

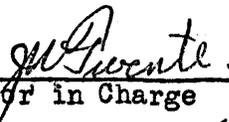
A STUDY OF THE PERSONAL EXPENDITURE OF 482 HIGH SCHOOL STUDENTS
OF LAWRENCE, KANSAS, FOR CURRICULAR AND EXTRA-
CURRICULAR ACTIVITIES

by

Marston M. McCluggage
A.B. College of Emporia, 1928

Submitted to the Department of
Education and the Faculty of the
Graduate School of the University
of Kansas in partial fulfillment
of the requirements for the de-
gree of Master of Arts.

Approved by:



Instructor in Charge



Head of the Department

May, 1931.

ACKNOWLEDGEMENTS

The writer hereby expresses his sincere appreciation of the helpful suggestions of Dean R.A. Schwegler, and of the thoughtful and constructive criticism of J.W. Twente, Professor of Education.

He is also deeply indebted to Principal H.L. Baker and to the teachers of Liberty Memorial High School, Lawrence, Kansas, for assistance in preparing the questionnaire and in supervising the collection of the data.

M.M. Mc.

TABLE OF CONTENTS

	Page
CHAPTER I- - - INTRODUCTION- - - - -	1
CHAPTER II- - -STATEMENT OF THE PROBLEM - - - - -	4
CHAPTER III- - SPECIFIC PROBLEMS OF THE STUDY AND METHODS OF PROCEDURE - - - - -	8
CHAPTER IV- - -PRESENTATION AND INTERPRETATION OF DATA - - - - -	14
CHAPTER V - - -SUMMARY AND CONCLUSION - - - - -	43
APPENDIX - - - - -	-50

LIST OF TABLES

		Page
TABLE I	Total Expenditure of 482 Pupils in School Entire Year	14
TABLE II	Percentile Table of Total Expenditure of 482 Pupils in School Entire Year	15
TABLE III	Total Expenditure of 252 Boys in School All Year; By Race and Class	16
TABLE IV	Total Expenditure of 230 Girls in School All Year; By Race and Class	17
TABLE V	Cost of Books for 482 Students	20
TABLE VI	Cost of Work Books, Laboratory Manuals, Magazine Fees, Breakage Fees, and Similar Instructional Supplies for 482 Students	22
TABLE VII	Cost of Tools of Instruction for 475 Students	23
TABLE VIII	Cost of Fountain Pens for 238 Students	24
TABLE IX	Amount of Money Spent for Materials for Use in Home Economics Laboratory by 61 Girls and for Use in Shop-work by 48 Boys	25
TABLE X	Summary of the Average; Standard Deviation, and Upper and Lower Limits of the Middle 68 Per cent of the Students for Curricular Expenditure	26
TABLE XI	Summary of the Median, Q, and Upper and Lower 50 Per cent of the Students for Curricular Expenditure	27
TABLE XII	Expenditure for Athletic Equipment by 195 Boys and 170 Girls	28
TABLE XIII	Total Expenditure for All Special Equipment, Fees, Costumes, etc., by 252 Boys and 230 Girls	30
TABLE XIV	Expenditure of 246 Boys and 229 Girls for Admission Charges to Athletic Events	31
TABLE XV	Expenditure of 252 Boys and 230 Girls for School Activities Other than Athletic Events	33

LIST OF TABLES (Cont.)

		Page
TABLE XVI	Expenditure of 252 Boys and 230 Girls for Class and Organization Dues	35
TABLE XVII	Expenditure for Class and Organization Parties, Banquets, Hikes and Other Social Functions	36
TABLE XVIII	Summary of Data on Student Employment	37
TABLE XIX	Weekly Wages of 185 Students Gainfully Employed	38
TABLE XX	Weekly Allowances of 74 Students	39
TABLE XXI	Summary of Answers to the Question "Is School Expense Burdensome?"	40
TABLE XXII	Summary of the Average, Standard Deviation, and Upper and Lower Limits of the Middle 68 Per cent of 482 Students for Extracurricular Expenditure	41
TABLE XXIII	Summary of the Median, Q, and Upper and Lower Limits of the Middle 50 Per cent of 482 Students for Extracurricular Expenditure	42

CHAPTER I

INTRODUCTION

Ten years ago F.H. Swift wrote "It may be startling, but it is nevertheless true, that at the present moment education in the United States is neither universal nor democratic nor free. . . . That it is not democratic is shown by the inequalities in educational opportunity to be found not only in every state in the Union, but existing within the counties of the same State."¹

Having thus had their attention called to this problem, educators subscribed to and supported this doctrine of equal educational opportunity, and began numerous investigations to determine to what extent inequalities existed and in what forms. Thus we find studies being made in inequalities of financial abilities of various school units, in inequalities in effort, in services rendered, in length of term, in salaries paid and in expenditures per pupil.

All the above studies however approached this problem of inequality from the side of school administration and of public expenditure. Educators in their studies placed little or no emphasis upon another kind of inequality that might exist - that of inequality of financial opportunity of students within a single school.

As educators we profess to believe in free public education; that all types of educational opportunity should be provided at public expense; that we should educate "all the children of all the



1. F.H. Swift in the American School Board Journal, May, 1920, Page 291.

people", and yet many school systems are so organized that in order for the pupil to avail himself of the opportunities offered he must make certain personal expenditures. How great these expenditures are, what items they are for, and how burdensome they are is a field that has been little investigated, and about which we have little definite information.

In recent years we have come to realize, to an increasingly greater extent, that in every American school there are two schools, the one within the classroom which deals with the regular curriculum, and the one without, which we have called extracurricular activities. Since extracurricular activities furnish such a large amount of educational opportunity to the youth of our schools, any study made of personal expenditure of students for educational activities most certainly should determine how much the student spends for the attractions the school offers outside the classroom.

In spite of the large number of investigations of school clubs and activities that have been made, the author has been unable to find any studies that report the cost of these activities to the student personally. There are numerous studies on the cost of school activities for each student, or the financial administration of school activities from a central banking account and on how to raise money for activities.

Thus we see that such studies as have been made on financing education, both curricular and extracurricular have all approached the problem from the point of view of the school administrator who must

act as steward for the public's money. The problem of how much the student has to spend to take advantage of the opportunities American education offers is a field that has been neglected. It is a field in which the educator should have some definite information if he wishes to meet the challenge of a public who questions every dollar spent on education. It is a field in which the educator must have definite knowledge in order to determine if the program of extracurricular activities is open to all students. It is information the educator must have to determine if there is equal educational opportunity for the students of his school.

This study, therefore, is for the purpose of investigating the personal expenditure of high school students, both for curricular and extraeurricular activities.

CHAPTER II

STATEMENT OF THE PROBLEM

The specific problem of this study is to ascertain the personal expenditure of students attending Liberty Memorial High School, Lawrence, Kansas, for the school year 1929-1930. Personal expenditure as used in this study means money spent both for curricular and extra-curricular activities. The study confines its investigation to such expenditures that students make because of the demands of the school, or because of the opportunities that the school offers for spending money. The items investigated thus will be confined to the cost of books, the cost of other instructional supplies, the cost of special equipment, both for curricular and extracurricular activity, the cost of materials for shop and laboratory use, the cost of various fees and dues to the student, the amount spent in admission charges to the various school events, and the amount spent for parties, picnics and similar school activities. The study will also endeavor to ascertain how the students meet the above expenses, whether through working, or by means of an allowance or by no organized method.

The study will not investigate such expenses as the student would have anyway, whether attending school or not. Therefore, such items as expenditure for clothing (other than that specially required for school use), for food, and for amusements at other places than school functions are not included in this study.

Liberty Memorial High School is the public senior high school in Lawrence, Kansas. It is a three year high school maintaining

sophomore, junior and senior classes. At the time this study was made it had an enrollment of 580 students. The instructional staff consisted of a principal and 33 teachers.

The curriculum contains the subjects customary in most Kansas high schools and in addition offers extended training in commerce, home economics, practical arts, fine arts, and physical education courses which may be conducive to more than the average amount of pupil expenditure. (see class schedule in appendix).

The school maintains a vigorous and extensive program of student clubs and activities. The school schedule provides for three 30 minute activity periods per week and for a 35 minute conference period in the evening which is used by many as an activity period. At the time this study was made the school contained an agriculture club, mathematics club, commercial club, debate club, dramatic club, English club, three foreign language clubs, girls' athletic association, home economics club, and three religious organizations. In addition to their regular activities most of these organizations sponsor from two to three social events each year such as parties, hikes, and banquets.

The school maintains a National Honor Society, Quill and Scroll--a national literary society, and the National Thespians,--an honorary dramatic society. These organizations sponsor such activities as their names indicate and in addition engage in at least one social event per year in which the member is expected to share the expense. The above organizations also have initiation fees, and insignia which may call for further expense on the part of the student.

