## A STUDX OF ACCREDITTMG

IN

## SELIEGIED HIGH SCHOOLS OF OKLAHOMA

# A GRDD (6) ACCDNETMTH <br> TH <br>  

> y
> onas Pay 1\%LsOW
> bebelor of Arta
> Southestent State College
> Durant, 0imahoma
> 293

Subrattod to the Doportmont of mateation Oltahone Agalcuztural ani Hochanteal Collede

In poxtin1 Murfilimont of the hoontrowonts
Dor the Dagreo of
Twher op cotamon
1846

OKL
AGRICLLTTRAL \& HECHANHCAL COLLEGR
LIBRARY MAY 61949

## APPROVID BY:


$\frac{\text { M, © aregr }}{\text { Head of the Dopartment }}$


## 231105

## Fexpat








 Conyor.




## TABLE OF CONTENIS

Chapter Page
I THE DEVELOPMEITI OF THE SECOMDARY SCHOOL CURRICULUM. . . . . . . . . . . 1
II PRTMISES GOVERNIMG THES STUDY ..... 26
III THE STUDY ATD ANALYSIS OF DATA. ..... 34
Part IMinimum Requirements, General Policies,and Regulations for Accrediting 0kla-homa High Schools............. 34
Part II
Analysis of Seventy-seven SelectedHigh Schools of Oklahoma offeringSixteen or More Units of Subject Matterand the Units of Credit offered byThese High Schools ........... 49
IV SUMMARY AND CONCLUSIONS. ..... 83
BIBLIOGRAPEY. ..... 92
I The Seventy-seven Selected High Schoolsof Okclahoma49
II Total Number of Units of Fach Subject Offered in the 77 Selected High Schools of Oklahoma ..... 53
III The Total Number of Units of Each Subjectoffered in the 77 Solected High schoolsof Okclahoma Interpreted as a Per Cent ofSubject offerings............... 5t
IV Net Increase and Decrease of Totalliumber of Units of Each Subject in the77 Selected High Schools in Oklahoma.57
V Total Number of Units, Grouped IntoFields of Related subject Matter, offeredin the 77 Selected High Schools of60
VI Total Mumber of Units, Grouped into Fields of Related Subject Matter, Offered in the 77 Selected High schools of Oklahoma Expressed as a Percentage of the Total Number of Units. ..... 62
VII Average limber of Units of Fach Subjectby the Number of Schools offering theSubjects of the 77 Selected High Schoolsof Oklahoma63
VIII Average Iumber of Units of Each Subject Offered by the 77 Selected High Schools of Oklahoma. ..... 67
IX The Relative Position of Each Subject as the Average Number of Units Per High school of the 77 Selected High Schools of Oklahoma ..... 69
X The Total Number of Units of SubjectMatter offered in the 77 Selected HighSchools of oklahoma Interpreted as a PerCont of the Total Number of Units ofSubject offerings Grouped According tothe Harvard Comittee Report of 1945 .71
Table Page
XI The Same Interpretation as Table IIIExcopt That the Groupings Are Madein Accordance with the National Educa-tion Association, Education PoliciesCommission Roport of 19\%\% ....... 72
XII Contrast between Curriculum Offeringsof the 77 Selected Oklahoma HighSchools of 1936-1946 and Those of FortySelected Jorth Central states HighSchools of 1860-1865 and 1906-1911. . . 7 4
XIII Total Mumber of the Schools of the 77Selected High schools of Oclahomaorfering Bach Subject. . . . . . . . .75
XIV The Total Thunber of Schools of the ..... 77
Selected High Schools of OklahomaOrfering Each Subjoct Interpreted as aPes Cent of the 77 Schools. . . . . 77

## CHAPTER I

## THE DENELOPMENT OF THE SECONDARY SCHOOL CURRICULUM

Schools were in the process of development in the Unitod States for more than two hundred years belore the people as a whole were villing to put into practice the principle of free, universal public education. ${ }^{1}$

The secondary school, as we know it today in America, is a development in the United States. It is based upon the fundamental principle of equal educational rights of all and for all members of a democratic society.

When America was being settled by the peoples of the many countries of Eupope it was only natural that the colonists would transplant the institutions with which they had been aequainted; therefore, to the New World came almost as many types of schools as nationalities. Trom this melting pot of educational philosophies developed the present secondary schools as they are known today. This process was slow and difficult. Great leaders 1ike Benjamin Franklin and Thomas Jefferson fully realized the part educational practices in the United States would influence in the direction of the progress of the nation. Many plans for state and national educational systems were devised. Some were tried and retained while others were rejected. In all of these theoretieal schemes was the underlying principle that every boy and girl should have an opportunity for an education.

[^0]According to Roos the developnent of the American secondary schools went through four separate stages.

In view of the relatively short span covered by our history since early colonial days-scarcely three centuriles-our types of secondary school may be understood to have followed each other in relatively swift succession. They wore four in number: (a) the Latin gramar school, (b) the acadery, (c) the publiff high school, and (d) the extended secondary school. ${ }^{2}$

These stages were not distinctly marked but quite complex and overlapping. The transition from one stage to the other was prompted more or less by a desire to broaden the scope of educational facilities according to the principle of equal opportunities for all boys and girls. There was an early reallzation of the need for schools that would do more than just prepare for entrance to some college. There was a realization of the need of an education for living.

The first secondary schools to be established in Anerica vere known as the Latin grammar schools. They had their prototypes in England and several countries of continental Burope. The purpose of this school was to prepare boys for college, its curriculum being primasily Latin and Greek. The course extended through four years.

The Latin grammar school had its most rapid development in the New England states; it was slow to develop in the Middle Atlantie and Southem states. The curpicula of the Latin gramnar schools were not well adapted to the dominant commercial interests
${ }^{2}$ Leonard V. $\mathrm{Koos}_{9}$, The Amorican Secondary School, p .16.
and expansions of these areas. Lack of records leaves it almost impossible to establish the extent of the Latin grammar schools throughout the colonies.

It is difficult, if not impossible, to secure data showing the extent of the Latin grammar school. It was established in most of the original colonies, being found most irequentiy in Wew England, especially in Nassachusetts. 3
The Latin grammar school was, to all intents and purposes, a public institution. It was established by a town, controlled by the town and intended for the boys of the torm. The early support was by private tuition and donations.

One purpose of the schools, as it states in the famous Law of 1647 , was 'that leaming may not be buried in the grave of our fathers in the church and comonvealth. ${ }^{14}$

The influence of the Latin granmar cursiculum is still felt. It was transmitted to the academy wifich followed. The latin curriculum as found in our modern high school is a thin projection from the early colonial Latin gramar curriculum. Although Latin, as a requirement for entrance to college, has lost much of its importance there are a few colleges and universities that still require from two to four years of this language for entrance. The inclusion of Latin as a requirement for entrance to college was thought to place college proparation upon a high plane. Latin was more recently the aristocratic subjoct of culture. It served, and probably still does, as a tool of exclusion. Being a subject

[^1]of culture, in place of vocation or avocation, Latin served as a means of excluding the less wealthy from the more aristocratic private schools.

By the middie of the eighteenth century there came into excistence a new type of school. The Latin granmar school had always been somowhat aristocratic and its cursiculum nawrow. During, and after, the Revolutionary period there was a great growth in the democratic spirit. parallel with this spirit, and a product of it, was a tendency to tum from the narrow and select curriculum of the Latin gramuar school toward one more demorratic in nature. There was a rapid change from the schools for the select and able to schools for the masses without regard to classes. Education was thought of as a responsibility of the commmity or the state.

The Latin grammar school did not meet the needs of the rapldIy expanding commercial, shipping and intemal expansion interests of the times. There was a great need for the training and education of something more than preparation for colloge. This was a period that fostered and established the academies throughout the colonies and the territories of the West. Finally, the whole acadeny movement was aided by the advances being made in the sciences and their application to industries. The great and new inventions called for something more than the lmowledge of Latin and Greek. There was a parallel development in Europe and America of the academies; however, the American academies were not transplanted forms of the European counterpart.

The aims and purposes of the acadeny wore twofold. They were not oniy to prepare for entrance to college but to prepare for the affairs of daily living. This has been well sumnarized by Grizzell:

The afm of secondary education as represented by the acadory became twofold: treining for 14 fe and proparation for college. Although the aim of the early New England acadomy was influenced largely by religious motives, it was a bsoader conception of religion than that which influenced the Latin grammar school. The breadth of aim is seen also in the fact that all classes of people wore served. Girls as well as boys found a place vithin its portals, 5
In contrast with the Latin graxmar school, whose curriculum was in many ways similar to the elenentary school, the curriculum of the acadercy was built upon that of the common school. It recoivod boys and girls tho had completed the elementary schools and gave them work that in some way fitted them for active paxticipation in the 1ife of the comunity. The cumpiculum of the acadeny not only included Latin and Greek but Gemman, French and other languages, mathematies, Fnglish, grammar, surveying, readIng and vxiting and other subjects thought to be usexilu to the students.

The requirements for entrance to the acadery were varied. There were almost as many standards as schools. This is well stated by Jngelhardt and Overn:

During the Latin gramars school period and the early life of the academies, students were enrolled in these institutions with what education they had and prepared for the college they plamed to enter. 6

Smail D. Grizzel1, onigin and Devolormont of the High school in Wov England Bofore 1865, p. 32 .

6 Fngelhardt and Overm, op. eftes p. 129.

Many of the academies, after setting up standards for entrance, were compelled to set up a preparatory department or lower school for those who had not secured adequate preparation for worls in the academies. These comon or lower schools later became the elementary schools and were intended for the oducation of the masses. The acadery was not as yet considered as a part of the democratic processes of equal oducational opportunities for all. They were not supported by general taxation as were the elementary schools. These early elementary schools were not really intended as a preparatory school for the academies; consequently, there was quite a distinct gap between the upper level of the elementary schools and the lower level of the academies.

The shift from the Latin gramnar school to the acadeny was parallel to the shift from the period of control of the New England church to the development of the new Industrial period that brought a prosperous middle-class mercantile group that began to assume more control and importance. To this group a nawrow classical training had little meaning. The new institution was one that served a broader need. There were new demands from those who were entering the new occupations that were arising as a result of the rapid industrial expansion. The academy was, in some respects and effects, an expression of an expanding and awakening democracy. Koos gives the contributions of the acadoryy as follows:

The specific contributions to school improvement made by the acadeny may be listed as (1) the more democratic service accompanied by (2) the broadening offering, (3) opportunities of secondary educa-

## tion for girls, (4) a place for the training of teachers for lower schools, and (5) a secondary education less dominated by sectarian influences.?

The waning of the Latin grommar school was characterized by the appearance of the acadery. They were not serious competitors. The acadery seems to be nore of a product of the Latin grammar school. It was a school that came into existence fostered by the need of something different and adequate to suppiy a demand for new kinds of education.

The appearance of the first high schools was long before the wane of the academies. The high schools were not altogether a development of the acadomies, but were contemporaries of the academies. They were to become, as the elementary schools had become, schools for the masses and not for the classes. The acadeny derived its support from tuition, ondownent, donations and other sources, other than general taxation. It was being rivaled by a new system, destined to take the place of the acadery as an institution offering free education at public expense.

Long before the first public high school appeared considerable thought and writing had been done by some of the foremost leadors of the day.

The American Philosophical Society, which owed. Its origin to two associations formod by Benjamin Franklin and his friends, awarded prizes in 1797 to two essays which best described a proposed system of national education. Both documents contain vigorous, modern vievs: The state should provide education in order to spread its benefits equally;....attention should
${ }^{7}$ Koos, op. cit., p. 27.
be given to science as a means of promoting business and industry; happiness, prosperity, and the social welfare depend upon the attainment of leaming. 8
The state of Nassachusetts was one of the leading, if not the leading, state in the early development of the secondary school movement. The Latin gramar school was initiated in Massachusetts. To the same state goes the honor of establishing the IIrst high school. It was founded in the elty of Boston in 1821 and was known as the Inglish Classical School. In 182 the school was moved to a new location and became the Inglish High School. High schools in the other states of Hew England quickiy followed. Several years later the states outside of New Ingland began the establishment of high schools.

