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Scott, Richmond Loring

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BOSTON UNIVERSITY

SCHOOL OF EDUCATION

THESIS

AN ANALYSIS OF A HIGH SCHOOL EDUCATION AND ITS APPLICABILITY TO THE MODERN OBJECTIVES IN EDUCATION

SUBMITTED BY

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PART I INTRODUCTION

SECTION I PURPOSE

In its educational progress a school is helped by three factors: the needs of the society to be served, the nature of the individuals to be educated, and the knowledge of educational theory and practice available. These dynamic needs call for extensive modifications of secondary education.

The Commission on the Reorganization of Secondary Education, appointed by the National Education Association, published through the Bureau of Education, Department of the Interior, the Bulletin, No. 35, 1918, on Cardinal Principles of Secondary Education.

The first thing this Commission did was to state the goal of education in a democracy. In the words of the Commission on the Reorganization of Secondary Education

"Education in a democracy, both within and without the school, should develop in each individual the knowledge, interests, ideals, habits and powers whereby he will find his place and use that place to shape both himself and society toward ever nobler ends."

After formulating this goal the Commission then set up the following main objectives of education:

1. Health
2. Command of fundamental processes
3. Worthy home-membership
4. Vocation
5. Citizenship
6. Worthy use of leisure
7. Ethical character

The outstanding achievement arising from the statement of the "Cardinal Principles" has been to focus attention upon pupils and their needs and to recognize the mastery of subject-matter as only one of the agents in the educational process.

The twelve years which have elapsed since the publication of the "Cardinal Principles" have focused much critical thinking upon the problems of secondary education and have shown the need of amplyfying and reorganizing the work in our high schools.

The present study has been undertaken to determine how much recognition the Taunton Massachusetts High School gives to the "Seven Cardinal Principles of Education" in its curriculums, what subjects need to be organized and modified, and helpful suggestions offered for a well-balanced and effective program to meet the foregoing aims.

SECTION II NATURE OF THE STUDY

As a result of a marked and rapid increase the bodies of students in the high schools at present are a varied mixture, representing all classes of the population and a much wider range of natural abilities and special adaptations than formerly. This rapid change in conditions has presented a tremendous problem to those who are responsible for the shaping of the educational training of the young people of the country. They are called upon to determine whether the kinds of training that are now given are adapted to the changing conditions and needs.

Many students of public affairs and progressive educators are beginning to raise the serious question whether the results of the work of the schools are actually sufficient to justify the annual expenditure of $2,000,000,000 and the time of 25,000,000 pupils and nearly 1,000,000 teachers.

The very possibility of a partially negative answer to a question of such magnitude calls for the most careful consideration of investigation. Critics and experts are therefore inclined to go to the root of the matter and to raise the definite inquiry whether that which the children are required to learn and do in the schools actually and practically prepares them for their later lives or whether the subject matter of the customary curriculum is in need of radical revision.

There appears to be an increasing public appreciation of the need of some radical changes in our general educational plans and purposes which will meet the "Seven Objectives in Education" and which will render the work of reform much easier than it has been in the past.

PART II BODY

In considering the problem of An Analysis of a High School Education and its Applicability to the Modern Objectives in Education the author felt that it would be well to take a representative group, study its records and make a complete analysis of the individual subjects studied over a four-year period. Being more familiar with his own school and feeling that this school was representative of the average high school, the author decided to analyze the individual records of the 217 graduates of the class of 1928 of the Taunton Massachusetts High School.

The Taunton High School, with an enrolment of approximately 1400, is located in an industrial city of 42,000 and draws its membership from all classes of people. Many high schools are larger and some are smaller and while the Taunton High School is not ideal it was felt that the ideal school would not be the best upon which to base such a study. The author doubts even the existence of an ideal situation in which the "Seven Cardinal Principles of Education" are fully met, although possibly there are schools which come closer to approaching this ideal than the one under consideration.

It might be well to bear in mind in connection with the data that follows that conditions in this school are not up to standard. Due to overcrowded conditions a double-session plan is in use with its many disadvantages: reduction of class periods, limited time, lack of individual attention, inadequate gymnasium, and so forth.

Yet in spite of these handicaps Taunton High has graduated fairly successful groups of students as evidenced by reports of

students who have entered higher institutions of learning and by those who have entered the business world in near-by localities.

To fit the needs of the community of such a varied population it has been found necessary to give seven curriculums of study (Figure 1). According to popular opinion and that expressed by most curriculums in general of all high schools Taunton has fallen in line. It will be noted from a consideration of Figure 1 that each curriculum provides for a good sound training in the fundamentals necessary in preparation for the ultimate aim of that particular curriculum as well as making provision for a comparatively wide choice of electives. Figure 1, theoretically, gives a very narrow choice of elective subjects although, in fact, this choice is wider than would be apparent to the casual observer. (See Figure 2) Pupils are permitted not only to choose as electives subjects from the elective groups alone but may elect with permission any subject from other curriculums in so far as it is deemed practical and advantageous.

In order to get a cross-section view of the entire group under consideration the individual cards of ten pupils were taken from the files, two each, a boy and a girl, from the following curriculums: College, General, and Commercial; one card each of boys from the Technical and Manual Arts; one card each of girls from the Normal and Household Arts. The results of this study will be found embodied in Figure 2.

Curriculums	Class Periods	FIRST YEAR	Credits	SECOND YEAR		THIRD YEAR		FOURTH YEAR	
College	5	English IV	5	4 English III	4	4 Eng. II	4	4 Eng. I	4
	5	Latin IV	5	5 Latin III	5	5 Latin II	5	5 Latin I	5
	5	Elem. Alg.	5	5 French III	5	5 French II	5	5 French	5
	5	Anc. Hist.	5	4 Elem. Geom.	4	2 Jr. Alg.	2	3 Sr. Alg.	3
						4 Am. Hist. & Government	4	2 Jr. Geom TT	2
Technical	5	Eng. IV	5	4 Eng. III	4	4 Eng. II	4	4 Eng. I	4
	5	Elem. Alg.	5	5 French III	5	5 French II	5	5 French I	5
	5	Am. Hist. & Government	5	4 Elem. Geom.	4	2 Jr. Alg.	2	3 Sr. Alg.	3
	5	Biology	4	5 Elem. Phys.	5	2 Jr. Geom.	2	5 Solid Geom. and Trig.	5
				4 Mech. Dr. IV	2	7 Col. Chem.	5	3 Sr. Phys. T	3
Commercial	5	Eng. IV	5	4 Eng. III	4	4 Eng. II	4	4 Eng. I	4
	3	Gen. Math.	3	5 Bkkg. III	5	5 Bkkg. II	5	4 Am. Hist. and Government	4
	3	Comm. Civics	3	4 Com. Arith. & Geog.	4	5 Type. II	2½	5 Type. I	2½
	5	Jr. Bus. Tr.	5	One elective		5 Stenog. II*	5	-Electives-	
	2	Com. Arith.	2			or		5 Stenog. I	5
						5 Com. Law & Ec	5	5 Bkkg. & Of. Pr.	5
						One elective by permission		5 Bkkg. and Bus. Organization	5
Household Arts	5	Eng. IV	5	4 English III	4	4 Eng. II	4	4 Eng. I	4
	4	Gen. Math.	4	4 Comm. Civics	4	5 Household Chem.	4	4 Am. Hist. & Government	4
	4	Gen. Sc.	4	4 Cookery III	2	3 Dietetics and Home Nursing	3	3 Household Org. and Manag.	1½
	4	Cookery	2	4 Sewing and Textiles III	2	2 Sewing II (Includes Millinery)	1	4 Adv. Dressmaking	2
	4	Sewing	2	2 Fr. Draw. III	1	Two electives		One elective	
	2	Fr. Draw.	1	One elective					
Manual Arts	5	Eng. IV	5	4 Eng. III	4	4 Eng. II	4	4 Eng. I	4
	4	Shop Math.	4	4 Math. III	4	4 Manual Tr.	2	4 Am. Hist. & Government	4
	3	Comm. Civics	3	5 Biology	4	4 Mech. Dr.	2	At least two electives	
	4	Manual Tr.	2	4 Manual Tr.	2	At least two electives			
	4	Mech. Dr.	2	4 Mech. Dr.	2				
	2	Shop Sketch.	1	2 Shop Sketch.	1				

FIGURE 1 ELECTIVE CURRICULUMS OF STUDY -- Taunton High School, 1924-28

* Stenography may be taken only by pupils who receive credit for first two years of English

T Senior Physics may be elected only with approval of the Head of Science Department

TT Not required if a B Grade was obtained in elementary work

Curriculums	Class Periods	FIRST YEAR	Credits	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Normal		5 Eng. IV 5 Latin IV 5 Elem. Alg. 4 Gen. Sc. 2 Fr. Draw.	5 5 5 4 1	4 English III 5 Latin or Fr. 4 Comm. Civics 5 Biology One elective by permission	4 Eng. II 2 Jr. Alg. π 5 French II (If Fr. III is taken second yr. 4 Elem. Geom. At least one elective	4 Eng. I 4 Am. Hist. & Government 4 Fr. Draw. At least two electives
¶		SECOND YEAR		THIRD YEAR	FOURTH YEAR	FIFTH YEAR
General		4 English 5 French 4 Elem. Geom One elective	4 5 4	4 English 5 French 2 Jr. Alg. 5 Elem. Phys.	4 English 5 French 2 Jr. Geom. 4 Am. Hist. & Government	4 English 5 French 3 Sr. Alg. 5 Gen. Chem.
				ELECTIVE	SUBJECTS	
		FIRST YEAR		SECOND YEAR	THIRD YEAR	FOURTH YEAR
	1 1	Chorus ⊖ Glee Club ⊖ 1 Band ⊖ 1 Orchestra ⊖ 2 Military Drill ¶ 2 Phys. Tr.**	½ ½ ½ ½ 1	ANY SUBJECT IN COLUMN 2 4 Eur. Hist. 1 Chorus ⊖ 1 Glee Club ⊖ 1 Band ⊖ 1 Orchestra ⊖ 2 Military Drill 1 Phys. Tr.	ANY SUBJECT IN COLUMN 3 4 Eur. Hist. 5 Gen. Chem. 1 Chorus ⊖ 1 Glee Club ⊖ 1 Band ⊖ 1 Orchestra ⊖ 2 Military Drill 1 Phys. Tr.	ANY SUBJECT IN COLUMN 4 4 Eur. Hist. 5 Gen. Chem. 1 Chorus ⊖ 1 Glee Club ⊖ 1 Band ⊖ 1 Orchestra ⊖ 2 Military Drill 1 Phys. Tr.

FIGURE 1 (Continued) ELECTIVE CURRICULUMS OF STUDY

⊖ May be elected with approval of music instructor

π Not required if a B Grade was obtained in elementary work

¶ For pupils who fail to do the first year of the college or technical curriculum with a certificate grade and desire to make further effort towards college preparation

** Required of all freshman girls

NOTES ON CURRICULUMS OF STUDY

1. A curriculum of study should be chosen only after consultation with teachers and parents.

2. Pupils who have received low grades in a subject should not continue that subject another year without the consent of the Head of the Department.