The school provides for the following social program apart from such functions that the activities mentioned above might have. Each class gives one class party during the year. The sophomore and senior parties are informal and school authorities require the classes to adhere to the general school policy of no admittance charges or more than fifty cents per person. The Junior Prom, however, is formal and, in the year in which this study was made, cost participating juniors two dollars and seniors attending for the first time one dollar twenty-five cents.

The Student Council also provides two general all-school parties as well as from one to three dances per year as the students demand them.

The school also maintains a newspaper, and publishes an annual. It offers opportunity to participate in and attend forensic and musical activities. It provides an intra-mural athletic program which offers opportunity for every student to participate, if he so desires, regardless of his athletic ability.

During the year in which this study was made the school had winning athletic teams, which caused the schedule of games to be extended to include two tournaments, both within easy reach of Lawrence. Both the lengthened schedule and the success of the teams probably had some effect on the amount expended for attendance at athletic events.

The school also offers entertainment in the form of school plays and special pay assemblies. In the year in which this study was made there were six such events. (For a more detailed account of the opportunities offered for expenditure see the appendix for the

questionnaire used in the collection of data).

Liberty Memorial High School was chosen for the location of this study, first, because the author felt it to be typical of other high schools of its size in respect to social and financial qualities of its students; secondly, because its curricular offerings are typical of other progressive high schools; thirdly because it offers the vigorous program of extracurricular activities so common in schools its size. Other reasons which made it desirable to use this particular school was the fact that numerous school patrons had complained of the expense to their children, so that the school administration was interested in getting exact data on this problem and were willing to cooperate in every way. The fact that the author taught in the school, that the other teachers of the school were interested in the problem, and that the school had advisory room organization made it an ideal location for the collection of material that must be closely supervised in its compilation.

CHAPTER III

SPECIFIC PROBLEMS OF THE STUDY AND METHOD OF PROCEDURE

The purpose of this study is to answer the following questions concerning the personal expenditure of students who were enrolled in Liberty Memorial High School for the entire 1929-1930 school year:

1. What was the total personal expenditure of students for school activities, both curricular and extracurricular?
2. What was the cost of books per student?
3. What was the cost of work books, laboratory materials and instructional supplies per student?
4. How much did the home economics courses cost the girls?
5. How much did the shop courses cost the boys?
6. What was the cost of athletic equipment per student?
7. What was the total expenditure of the pupil for all special equipment, fees, costumes, etc., including athletic equipment?
8. What was the expenditure per pupil for admission charges to school athletic events, both at home and at other schools?
9. What was the expenditure for all school activities other than athletic events? (This will include plays, debates, pay assemblies, all school parties, school paper and school annual for all but seniors whose annuals are included in their class dues).
10. What was the expenditure per pupil for class, club, and organization dues?
11. What was the expenditure per pupil for class and club parties, dinners, hikes, etc?

12. How many students worked at gainful occupations during the school year to earn part of their school expense? What was their average wage?

13. How many students have to meet their school expenses out of a regular allowance? How large are these allowances?

14. Do students think their school expense burdensome?

METHOD OF PROCEDURE

In studies of the nature of this investigation two methods of procedure are open to the investigator. The subjects may either keep an account book filled in daily, or at regular intervals, during the study, or they may compute their expenditure during the period of investigation at one sitting using a check sheet to refresh their memory of items and amounts for which they had opportunity to expend money.

The author chose the check sheet method for the following reasons: (1) The long period of time over which the accounts would have to be kept would induce carelessness, lack of interest, and lack of cooperation with the investigator, upon the part of the subjects if the diary or account method were used.

(2) Adequate supervision of the keeping of accounts would impose a heavy burden on the teachers of the school.

(3) The check sheet could be filled at one sitting with a high degree of interest on the part of pupils and under close supervision of advisory teachers. Since the check list contained practically all the items for which the students could have spent money

and estimates of how much certain purchases were likely to cost, the results were likely to be more complete and more reliable than under the diary or account system.

(4) The study was for the purpose of solving a pressing problem of school administration and for the purpose of furnishing information on which to build school policies for the following year. Consequently, the greater speed of the check sheet method was an important item in its favor.

The most important piece of work in the investigation was the formation of the check sheet. The author held personal interviews with each member of the teaching and administrative staff in which he gathered a complete list of the materials and equipment used in their courses together with the cost or information as to where to find the cost. In these interviews he also made a list of all the activities and expenses connected with the activities which the teacher sponsored. The next step was to examine the school announcements published twice each week and any activities or expenses previously omitted were added.

The author then chose a sample of 19 students representing all classes and all activities to fill in a sample check sheet and to add items omitted and to mark questions and items not clearly stated. After this the trial check sheet was discussed with the sample group.

The author then revised the check sheet and put in in its final form as seen in the appendix.

The check sheets as finally formed consisted of seven parts.

Part I consisted of personal information such as the name of the pupil, age, sex, size of family, number of months attending Liberty Memorial High School, occupation of parent, whether pupil was employed at gainful occupation during the school year, amount of earnings, whether pupil had an allowance and if so how much, and how much the pupil spent per week. The name of the advisory teacher was also asked so that the investigator could locate the pupil for additional information if necessary.

Not all of the information gathered in Part I is tabulated in this study. Some of it was felt to be unreliable, such as "How much do you actually spend per week?" since some students included lunches and others did not. Other parts of Part I were gathered for later use in a socialized study outside the range of this investigation.

Part II dealt with the cost of materials of instruction. The names of all texts used were listed and the pupil was asked to check whether he bought the book new, used at the book store, used at the school exchange or from another pupil. No prices were placed on this sheet, the author feeling that his own uniform computation of cost would be more reliable than asking students to remember what they paid. The author computed the cost of books on the basis of list price for new books, 60 per cent list price for used books purchased at book stores, and 50 percent list price if purchased at book exchange or from another student. The above percentages were adopted after investigation at the various stores and at the book exchange.

Section B of Part II included the cost of work books,

laboratory materials, magazines, newspapers and similar items. The list included the required and optional items with the cost of each which the student was asked to enter in the blanks.

Section C of Part II included the cost of tools of instruction such as pens, pencils, paper, notebooks, material used in home economics and shopwork, and similar items.

Part III included all special equipment, fees, and school costumes such as gymnasium clothes, athletic equipment, locks, debate and music books, play books, clothes for use in shop and laboratory work, club sweaters, emblems, glee club uniforms, school and organization jewelry, senior invitations and name cards, and similar items.

Part IV included the cost of school activities both athletic and non-athletic such as football and basketball games, plays, debates, pay assemblies, all school parties, school paper and school annual.

Part V included class and organization dues, part VI class and organization parties, hikes, dinners, etc., and Part VII miscellaneous items not covered in the above classifications.

The general purpose of the investigation was then explained to the teaching staff of the school in a faculty meeting and sample check lists with a letter of instructions for administering were placed with each advisory room teacher.

The check sheet was administered to the pupils of Liberty Memorial High School during the advisory period of May 13, 1930. The date was two weeks before the close of school. The only school activity occurring after May 13 was Senior Class day and this study made no

attempt to include the expense of that activity.

The advisory period of this school is a period of thirty minutes duration occurring once each week. The student meets with his regular fourth hour teacher in a regular sized class group. This appeared to the author as an ideal situation in which to administer the check list. The fact that the student listed his name (which was done with one exception), that he was under the supervision of a teacher who knew him well and who was sympathetic with the study, and that the information was gathered in small class groups would encourage a high degree of seriousness and accuracy in listing of information on the check sheets. The check sheets were without exception in a usable condition and appear to the author to have been conscientiously used.

537 pupils filled in the check sheets, but of these, 55 had not been in school all year. (This was due to mid-year promotion from the junior high school). This left 482 check sheets to form the basis of this study--252 boys and 230 girls.

Each check sheet was added into such totals and sub-totals as necessary to furnish answers to the questions asked in the first part of this chapter.

These answers were then tabulated into frequency distributions and the average, standard deviation, median, and Q computed if the distribution appeared to be normal. If the distributions were skewed, only median and Q were computed. These tables and computations are given in the following chapter.

CHAPTER IV

PRESENTATION AND INTERPRETATION OF DATA

TABLE I

TOTAL EXPENDITURE OF 482 PUPILS IN SCHOOL ENTIRE YEAR

	<u>Boys</u>	<u>Girls</u>	<u>Total</u>
\$95-\$100	1	0	1
90-95	0	0	0
85-90	0	0	0
80-85	1	0	1
75-80	1	0	1
70-75	0	0	0
65-70	1	2	3
60-65	1	0	1
55-60	5	3	8
50-55	7	4	11
45-50	6	10	16
40-45	15	15	30
35-40	32	25	57
30-35	21	37	58
25-30	35	37	72
20-25	48	47	95
15-20	40	35	75
10-15	28	11	39
5-10	8	4	12
.00-5.	<u>2</u>	<u>0</u>	<u>2</u>
N =	252	230	482
Average =	\$27.80	\$28.80	\$28.28
S. D. =	\$13.70	\$10.90	\$12.45
Median =	\$25.00	\$27.43	\$26.25
Q =	\$8.91	\$7.26	\$8.13

Table I shows that girls slightly exceed boys in average and median amounts spent but that the range and other measures of variability are not as great for girls as for boys.