To Massachusetts also goes the credit of the first law requiring the establishment of high schools throughout the state. In 1827 a law was passed requiring that every town or district of five hundred families
$\because$ shall be provided with a mastor of good moxals, competent to insturuct, in addition to the elementary-school branches of leaming aforesaid, the history of the United States, bookkeeping by single entry, geometry, surveying, and algebra...i and in every city, or town, containing four thousand inhabitants, such masters shall be competent in addition to all the foregoing branches, to in struct the latin and Greek languages, history, rhetoric, and logie. 9
"Previous to 1840 , ${ }^{n}$ said Inglis, "not more than eighteen high schools had been founded in Massachusetts."10

Douglas, gp. cit., p. 24 .
$9_{\text {From Lavs of Massachusetts, January Session, 1927, Chap. }}$ cxiliI, Secs. 19, 21 , quoted in $\mathrm{Koos}_{2}$ on. cit. p .27 .

10 Alexander J. Inglis, the Rise of the Hieh School in Massachusetts, pp. $154 \mathrm{~m}=5$.

After this date the mumber of high schools began to increase rapidiy not only in Massachusetts but throughout the New Rngland states and in many others outside these states.

The afins of education in the Pirst high school, the English Classical school, are, accoraing to Grizzell:

That those earily habits of industry and application may be acquired, which are so essential in leading to a future 1ife of virtue and usefulness...calculated to bring the powers of the mind into operation,...to qualify a youth to 1211 userully and respectably many of those stations, both in pubilic and private, in which he may be placed...an education that shail fit him for active life, and shail serve as a foundation for omineneo in his prom fession, either mercantile or mechantical... II
With the disappearance of the Latin grammar schools and the waning of the academies the high schools soon assunod a new aim. This new aim was the preparation for college; therefore, the high schools began to function under the dual purpose of preparation for living and preparation for college. Maturally with this twofold purpose came the requirement of a broader curricula to neet the neods of both functions and aims.

Nany of the now high schools being formed were dividing their curricula into tvo departments for the convenience of the students according to their aims of the futuse.

For example, the Classical and Inglish High School of Worcester in 1845 had two departments corresponding to the two adjectives in its mame. In the classical department, in a curriculum of four years in length, the worls included, besides arithmetic and English grammar, only Latin, Grreok, ancient geography, algebra and geometry. In the English departmont, in the curriculum three years in length, in place of the classical languages

11
Grizzell, ope eition p. 277.
were history, bookkeoping, French, botany, trigonomotry, physiology, natural philosophy, rhetoric, the constitutions of the United States and of Nassachusetts, and political economy. 12

The stualy of some of the curricula of the early high schools reveals that the difference in them and the curricula of the more developed acadomtes was more of degree than of kind. The principal difference in the two schools was the method of support and control.

Many of the subjects fornd in the early high school still obtain in the nodern high school. A few have long since disappeared, such as surveying, montal and moral philosophy. Others have changed in name only, while some have been combined under another name, and still others subdivided Into two or more fields of subject matter.

The next most ixportant development in the high schools of America is what Koos calls "the fixtended Secondary School," which he sumarizes as:

> The fourth type of Amorican secondary school is that which finds itself extended vertieniys that is, downuard to include what wese foumorly looked on as upperg grades of the elemontary sch ol, or upward to in clude what have been regarded as the infrst two years of higher education, or in both directions at once.

The first of these "vertical" extensions refers to the junior-high-school movement, the second to the Junior-college movement.

The Latin grammar schools, the acodemles, and the high schools were Initiated in the Bastern states. The extended form of the
> ${ }^{12}$ Koos, on. gitu, p. 34 . ${ }^{13 \text { xpid. . }}$ p. 37.
high school had its oxigin in the West where the state university had its most rapId growth. With both a vertical and horizontal expansion of the high schools of America comes a strong force that bids well to carry the three- or four-year high schools to a six-or an eight-year type of secondary education. This not only lengthens the time a boy or girl will remain in the local school but broadens the scope of subject matter to which he or she will be subjected. These six- and eight-year forms of secondary education are just now gaining a national momentur. The great majority of the small high schools for financial and other reasons have not been in a position or able to expand in either direction. A great mumber of the small high schools of America are much like the early high schools in curricular offerings and necessary facilities to promote a desirable expansion of education for living and preparation for college. Too many times one or the other forms of curricula mast be pursued. The usual result is one that prepares for college and, if there remains enough time or teachors qualified to teach the materials, a meager handful of offerings will be made that might be interpreted as education for living.

There was a time, not too far distant in the past, that it was generally accepted that high schools were for the select or those who plamed to enter college. The eanly high schools were probably filled with a higher intelligence as a result of this process of selection. After the change over to the principle that secondary education was for all who desire to attend and
that the right of every child to attond mast be supported by the state, there has been such a rapid increase in the number of high schools and the enrollment that it is not at a11 improbable to assume that the intelligence of the average high school stum dents is lower than in the past. This inclusion of a greater mumber of the boys and girls of high school age in the high schools demands that the high schools adapt a program that will offer some fomm of education that will make these boys and girls better ciftrens whether or not they will or can go to college. In 1890, there were 2,526 public high schools ${ }^{14}$ reported in the United States, The proportion of the adolescent population In these early schools was small, compased with the poprilation of school age (approxinately one-twelfth of what it was in 1930). 15 Although college proparation was the dominant aim, there was 2ittle agreement in the philosophy of secondary education. The fact that such a small proportion of those of high school age were attending high school indicates that the high schools were In a large way selective and were not differentlated to meet adequately the cemands of the individual interests and abilities.

The leaders of education in America recognized this failure and in 1892 the Nattional Education Association appointed a Com mittee of Ten on Secondary School Stuaies. ${ }^{16}$ This committee
${ }^{14}$ Leonard $V_{0}$ Koos, Ibtd , Table $I_{2} \mathrm{P}_{*}$. ${ }^{15}$ TbId. Fig. 2, p. 5 .
16 Thomas H. Bxiggs, "The conutitee of Ten, "Tuntor-Sentor High school clearing House, VI (Movember, 1931), 134.11.
formmated eleven questions concerning the age at which school subjects were introduced, the distribution and amount of time for each, entrance recquirements for college, methots of toaching, the topis to be inciuded, methods of testing, differentiation fors pupils not intending to go to college, and ilnal college entrance examfnations.

The comittee securod information from Porty of the leading secondary schools concerning subjects taught. It was learmod that forty different types of subject matter vere offerod in these schools, some of which wore offered in oniy a few schools. Some of the important subjects wore Latin, Greek, mathematics and Bnglish. Some more practical subjects as now found in high schools were hardly known or were offered only for internittont poriods usually at the discretion of the administrators and teachers. There was little uniformity in oither subject matter or recuifements for graduation. The comittee triod to bring about a bettor uniformity by setting up a series of curriculum principles and practices. They formod four optional curriculaz classical, Latin-scientific, modom languages and English.

For the purposes of genersal education it was assumed that one subject was about as good as another. This assumption led to the introduction of the elaborate free elective system, condemed by many educators as no system at a11. The coumt ttee agreed that all subjects should be presented in the same way to all students, with no regard to inditvidual differences. The time to offor the subject vas to be determined by the time the subject was noeded or to give the kind of montal training it was supposed to supply.

The comparison of the present curricula of the high schools will show that many of the subjects recomended have long since disappeared. Greek has gone, botany and zoology have become general biology, and geography has never gained the recognition accorded it by the comittee. The right of every student to be given the kind of courses which he desires or needs has, at least in theory, replaced the earlier theory that one should supply the needs of both those going to college and those who will terminate their education after graduation from high school. The Comntttee of Ten was important mostly in that it directed the thinleing of the educational leaders of the day to the need of the reorganization of the secondary school, in order that the childron of all clesses and abilities should have equal opportunities to receive that training or education best suited to them during the time that they will be in secsmdary school attendance.

Other important comittees worked under the supervision and direction of the National Education Association along mose specific IInes than the Committee of Ten. The Committee on Correlation of studies ${ }^{17}$ which completed its work in 1895, dealt chierly with the interpretation of the term corsolation, as applied to the curricula of the day. The theory was advocated that a student's course of study should be correlated with the vorid in which he 1ives. Correlation between subjects of a course of study, meanIng the intercomnection between the subjects of that course of

[^2]study, was not recognized prior to the report, according to the comittee.

Because of the study it was recommonded that certain courses should be taught earlies in the four-year high school curriculum than was found to be taught. Even some of the courses were recommended to be presented to the student before he entered high school. This roport led to an acceleration of the junior-senior high school movement. More than anything else the report of the Comifttee on Corselation of Studies was a formal statement of the general philosophy of education of the times. As such it served the purpose of developing and rapidly changing the secondary school curricula.

Another comittee of the National Eaucation Association that had great influence on the secondary school curricula was the Comittiee on College Entrance Requirements ${ }^{18}$ (appointed in $\mathbf{1 8 9 5}$, but not making its report until 1899). The comentitee recomended the recognition of the principle of election, but not unlimited olection of high school courses. It realized that certain courses were suitable for entrance to colleges and therefore deomed it necessaury to specify certain courses, which should be taken by 211 students regardless of special abilities or aptitudes, or of the college they expected to attend. The subjects recomenended were Inglish, foreign language, mathematics, history and science. However, the Comilttee agreed that any subject included within

[^3]the branches of strudy that they had covered in the report which had been pursued for at least one year, four periods each week, under competent instruction, and in a properly equipped school, should be acceptable for college entrance. The thaory of selection was that any student should be pormitted to choose any subject that fell within the Pive recomended ILelds.

An important contribution of the committee was its recommendations conceming the setting up of some kind of unit of measurement for the work done in schools. This was a recognition of the necessity of some form of unifomity in the matter of college entrance requiremonts. The study of history for five days a week for thirty-six weeks was to be considered equal to the study of algebre or English for the same anount of timo. The comatttee recomnended a load of four units for secondary students. A unit was to be the successinl completion of a course that met Pive days a veols, forty-five mimutes or sixty minutes a day for thirty-six weeks. This standard is the most prevalent and acceptable one in use today.

The Comntitee on the Econony of Time in Education ${ }^{19}$ was appointed by the Mational Education Association in 1908 and made its report in 1912. The conclusion was that the period of genesal oducation is too long. Through economy of tine, selection of subjects and presentation of subject matter approximately two years of time could be saved. In the thole period of elementary and secondary education.

[^4]In 1910 the Comittee of $\mathbb{M i n e}{ }^{20}$ was appointed by the National Education Association. It made its report in 1911. The committee proposed that the colleges should adjust their curpicula to the high school curricula, rather than that the high schools should continue to adjust their curpicula to the traditional requirements of the colleges. This committee proposed that every high school curviculum should include certain subjects whether the student intended to go to college or terminate his formal education with graduation from high school. In the opinion of the comittee these subjects should be: three units in Inglish, one unit in social science, one unit of natural science, and some form of physical training. It recomended that some form of econonics should be included in every curriculum.

Certain recomendations of the committee have been accepted by most of the colleges and universities. Among these are: requiring of the completion of filteen so-called "solid" units by the high school student; requiring of every high school student two majors of three units each, of which one should be Inglish, and a minor of two units; and prescribing that eleven of the fifteen units include English, foreign languages, mathematics and social studies or other work as might be prescribed by the demands of the students. In some of these recomendations the comittee goes even further than several of the conmittees and commissions that were appointed at later dates.

20
Calvin 0. Davis, "The Report of the Comnittee of Nine, 1911 , "unior-Senior High School Clearing House, VI (May, 1932), 550-55.

The Comission on the Reorganization of Secondary Education ${ }^{21}$ appointed by the National Education Association made its report in 1918. It is known by the formulation of the "Cardinal Objectives" and the application of them to curricula building, organization and administration of secondary schools. The seven "Cardinal Objectives" were: (1) Health, (2) Command of fundamental processes, (3) Worthy home mombership, (4) Vocation, (5) Citizenship, (6) Worthy use of leisure time, and (7) Ethical character.

The comission recognized individual differences in pupils and the varying demands of society. It recomended a curriculum that would include applied and industrial arts, as well as subjects that prepare for college. The work of the coumission has been criticized for its failure to make recomnendations conceming the comparative amount of time which should be given for a realization of the "Cardinal Objectives". The claim is made that those charged with the responsibility of administering the curriculum are left to their own interpretations of the relative importance of the subjects in realizing these objectives.

