cent of those keeping accumulative records felt that such records were of much benefit in guiding the pupils who were in school.

Along with a complete accumulative record usually there was a follow-up record of students after they had been graduated from high school. When asked whether these records were available, only 16.5 per cent of the 109 administrators reported that they kept them.

Wetzel (22, p. 97) says the wide range of pupil capacities found in the high school today makes some kind of measure of pupil capacity imperative for the administration of a guidance program. Certainly the capacity of the pupil for the kind of educational opportunity offered by the school is a most important factor in the proper guidance of the pupil.

Probably one of the most commonly used measure of pupil capacity is the I. Q. (Intelligence Quotient) determined from intelligence tests. The results of the questionnaire indicated that as few as 24.8 per cent of the schools used this quotient for the determination of what a child was able to do.

Another valuable condition for administering the guidance program efficiently is in the use of reliable ratings, given by the teachers within the subject offerings of the school. To be assured of arriving at ratings that are reliable and therefore of much value in guiding pupils in their work, some kind of standardized achievement tests should be used from time to time. Wetzol (22, p. 99) remarks,

"The record of past achievement is always significant in a guidance program, provided the measure of that record is reliable and provided it represents the pupil at his best."

The types of original teacher tests used, whether made subjectively or objectively, tend to have some bearing on the reliability of school ratings. It was encouraging to observe from this study that 80 administrators report that their teachers used standardized tests in their work; this represents nearly three-fourths of the schools studied. The type of original teacher tests predominating among the teachers of the 109 schools was the objective. In only 10.1 per cent of the schools did the teachers rely mainly on subjective tests, while 79.8 per cent of the schools reported the use of objective tests; 8.3 per cent of the schools used both types about equally, and 1.8 per cent failed to report.

Small schools do have an advantage over larger schools in giving attention to individual differences because of smaller numbers with which to work. There is a better opportunity for closer and more frequent associations between teachers and pupils. Sixty-seven per cent of the administrators reported that they were giving special attention to individual needs, while 33 per cent were not.

In summarizing the short study of the status of guidance in the 109 small schools of Kansas ranging in enrollment from 30 to 70, a question was asked concerning the set-up of a well organized program of vocational, educational, and personal guidance. Only 21 administrators, or 19.3 per cent, stated that they offered a well organized program of guidance; 5.5 per cent submitted no answer.

RECOMMENDATIONS

Some suggestions for the improvement of conditions through the solution of some of the problems of administration of small Kansas high schools as a result of this study are summarized in the following measures:

1. The State Department of Education of Kansas should emphasize the necessity of larger units of administration in the small high schools; encourage through experimentation the use of the newer plans of school organization,

especially the 6-6 plan; and offer careful guidance to these schools in their efforts toward reorganization.

2. Stress the need of closer relationship between the two boards of education found in most small communities and encourage them to combine in some manner to act as a single unit of five members for transacting business pertaining to the entire school system.

3. An excellent procedure for most rural communities where two three-member boards still exist (one over the elementary school and the other over the high school) is to elect two members from each of the two respective districts, to represent more directly the interests of the two groups, and then elect a director to represent both districts. These members can work cooperatively as a five-member board with all authority pertaining to the entire local educational program centralized in one body.

4. Boards of education in the small communities should vest all administrative responsibility over the whole school system in one capable administrator (superintendent) who would also serve as principal of the high school and supervisor of the elementary grades.

5. In organization of the small high school program, administrators should try to adopt the use of the supervised study plan, using 60-minute periods, either

throughout all of the day, or, if that is impracticable, using a combination of the 40 and 60-minute periods whenever possible.

6. In an effort to increase the size of classes, which are characteristic of the small school, wider use of combination and alternation of classes should be made than has been done in practice.

7. Most small high schools need to acquire more school property for carrying out a more adequate physical education program.

8. Janitors of small schools should be encouraged to attend some janitor-engineer school every spring. This requirement should become a part of the janitor's contract.

9. Administrators should make an accurate check-up of library books and supplies and all laboratory equipment at the close of each school year to determine immediate needs; then designate a definite sum in the school budget to supply those needs. A continuous building-up program should be effected in these two departments of the small high school in order to carry out progressive school methods.