Table II shows a percentile distribution of the same data given in Table I.

TABLE II
PERCENTILE TABLE OF TOTAL EXPENDITURE OF 482 PUPILS IN SCHOOL
ENTIRE YEAR

<u>Percent of Pupils</u>	<u>Cumulative Fre- quency of Pupils</u>	<u>Amount Spent</u>
100	482.	\$95.63
90	433.8	50.27
80	385.6	37.86
70	337.4	33.65
60	289.2	29.60
50	241.	26.25
40	192.8	23.41
30	144.6	20.87
20	96.4	17.89
10	48.2	14.38
0	0	1.90

TABLE III

TOTAL EXPENDITURE OF 252 BOYS IN SCHOOL ALL YEAR BY RACE AND CLASS

	<u>White</u> <u>Seniors</u>	<u>Colored</u> <u>Seniors</u>	<u>White</u> <u>Juniors</u>	<u>Colored</u> <u>Juniors</u>	<u>White</u> <u>Sophomores</u>	<u>Colored</u> <u>Sophomores</u>	<u>Total</u>
95-100	-	-	-1-	-	-	-	1
90-95	-	-	-	-	-	-	-
85-90	-	-	-	-	-	-	-
80-85	-1-	-	-	-	-	-	-1
75-80	-	-	-1-	-	-	-	1
70-75	-	-	-	-	-	-	-
65-70	-1-	-	-	-	-	-	1
60-65	-1-	-	-	-	-	-	1
55-60	-3-	-	1-	-	-1-	-	-5
50-55	-2-	-	5-	-	-	-	7
45-50	-2-	-	-3-	-	-1-	-	-6
40-45	-5-	-	8-	-	-2-	-	15
35-40	10-	-1-	13-	-	-7-	1-	-32
30-35	5-	-	11-	-	4-	1-	-21
25-30	12-	-1-	16-	-	-6-	-	-35
20-25	12-	1-	17-	1-	17-	-	48
15-20	7-	-	9-	1-	23-	-	40
10-15	1-	1-	7-	3-	-15-	1-	-28
5-10	1-	-	3-	1-	2-	-1-	-8
0-5.	-	-	-	1-	-	-1-	-2
N	63	4	95	7	78	5	252
Average	\$32.98	\$25.80	\$30.66	\$12.50	\$22.24	\$18.50	\$27.80
S.D.	\$14.13	\$8.68	\$13.58	\$5.95	\$9.65	\$13.60	\$13.70
Median	\$26.04		\$28.60		\$19.78		\$25.00
Q	\$8.41		\$8.39		\$5.36		\$8.91

TABLE IV

TOTAL EXPENDITURE OF 230 GIRLS IN SCHOOL ALL YEAR; BY RACE AND CLASS

	<u>White</u> <u>Seniors</u>	<u>Colored</u> <u>Seniors</u>	<u>White</u> <u>Juniors</u>	<u>Colored</u> <u>Juniors</u>	<u>White</u> <u>Sophomores</u>	<u>Colored</u> <u>Sophomores</u>	<u>Total</u>
65.00-69.99	2	-	-	-	-	-	2
60.00-64.99	-	-	-	-	-	-	0
55.00-59.99	2	-	1	-	-	-	3
50.00-54.99	2	-	2	-	-	-	4
45.00-49.99	2	-	7	-	1	-	10
40.00-44.99	9	-	6	-	-	-	15
35.00-39.99	6	-	16	-	3	-	25
30.00-34.99	13	-	14	1	9	-	37
25.00-29.99	9	1	14	2	11	-	37
20.00-24.99	7	1	18	3	13	5	47
15.00-19.99	6	-	9	3	15	2	35
10.00-14.99	1	-	-	1	9	-	11
5.00-9.99	-	2	-	-	-	2	4
N -	59	4	87	10	61	9	230
Average -	\$32.64	\$16.47	\$31.64	\$22.00	\$23.32	\$18.06	\$28.80
S.D. -	\$12.12	\$8.32	\$9.65	\$5.90	\$7.80	\$5.95	\$10.90
Median	\$32.50		\$30.89		\$22.50		\$27.43
Q	\$7.92		\$7.33		\$5.91		\$7.26

Tables III and IV show about the same average expenditure for both boys and girls but the median expenditure for boys is from \$6.46 for seniors to \$2.19 for juniors less than the girls' expenditure. The difference between median and average is shown both by the standard deviation and by Q which are smaller for the girls than for boys. This indicates that the range of expenditure is greater for boys, while the expenses of the girls are more closely grouped around the measure of central tendency.

An important feature of both tables is that the measures of variability, standard deviation and Q, are large thus showing that any given pupil's expenses may vary from the measure of central tendency to a rather large extent. This indicates that the opportunity for expenditure of money by pupils is much greater than many of them can afford. The table shows that much inequality exists between expenditures of different pupils in the same classes. Whether this inequality is due to inability to take advantage of the spending opportunities the school offers is another part of this investigation. It may be due to lack of interest on the part of the student to participate in different school activities.

A comparison of expenditure between classes shows little difference between juniors and seniors but there is more variability in the senior class showing that a few individuals could and did greatly exceed the median expenditure, but also that if circumstances demanded the expense could be less. A higher expense for seniors would be legitimate in view of the items on the check sheet connected with graduation.

Another interesting fact presented in Tables III and IV is that both junior and senior average expenditures run from \$2.84 to \$5.18

above the school average.

The expenditure of the sophomores are lower than for the other classes probably for two reasons: (1) the school does not offer to them the same opportunities for spending money; (2) they are new to the school and possibly take less interest in school activities.

The median and Q for negro students was not computed because of the small number of cases and the author thought the computations given would be more accurate. Negro expenditures run less than other students probably for two reasons: (1) many students lack the financial ability to spend more and (2) Negro students are prevented from participating in many school activities because in the words of one pupil "they feel they are not wanted."

TABLE V
COST OF BOOKS FOR 482 STUDENTS

	<u>Total Cost</u>	<u>Cost of New Books</u>	<u>Cost of Used Books</u>
\$11.50-12.00	2	1	
11.00-11.50	2	0	
10.50-11.00	1	1	
10.00-10.50	3	4	
9.50-10.00	2	2	
9.00-9.50	12	5	
8.50-9.00	9	5	
8.00-8.50	9	5	
7.50-8.00	17	12	
7.00-7.50	30	10	
6.50-7.00	38	17	1
6.00-6.50	46	23	0
5.50-6.00	44	35	1
5.00-5.50	49	21	2
4.50-5.00	52	53	9
4.00-4.50	45	39	6
3.50-4.00	29	31	8
3.00-3.50	34	43	20
2.50-3.00	21	50	50
2.00-2.50	12	14	37
1.50-2.00	14	42	73
1.00-1.50	5	22	47
.50-1.00	3	8	85
.00-.50	1	37	141
N* -	480	480	480
Average	\$5.31	\$3.94	\$1.44
S.D.	\$1.98	\$2.26	\$1.20
Median	\$5.19	\$3.89	\$1.15
Q	\$1.28	\$1.61	.90

*Two students reported books given to them.

Table V shows a wide range of expenditure for school books. Apparently a student can get the required books at low cost if he desires, or, if he is careless, he may spend a great deal. The table shows that 22 students spent more than \$9.00 for books. The author investigated the expenditures of these pupils and found that without exception one or more books had been lost or stolen and in a majority of instances only new books were purchased. These facts suggest that the school might well examine its enforcement of locker requirements to see that precautions are being taken to encourage honesty and carefulness.

The data of Table V show that new books represent about 74% of the total cost of books and that used books represent about 26% of the total cost of books. It appears that 37 students spend less than 50 cents for new books which probably means that they buy no new books at all. One hundred forty one spend less than 50 cents for used books which probably means that they buy no used books at all.

A factor that influenced this table to some extent was indicated by a few students on their check sheets when they stated that they purchased few books because they were using books purchased by older brothers and sisters. How active this factor was in lowering the cost the author cannot state.