One of the most recent and most widely known reports by any comnission is Rducation for All American Youth made by the Biucational Policies Comission of the National Education Association and the American Association of School Administrators. ${ }^{22}$ This

[^5]comittee began its study in 1942 and made its report in 194.
In the nearly three years in which it has been developing these policies for secondary education, the Commission has tried to dig beneath statements of genexal principles and to suggest in some detail how approved principles can be carried out in practice. 23

High school courses, according to the comenission, are too often a meaningless jumble of places, dates and names with very 1ittle relationship to the student's experience. It proposes to start the educational process from the student's own sphere of reference-of what he knows and what he has done--then go to the past philosophies, histories and experiences for material that wil1 give foundations to his present experiences. The student would be educated for present and future living. Education would be contimous and not preparatory in nature. The aim would be to produce a person well adjusted to present society with ability to adjust as changes requite.

Great emphasis is placed on elective courses, all of them functional in nature. The great majority of students who do not go to college get little training from their high school courses for their careers. More vocational and social courses are advocated.

The core of the Comnission's curriculum is its common learmings program, a collection of educational material related to what the high school student has done or is doing. This program would hold major importance in the early part of the high school career and tapor off as the student begins to specialize. Included would

## ${ }^{23}$ MbId., p. V.

be courses in economics, family living, eitizenship and literature, that would be presented in a way as to make the student aware of the society about him. It would begin with the present, then branch out into the past and future experiences without regard to chronology.

The social studies and history part of the curriculum would also begin with the present, then recede into the past, as it would have bearing on the present and future. Since many of the students never complete high school the analysis of curpent social problens would come early in the high school student's program.

Students world not study general biology, chemistry or botany but would study that part of such courses as they apply to their present living or future vocation. Algebra and geometry vould be abolished since they were thought to serve no useful puxpose for the great majority who do not go on to college. Instead would be substituted such courses as accounting, everyday mathematies and the use of various types of calculating machines.

According to the Comission ${ }^{24}$ the curriculum of the student through his high school course would roughly be divided into the following divisions: (1) Health and physical iltness, 16.7 per cent, (2) Cormon learnings, which include citizenship, economics, family living, literature and art, 33.3 per cent, (3) Vocational preparation, which includes comercial, industrial, agricultural, home economic, scientific, mathematical preparation, and foreign language, 33.3 per cent, (4) Electives, which Include ilterature,

[^6]arts, crafts and music, $\mathbf{1 6 . 7 \text { per cent. These percentages are }}$ variable, depending on the educational aim of the individual. They are rough estimations of relative time recomended for each field.

It is recomended that the secondary school curriculum not terminate at the twelfth year, fourteen years of schooling being reconmended. This would give the non-college bound youth more adequate and contimuous preparation for present and future living.

One important proposal is the almost complete abolition of differentiation of courses and the use of integration of subject matter into a comprehensive curriculum based on the aims, goals and needs of the individual student. Flexibllity of the curriculum Is an important keynote of the proposal.

In 19 43 President James Bryan Conant of Harvard University appointed a University comititee on the Objectives of a General Bducation in a Free society. The comnittee was composed of twelve members of the faculties of the Arts and Seiences and of Education. The cominttee made its report in 194.5 .25 It is cormoniy referred to as the "Harvard Report" or the "Harvard plan".

The Harvard Comittee emphasizes the fact that although the educational structure of the high school has changed considerably since 1870 its base has been altered only slightly during this time. The high school of 1870 was almost exclusively a preparatory school for well-to-do college-bound students. Today the high school deals with students with varying backgrounds, aptitudes, and

25 tion in a Free Society, General Rducation in a Xeee Society.
abilities. Many of these will never go to college. Many courses are of minor importance to students of today. Most reading lists are of the nineteenth century.

The aim of the educational system, according to the Harvard Report, should be the production of a responsible citizen aware of his duties and his fellow men. Scholarship is important if it serves to produce such a citizen.

The problem facing the schools of today, declares the committee, is how to give a complete and equal education to the heterogeneous mass of students which now make up the high school enrollment. As a solution, it proposes the creation of two areas in the school curriculum; one, called general education, would be taken by all students; the other, specialized training, which would give more intensive training to students working toward skills in specific trades or professions. ${ }^{26}$ Both areas of the curriculum would be taken by the students throughout the high school career.

General education would cover a minimum of 50 per cent and preferably about 62.5 per cent of the student's entire high school curriculum. 27 The difference would be in whether he was going to college. The college-bound student would devote the former percentage and the non-college student the latter. General educetimon would include: (1) English, 18.75 per cent; (2) social studies, 12.5 per cent; (3) science and mathematics, 35.3 per cent.

26 University Committee on the Objectives of a General Educeion, on. cit. pp. 98-102.
${ }^{27}$ 깨I., $\mathrm{pp} \cdot 98-102$.

This gives a total of 66.6 per cent of the curriculum. The specialized courses would take 33.3 per cont of the student's time and would include such subjects as physies, chemistry, forelgn language, vocational subjects and physical education. The courses in general education would be a continuous serles throughout the high school course but would depart very little from present-day curriculum except in degree of importance. Mathematics, certain science courses, and foreign languages would be somowhat of a survey of the fields to the non-college bound student.

The Harvard Comittee claims that its plan would minimize the differences between students who will go to college and those who will teminate their education with the completion of high school. It would give both types of students a common background and experience that would go far to eliminate the antagonism which exists between them. The practice of allowing high school students a wide choice of election of courses would be discontinued. Aecording to the Harvard Convalttee, there exists no high school today whose curriculum meets the demands of its proposals. There would need to be a radical change in the curricula if schools ase to turn out citizens capable of dealing with the future. At present colleges spend too meh time teaching students subjects they should have leamed while in high school. The courses to be offered in the colleges should be a contimuation of those given In the high schools. There should be a very close coordination In the curricula of both the high schools and the colleges with nelthor as the dotermining factors of what the other should include

## in its curricula. ${ }^{28}$

The foregoing longtiny discourse on some of the historical high points of the development of the secondary school curriculum has been given to emphasize some of the important problems which have contimuously faced those who have felt and still feel the need of better high schools to meot the needs of an American democratic society.

The curricula of all schools are constantly undergoing reconstruction. The reconstruction is not so important as is the direction and acceleration. There mast be some kind of positive correlation between the development and changes of the demands of society and the reconstruction of curpicula.

Some of the problems which have led to the reconstruction of the high school curriculum have beens

1. Systematization of programs of study
2. The extension of secondary education
3. A new attitude toward secondary-school pupils
4. ITew emphasis upon local conditions
5. The rise of non-professional vocational courses
6. The reorganization of secondary education
7. Changes in college entrance requirements
8. Restatements and refinoments of objectives
9. Development of improved teaching procedures
10. Increase and dissemination of knowledge of education 29
${ }^{28}$ University Commtttee on the Objectives of a General Education, on- cit. $\mathrm{Pp} \cdot 20+-30$.
${ }^{29} \mathrm{Uhl}$, Secondary School Gurpicula, $\mathrm{pp} \cdot 518-12$.

 23 a stato on gux dai moconotmetion.

## CHAPTER II

## PREMISES GOVERNITG THE SIUDY

The purpose of the study. The primary purpose of this study is to assemble and present data concerning high school accrediting practices in selected high schools of Oklahoma. The data are in two parts: The first part deals with the minimum requirements, general policies, and regulations for accrediting Oklahoma high schools as used by the High School Inspection Department of the Oklahoma Department of Education; the second part is the presentation of tabular data of the number of units and kinds of subjects offered for credit in the seventy-seven selected high schools. The secondary purpose of the study is an attempt to discover to some extent a trend or trends in curricula offerings by the study of accrediting practices.

Schools, at best, are only aids. They bring together certain factors winich, it is hoped, will encourage and stimulate individuals in arriving at an understanding of themselves and their enviromnent. Some arrive at this understanding without the aid of the schools, but it is generally conceded that schools accelerate $1 t$.

The practice of accrediting subject matter serves to accelerate and motivate the process. It also serves as an objective ovaluative criteria of officiency and function. By accrediting subject matter uniform standards may be maintained throughout a state or an area.

The selection of the schools. When data become too involved and umieldy it is a common practice to use the method of sampling. These samples should be representative of the total number of cases. The requirements for a representative sample are: (1) The sample must be selocted without blas or prejudice, (2) the components of the sample must be completely Independent of one another, (3) there should be no underlying differences between areas from which the data are selected, and (4) conditions nust be the same for all itoms constituting the sample.

Samples may be drawn from any given source in several different ways. They may be drawm by random sampling. The values composing a sample of this type are drawn entirely at random. They may be drawn by stratified sampling. Here the samples lie within a certain area that does not go above nor below certain specified conditions. They may be draw by purposive sampling. This represents a deliberate selection in such a fashion as to obtain a representative cross section of an area or of total conditions.

According to the oklahoma Department of Education ${ }^{1}$ the high schools of Oklahoma are classifled intos (1) North Central Association, (2) 16 units or more, (3) $15 \frac{7}{2}$ to 9 units, and (4) 9 or fever units. A "fully-accredited" high school is one that offers 16 or more units. There are only a fow schools offering $15 \frac{1}{2}$ or fewer units. The few that do are either "isolated" or

[^7]"separate" schools. The majority, including those belonging to the North Central Association, offer 16 or more units.

In oklahoma there are approximately 625 schools offering 16 or more units that do not belong to the North Central Association, located in districts with a total enumeration of $155,000^{2}$ during the school year 1946-1947. This gives a mean enmeration of approximately 250 per district. According to the same souree, there are approximately 3,500 high school teachers in these schools, which gives a mean of approximately 5.6 teachers per high school.

According to the accepted theorles of sampling a good sample is at least one case from ten. ${ }^{3}$ This would mean that a good sampling from 625 high schools would require 63 samples. To be more representative of this "16 or more units" elassirication of high schools, the high schools should have approximately 5.5 teachers per high school and the districts served should have an enumeration of approximately 250.

The method of selection of the high schools incluaded in this study is not wholly at random, stratifled, or purposive. It is purposive in that it is a deliberate selection of the "16 or more units" group of high schools, exclusive of the North Central Association group. It is stratifled in that it does not include any high schools that are not "fully-accredited". It is random in that, within the specifled group, the choice was wholly at random.
${ }^{2}$ State Department of Eaucation, oklahoma Raucational Directory, Bulletin 110 . $108 \mathrm{M}, 1946-1947$, pp. 22-72.

3 Herbert Arkin and Raymond R. Colton, An outline of Statistical Methods, p. 124.

Since there are seventy-seven counties in Oklahoma it was decided to include one high school from each of the seventyseven counties. They were to be taken from the "Inliy-accredited" group with the mean number of teachers and the mean enumeration of the districts close to the respective means of the total mumber of high schools in the state. According to data compiled from the directory mentioned previously ${ }^{4}$ the mean mumber of teachers per high school and the mean enrollment per district are 5.7 and 275 respectively. This is oniy .I teacher per school and 25 youths above the mean for this class of schools.

It was originaliy intended to make a study and analysis over a twenty-year period. This was not practical since several of the less populated counties did not have a high school offering 16 or more units and not belonging to the North Central Association. By a survey of the Ammal High School Bulletins it was found possible to use a ten-year period extending from 1936-1937 to and incluaing 1945-1946. By this means one fully-accredited high school offering 16 or more units and not belonging to the North Central Association could be selected.

The delimitation of the data was made to the State of oklehoma, Department of Education, Anmaal High School Bulletins, Nos. 112-L to 112-U issued anmally at the end of each fiscal year on June 30. The bulletins include the regulations for acerediting and lists of the schools accredited, with the number of units and names of subjects accredited.

4 State of Ociahoma, Department of Dacation, 오. cit.

On or before the flrst of November of each school year, all high schools in Oklahoma are required to Pile with the Department of Bducation an application for high school accroditing. In this application each school indicates the mumber of units in each subject for which it desires to be Iisted for credit.

Ho school shall be considered for accrediting unless the rogular annual application blanic, furnished for the purpose, for both high school and elementary grades, shall have been properly and completely filled out and placed on file with the state Department of Education, prior to November 1.5

This is the first of the minimum requirements for acerediting in each of the high school bulletins issued for each of the years in the period of study. From these applications for aecrediting the state Department of Barueation compiles a list of the accredited high schools of the state. It includes the subjects offered by each school and the mumber of units for which each subject is accredited. Frem these lists of accredited high schools, for each of the years of this ten-year study, was complled the mumorical data that is used.