3. Classes in elective subjects will be formed only for a sufficient number of pupils.

4. Pupils must take subjects amounting to at least 16 credits of prepared work. A subject is assigned as many credits as it has prepared recitations a week: i.e., Latin having 5 prepared recitations a week is assigned 5 credits, geometry having 4 prepared recitations a week is assigned 4 credits, etc.

5. Only pupils of a B grade of scholarship may be given permission to take subjects amounting to more than 22 prepared credits a year.

6. Regular reports on scholarship will be sent to parents at the end of each two months. Special reports may be sent oftener. All reports should be signed by a parent or a guardian.

7. To be enrolled as a sophomore, a pupil must have received 13 credits; to be enrolled as a junior, 29 credits; to be enrolled as a senior, 48 credits. 70 credits are required for graduation.

8. A state law requires of all pupils one year of American history in high school before a diploma can be gramted.

9. One major subject, other than English, and two minors are required for graduation. A major subject is one pursued three years, and a minor is one pursued two years.

10. For credit, a subject must be completed with an average of at least 70.

	I	II	III	IV
COL. BOY	ENGLISH LATIN FRENCH ELEM. GEOM. MILITARY TR.	ENGLISH LATIN FRENCH JUNIOR ALG. AM. HIST. MILITARY TR.	ENGLISH LATIN FRENCH SENIOR ALG. SENIOR GEOM. MILITARY TR.	ENGLISH LATIN EUR. HIST. GEN. CHEM.
COL. GIRL	ENGLISH LATIN ELEM. ALG. ANC. HIST. CHORUS PHYS. TR.	ENGLISH LATIN FRENCH ELEM. GEOM. FR. DR.	ENGLISH LATIN FRENCH JR. ALG. AM. HIST. FR. DR. GLEE CLUB CHORUS	ENGLISH LATIN FRENCH SR. ALG. JR. GEOM. GEN. CHEM. GLEE CLUB
COM'L BOY	ENGLISH Shop Math. CIVICS MECH. DR. MANUAL TR.	ENGLISH EUR. HIST. COM. ARITH. BOOKKEEPING PENMANSHIP MANUAL TR.	ENGLISH BIOLOGY BOOKKEEPING COM. LAW TYPEWRITING ECONOMICS	ENGLISH SHOP MATH. AM. HIST. BOOKKEEPING BUS. ORG. TYPEWRITING
COM'L GIRL	ENGLISH LATIN ELEM. ALG. CIVICS PENMANSHIP CHORUS PHYSICAL TR.	ENGLISH FRENCH COM. ARITH. BOOKKEEPING PENMANSHIP	ENGLISH FRENCH BOOKKEEPING STENOGRAPHY TYPEWRITING	ENGLISH AM. HIST. BOOKKEEPING OFFICE PR. STENOGRAPHY TYPEWRITING CHORUS GLEE CLUB
NORMAL GIRL	ENGLISH LATIN ELEM. ALG. GEN. SCIENCE CHORUS PHYSICAL TR.	ENGLISH FRENCH CIVICS BIOLOGY PHYSICAL TR. CHORUS GLEE CLUB ORCHESTRA	ENGLISH FRENCH ELEM. GEOM. EUR. HIST. PHYSICAL TR. GLEE CLUB CHOURS ORCHESTRA	ENGLISH FRENCH AM. HIST. CHORUS GLEE CLUB ORCHESTRA

FIGURE 2 TYPICAL PROGRAMS OF STUDY

	I	II	III	IV
H A	ENGLISH ELEM. ALG. COOKING SEWING FR. DR. CHORUS PHYSICAL TR.	ENGLISH CIVICS EUR. HIST. COOKING SEWING FR. DR. PHYS. TR. CHORUS	ENGLISH AM. HIST. GEN. CHEM. STENOGRAPHY SEWING DIETETICS PHYS. TR.	ENGLISH FRENCH BIOLOGY BOOKKEEPING HOUSEHOLD MAN. ADV. DRESS. PHYS. TR.
M A	ENGLISH ELEM. ALG. CIVICS GEN. SC. PENMANSHIP MANUAL TR. MILITARY TR.	ENGLISH MATH. BIOLOGY MECH. DR. MANUAL TR. MILITARY TR.	ENGLISH EUR. HIST. COM'L LAW MECH. DR. MANUAL TR. MILITARY TR. ECONOMICS	ENGLISH AM. HIST. GEN. CHEM. COM'L ARITH. COM'L GEOG. MECH. DR. MANUAL TR. MILITARY TR.
TECH.	ENGLISH ELEM. ALG. AM. HIST. BIOLOGY ORCHESTRA	ENGLISH FRENCH ELEM. GEOM. ELEM. PHYSIC MECH. DR.	ENGLISH FRENCH JR. ALG. JR. GEOM. COL. CHEM.	ENGLISH FRENCH SR. ALG. SOLID GEOM. TRIG. SR. PHYSICS
GEN. GIRL	ENGLISH LATIN ELEM. ALG. GEN. SC. FR. DR. CHORUS PHYS. TR.	ENGLISH LATIN FRENCH CIVICS BIOLOGY	ENGLISH FRENCH JR. ALG. ELEM. GEOM. DIETETICS	ENGLISH FRENCH AM. HIST. GEN. CHEM.
GEN. BOY	English ELEM. ALG. AM. HIST. BIOLOGY	ENGLISH FRENCH ELEM. GEOM. ELEM. PHYSICS MECH. DRAW.	ENGLISH FRENCH JR. ALG. JR. GEOM. GEN. CHEM. MECH. DR.	ENGLISH SR. ALG. SOL. GEOM. TRIG. SR. PHYSICS MECH. DR.

FIGURE 2 (CONTINUED) TYPICAL PROGRAMS OF STUDY

It will be noted that both pupils from the College curriculum followed the curriculum as set forth in Figure 1 very closely and that their electives were strictly in line of college preparatory work.

In the case of the Commercial pupils there was a marked deviation from the prescribed curriculum, the electives not in line of commercial training but embracing cultural aims. This discrepancy in the first year of the Commercial pupils is due, somewhat, to a change in the choice of curriculum.

The representative of the Normal curriculum apparently followed those subjects pertaining directly to her future work.

In the Household Arts curriculum we find our representative pupil deviating from the practical side and taking cultural subjects and some commercial work.

In this study the 217 pupils of the graduating class were considered from the standpoint of the number enrolled in each curriculum. The Commercial curriculum had the highest enrolment with 68 pupils, or 31.3% of the entire class. (Figure 3) Next in order of number enrolled was the General curriculum with 56 pupils, or 25.8%. There was a difference in the enrolment between the Commercial and the General curriculums of 12 pupils, or 5.5% less pupils graduating from the General curriculum than from the Commercial curriculum.

The College curriculum fell into third place having an enrolment of 30 pupils, or 13.8% of the entire class. Although this is a good percentage of college preparatory students for the type of school, yet there is a wide margin between this group and the Commercial group, the latter having 17.5% more pupils than the former.

There is very little difference in the enrolment between the Normal and the College curriculums, the former having 26 pupils, or 11.9% of the total or only 1.9% less than the College enrolment.

FIGURE 3 Number and percentage of pupils (Seniors) enrolled in the different curriculums