TABLE VI

COST OF WORK BOOKS, LABORATORY MANUALS, MAGAZINE FEES, BREAKAGE FEES,
AND SIMILAR INSTRUCTIONAL SUPPLIES FOR 482 STUDENTS

\$3.75-4.00	1
3.50-3.75	1
3.25-3.50	0
3.00-3.25	1
2.75-3.00	2
2.50-2.75	4
2.25-2.50	10
2.00-2.25	22
1.75-2.00	17
1.50-1.75	23
1.25-1.50	39
1.00-1.25	62
.75-1.00	47
.50-.75	98
.25-.50	104
.00-.25	<u>51</u>
N	482
Average	.91
S.D.	.65
Median	.72
Q	.40

The items in this table may really be looked upon as additional costs of textbooks since in most cases they are used to supplement the text. If the student should happen to take certain combinations of courses the cost of these materials might be extremely burdensome as this expense comes at the time other books are purchased.

TABLE VII

COST OF TOOLS OF INSTRUCTION FOR 475 STUDENTS. (This includes drawing instruments, pens, pencils, fees for use of musical instruments, ink, notebooks, paper, rulers, paints, maps and similar materials).

\$28-29	1
27-28	0
26-27	1
25-26	0
24-25	0
23-24	0
22-23	1
21-22	2
20-21	2
19-20	0
18-19	0
17-18	1
16-17	2
15-16	9
14-15	11
13-14	11
12-13	9
11-12	22
10-11	24
9-10	18
8-9	19
7-8	33
6-7	36
5-6	30
4-5	46
3-4	50
2-3	76
1-2	56
0-1	15
N	475
Average	\$6.15
S.D.	4.48
Median	4.88
Q	3.06

Seven students reported no expense or failed to fill out blank.

Table VII does not appear to the author to be as reliable as the other data of this investigation. Many of the items were of such nature that the pupils had to estimate their expenditure and probably they erred to some extent in doing this. This table, as do most of the other tables of this study, shows great variation. The author personally investigated some of the larger expenditures and found that generally the purchase of one or two expensive fountain pens were the contributing reasons. Expensive drawing sets and notebook covers were other important items in causing high expense.

The author carried his tabulations on the cost of fountain pens into Table VIII. Two hundred thirty eight pupils or 49.4 percent of the students in this study reported the purchase of pens.

TABLE VIII

COST OF FOUNTAIN PENS FOR 238 STUDENTS

\$15-16	2	
14-15	1	
13-14	0	
12-13	0	Average - \$4.69
11-12	0	S.D. 2.59
10-11	8	Median 5.02
		Q 1.46
9-10	2	
8-9	11	
7-8	13	
6-5	12	
5-6	61	
4-5	13	
3-4	53	
2-3	28	
1-2	33	
0-1	1	
N	238	

An investigation of the three students who spent more than \$14 revealed that they had purchased two pens during the year because of loss or theft of the first pen.

TABLE IX

AMOUNT SPENT FOR MATERIALS FOR USE IN HOME ECONOMICS LABORATORY BY 61
GIRLS FOR USE IN SHOP WORK BY 48 BOYS

	<u>Home Economics Girls</u>	<u>Shop Work Boys</u>
\$30-31	3	
29-30	1	
28-29	0	
27-28	0	
26-27	0	1
25-26	2	0
24-25	0	0
23-24	1	1
22-23	0	0
21-22	0	0
20-21	2	1
19-20	0	0
18-19	1	0
17-18	0	0
16-17	1	0
15-16	7	1
14-15	0	1
13-14	0	0
12-13	0	0
11-12	0	0
10-11	3	1
9-10	0	2
8-9	0	0
7-8	2	0
6-7	3	4
5-6	3	8
4-5	1	5
3-4	13	8
2-3	7	6
1-2	6	6
0-1	5	3
N	61	48
Average	\$8.88	\$7.25
S.D.	8.81	5.57
Median	3.96	4.20
Q	6.87	1.25

Table IX shows that 61 girls or 27% of the girls in the study reported expense for home economics materials. Forty-eight boys or 19% of the boys in the study reported expense for shop materials.

The measures of central tendency are of little value in Table IX because of the great variability as shown by S.D. and Q. One may conclude that students can spend just what they care to in these two courses. In both courses students may keep what they make, if they furnish their own material. The table shows that a few students took advantage of this opportunity to make clothes and farm equipment, which accounts for the high expenditure of these students. The low expenditure may be accounted for by the fact that the school will furnish equipment for these courses if the pupils cannot.

Table V to IX show the distribution of costs that would ordinarily be classes for purposes known as curricular. Table X shows a summary of the average, standard deviation, and the upper and lower limits of the middle 68% of the students for curricular expenditure.

TABLE X

	<u>Average</u>	<u>S.D.</u>	<u>Low Limit</u>	<u>High Limit</u>
Books	5.31	1.98	3.33	7.29
Work Books	.91	.65	.26	1.56
Tools of Instruction	6.15	4.48	1.67	10.63
Shop (for 19% of the Boys)	8.88	8.81	.07	17.69
Home Economics (for 27% of the girls)	7.25	5.57	1.68	12.82

TABLE XI

SUMMARY OF THE MEDIAN, Q, AND UPPER AND LOWER LIMITS OF THE MIDDLE
50 PERCENT OF THE STANDARD FOR CURRICULAR EXPENDITURES

	<u>Median</u>	<u>Q</u>	<u>Low</u>	<u>High</u>
Books	5.19	1.28	6.47	3.91
Work Books	.72	.40	.32	1.12
Tools of Instruction	4.88	3.06	1.82	7.94
Shop (for 19% of the boys)	4.20	1.25	2.95	5.45
Home Economics (for 27% of the girls)	3.96	6.87	.00	10.83

TABLE XII

EXPENDITURE FOR ATHLETIC EQUIPMENT BY 195 BOYS AND 170 GIRLS

	<u>Boys</u>	<u>Girls</u>
\$27-28	1	
26-27	1	
25-26	1	
24-25	0	
23-24	0	
22-23	0	
21-22	1	
20-21	1	
19-20	1	
18-19	2	
17-18	3	
16-17	2	
15-16	2	
14-15	0	1
13-14	4	0
12-13	2	0
11-12	6	1
10-11	7	1
9-10	7	2
8-9	7	3
7-8	15	31
6-7	16	20
5-6	32	47
4-5	35	38
3-4	17	8
2-3	19	14
1-2	10	2
0-1	6	2
N -	<u>195</u>	N - <u>170</u>
Average -	\$6.65	Average - \$5.53
S.D. -	4.82	S.D. - 1.91
Median -	5.33	Median - 5.45
Q -	1.97	Q - 1.20

Table XII shows that 195, or 77 percent, of the boys in the study purchased athletic equipment. One hundred seventy of 74 percent of the girls in the study purchased athletic equipment. The policy of the school is to require gymnasium suits of all girls and boys in physical education classes. It is also a school policy to furnish members of athletic squads all necessary equipment and uniforms except shoes. The fact that some athletes have a rather high expense in this item is balanced to a certain extent by free admission to athletic events.

TABLE XIII

TOTAL EXPENDITURE FOR ALL SPECIAL EQUIPMENT, FEES, COSTUMES, ETC. BY 252 BOYS AND 230 GIRLS. (This includes the athletic equipment tabulated in Table XII in addition to locker fees, towel fees, debate and music books, play books, clothes for use in shop and laboratory work, club sweaters, emblems, glee club uniforms, school and organization jewelry, senior invitations and name cards, and similar items.)

	<u>Boys</u>	<u>Girls</u>
\$30-31	1	
29-30	1	
28-29	0	
27-28	0	
26-27	0	
25-26	0	
24-25	1	1
23-24	0	0
22-23	1	0
21-22	6	0
20-21	0	4
19-20	1	1
18-19	4	3
17-18	2	2
16-17	1	8
15-16	10	6
14-15	2	3
13-14	9	7
12-13	12	6
11-12	7	5
10-11	9	6
9-10	15	12
8-9	15	17
7-8	22	34
6-7	27	31
5-6	23	21
4-5	15	14
3-4	20	14
2-3	21	8
1-2	11	10
0-1	16*	17**
N -	<u>252</u>	N - <u>230</u>
Average -	\$7.83	Average - \$7.66
S.D. -	5.42	S.D. - 4.80
Median -	6.74	Median - 6.33
Q -	3.35	Q - 2.84

*10 reported no expense.

**10 reported no expense.

TABLE XIV

EXPENDITURE OF 246 BOYS AND 229 GIRLS FOR ADMISSION CHARGES TO ATHLETIC EVENTS

	<u>Boys</u>	<u>Girls</u>
\$10.00 - 10.50	1	
9.50 - 10.00	1	
9.00 - 9.50	2	1
8.50 - 9.00	0	0
8.00 - 8.50	0	2
7.50 - 8.00	1	0
7.00 - 7.50	3	2
6.50 - 7.00	1	0
6.00 - 6.50	0	0
5.50 - 6.00	2	1
5.00 - 5.50	5	2
4.50 - 5.00	3	2
4.00 - 4.50	8	12
3.50 - 4.00	12	5
3.00 - 3.50	13	15
2.50 - 3.00	17	15
2.00 - 2.50	27	40
1.50 - 2.00	7	12
1.00 - 1.50	38	31
.50 - .50	16	5
.00 - .50	<u>89</u>	<u>84</u>
N -	246*	N - 229**
Average -	\$1.82	Aver. \$1.75
S.D. -	1.85	S.D. 1.56
Median -	1.24	Median - 1.41
Q -	1.15	Q - 1.07

*Six boys indicated on their check sheet expenses for this item of from \$19 to \$38. Investigations showed that they had included traveling expenses to out of town games so they are not included in this total.