The suamary of the selections for this study and the delimitations may be made as Pollows:
(1) The selected schools belong in the elassification of "I6 or more units", or fully-accredited high schools.
(2) No school selected is a momber of the North Central Association.
(3) The mean mumber of teachers per high school of the se-
${ }^{5}$ State of Oklahoma, Department of Bducation, Ammaal High School Bulletin, IVo. 112-0 (June 30, 1946), p. 6.
lected school approximates the mean mumber of teachers of the total number of schools of the state in the selected classification.
(4) The mean emmeration of the selected high schools comes from districts with a mean emmeration that approximates the mean emmoration of the districts in the selected group classification.
(5) The data for the study were delimited to the State of OkIahoma, Department of Education, Ammal High School Bulletins for accrediting of high schools.
(6) The period of the study is to be the ten-year period from the $1936-1937$ to the $1945-1946$ school year.
(7) The method of sampling was random, purposive and stratiPled.
(8) The number of samples used meets with accepted standards of the theory of sampling.

Dopinitions used in this analysis. The following definitions are used in this studys

1. Coursse. A course is the amount, kind and arrangement of subject-matter of instruction offered in any high school during a definite period of time, and for which high school credit is allowed.
2. Course of Study. A course of study is the aro rangement of materials and activities of instruction in any subject, such as Inglish or history, to serve as a guide to the teacher of this subject.
3. Cupriculum. A curriculum is any systematic axrangement of subjects extending through a period of years, and planned for any particular group of pupils.
4. Class Schedule. The class schedule shours all the classes taught by the different teachers during the various periods of the school day.
5. Mlective Subject. An elective subject is one not required of all pupils.
6. Extra-Curpicular Activity Credit. Extra-curpicular credit represents credit allowod, beyond the sixteen curpleular units required for graduationg for participation in regularly supervised school activities carried on outslde the classroom.
7. Fully-aceredited High Schoo1. A fully-aceredited high school maintains a standard term, and is accredited for sixteen or more units.
8. North Contral High School. A Morth Contral High School is one which neets all the standards and regulations for accroditing preseribed by the State Department of Education, and, in addition, the policies, regulations, and eriterla of the Forth Central Association of Colleges and Secondary Schools.
9. Required Subiocts. Four units in English, one in American history, one in laboratory science, and one in algebra are required of each pupil before graduation from high school.
10. Unit of Credit. A crodit unit, or unit of crodit, represents the amount of high school credit given a regularIy enrolled pupil for successfully completing a course covering an academic year that includes a mininmus of five forty-five minute recitation periods per week for thirtysix weeks.

These definitions have obtained throughout the ten-year period of this study, with the exception of algebra, in definition of reguired subjects. On page 13 of Bulletin No. I12-U cited above under the mintram requirements for acerediting is thiss mpouryear high schools shall require...one unit in mathematies..." These two seemingly contradictory statements in the same bulletin would indicate an error. It is assumed that the latter, being 1isted as a requirement for accrediting and not a deflnition of a term, should be the correct interpretation as a required subject for graduation.

Abbroviations used in this study. The following abbreviations have been used in many of the tables of the analysis for lack of space in the making of a well-balanced table to fit the page.

| ub. | Public speaking |
| :---: | :---: |
| Cornp. | Composite mathemati |
|  | Ampthmetic |
| O. H. \& C. | Okclahoma history and civic |
| Adv. Civ. | Advanced civics |
| Prob. De | Problems in democracy |
| 7. Phy. Geog. | Physical geography |
| 8. Com. Geog. | Commercial geography |
| 9. Gen. Sci. | General sclence |
| 10. Home Ec. | Home economics |
| 11. Com. Law | Commercial law |
| 12. Bus. Eng. | Business Finglish |
| 13. Gen. Bus. | Genoral business |

The state of Orlahoma, Departmont of Education, Anmual High School Bulletins are designated by the Dopartment as follows:

For the school year 1936-1937 No. 112-L
1937-1938 To. 112-11
1938-1939 NO. 112-1I
1939-1940 WO. 112-0
1940-194 No. 112-p
$19+1-19+2 \quad$ NTO. 112-Q
1942-1943 No. 112-R
$1943-1944 \quad$ NTO. 112-S

1945-1946 N0. 112-U
The bulletins are dated as of June 30 of the last year in the two years included in the school year. For example, Bulletin No. 112-U for the 1945-1946 school year is dated June $30,19 \% 6$.

This analysis will be divided into two parts. First will be the Listing of the Minimam Requirements, General Policies, and Regulations for Acerediting Oklahoma High Schools and some of the changes that have appeared during the ten-year study. The second part will be an analysis of the data collected from the Lists of Accredited High Schools as given in each Annual High School Bulletin issued by the State of Oklahoma, Department of Education.

## Part I

## Mininum Requirements, Genoral Policies, and Regulations

 for Accreatiting oklahoma High sehoolsFollowing the requirement, policy or regulation as given in Bulletin 112-L which was issued for the school year 1936-1937 will be given the changes made in it, or additions made to it, during each of the years of the ten-year period. Only those requirements, policies or regulations that have direct bearing on this study will be used. Those that refer to detalled procedure or method of execution of a requirement, policy or regulation will be excluded. This selection was made very carefully and closely as to whether it vould or would not have any bearing on the trends in accrediting and whon there was any doubt it was inciuded in rather than excluded from the study.

This part of the study is divided into eighteen parts: Application, (2) Faculty, (3) Teaching Load, (4) Instruction and

Spirit, (5) Length of Term, (6) Builaing and Sanitation, (7) Library, (8) Labosatories, (9) Records and Reports, (10) Admission, (11) Graduation and Credit, (12) Number of Units and Efficiency, (13) Extra-curricular Activities, (14) Sumer High Schools, (15) Supervised High School Correspondence Credit, (16) The Small High School, (17) General Policies and Regulations for Accrediting, and (18) sumary.

## (1) Application

No school shall be considered for accrediting unless the regular annual application blank fumnished for the purpose shall have been properly and completely filled out and placed on Pile with the State Department of Education, prior to November 1, each year.

This was changed to read:
No school shall be considered for accredtting unless the regular application blank furnished for the purpose, for both the high school and the elementary grades, shall have been properly and completely filled out and placed on Pile with the State Department of Education, prior to November 1.
In Bulletin 112-Q, after this statement in the foreword of Bulletin 112-P of June 30, 1941:

The recent legislature passed a law combining the rural and high school departments. For this reasom next year's bulletin will include the rural departmont with the high school department.

No other changes have been made.

## (2) Eaculty

(a) All high school teachers, principals and superintendents shall have oklahoma state high school certificates, and in addition teachers of home economies, vocational agriculture, manual training, theory of rusic, piano, voice, shorthand and typewriting shall have special certificates. Beginning september 1, 1938, instructors of bookkeeping and art shall have a special certificate to teach in each field.

This was changed in Bulletin 112-0 of 1\% to read:
All high school teachers, principals and superintendents shall have Oklahoma state high school certilicates.

In Bulletin 112-T of 194.5 it was changed to:
A11 high school teachers, principals and superintendents shall have valid Oklahoma state high school certificates.

The superintendent and principal shall have standard degrees. All teachers employed in a system which has an accredited high school shall have standard degrees after July 1, 1946.

Bulletin 112-U of 1946 had the same statement with the exception of the date. July $\mathbf{I}, 1946$, was changed to JuIy 1,1948 .
(b) Teachers should continue their professional preparation by attending college.

## became

Teachers should continue their professional preparation and growth.
In Bulletin 112-P of 1941.
(c) Below are the minimum requirements with suggested basic courses for collegiate preparation of high school teachers in the flelds not covered by certificates In their teaching flelds.
Fields
Semester hours
English 16
Public Speaking - one-half unit 6
Public speaking -- one unit 8
Science (General) 16
Foreign language (Any Poreign language plus 12 two units of the same language in high school)
Foreign Language (Any foreign language, no 20 high school credit)
Mathematies
12
History 16
Social Studies
Biology
12
Phulogy $\quad \frac{12}{12}$
Physics 10
Agriculture $=$ one-half unit 6
Agriculture - one unit 12

The same requirements have remained throughout the ten years.

## (3) Teaching Load

(a) No high school teacher, except teachers of nonacademic and laboratory subjects, may teach more than thirty periods per week, or six periods daily. Teachers of nonsacademic and laboratory subjects may not teach more than thirty-five periods per week.
remained the same for Bulletin 212-M of 1938 except after "thirtyfive periods per week" was added "in elass schedules where the forty-five periods are used." In Bulletin 112-1l of 1939 it read:

No high school teacher, except teachers of core subjects, may teach more than thirty periods per week, or six periods daily where the forty-five minute periods are used and twenty-five periods where the sixty minute perlods are used. Teachers of vocational and Laboratory subjects may not toach more than thirty-five periods per week in class schedules where the fortyfive mimute periods are used, and thirty where the sixty minute pexiods are used.
This remained the same for Bulletin 112-0 of 19\%0 with the exception of the phrase "except teachers of vocational and laboratory subjects" substituted for "except teachers of core subjects." The last change was made in Bulletin 112-R of 19\%3. Here the phrase "except a teacher of vocational and science subjects" took the place of "except teachers of vocational and laboratory subjects."
(b) For teachers of academic subjects, 160 pupil class periods per day shall be considered the nommal load.

Note: Academic subjects include English, social studies, mathematics, science and foreign language.
In Bulletin 112-N of 1939 the above statement read:
For teachers of high school subjects, 160 pupil elass periods per day shall be considered the nommal 1oad.

Wote: Core subjects include Inglish, social studies, mathematics, science and foreign language.
The last change in this was made in Bulletin 112-0. The note defining core subjects was dropped from the rogulation.

## (4) Instmuction and Spirit

(a) Efficiency of instruction, the acquired habits of thought and study, the general intellectual and moral tone of a school and the cooperative attitude of the comruntty are paramount factors and, therefore, only schools that rank woll in these particulars as evidenced by thorough-going, sympathetic evaluation shall be considered for accrediting.
(b) High schools are accrodited primarily on the quality of instiruction.
(c) The results of objective subject-matter examinations administered by the Department may be used as one measure of the efficiency of instiruction.

To these were added in Bulletin 112-R of 1943 the additional regulations:
(d) The mumber of acceptable books for individual reading in high school Eng1ish shall be six for the ninth and tenth grades and eight for the eleventh and twelfth grades. Not less than one written composition per week shall be required of all pupils, and 350 lines of poetry or prose memorized for the year. A record shail be kept of all books read by each pupil.
(e) All laboratory woric done by pupils in science courses should be recorded in a notebook and presented to the instructor once each six weeks or oftener for examination as to its organization, neatness and completeness of subject matter.
(f) There should be at least seven hundred and firty pages of collateral reading done in each course in history in high school for the year.
(5) Length of Temp
(a) The standard school year for unqualiftedly recomnended and $\mathfrak{f u l l y}$-aceredited high schools shall consist of thirty-six weeks of PIve days each, winich shall be maintained both in the elementary grades and in high
school. A term of 175 days of actual classroom work is interproted as meeting the requirement for a standard term:
(b) All schools should plan continuous terys in order to make the most profitable use of the school year for all concemed. Divided tems are not considered satisfactory from the standpoint of maximum achievement and the most economical utilization of the school plant, equipment and teaching staff.

There have been no changes made in these regulations.

## (6) Buildings and Sanitation

(a) The location and construction of the building, the lighting, heating and vontilation of the rooms, the nature of the corrldors, closets, water supply, school fumiture, apparatus and mothods of cleaning shall be such as to insure hygienic conditions and guarantee the safety of pupils and teacher.
(b) The toilets shall....meet the requilements of the state Board of Health.
(c) There shall be an abundant suyply of fresh, pure drinking water available for all pupils.

No changes have been nade during the ten years.
(7) IABraxy
(a) The equipment for the 11brary of a small high school shall consist of the following: suitable cases; an approved oncyclopedia; an approved dictionary: twenty-four approved books for each course in Finglish? eight for each course in history, problems in American democracy, science, mamual training, home economies and agriculture; and three books for each course in language. For classes enrolling more than twelve pupils, the mumber of books provided shall increase proportionally.