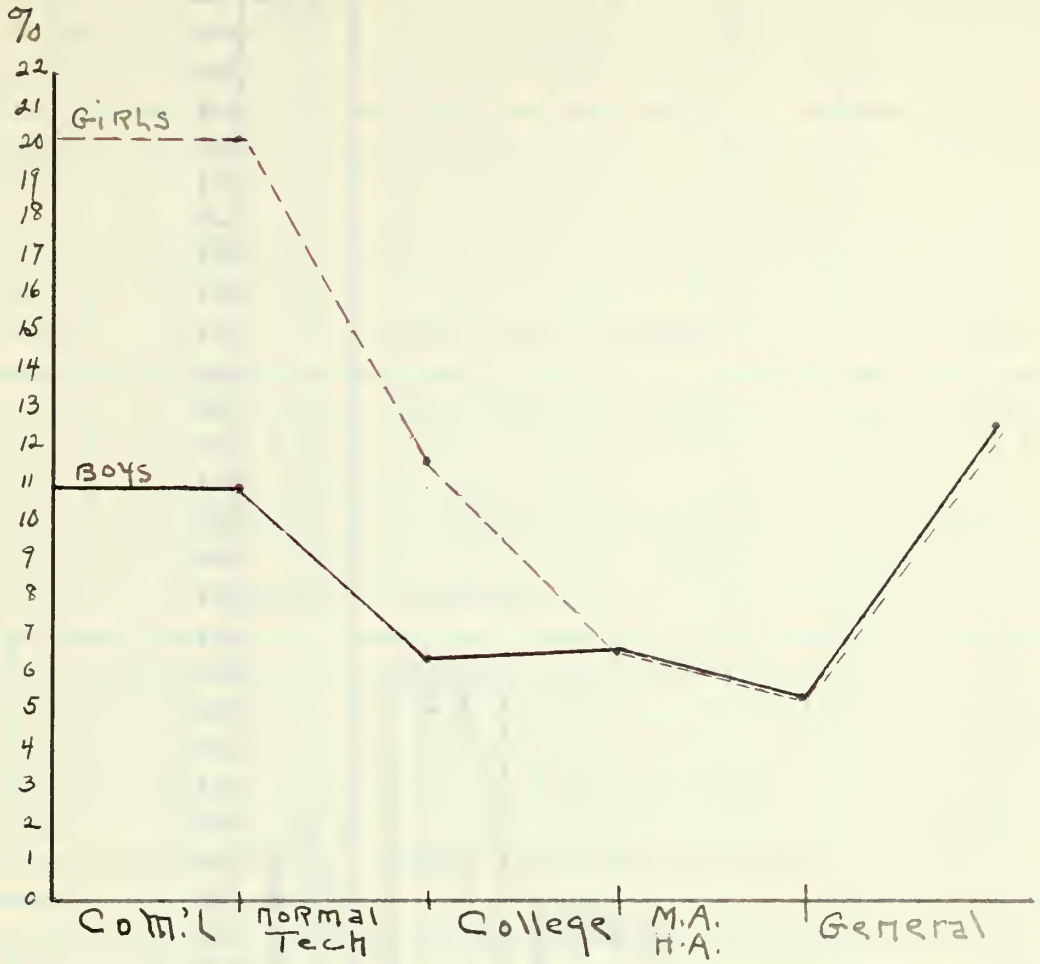

FIGURE 4 Percentage of boys and girls in the different curriculums

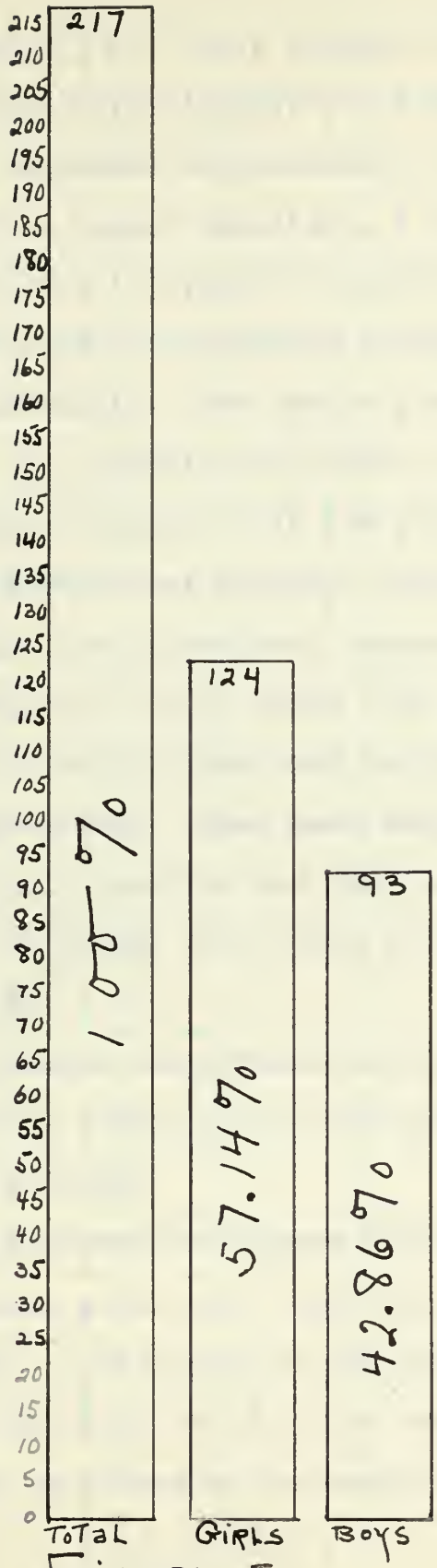

FIGURE 5—

Number and percentage of boys and girls; class of 1928, T.H.S.

In balancing the total number of pupils enrolled in the Commercial curriculum against the totals of the College, Normal, and Technical curriculums, or those concerned with preparation for higher education, I find that this High school is more concerned in preparing pupils for further study than in preparing them to contribute directly to the activities of its own community. For pupils planning to enter higher institutions our traditional ideals of preparation are particularly incongruous with the actual needs and future responsibilities of our pupils. There is a misapplication of our education in an industrial center.

From Figure 3 I have noted that the Manual Arts and the Household Arts curriculums have enrolments of 12 and 11 pupils, respectively. They take 6th and 7th places in the number of pupils enrolled and make up 10.5% of the total enrolment, the Manual Arts group having 5.5% and the Household Arts group 5%.

These figures are brought out more clearly in Figure 4 in which we find a comparison of the percentages enrolled in the various curriculums.

It is apparent from Figure 5 that we are educating or graduating more girls than boys for we find that 57.14% of our enrolment in the group of 217 graduates are girls as against 42.86% boys, or 124 girls and 93 boys. This may partially be explained by the nature of the industries in the

city. The fact that there are more openings for boys than for girls and that the boys gradually drop out of school for the money consideration should not be overlooked.

Figure 6 gives a very interesting comparison between the number of boys and girls in each curriculum. From Figure 5 we find that the number of girls enrolled far exceeds the number of boys. In the strict College curriculum there is an equal number of boys and girls. However, if we take into consideration the boys in the Technical curriculum who rightly should be considered as training for college, we find the number of boys far exceeds the number of girls in the College preparatory work. In the General curriculum the two groups are equal.

I find an approximate equality existing between the number of boys in the Manual Arts curriculum and the girls in the Household Arts curriculum. Although, in view of the fact that the total number of girls is greater than the total number of boys as shown in Figure 6, this proportion should follow through in the individual curriculums to some extent. Since these two groups, the Manual Arts and the Household Arts, are made up almost entirely of those pupils with low I. Q's it would seem that the general intelligence of the girls was lower than that of the boys.

Figure 6 also shows us that we are training the majority of our girls away from the home rather than toward it. For we find that only 11 from this group of 217 pursued those subjects which dealt directly with home management. From Figure 4 and

Column 8 of Figure 6, we find that only 11 of this group of 124 girls (Figure 5) took the Household Arts curriculum, while 85 girls were preparing for higher institutions of learning or for immediate employment in the commercial field. Figure 6 also shows that a total of 41 girls prepared for Normal or College while 44 prepared for employment in the business world. This latter condition may be a direct result of the location of the school in an industrial center. Comparatively more boys are prepared for college than for commercial work, there being 29 for college as against 24 for business.

Figure 7 gives us a rather clear comparison of percentages enrolled in each curriculum and of the relative position of each.

Figure 8 shows a rearrangement of material shown in Figure 6, bringing out with more clearness these relationships.

In Figure 9 we have a complete list of the 50 courses offered for study in this particular high school. Next follows a complete analysis of these courses. Each curriculum is listed with the number of boys and of girls under each pursuing the different courses. At the extreme right of Figure 9 is the total number of pupils and the percentage ranking.

Figure 10 makes Figure 9 a little clearer. Here we have placed the 50 courses in descending order of number enrolled with percentages. The two compulsory subjects, English and American History, take the lead. Next in order comes Elementary Algebra with 197 pupils, or 90.7%. The final course is Band with 8 pupils enrolled, having a percentage ranking of 3.6%.

COLLEGE			TECH-NICAL	COMMERCIAL			HOUSE-HOLD ARTS	MANUAL ARTS	GENERAL			NOR-MAL
B	G	T	B	B	G	T	G	B	B	G	T	G
No. 15	15	30	14	24	44	68	11	12	28	28	56	26
% 6.96	6.96	13.82	6.45	11.05	20.27	31.33	5.06	5.52	12.8	12.8	25.8	11.97

FIGURE 6 Distribution of boys and girls in each curriculum

COMMERCIAL CURRICULUM	31.336%
GENERAL "	25.806%
COLLEGE "	13.824%
NORMAL "	11.972%
TECHNICAL "	6.451%
MANUAL ARTS "	5.529%
HOUSEHOLD ARTS "	5.069%

Figure 7 PERCENTAGE OF PUPILS ENROLLED IN THE DIFFERENT CURRICULUMS

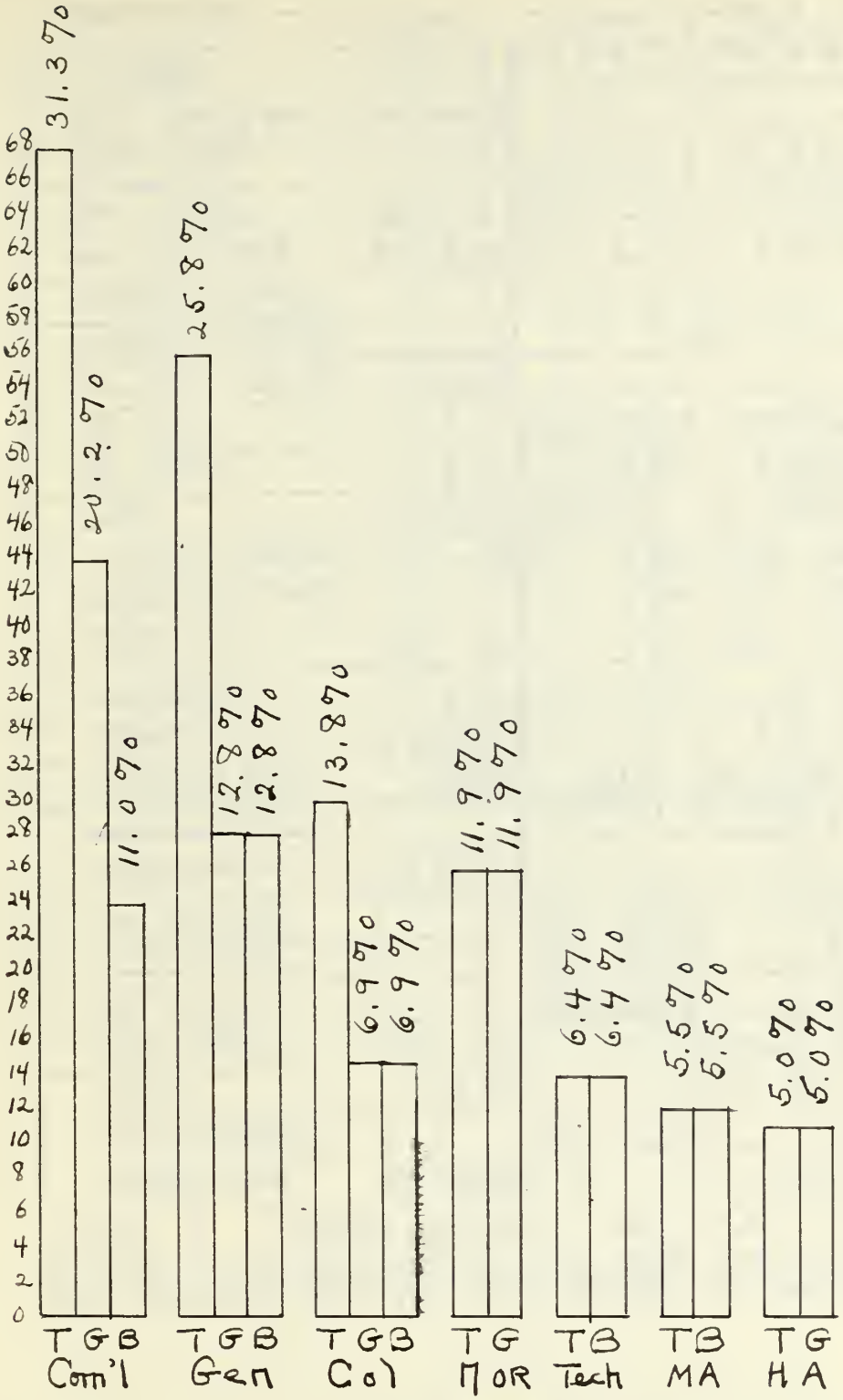

FIGURE 8 NUMBER AND PERCENTAGE OF BOYS AND GIRLS IN THE DIFFERENT CURRICULUMS IN RELATION TO THE TOTAL

CURRICULUMS →	COM'L			COLLEGE			T	HA	MA	N	GEN.				
COURSES	B	G	T	B	G	T	B	G	B	G	B	G	T	T	%
GEN. MATH. IV	24	44	68					11						79	36.4
GLEE CLUB		5	5	3	3	6	1	1	2	4	3	5	8	27	12.4
GEN. CHEM.	4	1	5	5	6	11	6	9	10	15	28	28	56	112	51.1
GEN. SCIENCE	12	18	30	4	2	6	2	11	1	26	9	22	31	97	44.7
HOUSEHOLD ORG.								11						11	5.3
HOUSEHOLD CHEM.								11						11	5.3
JR. BUS. TR. IV	24	44	68											68	31.3
JR. ALG.		1	1	15	15	30	14		4	8	28	28	56	113	52.
JR. GEOM.		2	2	7	7	14	14		2	26	28	28	56	114	52.5
LATIN	5	22	27	15	15	30		3		26	6	24	30	116	53.4
MILITARY DRILL	5		5	8		8	11		5		12		12	41	18.8
MECHANICAL DR.	7		7	1		1	14		12		18		18	52	23.
MANUAL TR.	10		10	1		1	6		12		5		5	34	15.6
ORCHESTRA	1	1	2	2	1	3	3			2	3	1	4	14	6.4
PENMANSHIP	24	39	63	1		1			1	3	6	4	10	78	35.
PHYSICAL TR.		44	44		15	15		11		26		28	28	124	57.1
SHOP SKETCHING									12					12	5.5
STENOGRAPHY	12	42	54							4		3	3	61	28.1
SR. PHYSICS				3		3	9			5	3		3	20	9.2
SOLID GEOM.				3	1	4	14				7		7	25	11.5
SR. ALG.				15	15	30	14				28	28	56	100	46.
SHOP MATH.	2		2				3		12		11		11	28	12.8
SEWING		11	11					11		5		3	3	30	13.8
TRIGONOMETRY				3	1	4	14				7		7	25	11.5
TYPEWRITING	24	44	68				1	1		6	4	4	8	84	38.6