** One girl who spent \$16.20 is not included in this table because she included traveling expenses to out of town games.

Table XIV shows little difference in the amounts boys and girls tend to spend for athletic contests. Both sexes have such a wide range of expenditure that measures of central tendency are practically worthless. The measures of variability tend to be almost as large as the measure of central tendency. In fact, the standard deviation of the boys' distribution exceeds the average. Inspection of the table shows this to be due to the very large number who spend nothing, or less than fifty cents, on such admission charges. This appeared to the author to be an abnormal situation, but investigation revealed the fact that large numbers of the boys were attending the games free of charge, either being on some athletic squad or playing in the band. There seemed to be very few boys who did not attend the athletic events. A further study of the 84 girls who spent little for this item showed that a few gained admittance free by playing in the band, but that a large number had no active interest in the athletic games of the school. This may be due to some extent to the fact that the school does not provide for interscholastic competition among girls.

The above facts point to a serious problem of school administration. Large numbers of high school students are evading their responsibility in financially supporting the school teams. The large number of complimentary tickets now granted perhaps should be abolished and all students required to share the burden equally through some such scheme as a student activity ticket or fee system. Data reported later in this study will reveal the same need.

The reader may question the reliability of Table XIV be-

cause some of the students spent such a large sum of money for this item. This may be explained by the fact that Lawrence had exceptionally good athletic teams which encouraged the students to follow the team out of town and thus pay admission charges in addition to their season tickets. For example, the two most important football games were out of town, as were all the games of the district and state basketball tournaments. A number of students attended practically all these events. After an investigation of some of the higher amounts the author believes Table XIV presents the true situation.

TABLE XV

EXPENDITURE OF 252 BOYS AND 230 GIRLS FOR SCHOOL ACTIVITIES OTHER THAN ATHLETIC EVENTS. (This includes plays, debates, pay assemblies, all school parties, school paper and school annual for all but seniors whose annuals are included in their class dues.)

	<u>Boys</u>	<u>Girls</u>
\$7.50 - 8.00	1	
7.00 - 7.50	0	
6.50 - 7.00	1	
6.00 - 6.50	1	
5.50 - 6.00	6	1
5.00 - 5.50	8	0
4.50 - 5.00	3	3
4.00 - 4.50	12	6
3.50 - 4.00	18	16
3.00 - 3.50	22	20
2.50 - 3.00	38	27
2.00 - 2.50	23	36
1.50 - 2.00	31	37
1.00 - 1.50	37	31
.50 - 1.00	15	14
.00 - .50	<u>36*</u>	<u>39**</u>
N -	252	N - 230
Average -	\$2.30	Average - \$1.93
S.D. -	1.46	S.D. - 1.17
Median -	2.14	Median - 1.92
Q -	1.02	Q - .78

*Fourteen reported no expense.

**Fifteen reported no expense.

Table XV is interesting in that it shows more expenditure for non-athletic activities than for athletics. It also shows a more uniform expenditure upon the part of the students, the range and measures of variability being much smaller than in the case of other expenditures. The table also shows 36 boys and 39 girls spending less than fifty cents for such activities which means that they are practically excluded from participation in an important part of school life. Perhaps this shows the need of some better plan of financing these activities in order to make them more accessible to all.

TABLE XVI

EXPENDITURE OF 252 BOYS AND 230 GIRLS FOR CLASS AND ORGANIZATION DUES

	<u>Boys</u>		<u>Girls</u>
\$5.50 - 6.00			1
5.00 - 5.50			0
4.50 - 5.00	5		2
4.00 - 4.50	15		19
3.50 - 4.00	4		26
3.00 - 3.50	40		11
2.50 - 3.00	0		0
2.00 - 2.50	13		11
1.50 - 2.00	25		53
1.00 - 1.50	33		44
.50 - 1.00	48		42
.00 - .50	69*		21*
N -	252	N -	230
Average -	\$1.57	Average	\$1.91
S.D. -	1.30	S.D.	1.26
Median -	1.14	Median	1.58
Q -	1.02	Q	1.06

*34 reported no expense.

**5 reported no expense.

Table XVI shows a wide range and wide variability. This is probably due to a large extent to the fact that senior dues were \$3.00, while sophomores pay only 25 cents, thus throwing a large number of students at both ends of the distribution.

This table shows that girls either join more organizations, or pay their dues better. The fact that 34 boys reported no expense at all shows not only that they belonged to no organizations but also

that they failed to pay class dues. An examination of the sophomore and junior class treasurer's books shows lax methods of collection.

TABLE XVII

EXPENDITURE FOR CLASS AND ORGANIZATION PARTIES, BANQUETS, HIKES AND OTHER SOCIAL FUNCTIONS

	<u>Boys</u>	<u>Girls</u>
\$5.00 - 5.50	2	1
4.50 - 5.00	1	2
4.00 - 4.50	0	12
3.50 - 4.00	1	2
3.00 - 3.50	3	8
2.50 - 3.00	16	19
2.00 - 2.50	35	16
1.50 - 2.00	12	17
1.00 - 1.50	12	19
.50 - 1.00	25	57
.00 - .50	<u>145*</u>	<u>77**</u>
N -	252	N - 230
Average -	.96	Average - \$1.32
S.D. -	1.02	S.D. 1.21
Median -	.43	Median @ .88
Q -	.78	Q - .85

*76 reported no expense.

**49 reported no expense.

The fact that the S.D. and Q are so large is caused by the abnormally large number of pupils who spent nothing or less than fifty cents. This table bears out an inference made in Table XVI that girls take a more active part in class parties and club work than do boys. The fact that 76 boys and 49 girls had no expense at all points to the need of a thorough examination of why students do not

participate to a wider extent. Negro students compose part of this group because the school offers little social opportunities for them.

TABLE XVIII

SUMMARY OF DATA ON STUDENT EMPLOYMENT

	<u>Boys</u>	<u>Girls</u>
Number of Students in study (includes part time students)	272	265
Number not answering this question	6	4
Number working at gainful occupation (for pay outside the home)	144	41
Number not working	122	220
Percent working	52.9%	15.7%
Average pay per week	\$5.35	\$3.57
Standard Deviation	\$4.25	\$2.35
Median pay per week	\$4.36	\$2.85
Q	\$1.71	\$2.25

TABLE XIX

WEEKLY WAGES OF 185 STUDENTS GAINFULLY EMPLOYED

	<u>Boys</u>	<u>Girls</u>
\$25-26	1	
24-25	0	
23-24	0	
22-23	1	
21-22	0	
20-21	1	
19-20	0	
18-19	0	
17-18	0	
16-17	1	
15-16	2	
14-15	1	
13-14	3	
12-13	3	
11-12	1	
10-11	5	2
9-10	0	0
8-9	4	0
7-8	6	0
6-7	14	2
5-6	13	9
4-5	22	2
3-4	24	4
2-3	17	10
1-2	19	9
0-1	<u>6</u>	<u>3</u>
N -	144	N - 41
Average -	\$5.35	Average - \$3.57
S.D.	4.25	S.D. 2.35
Median -	4.36	Median - 2.85
Q	1.71	Q 2.25

TABLE XX

WEEKLY ALLOWANCES OF 74 STUDENTS

	<u>Boys</u>	<u>Girls</u>
\$10.00 - \$10.50	1	
9.50 - 10.00	0	
9.00 - 9.50	0	
8.50 - 9.00	0	
8.00 - 8.50	0	1
7.50 - 7.00	1	0
7.00 - 7.50	0	0
6.50 - 7.00	0	0
6.00 - 6.50	0	1
5.50 - 6.00	1	0
5.00 - 5.50	1	1
4.50 - 5.00	1	0
4.00 - 4.50	0	1
3.50 - 4.00	0	2
3.00 - 3.50	2	6
2.50 - 3.00	2	2
2.00 - 2.50	3	8
1.50 - 2.00	0	7
1.00 - 1.50	9	11
.50 - 1.00	8	2
.00 - .50	<u>1</u>	<u>2</u>
	N - 30	N - 44
Percent of all boys	- 11.1	Girls 16.4
Average	- \$2.33	Average \$2.33
S.D.	- 2.27	S.D. 1.98
Median	- 1.33	Median 2.00
Q	1.23	Q .88

TABLE XXI

SUMMARY OF ANSWERS TO THE QUESTION "IS SCHOOL EXPENSE BURDENSOME?"