In Builetin 112-1N for the year 1939 the requirement of "twonty-
four approved books" was changed to "thirty approved books";
"For classes enrolling mose than twelve pupil.s" was changed to
$1_{\text {As a note in passing, and not within this ten-year study, }}$ beginning with the $19 \% 7-1948$ school year the standard term will become 180 days of actual classroom work.
"For classes emrolling more than fifteen pupils" in Builetin 112-R in 19*3.

## (8) Laboratomies

(a) Laboratory facilities shall be adequate to meet the needs of instruction in all courses offered.
To this was added in Bulletin 112-0 of 1946:
(b) Flve double periods per week shall be devoted to work in home economics, industitial arts, bookkeeping, typewsiting, and drawing when the forty-ilve minute periods are used in the daily schodule.
(c) At least two double periods per week shall be spent in laboratory work in each of the following science courses offered when the forty-five minute period reeitation is useds genaral science, high school geographies, biology, botany, zoology, physiology, agriculture, physies and chomistry.

## (9) Recoxds and Reports

(a) Complete and accurate records of attendance and scholarsh2p shall be kept for all high school pupils in such a form as to be used easily and preserved safe17.
(b) The Annual Record shall show a consolidated report of each pupil's marks for all subjects in which he is enroiled, together with his attendance record during the year.

There has been no change in the wording of these rogulations.
(10) Admission
(a) pupils may be admitted to high school upon presentation of a state eighth grade certiflcate of promotion, aftor having completed the IIrst to eighth grades satisfactomily; on certification of graduation from a state accredited elementary school; or from independent districts, upon presentation of promotion cards, entitilng them to high school standing.
(b) Pupils may be admitted to advanced standing upon presentation of a transcript of units earned in an accredsted high school.
(c) Pupils from a non-aceredited high school shall be given a comprehensive written examination, at the
time of entrance, in the subjects pursued in the nonaccredited school.

There have been no changes made in admissions.

## (11) Gxaduation and credit

The following regulations have remainod the same for the ten-year period as set forth in the Bulletin 112-L of 1937.
(a) Four-year senior high schools shall require sixteen or more units of regularly organized classroom instruction for graduation. These shall include one unit in mathomaties, one in science, one in American history and four in English. The remaining units requilred for graduation may be elective.
(b) Two units in mathematies, algebra I and plane geometry should be required for college-bound pupils. The required one unit of labosatory science mast be chosen from the following: General science, biology, physics, and chomistry. American history is required by state law.
(e) Gpedits in extra-curricular activities should count above the sixteen units required for graduation from Sour-year senior high schools.
(d) A unit is defined as a course covering an academic year that shall include a minimum of forty-ifive minute recitation periods for thirty-six weeks.
(e) Pupils in high school should be ancouraged to enroll in fours one-unit courses, or the equivalent. Only pupils above the ninth grade may be permitted to enroll for five subjects. The number is limited to the upper ten per cent, in scholarship, of the student body.
(12) Number of Intits and Affictency
(a) The real efficiency of a school system is measured by its quality of work rather than its quantity.
(b) Courses should not be given for the benerit of less than fifteon pupils.
To these were added the following in Bulletin 112-0 issued in 19*2:
(c) Lack of hamony in the teaching force or in the school board, where such conditions affect the quality and efficiency of instruction and the spirit of the school, shall be considered sufficlent cause for not accrediting a school system.
(d) To be oligible for sixteon or more units, it is necessary to use three high school teachers or the equivalent.
(e) The program of studies should have some permanency and ought not to be modified morely because of change in administration or for other unjustiflable reasons.

## (13) Bxtra-cumeiculax Activities

(a) The program of extro-curricular activities should be organized and administerod so as to contribute to one or more of the cardinal objectives of secondary education. Questionable practices in interscholastic athletic contests and one-sided and umbalanced activity programs shall be considerod sufficiont cause for not accrediting a school system.
(b) The Department wishes to caution against excesses both trom the standpoint of over-participation and underparticipation. The program should take account of the needs and particular abilities of the individual pupils.
(c) Each activity should be measured in terms of educational values, The activity program should contribute to the objectives of secondary education.
(d) Participation of the individual pupil in the activity program should be limited on the following basiss (1) the welfase of the pupil, and (2) the best Interests of the entire school program.
(e) A member of the teaching staff should be in charge of each activity.

There have been no changes in these regulations for the tenoyear period.
(14) Summer High Schools

Strumer high schools shall meet all the standards and regulations required of the accredited high school during the regular school term.

The following additions were made to this statement in Bulletin 112-0 for the school year 1939-19\%.
(a) The length of the term shall be nine weeks. The actual time in session shall not be less than 45 days.
(b) The minimum time allotment for each half-unit course shall be two class periods daily; for each unit course, four class periods daily. All courses requiring additional periods for the laboratory work, the time allotment shall be increased to meet the mininum requiremonts for the regular school term.
(c) No teacher should teach in excess of one and one-half units of work.
(d) Pupils should not be permitted to make more than one unit of credit.
(15) Supervised High School Correespondence Credit

Requirements for accrediting correspondence courses were added to the general requirements for the first time in Bulletin 112-L of 1936-1937. The bulletins for the years 1930-1936 were examined and did not contain anything concerning correspondence corrse accrediting.
(a) High school correspondence credit to be applied toward graduation from an aceredited high school shall consist only of credit earned by correspondence through one of the accredited institutions of higher learning. Ho high school is authorized to offer correspondence courses for credit.
(b) Pupils of school age in attendance in an aceredited high school should not be pemmitted to enroll in any course by correspondence without the written approval of the prineipal or superintendent of the local school.
(c) Pupils of school age in attendance in an aceredited high school may be permitted to pursue a maxfrmum of two units by correspondence each year for two years only, provided that total correspondence and residence eredit shall not exceed two units during any one school year.
(d) Pupils of school age in attendance may not present more than four units of credit by correspondence to count towards graduation from high school.

To these was added the following in the Bulletin 112-T of the 194,4-194.5 school year:
(e) Correspondence work done under the supervision of the Federal Government by those in the armed service will be recognized for credit toward graduation.

## (16) The Small High School

This part of the minimum requirements for accrediting was
added in 1938 in Bulletin 112-M.
(a) The following factors should be considered in deciding what subjects are to be included in the curriculums (i) the financial ability of the district, (2) the needs of the individual pupils, (3) the demands of the community, (4) the number of pupils in high school, (5) the number of teachers available, (6) the building facilities, (7) the books, supplies and equipment available, and (8) the condition of the elementary department.
(b) The curriculum should contain vocational and pre-vocational courses wherever possible. Such subjects as home economies, vocational agriculture, industrial arts, etc., are practical and valuable additions, which should be made to the usual narrow and acadomic offerings of the small high school. These courses are relatively expensive but, if a sufficient number of pupils is interested, the per capita cost may be greatly reduced.
(c) The department recomends that no high school worls be offered at the expense of the elementary grades. Since the majority of the pupils are enrolled in these grades, the district owes its first obligation to provide adequately for them.
(d) Schools enrolling fever than thirty pupils in the ninth and tenth grades should alternate history and science subjects. When the enrollment in the eleventh and twelfth grades is below thirty, all subjects should be alternated and the two grades combined in the same courses. This program of altermation and combination should be planned systematically and for several years in advance. Alternations should include subjects recomended for the particular grades in which combinations are made.

The Department lists some of the recomendations for this
plan of alternation in order that most of the high schools of the state may be offering the same subjects in the same year that would be convenient for pupils that are compelled to transier from one district to anothes duxing the course of the school year.

## (17) General Policios and Rerulations for Accrediting

The following general policies and regulations have obtained throughout the ten years of this study as taken from Bulletin

112-L issued in 1937.
(a) It is the policy of the Department of High School Inspection to accredit high schools primarily on the basis of scholarship. Objective subject-matter tests may be used to supplement other information re* lating to instructional efficiency.
(b) The policy of the Department is to encourage the establishment and maintenance of a high school within the reach of every boy and girl in the state. In this comnection the contimuation of small high schools located in commitities inaccessible to fully accredited high schools will be encouraged. Both econory and eff1ciency are considered as factory in the accrediting process.
(c) High School accrediting depends largely upon instructional conditions maintained in the elementary grades. Command of the fundamental processes is considered of prime importance in all subsequent education. Consequently, the entire program of education is examined as a basis for recognition.
(d) As a corollary to the policy stated above, it is the practice to discourage the establishment and maintenance of high school departments at the expense of the elementary grades. The elementary grades should receive first consideration. To offer high school courses to a few pupils to the detriment of the large group in the elementary grades is unjust and unfair.
(e) It is the policy to consider stability and permanency of the school organization and staff as factors in acerediting high schools. Frequent changes in the organization and teaching staff directly affect the continuity and efficiency of instruction.
(f) High schools are accredited for one year only. (g) It is the policy to wamn a school before drop-
ping it from the aceredited list except in cases of fail-
ure to meet one or mose of the fundamental regulations
or standards. (18) Sumpayy

Some of the minimum requirements, general policies, and regulations For accrediting Oklahoma high schools, as set forth in the Annual High School Bulletins mumbered 112-In, 112-M, 112- $\mathrm{N}_{\text {, }}$ $112-0,112-\mathrm{P}, 112-8,112-\mathrm{R}, 112-\mathrm{S}, 112-\mathrm{T}$, and $112-\mathrm{U}$ for the years $1937,1938,1939,1940,19+1,1942,19 * 3,194,1945,1946$, and 1947 respectively, as issued by the State of Oklahoma, Department of Education have not been changed during the ten-year perlod of this study. Some have been changed for better clarification. Others have been changed in content.

Several of the changes in content of a requirement, policy or regulation have reflected a change in the trend of accrediting the high schools of the state. These trends in summary are:
(1) The combination of the high school department and the sural school department more closely integrates the educational processes from grades one to twelve.
(2) The raising of the standards of qualification and certification of both high school and elementary school teachers is a move to raise the quality of instruction.
(3) The narrow method of continuing professional preparation by attending college was changed to a broader viev by the recommendation of continuing professional preparation and growth. This change recognizes methods of professional preparation and growth other than college attendance.
(4) The elimination of the words "acadente" and "core" subjects from certain regulations recognizes the need of Mexibility of interpretation of subjects and subject matter. The needs of the individual student is paramount and his course in school should dotermine what might be considered as "academic" or "core" subjects.
(5) The addition of the mumber of required books, lines of peotry and compositions in English and the number of pages to be read in courses in history paises the standards of instruction as well as limits the initiative of the teachers of these fields in the interpretation of the needs of the individual pupil and the entire class.
(6) The raising of the mumber of books per pupil in the library of a high school from twenty-four to thirty for English broadens the sources of learning for every student. A larger number of books can give a wider variety in the reading habits and sources of information for all students.
(7) The increase in the number of periods per week in certain courses recognizes the increased Importance of these courses in the curricutum.
(8) The lack of hamony among teachers and the school board and the permanency of program in the changing of superintendents or other causes recognizes factors other than subject matter qualifications of teachers for the accrediting of a high school.
(9) Greater needs of the students and broader service for the high school are implied by the initiation of the program of accrediting summer terys.
(10) The program of accrediting certain compespondence courses recognizes that education is not limited to work done
or time spent only in the high school. There are agencies of education besides the high school. The more capable student may accelerate the educational process. The handicapped may meet the requirements for graduation. All students may pursue some phase of education in which he is vitally interested even though the high school is unable to offer the work.
(11) By the institution of a program of altemation of high school subjects all high schools are enabled to offer a broader curriculum in the four years. This gives the individual better selections of work that meet the aims and needs of the individual.

Part II

## Analysis of Seventy-seven Solected High Schools of Oklahoma offering Sixteon of More Units of Subject Matter and the Units of Credit ofrered by These Hiph Schools

The following is a list of the selected high schools used in this analysis. Independent districts are denoted by an asterisk folloring the name of the school. The number of the district in parentheses follows the name. "C" denotes consolidated district, "Jt." denotes joint district, "Jt. C." denotes joint consolidated district, and all schools furnishing transportation are designated by "TY".