FIGURE 9 COURSES OFFERED IN THE T.H.S. WITH THE NUMBER OF BOYS AND GIRLS PURSUING EACH UNDER THE DIFFERENT CURRICULUMS, TOGETHER WITH THE TOTAL NUMBER AND PERCENTAGE

CURRICULUMS →	COM'L			COLL.			T	HA	MA	N	GEN.				
COURSES	B	G	T	B	G	T	B	G	B	G	B	G	T	T	%
American History	24	44	68	15	15	30	14	11	12	26	28	28	56	217	100.
Ancient History	6	4	10	15	15	30				3	5	8	13	56	25.8
Adv. Dressmaking								11						11	5.3
Arithmetic IV	24	44	68											68	31.3
Bookkeeping III	24	44	68				1	1	2	2	4	2	6	80	36.8
Biology	11	6	17		7	7	14	8	12	26	17	23	40	124	57.1
Bkkg. & Bus. Org.	13	9	22											22	10.1
Bkkg. & Of. Pr.	11	35	46											46	21.1
Band	1		1	1	1	2	1				4		4	8	3.6
Com'l Arith. III	24	44	68						4	5	7	3	10	87	40.
Com'l Geog	24	44	68				1	3	4	5	1	1	2	83	38.2
Com'l Law	12	2	14						2	5	11	6	17	38	17.5
College Chem.							14							14	6.4
Cookery		7	7					11				6	6	24	11.
Community Civics	24	44	68	2	1	3	3	11	12	26	10	18	28	151	69.5
Chorus	2	44	46	4	12	16	1	10	1	24	7	28	35	133	61.3
Dietetics								11				1	1	12	5.5
English	24	44	68	15	15	30	14	11	12	26	28	28	56	217	100.
Economics	12	2	14						2	5	11	6	17	38	17.5
Elem. Physics	3	1	4				14		6		28	28	56	80	36.8
Elem. Geom.		2	2	15	15	30	14	1	9	26	21	26	47	128	58.
Elem. Alg.	24	42	66	15	15	30	14	8	2	26	23	28	51	197	90.7
European Hist.	11	5	16	2	1	3	3	6	9	6	20	16	36	79	36.4
Freehand Draw.		13	13		7	7		11		26	0	26	26	83	38.2
French	11	27	38	15	15	30	14	9	3	26	28	28	56	168	77.4

FIGURE 9 (CONTINUED) COURSES OFFERED IN THE T.H.S. WITH THE NUMBER OF BOYS AND GIRLSPURSUING EACH UNDER THE DIFFERENT CURRICULUMS, TOGETHER WITH THE TOTAL NUMBER AND PERCENTAGE

FIGURE 10 COURSES OFFERED WITH NUMBER OF PUPILS STUDYING EACH WITH PERCENTAGE RANKING

FIGURE 10 (CONTINUED) COURSES OFFERED WITH NUMBER OF PUPILS STUDYING EACH WITH PERCENTAGE RANKING

"Just as administration should always be a means to an end and never an end itself, so courses of instruction must ever be organized with regard to the extent and degree to which they can contribute to the aims and objectives of education,--never for their own sakes merely. Hence the question of educational values becomes the all-significant one in the selection of subject material for the school." (Davis, "Our Evolving High School Curriculum," p. 119)

Courses that contain no vital interest and later manifest no material influence on action or on character are mischievous and deceiving. A serious effort must be made to prepare a curriculum to contribute to the betterment of society; that there will be a respectable achievement in the various courses. An effort must be made sufficient to establish in students appreciation of the values of the subjects in the curriculums such as to insure continued study either in higher schools or independently after compulsion ceases.

Quite naturally we ask the question, "What knowledge is of most worth?" The answer is to be found in the ideals that are to be realized and the nature of the pupils for whom the training is planned. Davis in his "Our Evolving High School Curriculum," page 121, says values are of two kinds: direct and indirect. Direct values are those relating directly to the affairs of the contemporary world; indirect, those values gained by knowledge and training which are stored away for future use.

SCHOOL SUBJECTS	1 Auxiliary	2 Practical	3 Intellectual	4 Political and Civic	5 Social	6 Ethical	7 Religious	8 Aesthetic	9 Conventional	10 Cultural
Am. History	M	S	L	L	L	L	M	S	L	S
Anc. History	M	S	L	L	L	L	M	S	L	S
Adv. Dress.	S	L	S	S	S	S	S	L	M	S
Arith. IV	M	M	M	S	S	S	S	S	L	S
Bkkg. III	M	L	L	M	S	S	S	S	M	S
Biology	M	M	M	M	S	S	L	L	L	S
Bkkg. & Bus. Org.	M	L	L	M	S	L	S	S	M	S
Bkkg. & Of. Pr.	M	L	L	M	S	M	S	S	M	S
Band	S	L	S	S	S	S	S	L	L	S
Com. Arith.	M	M	M	S	S	S	S	S	L	S
Com. Geog.	M	M	M	S	M	S	S	S	M	S
Col. Chem.	M	S	M	S	S	S	S	S	L	S
Cookery	S	L	S	S	S	S	S	S	S	S
Com. Civics	M	L	L	L	L	L	M	S	L	S
Chorus	S	S	S	S	S	S	S	L	S	S
Dietetics	S	L	S	S	S	S	S	S	S	S
English	L	L	L	L	L	L	L	L	L	L
Economics	M	L	L	L	L	M	S	S	L	S
El. Physics	M	S	L	S	M	S	S	S	L	S
El. Geometry	M	S	L	S	S	S	S	S	L	S
El. Algebra	M	S	L	S	S	S	S	S	L	S
Eur. History	M	S	L	L	L	L	L	S	L	S
Fr. Drawing	S	M	S	S	S	S	S	L	S	S
French	S	S	L	S	S	S	S	S	L	S
Com. Law	S	S	L	L	L	L	S	S	L	S

FIGURE 11 A WEIGHING OF EDUCATIONAL VALUES

KEY: L-arge; M-edium; S-mall

SCHOOL SUBJECTS	1 Auxiliary	2 Practical	3 Intellectual	4 Political and Civic	5 Social	6 Ethical	7 Religious	8 Aesthetic	9 Conventional	10 Cultural
Gen. Math.	M	M	M	S	S	S	S	S	L	S
Glee Club	S	S	S	S	S	S	S	L	S	S
Gen. Chem.	M	S	M	S	S	S	S	S	L	S
House. Org.	S	L	S	S	M	S	S	L	M	S
Jr. Bus. Tr.	M	M	L	L	L	M	S	S	S	S
Jr. Algebra	M	S	L	S	S	S	S	S	L	S
Jr. Geometry	M	S	L	S	S	S	S	S	L	S
Latin	S	S	L	S	S	S	S	S	L	S
Military Dr.	S	S	S	S	L	M	S	S	S	S
Mech. Draw.	S	M	S	S	S	S	S	L	S	S
Manual Tr.	S	L	S	S	S	S	S	M	M	S
Orchestra	S	L	S	S	S	S	S	L	L	S
Penmanship	S	S	S	S	S	S	S	M	L	S
Phys. Tr.	S	L	S	S	M	L	S	L	S	S
Shop Sketch.	S	S	S	S	S	S	S	M	S	S
Stenography	M	L	L	S	S	S	S	S	M	S
Sr. Physics	M	S	L	S	S	S	S	S	L	S
Solid Geom.	M	S	L	S	S	S	S	S	L	S
Sr. Algebra	M	S	L	S	S	S	S	S	L	S
Shop Math.	M	M	M	S	S	S	S	S	L	S
Trigonometry	S	S	L	S	S	S	S	S	L	S
Typewriting	M	L	S	S	S	S	S	M	S	S
Gen. Science	L	M	M	S	M	S	S	S	L	S
House. Chem.	M	M	M	S	S	S	S	S	L	S
Sewing	S	L	S	S	S	S	S	L	S	S

FIGURE 11 (Continued) A WEIGHING OF EDUCATIONAL VALUES

KEY: L-arge; M-edium; S-mall

The second logical question to follow from the definitions of values is, Do certain subjects in the curriculum lend themselves, to a greater extent than other subjects, to the development of generalized power within the learner? There is much to be said on both sides to this question. The whole question of educational values is involved and difficult. What is of educational value depends fundamentally upon the aims that are sought. A course organized and conducted in a manner to yield one set of values may indirectly yield the second set of values. If, however, the two kinds of values are unsecurable within the same course, then clearly a pupil's individual needs must decide the issue.

As administrators then, it is up to us to provide a program of studies for the school as broad in range of offerings as the personal interest of all the pupils who may attend demand and as the resources of the community can fairly support. From these courses a number of curricula should be formed, directing definitely, each individual pupil, or else of furnishing him suggestions by which he can make his own selections of work and thus fit himself for a more or less clearly accepted goal in life.. Each curriculum should contain certain constants and variables.