	Boys		Girls	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Yes	23	9.1	50	21.7
No	110	43.6	124	53.9
Somewhat	7	2.9	6	2.7
No Answer	<u>112</u>	44.4	<u>50</u>	21.7
Total	252		230	

Table XXI shows that 9.1% of the boys and 21.7% of the girls reported their school expense to be a burden. Whether this is because school expenses are too high, or because the family income is too low, can be answered only by a study of the previous tables and a knowledge of what the family income is, a fact which this study did not attempt to determine. Those pupils answering "somewhat" indicated in most cases that school expenses were burdensome at certain times of the year, such as at the beginning of school. This question is a very personal one and the author feels that probably a good number of those not answering this question did really feel the expenses of school to be heavy, but objected to answering the question.

TABLE XXII

SUMMARY OF THE AVERAGE, STANDARD DEVIATION, AND UPPER AND LOWER LIMITS OF THE MIDDLE 68 PERCENT OF 482 STUDENTS FOR EXTRA CURRICULAR EXPENDITURE

		<u>Average</u>	<u>S.D.</u>	<u>Low Limit</u>	<u>High Limit</u>
Athletic Equipment	Boys	\$6.65	\$4.82	\$1.83	\$11.47
	Girls	5.53	1.91	3.62	7.44
Special Equipment Fees, Costumes	Boys	7.83	5.42	2.41	13.25
	Girls	7.66	4.80	2.86	12.46
Admission Charges to Athletic Events	Boys	1.82	1.85	.00	3.67
	Girls	1.75	1.56	.19	3.31
Charges for School Activities Other than Athletic Events	Boys	2.30	1.46	.84	3.76
	Girls	1.93	1.17	.76	3.10
Class and Organization Dues	Boys	1.57	1.30	.27	2.87
	Girls	1.91	1.26	.65	3.17
Class and Organization Parties, Banquets, Hikes, etc.	Boys	1.96	1.02	.00	1.98
	Girls	1.32	1.21	.09	2.53
Wages	Boys	5.35	4.25	1.10	9.60
	Girls	3.57	2.35	1.22	5.92
Allowances	Boys	2.33	2.27	.06	4.60
	Girls	2.33	1.98	.35	4.31

TABLE XXIII

SUMMARY OF THE MEDIAN, Q, AND UPPER AND LOWER LIMITS OF THE MIDDLE 50 PER CENT OF 482 STUDENTS FOR EXTRA CURRICULAR EXPENDITURE

		<u>Median</u>	<u>Q</u>	<u>Low Limit</u>	<u>High Limit</u>
Athletic Equipment	Boys	5.33	1.97	3.36	7.30
	Girls	5.45	1.20	4.25	6.65
Special Equipment Fees, Costumes, etc.	Boys	6.74	3.35	3.39	10.09
	Girls	6.33	2.84	3.49	9.17
Admission Charges to Athletic Events	Boys	1.24	1.15	.09	2.39
	Girls	1.41	1.07	.34	2.48
Charges for School Activities Other than Athletic Events	Boys	2.14	1.02	1.12	3.16
	Girls	1.92	.78	1.14	2.70
Class and Organiza- tion Dues	Boys	1.14	1.02	.12	2.16
	Girls	1.58	1.06	.52	2.64
Class and Organiza- tion Parties, Ban- quets, Hikes, etc.	Boys	.43	.78	.00	1.21
	Girls	.88	.85	.03	1.73
Wages	Boys	4.36	1.71	2.65	6.07
	Girls	2.85	2.25	.60	5.10
Allowances	Boys	1.33	1.23	.10	2.56
	Girls	2.00	.88	1.12	2.88

CHAPTER V

SUMMARY AND CONCLUSION

1. The average total expenditure of students for school activities, both curricular and extra-curricular was \$28.28 with a standard deviation of \$12.45. This means that 68% of the students spent between \$15.83 and \$40.73. There was practically no difference between the expenditure of the boys and the girls. There was little difference between the expenditure of the junior and senior classes but the average sophomore spent from \$9.00 to \$10.00 less than either juniors or seniors. There was wide variation in the expenditure of negro students but their average expenditure was from \$5.00 to \$18.00 less than white students of the same sex and class.

The median expenditure of students for school activities both curricular and extra-curricular was \$26.25 with a Q of \$8.13. This means that 50% of the students spent between \$18.12 and \$34.38. The relationships between sexes, races and classes are practically the same using this system of computation as in using the average.

2. The average cost of books per student was \$5.31 with a standard deviation of \$1.98 which means that the middle 58% of the students spent from \$3.33 to \$7.29 for this item. The median expenditure was \$5.19 with a Q of \$1.28 which means that the middle 50% of the students spent from \$3.91 to \$6.47.

3. The average cost of work books, laboratory supplies, and instructional supplies was .91 with an S.D. of .65 which means that

the middle 68% of the students spent from .26 to \$1.56 for this item. The median cost was .72 with a Q of .40 which means that the middle 50% of the students spent from .32 to \$1.12 for this item.

The average cost of tools of instruction as defined in Table VII was \$6.15 with an S.D. of \$4.48 which means that the middle 68% of the students spent from \$1.67 to \$10.63 for this item. The median was \$4.88 with a Q of \$3.06 which means that the middle 50% spent from \$1.82 to \$7.94 on this item.

4. Sixty-one girls or 27% of the girls in the study reported expense for materials used in the home economics laboratory. The average expenditure was \$7.25 with an S.D. of \$5.57 which means that the middle 68% of the girls reporting spent from \$1.68 to \$12.82. The median expenditure was \$3.96 with a Q of \$6.87 which means that the middle 50% spent from nothing to \$10.83.

5. Forty-eight boys, or 19% of the boys in the study reported expense for materials used in shop work. The average expenditure was \$8.88 with an S.D. of \$8.81 which means that the middle 68% of those reporting spent from \$.07 to \$17.69. The median expenditure was \$4.20 with a Q of \$1.25 which means that the middle 50% of those reporting spent from \$2.95 to \$5.45 for this item.

6. The average cost of athletic equipment for boys was \$6.65 with an S.D. of \$4.82 which means that the middle 68% of the boys spent from \$1.83 to \$11.47. The median cost was \$5.33 with a Q of \$1.97 which means that the middle 50% spent from \$3.36 to \$7.30. Seventy-

seven per cent of the boys purchased athletic equipment.

The average cost of athletic equipment for girls was \$5.53 with an S.D. of \$1.91 which means that the middle 68% of the girls spent from \$3.62 to \$7.44. The median cost was \$5.45 with a Q of \$1.20 which means that the middle 50% spent from \$4.25 to \$6.65. Seventy-four percent of the girls purchased athletic equipment.

7. The average expenditure of boys for special equipment, fees, costumes and similar items given in Table XIII was \$7.83 with an S.D. of \$5.42 which means that the middle 68% of the students spent from \$2.41 to \$13.25 for this item. The median expense was \$6.74 with a Q of \$3.35 which means that the middle 50% spent from \$3.39 to \$10.09.

The average expenditure for this item by girls was \$7.66 with an S.D. of \$4.80 which means that the middle 68% of the students spent from \$2.86 to \$12.46. The median expenditure was \$6.33 with a Q of \$2.84 which means that the middle 50% spent from \$3.49 to \$9.17 for this item.

8. The average expenditure for boys for admission charges to athletic events was \$1.82 with an S.D. of \$1.85 which means that the middle 68% spent from nothing to \$3.67. The median expenditure was \$1.24 with a Q of \$1.15 which means that the middle 50% spent from .09 to \$2.39. Eighty-nine boys reported no expense or less than .50 expense for this item showing that 35% of the boys do not financially support athletics.

The average expenditure for girls for this item was \$1.75 with an S.D. of \$1.56 which means that the middle 68% spent from .19 to

to \$3.31. The median expenditure was \$1.41 with a Q of \$1.07 which means that the middle 50% spent from .34 to \$2.48. Eighty-four girls reported less than .50 expense for this item showing that 36% of the girls do not financially support athletics.

9. The average expenditure of boys for "all school" activities other than thletic events was \$2.30 with standard deviation of \$1.46 which means that the middle 68% spent from .84 to \$3.76. The median expenditure for boys was \$2.14 with a Q of \$1.02 which means that the middle 50% spent from \$1.12 to \$3.16.

The average expenditure of girls for "all school" activities other than athletic events was \$1.93 with a standard deviation of \$1.17 which means that the middle 68% spent from .76 to \$3.10. The median expenditure for girls was \$1.92 with a Q of .78 which means that the middle 50% spent from \$1.14 to \$2.70.