## TABLE I

THE SEVEITY-SEVEN SELECYIP HIGH SCHOOLS OF OKLAHOMA*

| School | rind | County |
| :---: | :---: | :---: |
| 1. Afton | (*) (26) (T) | Ottawa |
| 2. Apache | (*) (6) (T) | Caddo |
| 3. Arapaho | (*) (C-5) (T) | Custer |
| 4. Arnett | (*) (C-2) (T) | E111s |
| 5. Avant | (*) $(35)$ (T) | Osage |
| 6. Beggs | (*) (4) (T) | Okmulgee |
| 7. Biliings | (*) (Jt. 4) (T) | Noble |
| 8. Bixby | (*) (23) (T) | Tulsa |
| 9. Boise City | (*) (C-2) (T) | Clmaxron |
| 11. Boswell | (*) $(\mathrm{c}-1)^{(T)}$ | Choctaw |
| 12. Bray | (Cd+2) (T) | Stephens |
| 13. Bxilnkuan | (*) (2) (T) | Greer |
| 14. Calera | (*) (48) (T) | Bryan |
| 15. Calumet | (*) (C-76) (T) | Canadian |
| 16. Calvin | (*) (48) (T) | Hughes |
| 17. Choctaw | (*) (C-4) (T) | Oklahoma |
| 18. Covington | (*) (C-77) (T) | Garfield |
| 19. Dale | (*) $(\mathrm{C}-2)$ (T) | Pottawatomie |
| 20. Davidson | (*) (C-9) (T) | Tillman |

*State of oklahoma, Department of Bducation, orclahoma Bducatifonal Directory, Bulletin Tumber 108-W, 194.6-1947.

TABLE I--Continued

| School | Kind | County |
| :---: | :---: | :---: |
| 21. Davis | (*) (10) (T) | Murray |
| 22. Delaware | (*) $(\mathrm{C}-30)(\mathrm{T})$ | Mowata |
| 23. D111 | (*) (C-3) (T) | Washita |
| 24. Dover | (c-4) (T) | Kingfisher |
| 25. Fletcher | (*) (9) (T) | Comanche |
| 26. Forgan | (*) ( $\mathrm{C}-123$ ) (T) | Beaver |
| 27. Gotebo |  | Kiowa |
| 28. Graham | (*) $(\mathrm{c}-\mathrm{L}+6)(\mathrm{T})$ | Carter |
| 29. Haworth <br> 30. Hitcheock | (*) ${ }^{(4)-6)}(29)(\mathrm{T})$ | MeCurtain |
| 31. Mitchita | (*) (C-27) (T) | MeIntosh |
| 32. Hulbert | (16) (T) | Cherokee |
| 33. Jay | (*) (33) (T) | Delaware |
| 34. Kaw City | (*) (84) ${ }^{(T)}$ | Ray |
| 35. Keota | (*) $\left(\begin{array}{c}\text { ( }-3 \\ \text { - } \\ \text { ( }\end{array}\right.$ | Haskell |
| 37. Kiowa | (*) (12) (T) | Pittsburgh |
| 38. Lambert | (*) (C-3) (T) | Alfalfa |
| 39. Lamont | (*) (95) (T) | Grant |
| 40. Laverne | (*) $(\mathrm{C}-1)(\mathrm{T})$ | Harper |
| 41. Lexington | (*) (57) (T) | cleveland |
| 42. Marshall | (*) (Jt. $\mathrm{C-3}$ ) (T) | Logan |
| 43. Kieeker | (*) (95) (T) | Zincoln |
| 4.4. Moyers | (C-22) (T) | Pushmataha |
| 45. Minnokah | (C-51) (T) | Grady |
| 46. Ochelata | (*) ( $\mathrm{C}-15$ ) (T) | Washington |
| 47. Okayy | (*) ( $\mathrm{C}-1)^{(T)}$ | Wagoner |
| 48. Olustee | (*) (C-35) (T) | Jackson |
| 50. Perkins | (*) (Jt. C-56) (T) | Payme |
| 51. Ralston | (*) (Jt. 69) (T) | Pawnee |
| 52. Ringwood | (*) ( $\mathrm{C}-\mathrm{l}$ ) ( T ) | Major |
| 53. Rors | (*) (37) (T) | Pontotoc |
| 55. Salina | (*) (16) ${ }^{(T)}$ | Nayes |
| 56. S1i.ck | (*) $(75){ }^{(T)}$ | Seminole <br> Creels |
| 57. Stratford | (*) (2) (T) | Garvin |
| 58. Stringtom | (*) (7) (T) | Atoka |
| 59. Strong City supply |  | Roger Mills |
| 61. Sweetwater | (Jt. C-15) (T) | Beckham |
| 62. Talala | (35) (T) | Rogers |
| 63. Taloga | (*) (1) (T) | Devey |
| 64. Temple | (*) (101) (T) | Cotton |
| 65. Terral | (*) (3) (T) | Jefferson |

## TABLE I-- Continued

School

Kind

|  | (C-61) (T) |
| :---: | :---: |
| (*) | (C- ${ }^{\text {d }}$ ( ${ }^{\text {(T) }}$ |
|  | (c) |
|  | (C-5) (T) |
| (*) | (Jt. C-37) |
|  | (10) (T) |
| (*) | (3) (T) |
|  | (17) (T) |
|  | (11) (T) |
| (*) | (1) (T) |
| (*) | (49) (T) |

County
Texas
Love
Coal
Sequoyah
Harmon
Johnson
McClain
Woods
Craig
Adair
Latimer
LeFlore

On prepared tally sheets the units of credit, for which each of the above 1isted high schools were accredited by the State of Oklahoma Department of Education as listed in the Annual High School Bulletins numbered 112-L, 112-M, 112-11, 112-0, 112-P, $112-\mathrm{Q}, 112-\mathrm{R}, 112-\mathrm{S}, 112-\mathrm{T}, 112-\mathrm{U}$ issued in 1938, 1939, 1940 , $1941,1942,1943,1944,1945,1946$, and 1947 , respectively, were 11sted and totaled. These were carefully tallied and checked for accuracy. The results of this tabulation are 1isted in Table II. The total number of units of each subject, for which the seventyseven high schools were aceredited, is listed for each of the school terms of the ten-year period of this analysis.

Table II may be read in this manner: In 1936-37 the seventyseven selected high schools of Oklahoma were accredited by the Oklahoma Department of Education for 307 units in English, $43 \frac{1}{2}$ units of public speaking, and down the colum for each subject by years.

The number of units in Rnglish remains fairly constant throughout the ten years. This is primarily determinod by the requirement
of four units of English for graduation as stated in Section (a), Part (II) of Chapter III of this thesis.

History decreases in the number of units from a total of 195 in 1936-1937 to $19 \% 0-19+1$ and contimues to decrease thereafter to 145 units in 1945-1946.

The total number of units for which the seventy-seven high schools are accredited in home economies becomes second highest in 19 $42-1943$, when it exceeds the total number of units of history.

French appears for one unit in 1936-1937 and drops out in 19\% $0-19 \%$.

Physiology, the smallest total of them all, disappears at the end of the school year $1941-19 \% 2$.

There is a rapid increase in the number of units in both agriculture and home economics.

Two new courses appear: Pre-Flight in 1942-194 3 and general business in 19 $19-1944$.

Table III was calculated from the data given in Table II. The total number of units for wilich the seventy-seven high schools were accredited in each subject for each of the ten years was interpreted as a per cent of the total number of units for which all seventy-seven high schools were accredited.

In 1936-1937, 20.10 per cent of the total number of units for which the seventy-seven high schools were accredit was in English. This decreased to 18.10 per cent of the total mumber of units in 19 4 -5-194. Even though Table II shows an increase in number of units from 307 to 309 the percentage of the total number of units offered for credit decreased.

## TABLE II

## TOLAL IUNBBER OF UNITS OF PACH SUBJECT OFFGRRD IN THE 77 SELECTISD HIGH SCHOOLS OF OKIAHOMA

| Subiect | $\begin{aligned} & 1936 \\ & 1937 \\ & \hline \end{aligned}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. English | 307 | 307 | 308 | 307 | 307 | 306 | 309 | 308 | 30 |  |
| 2. Pub. Spk. |  | 47 | 52 | 42 | 55 2 | 50 |  | 35 |  | 37 |
| 3. Comp. Math. | 37 | 52 | 60 | 61 | 60 | 65 | 65 |  | , | 49 |
| 4. Algebra | 79 | 99 | $94+\frac{2}{2}$ | 9 | 90 | 91 | 91 | 105 |  | 107 |
| 5. Geometry | 73를 | 7 | 64 | 62 | 60 | 59 | 64 | 673 | 68 | 657 |
| 6. Ardth. | 30 | 26 | 22 2 | 182 | 15 | $13 \frac{1}{2}$ | $14^{2}$ 2 |  |  | 9 |
| 7. O. H. \& C. | 77 | 77 | 77 |  | 70 | 72 | 72 | 75 |  | $\frac{3}{2}$ |
| 8. History | 195 | 180 | 169 | 166 | 169 |  | 150 | 150 | 147 | 145 |
| 9. Adv. Civ. |  | 12ㅈㄹ |  | 12 |  |  |  |  |  |  |
| 10. Economites |  |  |  |  |  |  |  |  |  |  |
| 11. Sociology |  |  |  |  |  | 6 |  |  |  |  |
| 12. Prob. Dem. |  | 56 | 53 | 53 | 55 | 51 |  |  |  | 41 |
| 13. Latin | 22 | 20 | 16 | 11 | 12 | 11 |  |  |  |  |
| 14. French |  | - | 1 | ? | T |  |  |  |  |  |
| 15. Spanish | 34 | 21 | 17 |  | 8 | 12 | 9 | 8 | 8 | 12 |
| 16. Physies | 10 |  | 7 |  | 6 | 7 | 11 | 18 | 15 | $15 \frac{1}{2}$ |
| 17. Chemistry |  |  |  |  |  | 12 | 9 | 4 |  | 4 |
| 18. Phy. Geog. | 312 | 30 | $27 \frac{1}{2}$ | 25 | 2 2 슬 | 232 | 21 | 18 | 212 | $22^{2}$ |
| 19. Com. Geog. | 29 \% | 30 | $26 \frac{1}{2}$ | 25 | 232 |  | 192 | 18 | $21 \frac{1}{8}$ | 23 |
| 20. Biology | 70 | 68 | 66 | 66 | 62 | 62. | 64 | $64 \frac{1}{2}$ | 55 | 60 |
| 21. Physiology |  |  |  | ${ }^{12}$ | $1{ }^{1}$ |  | - |  |  |  |
| 22. Gen. ScI. | 73 |  | 72 | 72 | 70 | 73 | 70 | 72 | 72 | 72 |
| 23. Agri. |  | 69 | 86 | 100를 | 110 | 128 | 1083 | 1062 | 106 ${ }^{2}$ | 105 |
| 24. Home EC. | 85 | 9 | 109 | 126를 | 14. | 154 | 153 | 162 | 153 | 165 |
| 25. Ind. Arts | 12 | 17 | 23 | 20 | 25 | 32 | $32{ }^{\frac{1}{2}}$ | 27즐 | 29 | 35 |
| 26. Drawing | 3 | 2 | 4 | 2 | 4 | 9 |  | 8 |  |  |
| 27. Com. Law | 15 | 17 | 20 | $15 \frac{1}{2}$ | 132 | 12 | 112 | 11 |  |  |
| 28. Boolckpg. | 33 | 4. | 54 | 58 | 67 | 69 | 52 | 50 |  | 50 |
| 29. Shorthand | 24 | 39 | 38 | 4. | 43 | 48 | 57 | 60 |  | 析 |
| 30. Typing | 45 | 65 | 79 | 88 | 90 |  | 109 | 120 |  |  |
| 31. Bus. Ing. | 162 | 14 | 17 | 12 | 11 |  |  |  |  |  |
| 32. Psych. | 122 | 1172 | $121{ }^{\frac{1}{2}}$ | 83 | 8 |  |  |  |  |  |
| 33. Music | 27 | 27 | 33 | 33 | 38 |  |  |  |  |  |
| 34. Pre-F1.ight |  |  |  |  |  |  | 4 | 28 |  | 10 |
| 35. Gen. Bus. | - | - | - | - |  |  |  | 28 | 25 |  |