In Figure 11 I have attempted to weigh educationally the 50 courses offered in the Taunton High School. Briefly stated the values with their meanings are as follows:

1. Auxiliary -- helping to get the full value from other school subjects

2. PRACTICAL -- utilization of knowledge in gaining a

livelihood or in adding to one's material advantages

3. Intellectual -- the quality of developing the power to think

4. Political and Civic -- aim: good citizenship

5. Social -- the ability to make social adjustments with ease and readiness

6. Ethical -- the ability to stimulate and develop personal qualities which constitute good character

7. Religious -- the ability to develop within an individual a spirit of reverence and devotion to the Deity

8. Aesthetic -- to stimulate an appreciation for the beautiful

9. Conventional -- the prestige value which is expected of educated persons

10. Cultural -- the immediate enjoyment to the individual of the subject studied

Figure 12 is an attempt of visualizing the educational possibilities of the various courses by considering the Seven Objectives of Secondary Education listed in the pamphlet, "Cardinal Principles of Secondary Education". These, as given, are:

1. Health
2. Command of Fundamental Processes
3. Worthy Home Membership
4. Citizenship
5. Vocation
6. Worthy Use of Leisure
7. Ethical Character

Each contribution is computed, as at present taught, as Large, Medium, or Small.

SCHOOL SUBJECTS	1 Health	2 Command of Fundamental Processes	3 Worthy Home Membership	4 Citizenship	5 Worthy Use of Leisure	6 Vocation	7 Ethical Character
Am. History	S	L	L	L	S	S	L
Anc. History	S	L	L	L	S	S	L
Adv. Dressmaking	M	S	L	M	L	L	S
Arith. IV	S	L	S	L	S	S	S
Bkkg. III	S	L	S	L	S	S	S
Biology	L	L	S	L	S	S	S
Bkkg. & Bus. Org.	S	L	S	L	S	L	S
Bkkg. & Of. Pr.	S	L	S	L	S	L	S
Band	S	S	L	S	L	M	S
Commercial Arith.	S	L	S	L	S	S	S
Commercial Geog.	S	L	S	L	S	S	S
Commercial Law	S	L	S	L	S	S	L
Col. Chemistry	S	S	S	S	S	S	S
Cookery	S	S	L	S	L	S	S
Community Civics	M	L	L	L	L	S	L
Chorus	S	S	L	S	L	S	S
Dietetics	S	S	S	S	S	S	S
English	S	L	L	L	L	S	L
Economics	S	L	L	L	L	S	L
El. Physics	L	M	M	S	M	S	S
El. Geometry	S	M	S	S	S	S	S
El. Algebra	S	M	S	S	S	S	S
Eur. History	S	L	L	L	S	S	L
Fr. Drawing	S	M	S	S	M	S	S
French	S	S	S	S	S	S	S

FIGURE 12 EDUCATIONAL VALUES AND THE SEVEN OBJECTIVES

KEY: L-arge; M-edium; S-mall

SCHOOL SUBJECTS	1 Health	2 Command Fundamental Tools	3 Worthy Home Membership	4 Citizenship	5 Worthy Use of Leisure	6 Vocation	7 Ethical Character
Gen. Math. IV	S	L	S	S	S	S	S
Glee Club	S	S	M	M	L	S	M
Gen. Chemistry	S	S	S	S	S	S	S
Gen. Science	M	S	S	S	S	S	S
Household Org.	S	S	L	S	M	S	S
Household Chem.	S	S	S	S	S	S	S
Jr. Bus. Tr.	S	M	S	M	S	S	M
Jr. Algebra	S	M	S	S	S	S	S
Jr. Geometry	S	M	S	S	S	S	S
Latin	S	S	S	S	S	S	S
Military Drill	M	S	S	M	M	S	M
Mechanical Dr.	S	M	S	S	M	S	S
Manual Training	S	M	S	S	L	S	M
Orchestra	S	S	M	M	S	S	M
Penmanship	S	L	S	S	L	S	S
Phys. Training	L	S	S	S	M	S	M
Shop Sketching	S	M	S	S	S	S	S
Stenography	S	S	S	S	S	L	S
Sr. Physics	S	S	S	S	S	S	S
Solid Geometry	S	M	S	S	S	S	S
Sr. Algebra	S	M	S	S	S	S	S
Shop Math.	S	L	S	S	S	S	S
Sewing	M	S	M	S	M	S	S
Trigonometry	S	M	S	S	S	S	S
Typewriting	S	S	S	S	M	M	S

FIGURE 12 (Continued) EDUCATIONAL VALUES AND THE SEVEN OBJECTIVES

OBJECTIVES	SUBJECTS
1. HEALTH	Biology Community Civics Elementary Physics General Science Military Drill *Physical Training
2. COMMAND OF FUNDAMENTAL PROCESSES	American History Ancient History *Arithmetic IV Bookkeeping III Biology Bkkg. & Of. Pr. Bkkg. & Bus. Org. *Commercial Arith. Commercial Geog. Commercial Law Community Civics *English Economics Elementary Physics Elementary Geom. Elementary Alg. European History Freehand Drawing *General Math. IV Jr. Bus. Tr. Junior Algebra Junior Geometry Mechanical Drawing Manual Training *Penmanship Shop Sketching Solid Geometry Senior Algebra Shop Math. Trigonometry
3. WORTHY HOME MEMBERSHIP	American History Ancient History *Advanced Dressmaking Band *Cookery Community Civics English Economics Elementary Physics European History Glee Club *Household Org. Orchestra *Sewing

FIGURE 13 CLAIMS MADE FOR THE SUBJECTS OFFERED IN THE PROGRAMS OF STUDIES IN RELATION TO THE SEVEN OBJECTIVES OF SECONDARY EDUCATION
* SUBJECT MAKES A DIRECT CONTRIBUTION

OBJECTIVES	SUBJECTS
4. CITIZENSHIP	* American History
	* Ancient History
	Adv. Dressmaking
	Arithmetic
	Bookkeeping
	Biology
	Bkkg. & Bus. Org.
	Bookkeeping and Office Tr.
	Commercial Arith.
	Commercial Geog.
	* Commercial Law
	* Community Civics
	* English
	* Economics
	* European History
	Glee Club
	Jr. Bus. Tr.
	Military Drill
	Orchestra
5. WORTHY USE OF LEISURE	American History
	Ancient History
	Adv. Dressmaking
	* Band
	Cookery
	Community Civics
	* Chorus
	* English
	Economics
	Elementary Physics
	European History
	Freehand Drawing
	French
	* Glee Club
	Household Org.
	Mechanical Drawing
	Manual Training
	* Orchestra
	* Physical Training
	Shop Sketching
	Shop Math.
	Typewriting

TABLE 13 (continued) CLAIMS FOR THE SUBJECTS IN RELATION TO THE SEVEN OBJECTIVES

OBJECTIVES	SUBJECTS
6. ETHICAL CHARACTER	American History Ancient History Commercial Law Community Civics English Economics European History Glee Club Jr. Bus. Tr. Military Drill Manual Training Orchestra Physical Training
7. VOCATION	Advanced Dressmaking * Bookkeeping Bus. Org. * Office Practice Band * Typewriting * Stenography

TABLE 13 (continued) CLAIMS MADE FOR THE SUBJECTS IN RELATION TO THE SEVEN OBJECTIVES

In working out this chart (Figure 12) the author submitted similar charts to all heads of departments and to several assistant teachers for their reflective thought on how the subjects contributed towards the "Seven Objectives". In this way the author was enabled to draw a fair estimate.

Figure 13 shows the relation of the typical curriculums to the "Seven Objectives". The first method of attack on this problem was to study the claims made for each subject in relation to the "Seven Objectives" as was done in Figure 12. These were determined by an analysis of the checkings which were set up for each subject by the teachers interviewed. As many of these claims were not stated in terms of the "Seven Cardinal Objectives," a certain amount of subjective judgment was necessarily involved in interpreting the checkings of the authors. The asterisk placed before some subjects indicates that the subjects contribute directly to the objective. Subjects which are not starred contribute to the objective only indirectly.

Figure 14 shows the small variety of extra-curricular activities and their contributions to the "Seven Objectives in Education". Some of these activities make a real contribution to the "Seven Objectives"; others, very little. Due to lack of time and the limited amount of pupil participation the conclusion is drawn that the extra-curricular activities do not contribute as much as they should.

ACTIVITIES	Health	Fundamentals	Citizenship	Home Membership	Leisure	Character	Vocation
BOYS' PUBLIC SPEAKING		*			*	*	
GIRLS' PUBLIC SPEAKING		*			*	*	
HISTORY CLUB		*	*				
GIRLS' SPORT CLUB	*				*	*	
MUSIC CLUB				*	*		
BIOLOGY CLUB	*						
BOYS' DEBATING TEAM		*	*		*	*	
CLASS ORGANIZATIONS			*			*	
HOME-ROOM ORGANIZATIONS			*			*	
GIRLS' GLEE CLUB				*	*	*	
BOYS' GLEE CLUB				*	*	*	
SCHOOL PAPER		*			*	*	*
SCRIBBLER'S CLUB		*			*		
STUDENT GOVERNMENT			*			*	
ATHLETICS	*		*		*	*	

TABLE 14 HOW THE EXTRA-CURRICULAR ACTIVITIES CONTRIBUTE TOWARD THE OBJECTIVES IN EDUCATION

PART III: SUMMARY

In the compilation of the foregoing figures and in making analyses of the subject under discussion from various angles the author has attempted to present a composite picture of the entire scholastic situation as it exists in the Taunton High School. It is quite possible that some phases of the situation have not been clearly presented. But with the material available the author felt that in taking the entire graduating class of 217 pupils, he has chosen as near a typical situation as could be found. This study, thus far, seems to show a great many outstanding faults which do not coincide with the "Seven Objectives in Education" as laid down by the Commission on the Reorganization of Secondary Education and as set forth in Bulletin, No. 35, 1918, on "Cardinal Principles of Secondary Education."

The following criticisms of existing conditions with recommendations for correcting such and making them more nearly approximate the "Seven Objectives" follows.

PART IV CONCLUSIONS and RECOMMENDATIONS

I HEALTH

Since the Commission on the Reorganization of Secondary Education hold that Health is the first and foremost consideration of the educator it seems not only logical but practical that we should consider the present problem first from the standpoint of Health.

Figure 12 shows us that few subjects of the program of studies contribute to Health. Elementary Physics, Military Drill, General Science, Physical Training, and Community Civics contribute somewhat. From Figure 14 we find that the Girls' Sport Club, the Biology Club, and Athletics contribute directly to Health. But this is meagre.

All school courses should be so taught as to permit frequent opportunities for correlation with the various parts of the health program. To illustrate, in history classes the influence of health and disease upon the great movements of history should be pointed out. Civics classes offer opportunity for studies and discussions of health organizations, examination into community taxes to find out what proportion goes to such health projects as adequate sewage disposal, to sanitation and sterilization of water supplies, to inspection of food products and sale, and to communicable disease control. The different sciences present perhaps the most fertile opportunity of all, because upon these sciences are based our present procedures for health preservation.

Military Drill is just what the name implies and should be abolished. It has no place in the school curriculum of today. The old military aim that physical exercises and training were simply a means for making the citizen physically fit to become the fighting soldier is rapidly disappearing over the world. Back of all the old systems lurked this military aim. Physical activity was simply a means to an end, and that end was the making of a fit soldier. Our present education seems to be away from the military aim. Schools and organizations are spending vast sums in the interest of peace. Military Drill is antagonistic towards this.