10. The average expenditure of boys for class and organization dues was \$1.57 with a standard deviation of \$1.30 which means that the middle 68% spent from .27 to \$2.87. The median expenditure for boys was \$1.14 with a Q of 1.02 which means that the middle 50% spent from .12 to \$2.16.

The average expenditure of girls for class and organization dues was \$1.91 with a standard deviation of \$1.26 which means that the middle 68% spent from .65 to \$3.17. The median expenditures for girls was \$1.58 with a Q of \$1.06 which means that the middle 50% spent from .52 to \$2.64.

11. The average expenditure of boys for class and

organization parties, banquets and hikes was .96 with a standard deviation of \$1.02 which means that the middle 68% spent from .00 to \$1.98. The median expenditure was .43 with a Q of .78 which means that the middle 50% spent from .00 to \$1.21.

The average expenditure of girls for this item was \$1.32 with a standard deviation of \$1.21 which means that the middle 68% spent from .09 to \$2.53. The median expenditure was .88 with a Q of .85 which means that the middle 50% spent from .03 to \$1.73.

12. 52.9% of the boys worked at gainful occupations during the school year. Their average wage was \$5.35 per week with a standard deviation of \$4.25 which means that the middle 68% of these working boys received from \$1.10 to \$9.60. Their median wage was \$4.36 with a Q of \$1.71 which means that the middle 50% received from \$2.65 to \$6.07.

Fifteen percent of the girls worked at gainful occupations during the school year. Their average wage was 3.57 with a standard deviation of \$2.35 which means that the middle 68% of those working received from \$1.22 to \$5.92. The median wage was 2.85 with a Q of \$2.25 which means that the middle 50% received from .60 to \$5.10.

13. 11.17% of the boys received allowances the average of which was \$2.33 with a standard deviation of \$2.27. Their median allowance was \$1.33 with a Q of \$1.23.

16.4% of the girls received allowances the average of which was \$2.33 with a standard deviation of \$1.98. The median allowance was \$2.00 with a Q of .88.

14. 9.1% of the boys stated school expense to be burdensome. 44.4% of the boys did not answer this question and to what extent

these felt the expense to be a burden the study does not show.

21.7% of the girls reported school expense to be burdensome while 21.7% did not answer.

This question was purely a matter of opinion, each student forming his own criteria of judgment.

CONCLUSION

1. The measures of central tendency in the various tables of the study appear to have little value, because of so much variability of expenditure. For true interpretation of any data in the study the whole table should be used.

2. Apparently students may spend very little or a great deal for school activities, just as they wish or as their finances permit. The school offers opportunity for considerable expenditure but many students do not take advantage of the opportunities offered. The outstanding conclusion of the study is that there is much variation in the amount students spend for school purposes. Whether this was due to lack of interest in school activities, lack of finances, or extravagant spending, this study did not satisfactorily determine. Few students admitted lack of finance, the check sheets showed few cases of extravagant spending, although the extremely high expenditures were generally of such nature. To what extent lack of interest was responsible for non-participation in school activities would form the basis for a very desirable investigation.

3. The data show that over one-half the boys and one-third the girls spent less than fifty cents on club activities. This

reveals that for this part of the school population the club program either partially or completely fails. The reasons for this condition would form the basis of a desirable investigation.

4. The data show that the average boy spends \$1.82 for admission charges to athletic events as compared to \$2.30 for non-athletic events which is an indication that athletics do not monopolize the school. One of the reasons for this difference in expenditure as indicated in the discussion following Table XIV, is the large number of free admissions to athletic events. Three-eighths of the boys do not financially support athletics at all. This should lead to a study of means to support school activities where the burdens and advantages of supporting and participating in school activities could be more equitably distributed. The author recommends consideration of a student activity ticket as a solution to this problem.

A P P E N D I X

Lawrence, Kansas
May 13, 1930

To the Students of Liberty Memorial High School:

Your cooperation is sought in finding out how much it has cost a student to attend Liberty Memorial High School this year.

On the following pages you will find blanks listing most of the items for which you could have spent money. Please go over the list carefully. Fill in everything you think applies to you but don't put in things you didn't spend. If you had expenditures not named, please write them in the extra blanks. This investigation is trying to find out the actual situation and is not trying to make costs seem either large or small.

If you will adopt the same attitude, you will help greatly. We wish to thank you for your assistance.

Sincerely yours,
Marston McCluggage
H. L. Baker

A Study of Individual Expenditure of Students Attending Liberty Memorial High School during the school year 1929-1930

I Personal Data

Name _____ Sex _____

Class _____ Age _____
(to nearest birthday)

Advisory Teacher _____

Have you been in this school all year? yes-no _____

If not, how many months have you attended? _____

Number of children in family? _____

Number of children in family in L. M. H. S.? _____

Parent's Occupation _____

Do you work for part of your school expense? _____

How much income do you average per week from your work? _____

Do your parents give you a definite allowance per week? _____

If they do, how much does it amount to per week? _____

How much does your personal income average per week including both earnings and allowance? _____

How much Money on the average do you actually spend per week? _____

II Materials for Instruction

A. Text-Books

Below are listed the courses taught in this high school that require textbooks. Please put an (x) in the appropriate column following each course you have taken this year (both semesters) so that you indicate whether you (1) bought the text new (2) bought it second hand at a book store or (3) bought it second hand at the school exchange or of a classmate.

Name of Course	Purchased new	Purchased 2ond hand at store	Purchased second hand at school exchange or from a student	Please leave blank
English III	()	()	()	()
English IV	()	()	()	()
English V	()	()	()	()
English VI	()	()	()	()
English VIII	()	(Lab. fee)	(Lab. fee)	()
Journalism	()	()	()	()
Public Speaking	()	()	()	()
World History	()	()	()	()
American History	()	()	()	()
Economics	()	()	()	()
Sociology	()	()	()	()
Biology	()	()	()	()
Chemistry	()	()	()	()
Physics	()	()	()	()
Algebra III	()	()	()	()
Geometry I-II-III	()	()	()	()
Beginning Latin	()	()	()	()
Second year Latin	()	()	()	()
French I and II	()	()	()	()
French Readers	()	()	()	()
Sans Famille	()	()	()	()
La Poudre Aux yeux	()	()	()	()

Name of Course	Pur. New	Pur. 2nd h. at store	Pur. 2nd h. at school ex. or student	Please leave blank
L' Abbe Coustanin(()	()	()	()
French Stories	()	()	()	()
Petits Contes	()	()	()	()
Auto Mechanics	()	()	()	()
Psychology	()	()	()	()
Home Management	()	()	()	()
Foods Classes	()	()	()	()
Typewriting	()	()	()	()
Shorthand	()	()	()	()
Bookkeeping 1st yr(()	()	()	()
Business Efficiency(()	()	()	()
Commercial Law	()	()	()	()
Advanced Agriculture)	()	()	()	()
German I	()	()	()	()
German'II	()	()	()	()

Please list below and check the appropriate blanks for any other courses you have taken this year that required texts.

_____ () () () ()

_____ () () () ()

_____ () () () ()

_____ () () () ()

B. Work Books, Laboratory Manuals and Materials
 (Below are listed special materials required for some courses.
 If you purchased any of these, put the actual amount spent in
 The blank following each item.)

Name	Price	Put Cost here
American History Work Book	.75	_____
Agriculture Notebook	.80	_____
Geometry Work Book	.40	_____
Latin I Practice Book	.84	_____
English Magazine fee, required of English students For one semester,	.25	_____
Bookkeeping Laboratory pad	.50	_____
Weekly News Review -- Private copy per semester	.50	_____
Class use per semester	.25	_____
Mechanical Drawing Ink and Paper fee per semester	.25	_____
Other Work Books		_____

Chemistry Breakage Fee \$1.00

Materials for shop work (estimate
 amount spent this yr. as accurately
 as possible

Materials used in Home Economics
 estimate amount accurately as possible

C. Tools of Instruction

(It is impossible to give prices on most of the following
 items. Please estimate the amount you have spent this yr.
 for each item. (school year)

Mechanical drawing instruments \$3.50 to \$5.00 _____

Compass and protractors .25 to .50 _____

Fountain pens _____

Pencils _____

Ink _____

Notebooks _____

Paper _____

Rulers _____

crayolas _____

Paints

Maps

Recipe cards

Please list any other similar items purchased

III. Special Equipment, Fees, and Costumes

(Please put the actual amount you spent for any of the following articles in the blank to the right of the items purchased this school year)

Locks for locker (school lock .85)

Towel fee for all gymnasium students .50
(per semester)

Gymnasium Suits

Girls

Bloomers 2.25

Belt .25

Gym Skirts 1.50

Socks .25

Shoes about 1.25

Tap dance shoes about 3.00

Boys

Jersey .50 to .75

Pants .50 to 1.00

Socks .25 to .50

Supporter .50 to .75

Shoes 2.50 to 5.00

Athletic Equipment

Football shoes \$5.00 to \$10.75

Basketballshoes 3.75 to 5.00

If same as gym shoes don't list again

Track shoes 4.00

Others

Debate handbook .50

Operetta Book \$1.50

Union alls for auto Mech. 2.00

Pep club sweater and emblem \$2.00 _____
 Girls Athletic Association costume \$6.00 _____
 Girls Glee club costume \$6.00 _____
 Honor Society pins or chains \$2.10 to \$2.60 _____
 High School Jewelry
 Silver rings \$1.10 _____
 Gold rings \$4.00 _____
 Silver pins \$ 1.30 _____
 Gold pins \$3.10 _____
 Senior invitations .10 each _____
 Name cards of Seniors (for 100) \$1.00 _____

IV. School Activities

(Please put the cost of the activity you supported in the blank following the item. If you purchased more than one ticket for an event count the total cost.)