## TABLE III

THE TOTAL MONGER OF UNITS OF EACH SUBJECT OFFERED IN THE 77 SELECTED HIGH SCHOOLS OF OKLAHOMA INTERPRETED AS A PER CENT OF THE TOTAL NUMBER OF UNITS OF SUBJECT OFFERINGS


| Subject | $\begin{array}{r} 1936 \\ 1937 \\ \hline \end{array}$ | $\begin{array}{r} 1937 \\ 1938 \\ \hline \end{array}$ | $\begin{array}{r} 1938 \\ 1939 \\ \hline \end{array}$ | $\begin{array}{r} 1939 \\ 1940 \\ \hline \end{array}$ | $\begin{aligned} & 1940 \\ & 394 \end{aligned}$ | $\begin{aligned} & 1941 \\ & 1942 \end{aligned}$ | $\begin{aligned} & 19+2 \\ & 19+3 \end{aligned}$ | $\begin{aligned} & 19 \div 3 \\ & 104 \end{aligned}$ | $\begin{aligned} & 1944 \\ & 1945 \end{aligned}$ | $\begin{aligned} & 19+5 \\ & 10+6 \end{aligned}$ | Arith. Mean |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18. Phy. Goog. | 2.06 | 1.89 | 1.70 | 1. 54 | 1.47 | 1.37 | 1.33 | 1.05 | 1.29 | 1.31 | 1.4. 9 |
| 19. Com. Geog. | 1.93 | 1.89 | 1.63 | 1.54 | 1.21 | 1.31 | 2.14 | 1.05 | 1.29 | 1.35 | 1.45 |
| 20. Biology | 4.58 | 4.28 | 4.08 | 4.06 | 3.73 | 3.75 | 3.76 | 3.77 | 3.32 | 3.52 | 3.88 |
| 21. Physiology | +.03 | +.03 | 03 | +.09 | . 09 | . 03 |  |  |  |  | . 03 |
| 22. Gen. Sci. | 4.78 | 4.66 | 4.4 | 4.36 | 4.21 | 4.26 | 4.12 | 4.20 | 4.34 | 4.21 | 4.36 |
| 23. Agricultuxe 2\%. Home Ec. | 4.11 | 4.35 5.93 | 5.31 6.74 | 6.18 | 6.63 8.66 | 7.51 9.00 | 6.38 9.00 | 6.20 9.47 | 6.42 9.21 | 6.18 9.68 | 5.93 8.10 |
| 25. Ind. Arts | . 78 | 1.07 | 1.42 | 1.23 | 2.50 | 1.87 | 1.91 | 1.61 | 1.75 | 2.05 | 1.52 |
| 26. Drawing | . 19 | . 13 | .25 | .12 | .24 | . 52 | . 35 | . 47 | . 36 | . 29 | . 29 |
| 27. Com. Law |  | 1.07 | 1.23 | .95 |  | . 71 |  |  | -11 |  | 8 |
| 28. Bookkpg. | 2.16 | 2.77 | 3.33 | 3.57 | 4.02 | 4.03 | 3.06 | 2.91 | 3.19 | 93 | 3.20 |
| 29. Shorthand | 1.57 |  |  |  | 2.58 | 2.80 | 3.35 | 3.50 |  |  | + |
| 30. Typing | 2.94 | . 10 |  | 5:+2 | 5.41 | 5.78 |  | 7.02 | 7.35 | 8.04 | 5.74 |
| 31. Bus. Eng. | 1.08 | 8 | 1.05 | . 73 |  | . 56 | , |  | . 42 | . 35 | . 66 |
| 32. Psych. | . 82 | .72 | .71 |  |  |  | 21 |  | .29 |  |  |
| 33. Music | 1.76 | 2.70 | 2.04 | 2.03 | 2.28 | 2.57 | 2.13 | 2.55 | 1.23 | . 43 | 7 |
| 34. Pre-Flight |  |  |  |  |  |  |  |  |  |  |  |
| 35. Gen. Bus. | - | - | - | - | - |  | $\bigcirc$ | 1.64 | 1.50 | 1.94 | .51* |

*Each of the percentages is roundod-off to the nearest hundredths place and, consequentily, the total of each columen will not total exactiy one hundred.

History not only decreased in number of units, as show in Table II, but decreased from 12.70 per cent of the total to $8.5 \%$ per cent of the total number of units.

By a study of Table III, therefore, a relative importance of each subject to the total number of units is shown. To say that a subject gains 10 units has no relative neaning. Table III shows the relative gain or loss in number of units of each subject in relation to the total number of units.

Table $V$ is the listing of the net increase and decrease in number of units for which the seventy-seven high schools were accredited.

For example, during the first of the nine intervals in the ten years, 1936-1937 to 1937-1938, will be seen no increase in English, a $3 \frac{1}{2}$ unit decrease in the total number of units in public speaking, a 15 unit increase in composite mathematics, a 20 unit increase in algebra and a loss of $2 \frac{1}{2}$ units in geometry.

The greatest increase is shown in general business from no schools offering the subject in 1941-1942 to 28 units in 19421943. However, there is a loss of 3 units during the following interval, but these three and two more are gained in the following Interval.

Typewriting is the only subject in which there is a continual increase for the nine intervals.

Home economies shows a loss in only two intervals and agriculture in three. These losses are small as compared to the gains of the other intervals.

TABLE V
NEIT INCREASE AND DECREASE OF TOTAL NUMBER OF UNITS OF EACH SUBJECT IN THE 77 SELECTIW HIGH SCHOOLS IN OKIAHOMA

| Sublects | $\begin{gathered} \text { From } \\ 36-7 \\ \text { to } \\ 37-8 \end{gathered}$ | $\begin{aligned} & \text { From } \\ & 37-8 \\ & \text { to } \\ & 38-9 \end{aligned}$ | $\begin{aligned} & \text { From } \\ & 38-9 \\ & \text { to } \\ & 39-40 \end{aligned}$ | $\begin{aligned} & \text { From } \\ & 39 \mathrm{~d}+0 \\ & \text { to } \\ & 40 \mathrm{~m} \\ & \hline \end{aligned}$ | $\begin{gathered} \text { From } \\ 40-1 \\ \text { to } \\ 4.1-2 \end{gathered}$ | $\begin{gathered} \text { From } \\ 41-2 \\ \text { to } \\ 42-3 \end{gathered}$ | $\begin{array}{r} \text { From } \\ 42-3 \\ \text { to } \\ 4.3-1 \end{array}$ |  | $\begin{aligned} & \text { From } \\ & 44=5 \\ & \text { to } \\ & 45-6 \end{aligned}$ | Net <br> Inc. <br> or <br> Dec. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. English | $\cdots$ | 1* | -1 | - | -1 | 3 | -1. | 12 $\frac{1}{2}$ | - | $\frac{1}{8}$ |
| 2. Pub. Spk. | 32 | -12 | -32 | 172 | d42 | -6 | -8i | - $5^{2}$ | $5 \frac{1}{2}$ | -6를 |
| 3. Comp. Math. | 15 | 8 |  | ${ }^{1}$ | 5 | - | -7 | -13 |  | 12 |
| 4. Algebra | 20 | $1+\frac{1}{2}$ | - $\frac{1}{2}$ | 2 | 1 | - | 14 | - | 1212 | 28 |
| 5. Geometry | -2 2 | -7 | -2 | -2 |  | $4 \frac{1}{2}$ | 31 | 1 | -3 | -8 |
| 6. Arith. | 2 | -32 | 2 | -32 | -12 | 1. | $21 \frac{1}{2}$ | -2 |  | -21 |
| 7. O. H. \& C. | -- | - | -2 | -5 | 2 | -1 | 4 | -1 | -12 | 24 $\frac{1}{2}$ |
| 8. H1story | -15 | -11 | -3 | 3 | -10 | -9 | - | -3 | -2 | -50 |
| 9. Adv. Civ. | -1 | - | - | - | -1 | - 1 | - | - | 2 | $\frac{1}{2}$ |
| 10. Economies | - $\frac{1}{2}$ | $\cdots$ | 1 | 1 $\frac{1}{2}$ | -1/2 | $-1 \frac{1}{2}$ | 2 | $\frac{1}{8}$ |  | -1 |
| 11. Sociology | 1. | d) | 2 | $-2^{2}$ | 12 | -2 | - $\frac{2}{2}$ | $\frac{1}{2}$ |  | 1. |
| 12. Prob. Dem. | $2 \frac{1}{2}$ | -3 | - | 2 | 4 | - | -3 | - ${ }^{2}$ | -2 ${ }^{\frac{1}{2}}$ | $-12 \frac{1}{2}$ |
| 13. Latin | -2 | -4 | -5 | 1 | -1 | -2 | -2 | -2 | -1 | -18 |
| 14. French | - | - |  | - | - | -1 | - | -- |  |  |
| 15. Spanish | -13 | 2 | -8 | -1 | 4 | -3 | -1 | - |  | -22 |
| 16. Physies | -2 | -1 | - | -1 | 1 | 4 | 7 | -3 | $\frac{1}{2}$ | 51 |
| 17. Chemistry | - | 1 | -1 | 3 | 1 | -3 | -5 | 3 | -3 | -2 |

*All numbers without a sign are positive and denote an increase.

## TABLE V--Contimued

| Sublects | $\begin{aligned} & \text { From } \\ & 36-7 \\ & \text { to } \\ & 37-8 \end{aligned}$ | $\begin{aligned} & \text { From } \\ & 37-8 \\ & \text { to } \\ & 38-9 \end{aligned}$ | $\begin{aligned} & \text { Fyom } \\ & 3889 \\ & t 0 \\ & \text { to } \\ & 39-40 \end{aligned}$ | $\begin{aligned} & \text { From } \\ & 39 .{ }^{-10} \\ & \text { to } \\ & 4.0-1 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { From } \\ & 40-1 \\ & \text { to } \\ & 41-2 \end{aligned}$ | $\begin{aligned} & \text { From } \\ & 41-2 \\ & t 0 \\ & 42-3 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { From } \\ & 42-3 \\ & \text { to } \\ & 4.3-4 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Fyom } \\ & 43+4 \\ & 4.4 \\ & 44-5 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Trom } \\ & 4,4-5 \\ & \text { to } \\ & 4.5-6 \\ & \hline \end{aligned}$ | Net <br> Inc. <br> 05 <br> Dec. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18. Phy, Geog. |  | $-2^{2}$ | -12 | - | -1 | -12 |  | $3 \frac{2}{2}$ | 1 | -8 |
| 20. Biology | -2 | -3 | - | $\frac{-1}{2}$ |  |  |  |  | $\frac{12}{5}$ | - 10.6 |
| 21. Physiol. | -2 | - | 1 |  | -1 | ${ }^{\text {¢ }}$ |  |  |  | - ${ }^{\frac{1}{2}}$ |
| 22. Gen. Sci. | 7 | -2 | -1 |  | 3 | -3 | 2 | - | - ${ }^{\circ}$ | -1. |
| 24. Agrme Ec. |  | 15 | 15 | $17 \frac{12}{2}$ | 10 |  | 9 | -9 | -12 | $85^{2}$ |
| 25. Ind. Arts |  | 6 | -3 |  | 1 |  | -5 | $1{ }^{1}$ | 6 | 23 |
| 26. Drawing | -1 | 2 | -2 | 2 | , |  | 2 | -2 | -1 | 2 |
| 27. Com, Law | -2 | 10 | +1/2 | -2 | $\frac{1}{2}$ |  | ${ }^{\frac{1}{2}}$ | $-2 \frac{2}{2}$ | 2 | -7 |
| 29. Shorthand | $\frac{11}{25}$ | 10 | 4 | -1 | 2 | $-17$ | 2 | -2 | -3 | 175 |
| 30. Typing | 20 | 14 | 9 | $-\frac{1}{2}$ | 9 | 10 | 11 | -2 | 15 | 92 |
| 31. Bus. Eng. | -12 | 3 | -5 | -1 | -12 | -2 ${ }^{\frac{1}{2}}$ | - | - | -1 | -10 ${ }^{\frac{1}{2}}$ |
| 32. Psych. | -1 | - | -3 | ${ }^{-\frac{1}{2}}$ | -2 | -2 ${ }^{2}$ | 1 | - | 3 | -5 |
| 33. Music | - | 6 | - | 5 | 6 | -7\% | -10 | -6 | 4 | -2 ${ }^{\frac{1}{2}}$ |
| 34. Pre-Flight | -- | - | - | - | - | 24 | $3{ }^{\frac{1}{2}}$ | -15 | -3 | 20 |
| 35. Gen. Bus. | - | - | - | - | - | - | 28 | -3 | 5 | 30 |

The last or tenth colum shows the net increase or decrease over the ten-year period. The largest net decrease in number of units is in history and the largest net increase is in home economics. The smallest increase is in sociology and the smallest decrease is in physiology.