Within recent years, various facts have been brought to light which show the urgent need of health education in the public schools. In the selective draft, a million young men, more than one-third of the entire draft, were rejected because of physical defects. In the public schools, it has been estimated by various authorities that three-fourths of the children are physically defective. The fact that three-quarters of the school children have physical defects which are largely remediable and preventable, points to the need of positive health work in the schools.

What are the specific objectives of physical education? One course of study for senior high-school boys lists these seven objectives of physical education, which are more or less typical of those presented in the newer courses of study:

1. To aid the body in the development of motor power and normal growth
2. Development of ability to work and play with others - sportsmanship
3. Good posture
4. Elimination of removable growth handicaps
5. To provide opportunity for acquiring knowledge, skill, and control in activities suitable for leisure time occupation
6. Utilization of the play instinct
7. Coordination with the general curriculum

The most common methods for attaining these objectives are: games and sports, team and individual recreational activities, formal gymnastic, apparatus and stunts, tumbling and mat work, and hygiene and health education through incidental instruction, examination, classification, and cooperation with school nurses and physicians. Above all the program of health education should be under a competent teacher and directed along the right lines so as to insure the above specific objectives.

A properly graded course taking into account the age, ability and taste of the child can be formulated to provide suitable training for everybody. In physical training, physical development of the individual is the aim, whereas in physical education the aim is the education of the individual through physical activities. The aim of physical education is training for each and every boy and girl in the school. "A sound mind in a sound body" is the purpose.

The regular curriculum of the school should require at least two hours a week devoted to corrective gymnastics and to games and athletics.

The public school should also maintain a dental and an eye clinic. There is a great need for permanently established dental and eye clinics in the school. This is one of the most strategic measures in conserving children's health.

Mr. J. E. Rogers, director of the National Physical Education Service, in a paper published by the United States Bureau of Education, says, "Education is the end and physical activities are the means. We must get the conception that physical education is education; that we are training for health, neuro-muscular skills, sportsmanship, personality, and not developing weight lifters, high jumpers and parallel-bar champions."

II COMMAND OF THE FUNDAMENTAL PROCESSES

In considering the second of the objectives, namely, the Command of Fundamental Processes, it is the opinion of the author based upon his own study of the situation and on the opinions of twelve other members of the faculty, that few of the subjects as taught at the present time give the desired results. The most direct claim of meeting this objective is submitted by English. The social studies and commercial subjects which have high frequency of occurrence claim an indirect contribution. The bookkeeping courses as organized are on a vocational basis and too often contribute little of use to the average individual in the handling of his own private accounts. It seems reasonable to conclude, therefore, that the attempt to meet this objective is largely indirect.

This is not as it should be. There should be large direct results from all subjects to meet this objective.

That the English course in the Taunton High School needs to be reorganized is plainly felt by the author. It is folly to insist that the high-school course in English shall be a college-preparatory one. And yet at the present time the course as such is mainly along college-preparatory lines. Courses in English should be worked out adapted to the needs of the pupils. In the purely classical curriculum in literature, for example, the course may with safety be made more frankly literary than in any other type. A course in literature for

vocational and technical curriculums must never lose sight of the fact that its reason for being is its inspirational value. It should also make a special effort to give help for future leisure hours.

The general aims of the English course, as set forth by the Committee on the Reorganization of English in Secondary Schools, are: (1) to give the pupils command of the art of communication in speech and in writing, and (2) to teach them to read thoughtfully and with appreciation, to form in them a taste for good reading, and to teach them how to find books that are worth while. (Bulletin, 1917, No. 2, Bureau of Education, Department of the Interior, Washington, D. C.)

The subject-matter of English consists primarily of activities and is to be learned by practice. This is vital and economic. The study of expression for practical purposes should go hand in hand with the study of books of a practical character.

Thus I would say that all irrelevant and comparatively unimportant material needs to be excluded. If there must be a college-preparatory group for the few "traditional" hangers-on, then have it,- but for only the select few. For the vast majority of the pupils adapt the course in English to their daily experiences as it seems justified.

English is not only a subject of instruction, but the means of communication used for teaching all the subjects. It is a cooperative subject. All the teachers in the school should have a share in the task of teaching correct and effective English expression. Only through the cooperation of all members of the staff can any school maintain the social requirements of good usage.

In connection with this I would mention penmanship. Here is a fine chance for cooperation of other departments with the English department. No teacher should accept a paper from a pupil that is not legible, clean, and free from gross errors. It is only by close cooperation among the departments that the pupils grow with the school.

Few subjects taught in the secondary school elicit more contradictory viewpoints than does mathematics. What should be taught, how much of it, to whom, how, and why, are matters of disagreement.

Traditionally, a great deal has been taught and is still being taught that has no logical place in our high schools. Professor Guy Wilson of Boston University, who has been working for a number of years on curriculum revision in the elementary grades, has found that a great deal of irrelevant and unimportant material is being taught that has no direct use in the pupil's life. That the same is true of the high school I firmly believe. The reorganization of mathematics in the high schools is badly needed. This is true of Taunton High. As now taught mathematics does not fulfill the requirements of the second objective. Colleges still dictate what shall be taught. This limits the field and makes the preparation theoretical. There is no time for practical mathematics. Again, the background of the pupil does not furnish a sound foundation for further study of the subject. This is due to poor training in the elementary school where the subject-matter is illogical and impractical. A third need should be considered. This is a suitable, practical text. It is difficult to find such a book. Few texts in mathematics are written by authors who understand the high school pupil and

his needs. Most of the texts have been written by college professors with a college viewpoint. The material is mostly theoretical and not of a practical nature. Consider the commercial arithmetics, for example. In examining several for the type of problems therein presented I find that a great many of them have no relationship with the type of problem the pupil would have to face in everyday life. Most of the texts present mental gymnastics to the pupil. The authors of our mathematics books have failed miserably. If they would make a text of a practical value which would function in the lives of the pupils, giving them actual everyday problems, then a great deal will have been accomplished.

III WORTHY HOME MEMBERSHIP

Worthy home-membership as an objective calls for the development of those qualities that make the individual a worthy member of a family, both contributing to and deriving benefit from that membership.

The only subjects which claim to meet this objective directly are Household Economics, English, music, art, and some phases of History. We view with alarm this fact that so few subjects contribute directly to this objective in education. In the present era when there are so many outside interests to widen the ever-increasing gap between the youth and his home it devolves more and more upon the schools to take over the functions once exercised by the home. More and more the tendency seems to be to shift those responsibilities which were formerly considered as the duty of the home to the schools. Today our schools must have teachers and departments to act more or less in the capacity of a parent. The usual result of all this is a clogging of the schools and unsatisfactory results. For regardless of the ability and training of such teachers they have not that true parental feeling that is so necessary to successful guidance and instruction of the youth along such lines.

Mechanical Drawing and Manual Training should contribute largely to this objective but there is little carry over of such into the home.

The conclusion is drawn, therefore, that outside of the limited training given to girls in home economics, little attempt is being made to train boys and girls in such knowledges as those of the financial basis of home life, the place of the family

in our social organization, the duties and responsibilities of parenthood, the basic social principles and habits which are involved in the maintenance of wholesome family life, and skill in the use of the mechanical processes which are necessary for the upkeep of the home and the appliances with which the work of the home is conducted.

IV CITIZENSHIP

Bennion in his "Citizenship" says, "Attention to this social function (Citizenship) of schools should not lead to oversight of the fact that the school must also seek the welfare of the individual student, that he may conserve physical and mental health, develop his talents, and cultivate a disposition to use his knowledge and abilities in the service of his fellow men."

From the Cardinal Principles of Education we learn that the following are essential: "A many-sided interest in the welfare of the communities to which one belongs; loyalty to ideals of civic righteousness; practical knowledge of social agencies and institutions; good judgment as to means and methods that will promote one social end without defeating others; and as putting all these into effect, habits of cordial cooperation in social undertakings."

Let us see which subjects meet the above essentials. The subjects which lay claim to making direct contributions to citizenship are history, which includes ancient, American, European, and civics; and other social studies which are composed of economics, commercial geography, and commercial law. Some subjects are marked as contributing low and a few medium. General Science, which should contribute largely to this objective, does so only indirectly as now taught.

I think the work in English as now taught does kindle social ideals and gives insight into social conditions and into personal character as related to these conditions. English, in its broadest development and manifold relations seems to me to be the foundation of everything.

We lose a golden opportunity in self-expression in not cultivating that highly important part of the curriculum -- the socialized and self-expressive activities. These activities have not for their purpose the mastery of subject-matter or skills. They provide opportunity for pupils to work together,to learn co-operation, to sense the interdependence of the members of the group.

Training for effective citizenship should not stop with the acquisition of a fundof historical information, nor with a mere interest in the past. Citizenship is called upon to deal with social situations as they exist today and as they will arise tomorrow. Hence, courses in history must be supplemented by courses of study dealing with current events, current social theories, current social problems, and current human relationships of many sorts. This knowledge must be made to operate in the lives of the boys and girls more or less immediately and to establish in them desirable social attitudes.

V WORTHY USE OF LEISURE

Preparation for the leisure part of life should be one of the important aims of the secondary school. It is estimated that the average individual has from one quarter to one fifth of his time for leisure. His action during leisure is as much a matter of social concern as his action in any other part of his life. The increase in the amount of leisure within the last few years has introduced problems of no slight importance for secondary education.

The subjects which claim major attention in relation to this objective are English, music, physical training, and athletics. A good bit of the work in English is determined by the demands of college entrance requirements. Too little time is spent on the intelligent and discriminate reading and selection of present-day newspapers and periodicals. We should attempt to reach the mass and not the slect mew who are preparing for higher institutions of learning.

The pupil's ability should be utilized in the field of drama. History offers abundant material for dramatization in which the subject can be made vivid and alive. Frequent assemblies should be held under proper guidance in which the pupils have a chance for self-expression. Motion pictures, club work, and athletic contests all offer a wealth of material for the cultivation of the worthy use of leisure.

While the individual's activities during his leisure time are not designed primarily to make positive contributions to social well-being and to social progress and while they do not tend on the whole to build up society, unless directed along desirable social lines they may and doubtless do tend to interfere seriously with that process, or even, in some cases, to tear civilization down. Vice and social degeneration find fertile soil in leisure. The social menace of the activities of leisure not well guided, where standards, habits, and ideals have not been established along desirable social lines, is by no means unimportant.

In connection with the above I would recommend strongly the cultivation of hobbies, such as collection of stamps, the keeping of an autograph album, picture collecting, gathering of specimens of various kinds, the building up of a worth-while library, and so forth. Aviation and the radio offer wonderful possibilities for the mechanical boy which will give him a fund of knowledge as well as leisure time well spent.

VI VOCATION

The two great assets of a Nation which enter into the production of wealth, whether agricultural or industrial, are natural resources and human labor. The conservation and full utilization of both of these depend upon vocational education.