Subscription to the "Budget" \$1.00 _____
 Subscription to the "Red and Black" \$1.00 _____
 Season Football Ticket \$1.00 _____
 Season Basketball Ticket 1.00 _____
 Ticket to "The Goose Hangs High" .35 & .50 _____
 " " "Mrs. Temple's' Telegram"
 2 performances .25 each _____
 " " "Seven Keys to Baldpate" .35 & .50 _____
 " " "Up in the Air" operetta .35 & .50 _____
 " " Electrical Assembly .15 _____
 " " Woodwind Choir .25 _____
 " 1st all school party .10 _____
 " " 2nd all school party .35 & .50 _____
 " " Cherryvale Basketball game .20 _____

Please list any expenses occurred in attending out of town athletic events. Tickets were generally .50; also list any single admissions at Lawrence (.35)

Please list any other admission charges to school activities

V Class and Organization Dues

Please list the amounts you spent in the blanks following the appropriate items

Sophomore class dues

(5¢ general-25¢ to annual) .30

Junior Class dues .25

Junior stamp Picture for annual .25

Senior Guarantee Fund \$2.00

Hi-Y Dues 1.00

Girl Reserve Dues .50

Girl's Athletic Assn' Dues .50

Magaziz Club Dues .50

Ben Franklin Initiation fee .50

Euclid Club Dues .25

Classical Club Dues .25

French Club Dues .25

German Club Dues .25

Home Economics Club Dues .25

Oita Literary Society Dues .25

Travel Club Dues .25

Ag. Club Dues .50

O. B. A. Dues .25

Promoters Club Dues .25

VI Class and Organization Parties, Dinners, Grubs, Hikes, etc. Please list the amount you spent in the blanks following appropriate items.

Sophomore Party .15

Junior Prom Juniors \$2.00

S Seniors \$1.25

Senior Party .50

Hi-Y Cabinent picnics	.50 each	_____
" Watermelon feed	.10	_____
" , G.R. Weiner Roast	.25	_____
" , G.R. Banquet	.55	_____
G.P.--Dad-Daughter Grub	.35	_____
G.R. Easter Breakfast	.25	_____
G.R. Free Will gift	.25	_____
Co-ed Frolic	.50	_____
Ag Club--2 picnics	.15 each	_____
Magaziz picnic	.25	_____
Euclid Club Supper	.25	_____
Classical Club Roman Banquet	.50	_____
Home Economics club (2 dinners and one picnic)	.25 each	_____
Hostess Club--2 suppers	.15 each	_____
Oita Grub	.15	_____
Senate Picnic	.30	_____
Travel Club Picnic	.15	_____
Dramatic Club Dance	.50	_____
_____	_____	_____
_____	_____	_____

VII Conclusion

Mention any additional expenses not enumerated above that are incurred in connection with your attendance at school

In your case, does the financial effort involved in supporting school activities such as named above seem burdensome? yes-no

Please mention below the names of school activities not attended this year because of the expense involved.

Class Schedule

Liberty Memorial High School

Lawrence, Kansas

DEPARTMENT Teacher Room	1st Period 8:20-9:21	2nd Period 9:24-10:24	3rd Period 10:27-10:57	4th Period 11:00-12:00	5th Period 1:00-2:00	6th Period 2:03-3:03	3:03 3:40
English Bernhard 110	English VI	English VI	O'ita-M	English VI	English V	English V	
Foreman 208	English IV	English IV	Chr. Sophomore Sponsors	English IV	(Commercial Department)		
Harper 10	Journalism	Red & Black	Red & Black-M Budget-W	Budget	English III	English VIII	
Sisson 4-108-104	Office	Office	O'ita-M Girl Reserves-Th	English IV 108	Office	English IV 104	
Wilson 108	English VI	English VI	Dramatic Club	Play Coaching	English VI	English VI	
Social Science Davenport 205	Study Hall	Economics	Travel Club W	American History Constitution II	American History Constitution II	American History Constitution II	
Ernst 105	World History II	World History II	Study Group	World History II	World History I 10B	World History I 10B	
McCluggage 106	Sociology	Public Speaking	Senate-M Student Council-W	Sociology	American History Constitution I	American History Constitution I	
Spangler 103	World History II	Modern History II	Travel Club-W	World History II	World History II	World History II	
Warson 101	American History Constitution II	American History Constitution II	Girl Reserves-Th	American History Constitution II	English VIII	Psychology	
Science Carpenter 8	Biology I	Biology II	Girl Reserves-Th Agassiz-W	Study Hall	Biology II	Biology II	
Riggs, H. C. 207	Girls Physics	Boys Physics	Ben Franklin-W	Boys Physics			
Wood, R. E. 206	Boys Chemistry	Boys Chemistry	Chr. Sr. Sponsors Ben Franklin-W	Girls Chemistry	Study Hall	Girls Chemistry	
Mathematics Newman 201	English III 10B	Study Hall	Eculid-W	Geometry III	Geometry II	Geometry II	
Olney 104	Geometry II	Geometry I 10B	Hi-Y-Th Honor Society	Geometry II			
Rayhill 203	Office	Algebra III	Study Group	Geometry II	Geometry II	Geometry I 10B	
Foreign Language Heinrich 202	English IV	Latin II	Classical-M Club	Latin IV	Latin IV	Latin IV	
Riggs, Kate 6	German II	German II	Ger. M French-W Girl Reserves-Th	French II	French II	French IV	
Commerce Birch 107	Bookkeeping II and IV	Bookkeeping II and IV	Commercial Club W	Commercial Law			
Foreman 109	(English Department)			Typing II	Typing II		
Schin.pff 109	Typing IV	Typing II	Commercial Club W	Shorthand II 209	Shorthand II 107	Bookkeeping II 107	
Home Economics Orelup 211	Clothing IV	Clothing II	Chr. Jr. Sponsors Home E.-W	Clothing IV	Foods II 214	Home Economics II 214	
Rose 208	Junior High School		Home E.-W			Home Manage.	
Woodruff 214	Foods II	(Junior High School)					
Practical Arts Emmett 7-9	Ag Shop II-TuW Ag Shop VI-MTF	Ag Shop II-MTW Ag Shop VI-ThF	Study Group	Advanced Mech Drawing			
Essick 7	Ag II-MThF Ag VI-TuW	Ag II-ThF Ag VI-MTuW	Ag Club-M Athletic Manager	Ag II-TuTh Ag VI-MWF			
Graber 2C, J. H.	(Junior High School)			Advanced Printing	(Junior High School)		
Krieg 9			Hi-Y-Th	Cabinet Work	Woodwork		
Logsdon 11-12	Mech Drawing II	Mech Drawing II	Intramurals Pep Club-W	(Intramurals)	Auto Mechanics II	Auto Mechanics II	
Fine Arts Barnhart 200					Chorus-TuTh	Chorus-TuTh	
Donmyer 200, Aud.	Band-WF Orchestra-MTuTh	Boys Glee-MW Girls Glee-TuThF	Cameron White Chorus	Chorus-TuTh			
Seabury 204	Art II	Art II-IV					
Physical Education Griffin North Gym	Gym IV-MWF Gym VI-TuTh	Gym IV-MTuTh	Chalk Talk-M	Gym IV-MWF Gym VI-TuTh	Gym IV-MTuTh Gym VI-WF	Coaching	
Stebbins South Gym	Gym IV-MWF Gym VI-TuTh	Dancing-MW	G. A. A.-MW	Gym IV-MWF Gym VI-TuTh	Gym IV-MTuTh Dancing-WF	Gym IV-MWF Dancing-TuTh	
Hygiene 209-200	Stebbins-M Griffin-W	Griffin-Tu		Stebbins-M 200 Griffin-W 200	Stebbins-M Griffin-Tu	Stebbins-M	
Library Wood, Marcia 100	Library	Library	Travel Club-W	Library	Library	Library	

C O N F E R E N C E A N D O P P O R T U N I T Y P E R I O D