10. In every small high school of Kansas, teachers should be nominated by the administrator of the school and subsequently approved by the board of education.

11. Boards of education should use greater care in selecting their administrators and should try to develop a definite feeling among patrons that the head of the school system is to be a permanent citizen of the community, and that the welfare of a school is promoted by longer tenure of administration.

12. The Kansas State Department of Education should make a comprehensive study of teaching combinations now used in the small high schools and formulate standards which would result in more uniform teaching positions for which teachers might more adequately prepare.

13. Administrators in the small high schools should be relieved of much of their present teaching assignment so that they may give more attention to the vitally important administrative duties of administration and supervision.

14. In each small school the administrator should participate in preparing the school budget, the largest part of which should be based mainly upon his recommendations.

CONCLUSIONS

1. Nearly 90 per cent of the 109 small high schools in Kansas used in this study were still operating under the 8-4 system of organization.

2. Of the ten per cent of the schools which had reorganized their programs, 6.5 per cent were trying the 6-6 plan.

3. Less than one-sixth of the small communities elected one board of education to govern the entire school system.

4. The opinion of a large majority of the high school administrators was that only one board of education over the whole educational program should be found in the small towns.

5. In nearly 25 per cent of the small high schools in this study was found a superintendent of schools with authority over both the elementary and secondary schools.

6. Two-thirds of the above superintendents served also as principal of the high school.

7. There were comparatively few schools making use of the straight 60-minute supervised study periods throughout the school program - 21.1 per cent in this study.

8. In small Kansas high schools administrators spent

approximately four hours of each school day teaching classes. This represented almost two-thirds of the school day.

9. The average amount of his time spent on supervision by an administrator in a small high school was about 12 per cent; Markham recommends a minimum of 20 per cent.

10. In one-third of the schools the board of education prepared the school budget without the help of the high school administrator.

11. Nearly one-fifth of the administrators in the small rural high schools of Kansas stated that they were making special effort to carry on a well organized program of school guidance.

12. The school sites in these small communities were entirely too small for adequate play areas as compared to national standards suggested by educators.

13. Forty of the 109 small high schools were housed with the grade schools; and nearly 50 per cent of these one-building systems did not have adequate room for instructional purposes.

14. Over one-half of the school buildings in small high schools were not rated as being strictly fireproof.

15. The buildings of nearly 50 per cent of the small high schools were not kept at an even temperature during

cold weather.

16. The ventilating systems of more than one-half of the above schools did not operate properly.

17. Not one janitor in small high schools who was rated low in efficiency by the administrator ever attended a janitor-engineer school.

18. Of the 109 small high school janitors, only six janitors (5.6 per cent) attended janitor-engineer school regularly; and 21 (19.2 per cent) janitors attended occasionally.

19. Of those schools, nearly 25 per cent, whose janitors attended janitor-engineer school, not one janitor was rated low in efficiency by the administrator.

20. The average number of volumes in the libraries of these small schools was 625.

21. The results of this study seemed to indicate that the small Kansas high schools did not spend an adequate amount of money each year for libraries and laboratory equipment.

22. There were about ten per cent of the administrators in the small high schools who did not have any part in the selection of teachers.

23. College agencies were the most popular source for securing new teachers.

24. In the school year 1937-1938 there was an average of 0.6 teachers per small school holding a Master's degree.

25. Nearly one-half of the high school teachers in these small schools had taken work in addition to the Bachelor's degree.

26. Approximately three-fourths of the teachers were faithful in attending teachers meetings sponsored by the state.

27. Only 12.6 per cent of the teachers were members of the N. E. A.

28. The average tenure of the small high school administrators was not long enough to allow any extended plan of educational improvement to be carried to completion.

29. The teaching combinations for which administrators of the small Kansas high schools found it most difficult to get competent teachers were: commerce-domestic science; commerce with any combination; and English-music.

30. Teachers of the small high schools of Kansas were expected to teach an unreasonable variety of subject combinations.

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