This vocation training is required to conserve and develop our natural resources, to prevent waste of human labor, to increase wage earning power, to meet the increasing demand for trained workmen, to offset the increased cost of living, as a wise investment and because our national prosperity is at stake.

This vocational education is needed to democratize the education of the country by developing a better teaching process through which children who do not respond to book instruction alone may be reached and educated through learning by doing, by introducing into our educational system the aim of utility to take its place in dignity by the side of culture and to connect education with life by making it purposeful and useful.

The largest contribution made to this objective is through the courses of the Commercial department. Bookkeeping, office practice, typewriting and stenography contribute directly towards fitting the pupils for positions in the business places within the community. To this list should be

added those subjects, -- ancient history, algebra, geometry, physics, chemistry, Latin, French -- which are organized for the purpose of giving the pupil credit for admission to college, thus making it possible for him to secure a higher education and prepare for a vocation which requires greater basic educational preparation. We should also include the Manual Art subjects but in the school under consideration the physical equipment is so inadequate that this phase of the work is not functioning as it should.

At the beginning of the year 1929 a department of Vocational Guidance was created, the duty of which was to guide, counsel and assist the pupil in adjusting himself so that he may secure a maximum of benefit from his high school work and become better fitted to fill his place in society. Under the present regime any public school finds itself supplied plentifully with that group of pupils who are not mentally equipped to handle the subjects contained in any set curriculum. These pupils certainly cannot be excluded from the opportunities of education and yet due partly to heredity and environment, these pupils are hard to assimilate in the present system.

Mr. Henry Norr, principal of the Evander Childs High School, in the Bronx, in a recent paper delivered before the city high school administrative assistants, advocated "the adoption in city schools of three distinct types of curriculums, with three different certificates to be given

for completing the work, the curriculums to vary according to the student's ability." In the three types of curriculums that Mr. Norr proposes one would maintain very high standards, designed primarily for the gifted, -- the college group, upon the completion of which, "a college preparatory diploma" would be given. "A second curriculum should follow that now in the schools for which a diploma is given," he said. The third curriculum should have lower standards than those at present maintained and a certificate of completion, not a diploma, should be given when it is completed, Mr. Norr declared that this third curriculum was necessary "because many students who are unable to do high school work would not be benefited by a technical or vocational curriculum."

It certainly seems to the author in a school of the size and type as Taunton High that the plan suggested by Mr. Norr would be a decided improvement. After all "the school should be fitted to the pupil."

Lincoln once said: "Educated people must labor. Otherwise, education itself would become a positive and intolerable evil."

No country can sustain in idleness more than a small percentage of its numbers. The great majority must labor at something productive.

From these premises the problem springs: How can labor and education be the most satisfactorily combined?

To answer this vital question is the purpose of vocational education. If the taxpayers willingly support the program of vocational education the benefits derived will far outweigh the financial cost.

VII ETHICAL CHARACTER

It requires no more than a superficial acquaintance with the educational situation of today to realize that the mastery of a textbook no longer constitutes the chief end of school education. The text is being transformed into a means for realizing more fundamental objectives; and emphasis in school has shifted from knowledge as book learning to information and activities as instruments in the formation of character traits.

Professor Dewey in his Democracy and Education, 1916, p. 65, states "If the environment, in school and out, supplies conditions which utilize adequately the present capacities of the immature, the future which grows out of the present is surely taken care of. The mistake is not in attaching importance to preparation for future need, but in making it the mainspring of present effort."

Although ethical character is paramount among the objectives of the secondary school, yet no subject in the Taunton High School is taught with this aim in mind. English and the social studies contribute largely but indirectly toward this objective. Most subjects can be made to contribute indirectly developing in the pupil a sense of personal responsibility, initiative, and a spirit of service.

In order to educate our boys and girls along this line we must concentrate upon pupil activity and not upon traditional information methods. Every course should first

of all have stated the objectives which subject matter should endeavor to realize, and secondly, to translate these objectives into specific items of subject matter.

A complete analysis of the conditions which call for a reorganization of the secondary school would call for the enumeration of many things which cannot be considered here. There is one very important change, however, which cannot be ignored because an appreciation of its significance is leading to far-reaching effects. I refer to the educational importance of social activities.

One of the greatest possibilities in the way of utilizing the social interest of pupils for character training is through the extra-curricular activities. In the first place they are a means of socialization and afford opportunities for developing an appreciation and understanding between boys and girls of different racial, social, and economic backgrounds. Secondly, they make possible a more careful building of personal and social standards.

TENTATIVE CONCLUSIONS TO BE DRAWN FROM THIS ANALYSIS OF THE PROGRAM OF STUDIES IN THE TAUNTON HIGH SCHOOL IN RELATION TO THE SEVEN CARDINAL OBJECTIVES OF SECONDARY EDUCATION ARE AS FOLLOWS:

1. The basic academic studies make their major contribution to the seventh objective - that of vocational training when interpreted to include preparation for college.

2. The basic academic subjects meet the vocational objective directly for the small percent of high school pupils who go to college.

3. The first six or life objectives are met indirectly by the basic academic subjects.

4. The program of studies needs an extensive reorganization to conform to the seven objectives in education.

5. A complete testing program is needed to be followed by ability grouping and curriculums built around the needs of the pupils.

6. The non-academic subjects which are offered do attempt to meet the life needs of pupils to some degree.

7. Large numbers of secondary-school pupils do not profit by the training offered in the four-year high-school, since they drop out of school before completing the work; others do not profit by it as largely as they might, since it is not adapted to their abilities, needs, and interests.

8. The number of extra-curricular activities is limited and the amount of pupil participation is meager.

9. Potent reasons as to why the curriculum and extra-curriculum program does not meet the needs of pupils who are not going to college are found in the requirements for admission to college and the requirements for high-school graduation which are set up by local requirements.

10. The past training of parents and teachers and the influence of tradition are doubtless important influencing factors in the election of courses.

The Commission on the Reorganization of Secondary Education "holds that that education is essentially a unitary and continuous process, and that each of the objectives in education must be recognized throughout the entire extent of secondary education." (Cardinal Principles of Education, p. 16)

Each subject now taught in the Taunton High School is in need of extensive reorganization in order that it may contribute more effectively to the objectives outlined in Cardinal Principles of Secondary Education, Bulletin 35, Department of Education.

The widespread use of intelligence tests and achievement tests has proven to us that children vary greatly as individuals. Therefore individual differences must be considered. Education can never be accomplished en masse. It becomes a personal, individual process. The "will to learn" is present in pupils in different amounts. They are not alike in the amount of ability to perform. It behooves us then to break away from the traditional type of organization and to recognize individual differences and that we must form new and better methods of work.

Dr. Sutherland in his summary on individual differences among children says, "The primary consideration in schools heretofore has been ease of administration, not efficiency of instruction. Ease in organizing and managing the program of studies, ease in handling and directing the use of textbooks, ease in organizations of classrooms, have made possible the administration with equal ease of larger and larger classes. The quality of the citizen who is a product of this maladjustment of the schools depends too largely upon influences outside the school, and is not

schools depends too largely upon influences outside the school, and is not sufficiently influenced by the school training." (The Twenty-Fourth Yearbook of the National Society for the Study of Education, Part II, Adapting the Schools to Individual Differences, p. 23)

Again on page 29 Dr. Sutherland says, "The more carefully the processes and goals of education are analyzed and made clear, the more the fact appears that individual differences are unavoidable and invaluable. By means of them the public schools should be able to keep up a wholesome supply of the many kinds of persons needed to carry on the complex work of civilization, all of these different individuals with trained abilities in a state of healthy and buoyant readiness to perform their appropriate tasks."

"No curriculum in the secondary school can be regarded as satisfactory unless it gives due attention to each of the objectives of education."

Health, as an objective, makes imperative an adequate time assignment for physical education and requires science courses properly focused upon personal and community hygiene, the principles of sanitation, and their applications. Command of fundamental processes necessitates thorough courses in the English language as a means of taking in and giving forth ideas. Worthy home membership calls for the redirection of much of the work in literature, art, and the social studies. For girls it necessitates adequate courses in household arts. Citizenship demands that the social studies be given a prominent place.

Vocation as an objective requires that many pupils devote much of their time to specific preparation for a definite trade or occupation, and that some pursue studies that serve as a basis for advanced work in higher institutions. The worthy use of leisure calls for courses in literature, art, music, and science so taught as to develop appreciation. It necessitates also a margin of free electives to be chosen on the basis of personal avocational interests.

At last we have come to realize that our profession is that of education; that our aims are the seven cardinal principles of general education, -- namely, to train for health, for worthy home membership, for the tools of learning, for vocational efficiency, for the wise use of leisure, for worthy citizenship and for ethical character.

In view of the above I submit a suggested curriculum to meet the modern objectives in education.

	FIRST YEAR			SECOND YEAR			THIRD YEAR			FOURTH YEAR		
	P		C	P		C	P		C	P		C
Scientific		-REQUIRED-			-REQUIRED-			-REQUIRED-			-REQUIRED-	
	5	English	5	4	English	4	4	English	4	4	English	4
	5	Algebra	5	4	Geom. I	4	4	Am. Hist. & Gov't	4	4	Prob. of Dem.	4
	2	Phys. Ed.	1	5	Biology	5	5	Physics	5	7	Chem.	5
	4	Gen. Sc.	4	2	Phys. Ed.	1						
		-ELECTIVE-			-ELECTIVE-			-ELECTIVE-			-ELECTIVE-	
	2	Shop Work	1	5	French I	5	5	French II	5	5	Trig.	2½
	3	Comm. Civics	3	5	Latin II	5	5	Latin III	5	5	Solid Geom	2½
	5	Latin I	5	4	Eur. Hist.	4	2	Alg. II	2	5	French III	5
	4	World Hist.	4	1	Music	½	2	Shop Work	1	5	Latin IV	5
	1	Music	½	1	Orch.	½	1	Music	½	3	Alg. III	3
	1	Orch.	½	1	Music App.	½	1	Orch.	½	2	Shop Work	1
	1	Music App.	½	1	Art App.	½	1	Music App.	½	1	Orch.	½
	1	Art App.	½				1	Art App.	½	1	Music	½
							2	Phys. Ed.	1	1	Music App.	½
										1	Art App.	½
										2	Phys. Ed.	1
General		-REQUIRED-			-REQUIRED-			-REQUIRED-			-REQUIRED-	
	5	English	5	4	English	4	4	English	4	4	English	4
	4	Gen. Sc.	4	5	Biology	5	4	Am. Hist. & Gov't	4	4	Prob. of Dem.	4
	4	World Hist.	4	2	Phys. Ed.	1						
	2	Phys. Ed.	1									
		-ELECTIVE-			-ELECTIVE-			-ELECTIVE-			-ELECTIVE-	
	3	Comm. Civics	3	5	French I	5	5	French II	5	5	French III	5
	5	Alg.	5	5	Latin II	5	5	Latin III	5	5	Latin IV	5
	5	Latin I	5	4	Eur. Hist.	4	5	Physics	5	5	Chem.	5
	1	Music	½	4	Geom. I	4	2	Alg. II	2	3	Alg. III	3
	1	Orch.	½	1	Music	½	4	Geom. II	4	1	Orch.	½
	1	Music App.	½	1	Orch.	½	1	Orch.	½	1	Music	½
	1	Art App.	½	1	Music App.	½	1	Music	½	1	Music App.	½
				1	Art App.	½	1	Music App.	½	1	Art App.	½
							1	Art App.	½	2	Phys. Ed.	1
							2	Phys. Ed.	1			

FIGURE 15 A SUGGESTED CURRICULUM TO MEET THE MODERN OBJECTIVES IN EDUCATION

	FIRST YEAR			SECOND YEAR			THIRD YEAR			FOURTH YEAR		
	P		C	P		C	P		C	P		C
PRACTICAL ARTS (BOYS)		-REQUIRED-			-REQUIRED-			-REQUIRED-			-REQUIRED-	
	5	English	5	4	English	4	4	English	4	4	English	4
	4	Gen. Sc.	4	2	Phys. Ed.	1	4	Am. Hist. & Gov't	4	4	Prob. of Dem.	4
	2	Phys. Ed.	1									
		-ELECTIVE-			-ELECTIVE-			-ELECTIVE-			-ELECTIVE-	
	2	Fr. Dr.	1	4	Ind. Hist. & Geog.	4	5	Physics	5	5	Industrial Chem.	5
	4	Mech. Dr.	2	5	Biology	5	4	Mech. Dr.	2	4	Mech. Dr.	2
	5	Shop Math.	5	4	Mech. Dr.	2	4	Manual Tr.	2	4	Manual Tr.	2
	3	Comm. Civics	3	4	Manual Tr.	2	3	Adv. Shop Math.	3	1	Music	½
	4	Manual Tr.	2	1	Music	½	1	Music	½	1	Orch.	½
	1	Music	½	1	Orch.	½	1	Orch.	½	2	Phys. Ed.	1
	1	Orch.	½	1	Music App.	½	2	Phys. Ed.	1	1	Music App.	½
	1	Music App.	½	1	Art App.	½	1	Music App.	½	1	Art App.	½
	1	Art App.	½				1	Art App.	½			
PRACTICAL ARTS (GIRLS)		-REQUIRED-			-REQUIRED-			-REQUIRED-			-REQUIRED-	
	5	English	5	4	English	4	4	English	4	4	English	4
	4	Gen. Sc.	4	5	Biology	5	4	Am. Hist. & Gov't	4	4	Prob. of Dem.	4
	2	Phys. Ed.	1	2	Phys. Ed.	1						
		-ELECTIVE-			-ELECTIVE-			-ELECTIVE-			-ELECTIVE-	
	5	Gen. Math.	5	3	Comm. Civics	3	5	Household Physics	5	5	Household Chem.	5
	2	Fr. Dr.	1	4	Eur. Hist.	4	2	Fr. Dr.	1	4	Dressmaking	2
	4	Cooking & Sewing	2	2	Household Ec	2	2	Applied Design	1	2	Millinery	1
	1	Music	½	2	Fr. Dr.	1	1	Orch.	½	2	Dietetics & Nursing	1
	1	Orch.	½	2	Applied Design	1	1	Music	½	1	Music	½
	1	Music App.	½	1	Music	½	2	Phys. Ed.	1	1	Orch.	½
	1	Art App.	½	1	Orch.	½	1	Music App.	½	2	Phys. Ed.	1
				1	Music App.	½	1	Art App.	½	1	Music App.	½
				1	Art App.	½				1	Art App.	½

FIGURE 15 (continued) A SUGGESTED CURRICULUM TO MEET THE MODERN OBJECTIVES IN EDUCATION

	FIRST YEAR		SECOND YEAR		THIRD YEAR		FOURTH YEAR	
	P	C	P	C	P	C	P	C
CLASSICAL	-Required-		-Required-		-Required-		-Required-	
	5 English	5	4 English	4	4 English	4	4 English	4
	5 Algebra	5	4 Geom.	4	4 Am. Hist. & Gov't	4	4 Prob. of Dem.	4
	5 Latin	5	5 Latin II	5	5 Latin III	5	5 Latin IV	5
	2 Phys. Ed.	1	2 Phys. Ed.	1				
	-Electives-		-Electives-		-Electives-		-Electives-	
	4 Gen. Sc.	4	5 French I	5	5 Latin III	5	3 Alg. III	3
	3 Com. Civics	3	5 Biology	5	5 French II	5	5 Trig.	2½
	1 Music	½	1 Music	½	2 Alg. II	2	5 Solid Geom	2½
	1 Orch.	½	1 Orch.	½	5 Physics	5	5 Fr. III	5
	1 Music App.	½	1 Music App.	½	2 Phys. Ed.	1	7 Chem	5
	1 Art App.	½	1 Art App.	½	1 Music	½	2 Phys. Ed.	1
	5 Anc. Hist.	5	4 Eur. Hist.	4	1 Orch.	½	1 Music	½
					1 Music App.	½	1 Orch.	½
					1 Art App.	½	1 Music App.	½
							1 Art App.	½
NORMAL	-Required-		-Required-		-Required-		-Required-	
	5 English	5	4 English	4	4 English	4	4 English	4
	5 Algebra	5	5 Biology	5	4 Am. Hist. & Gov't	4	4 Prob. of Dem.	4
	4 Gen. Sc.	4	2 Phys. Ed.	1				
	2 Phys. Ed.	1						
	-Electives-		-Electives-		-Electives-		-Electives-	
	2 Fr. Dr.	1	3 Com. Civics	3	2 Phys. Ed.	1	2 Phys. Ed.	1
	1 Music	½	4 Eur. Hist.	4	1 Music	½	1 Music	½
	4 World Hist.	4	1 Music	½	5 French II	5	5 French III	5
	1 Orch.	½	4 Geom. I	4	5 Latin III	5	5 Latin IV	5
	1 Music App.	½	5 French I	5	5 Physics	5	5 Chem.	5
	1 Art App.	½	2 Fr. Dr.	1	2 Fr. Dr.	1	2 Fr. Dr.	1
	5 Latin	5	1 Orch.	½	1 Orch.	½	1 Orch.	½
			1 Music App.	½	1 Music App.	½	1 Music App.	½
			1 Art App.	½	1 Art App.	½	1 Art App.	½
			5 Latin	5				

FIGURE 15 (Continued) A SUGGESTED CURRICULUM TO MEET THE MODERN OBJECTIVES IN EDUCATION

COMMERCIAL	P	FIRST YEAR	C	P	SECOND YEAR	C	P	THIRD YEAR	C	P	FOURTH YEAR	C
		-REQUIRED-			-REQUIRED-			-REQUIRED-			-REQUIRED-	
	5	English	5	4	English	4	4	English	4	4	English	4
	2	Phys. Ed.	1	2	Phys. Ed.	1	4	Am. Hist. & Gov't	4	4	Prob. of Dem.	4
	3	Voc. & Ec. Civics	3	5	Bookkeeping	5						
	2	Penmanship	1									
	5	Jr. Bus. Tr.	5									
	4	Gen. Sc.	4									
		-ELECTIVE-			-ELECTIVE-			-ELECTIVE-			-ELECTIVE-	
	5	Gen. Math.	5	4	World Hist.	4	5	Type.	$2\frac{1}{2}$	5	Gen. Chem.	5
	1	Music	$\frac{1}{2}$	5	Com. Geog.	$2\frac{1}{2}$	5	Bkkg.	5	5	Typew.	$2\frac{1}{2}$
	1	Orch.	$\frac{1}{2}$	5.	Com. Arith	$2\frac{1}{2}$	5	Stenog.	5	5	Stenog.	5
	1	Music App.	$\frac{1}{2}$	2	Penmanship	1	5	Com. Law	$2\frac{1}{2}$	5	Of. Pr.	5
	1	Art App.	$\frac{1}{2}$	1	Music	$\frac{1}{2}$	5	Ec.	$2\frac{1}{2}$	5	Bus. Org. & Acctg.	5
				1	Orch.	$\frac{1}{2}$	2	Phys. Ed.	1	2	Phys. Ed.	1
				1	Music App.	$\frac{1}{2}$	1	Music App.	$\frac{1}{2}$	1	Music	$\frac{1}{2}$
				1	Art App.	$\frac{1}{2}$	1	Art App.	$\frac{1}{2}$	1	Orch.	$\frac{1}{2}$
							1	Orch.	$\frac{1}{2}$	1	Music App.	$\frac{1}{2}$
							1	Music	$\frac{1}{2}$	1	Art App.	$\frac{1}{2}$

FIGURE 15 (continued) A SUGGESTED CURRICULUM TO MEET THE MODERN OBJECTIVES IN EDUCATION

EXPLANATORY

1. The subjects listed under "Required" shall be taken by all pupils.

2. The subjects listed under "Electives" shall be taken by the pupils enrolled in the particular curriculum.

3. Pupils must take subjects amounting to at least sixteen (16) credits of prepared work. A subject is assigned as many credits as it has prepared assignments a week. Two unprepared assignments equal one prepared.

4. The figures in column "P" indicate the number of periods the different subjects or activities will be offered each week during the year and those in column "C" the unit credit to be received at the end of the year for the satisfactory completion of the subjects listed.

5. Classes in elective subjects will be formed only for a sufficient number of pupils.

6. It is expected that a foreign language, once begun, will be continued throughout at least two years.

7. A "Unit Credit" represents not less than 180 forty-minute periods of prepared work, or the equivalent, two hours of unprepared work (e.g., shop, laboratory, etc.) should be counted as one hour of prepared work.

8. One major subject, other than English, and two minors are required for graduation. A major subject is one pursued three years, and a minor is one pursued two years.

9. Only pupils of a B grade of scholarship may be given permission to take subjects amounting to more than 22 prepared credits a year.

10. To be enrolled as a sophomore, a pupil must have received thirteen (13) credits; to be enrolled as a junior, twenty-nine (29) credits; to be enrolled as a senior, forty-eight (48) credits. Seventy (70) credits are required for graduation.

11. For credit, a subject must be completed with an average of at least 70.

12. In the 11th and 12th years pupils may have the privilege of electing subjects listed in their curriculums for the previous years for which credit has not already been received.

13. Physical education shall be required the first two years of all pupils unless excused by the family or school doctor.

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The main purpose of this book is the attempt to set forth the educational principles and assumptions that underlie

traditional teaching; and which indicates in what respects these new methods are reactions against early presuppositions and in what ways they are outgrowths of recent developments in biology, psychology, and sociology.

14. Williams, L. A. The Making of High School Curricula Ginn & Company, 1928

A book dealing with general curriculum problems of the secondary school.