Table VI gives the total number of units offered in the related fields for each of the ten years for the seventy-seven high schools.

English includes inglish and public speaking; mathematics includes composite mathematies, algebra, geometry and arithmetic; social science includes history, advanced civies, economics, sociology, problems in democracy, Oklahoma history and commity cIvies; foreign language includes Latin, Spanish and French. Vocational agriculture and vocational home economics include the total number of units in schools offering four units of each. Comercial includes commercial law, bookkeeping, shorthand, typewriting, business Inglish and general business; science includes general science, physics, chemistry and biology. These are referred to as laboratory science courses in Section (b), Part (11) of Chapter III. M scellaneous includes the other subjects not listed separately in the table.

Item number 12 of the table shows the total mumber of units for which the seventy-seven high schools were accredited in each of the ten years.

The table needs no explanation as to interpretation since it is self-explanatory.

## TABLE VI

TOTAL MUMBEER OF UNITS, GROUPED TNMO FTELDS OF RELATED SUBJECT MATYER, OFFERED TN THE 77 SELECSED HIGH SCHOOLS OF OKTAAHOMA

| Subject Matter Matter | $\begin{array}{r} 1936 \\ 1937 \\ \hline \end{array}$ | $\begin{array}{r} 1937 \\ 1938 \\ \hline \end{array}$ | $\begin{array}{r} 1938 \\ 1939 \\ \hline \end{array}$ | $\begin{array}{r} 1939 \\ 1940 \\ \hline \end{array}$ | $\begin{aligned} & 1940 \\ & 194+1 \\ & \hline \end{aligned}$ | $\frac{19}{19}+1$ | $\begin{aligned} & 19+2 \\ & 194+3 \end{aligned}$ | 1943 1944 | $\frac{19,4}{19+5}$ | 1945 1046 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. English <br> 2. Mathematies <br> 3. Social science <br> 4. Foreign Language | $\begin{aligned} & 350 \frac{1}{2} \\ & 219 \\ & 342 \\ & 36 \\ & 56 \end{aligned}$ | $\begin{aligned} & 354 \\ & 248 \\ & 328 \\ & 41 \end{aligned}$ | $\begin{aligned} & 353 \frac{1}{2} \\ & 24 \frac{1}{2} \\ & 3 \frac{114}{34} \end{aligned}$ | $\begin{gathered} 349 \\ 235 \\ 308 \\ 21 \end{gathered}$ | $\begin{aligned} & 362 \frac{1}{2} \\ & 225 \\ & 304 \\ & 21 \end{aligned}$ | $\begin{gathered} 356 \\ 229 \\ 292 \frac{1}{2} \\ 23 \end{gathered}$ | $\begin{aligned} & 353 \\ & 234 \\ & 277 \\ & 278 \\ & 18 \end{aligned}$ | $\begin{aligned} & 343 \frac{2}{2} \\ & 240 \\ & 280 \\ & 15 \end{aligned}$ | $\begin{array}{r} 341 \\ 226 \\ 273 \\ 13 \end{array}$ | $\begin{aligned} & 346 \frac{1}{2} \\ & 2301 \\ & 274 \\ & 16 \\ & 10 \end{aligned}$ |
| 5. Vocational | 40 | 45 | 52 | 68 | 88 | 116 | 97 | 97 | 90 | 93 |
| 6. Vocational Home Economics | 4 | 6 | 21 | 39 | 74 | 85 | 91 | 94. | 95 | 100 |
| 7. Commercial <br> 8. Industrial <br> Arts | $\begin{array}{r} 133 \frac{2}{2} \\ 12 \end{array}$ | $\begin{array}{r} 179 \\ 17 \end{array}$ | $\begin{array}{r} 208 \\ 23 \end{array}$ | $\frac{217 \frac{1}{2}}{20}$ | $\begin{gathered} 224 \frac{1}{2} \\ 25 \end{gathered}$ | $\begin{array}{r} 237 \frac{1}{2} \\ 32 \end{array}$ | $\begin{array}{r} 236 \frac{1}{2} \\ 32 \\ \hline \end{array}$ | $\begin{gathered} 276 \\ 27 \frac{1}{2} \end{gathered}$ | $\begin{array}{r} 273 \frac{1}{2} \\ 29 \end{array}$ | $\begin{array}{r} 290 \\ 35 \end{array}$ |
| 9. Music <br> 10. Viscellaneous <br> 11. Science <br> 12. Total | $\begin{array}{r} 27 \\ 247 \\ 220 \\ \hline 25512 \end{array}$ | $\begin{array}{r} 27 \\ 153 \\ 216 \\ 1694 \end{array}$ | $\begin{gathered} 33 \\ 170 \\ 206 \frac{2}{2} \\ 104+6 \end{gathered}$ | $\begin{array}{r} 33 \\ 362 \\ 201 \\ 1655 \\ \hline 165 \end{array}$ | $\begin{array}{r} 38 \\ 142 \\ 196 \frac{2}{2} \\ 27901 \end{array}$ | $\begin{gathered} 44 \\ 144 \\ 20 \frac{1}{2} \\ 2002 \\ 1756 \end{gathered}$ | $\begin{array}{r} 36 \frac{1}{2} \\ 114 \\ 194 \frac{1}{2} \\ 1715 \end{array}$ | $\begin{array}{r} 26 \frac{2}{2} \\ 1+492 \\ 19492 \\ 1736 \end{array}$ | $\begin{array}{r} 201 \\ 101 \\ 192 \\ 162 \\ 1661 \end{array}$ | $\begin{array}{r} 24 \frac{1}{2} \\ 1102 \\ 197 \\ 1717 \frac{1}{2} \end{array}$ |

The pereentages shown in Table VII were calculated from Table VI. It needs little explanation. From Table VI the total number of units for which Bnglish was accredited in 1936-1937 was 350를. In Table VII this $350^{2}$ units is shown as 22.70 per cent of the total mumber of units for which the schools were accredited; $350 \frac{2}{2}$ is 22.70 percent of $1551 \frac{2}{2}$.

English holds the highest percentage of the total for that year with social science a close second. By 1945-194.6 second place is lost by social science to the commercial subjects.

Foreign language almost disappears as a subject field. There is only one year, $1941-19 \% 2$, in which there is a notable gain.

The field of seience makes a small loss during each year with the exception of $1940-1941$ and $1944-194.5$.

Vocational agriculture has a net gain of 2.87 of the total number of units, starting with 2.58 and increasing to 5.45 . In number of units this would be more than double.

Home economics makes rapid gains each year. Starting with . 25 per cent (one-fourth of one per cent), it increases to 5.86 per cent of the total number of units for which the seventyseven schools are accredited in 1945-1946.

If 40 of the 77 schools offer a total of 80 units in agriculture, the average units per school would be 2. Table IX gives this type of information. The total of 77 schools is not considered. Oniy those schools that offer each subject enter in the caleulation.

Such subjects as composite mathematies, advanced eivies, economies, sociology, chemistry, sociology, arithnetic, general

## TABLE VII

TOTAL MUMBER OF UNITS, GROUPM IN INTO FIETAD OF RETAATED SUBJECT MATTER,
OFFFERED IN THE 77 SELEGTED HIGH SCHOOLS OF OKTAHOMA EXPRESSIED
AS A PERCENTAGE OF THE TOTAL INMBER OF UNITS


[^8]TABLE VIII
AVERAGE NUMBER OF UNITS OF RACH SUBJECT BY THE NUVBER OF SGHOOLS OFFERIIG THE SUBJECT OF THE 77 SELECTED HIGH SCHOOLS

ог окиaномA

| Subjects | $\begin{array}{r} 1936 \\ 1937 \\ \hline \end{array}$ | $\begin{array}{r} 1937 \\ 1938 \end{array}$ | $\begin{array}{r} 1938 \\ 1939 \\ \hline \end{array}$ | $\begin{array}{r} 1939 \\ 1940 \end{array}$ | $\begin{array}{r} 1940 \\ 194 \\ \hline \end{array}$ | $\begin{aligned} & 1941 \\ & 1942 \end{aligned}$ | $\begin{array}{r} 194+2 \\ 1943 \\ \hline \end{array}$ | $\begin{aligned} & 19 \div 3 \\ & 10 \div 4 \end{aligned}$ | $\begin{aligned} & \frac{1944}{194+5} \\ & \hline \end{aligned}$ | $\begin{array}{r} 194+5 \\ 194+6 \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Enclish | 4.00 | 4.00 | 3.99 | 4.00 | 4.00 | 3.98 | 4.02 | 4.0 | 4 | . 02 |
| 2. public spig. | .91 | . 82 | . 89 | . 98 | .94 | . 98 | . 98 | .94 | . 96 | . 95 |
| 3. Comp. Nath. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 4. Algebra | 1.07 | 1.32 | 1.24 | 1.24 | 1. 28 | 1.30 | 1.30 | 1.51 | 1.51 | 1.53 |
| 5. Geometry | 3.02 | 1.35 | 1.02 | 1.02 | 1.00 | . 99 | 1.00 | 1.07 | 1.02 | 1.06 |
| 6. Arith. | .50 1.00 | + 50 $\mathbf{+} .00$ | .50 .1 .00 | .50 .00 | .50 +.00 | .50 $\mathbf{1} .00$ | .50 1.00 | $\begin{array}{r}.50 \\ \hline .00\end{array}$ | .50 1.00 | .50 1.00 |
| 8. History | 2.00 | 1.00 | 1.00 2.19 | 2.16 | 2.16 | 1.06 | 1.00 | $\cdots$ | 1.00 | 1.00 |
| 9. Adv. Civ. | .50 | . 50 | . 50 | .50 | . 50 | . 50 |  |  | - | .50 |
| 10. Economies | . 50 | . 50 | . 50 | . 50 | - 50 | . 50 | . 50 | . 55 | . 72 | . 50 |
| 11. Sociology | - 50 | . 50 | . 50 | . 50 | . 50 | . 50 | . 50 | - | - 50 | . 50 |
| 12. Prob. Dem. | . 97 | . 98 | .98 | 1.00 | 3.02 | 2.00 | - | . 99 |  | 1.00 |
| 13. Latin | 2.57 | 2.67 | 1.60 | - | 1.50 | 2.83 | 1.80 | 1.75 | 1.66 | 2.00 |
| 14. French |  |  | 1.00 | 1.00 | 2.00 | - |  |  |  |  |
| 15. Spanish | 3.\% | 2.50 | 2.70 | 1.28 | 1.33 | 2.50 | 1.50 | 2.00 | 1.33 | 1.72 |
| 16. Physics | 1.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.03 |
| 17. Chemtstry | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

TABLE VIII-eContimued

science, comnercial law, business English, psychology, physical geography and comercial geography are one unit or one-half unit courses. By this table the number of units per school offering the subjects would naturally show no change. This would have to be shown by another type of calculation. (See Table IX.)

The purpose of this table is to show the importance attached to those subjects that a school is permitted to offer in varying units, or half-units, of credit by the schools that are offering them. Typewniting may be offered as a one unit or a two unit course. Agriculture varies from a half-unit credit to a four unit credit course. Public speaking may be a one-half or a one unit credit course.

In the ten-year period a net inerease is shown by English, public speaking, algebra, geometry, problems in democracy, Latin, Spanish, physies, agriculture, blology, home economies, industrial arts, typewriting and pre-flight. A net decrease is shown in history, bookkeeping, shorthand, and music.

To show that a total of 40 schools offer a total of 80 units gives an average of two units per school is one thing; to show that 40 of 77 schools offer 80 units of some subject does not indicate the relative importance of that subject to the total number of schools. The fact that 37 schools are not offering that particular subject means something.

Table IX gives this type of information. It gives an index of importance attached to each subject in relation to all the 77 schools used in this analysis.

Table II showed that the total number of units offered for credit in 1936-1937 was 307. This 307 divided by 77 schools gives four units of credit. This four is found in the first colum of Table IX as 4.000. The divisions of the total number of units of each subject, as found in Table II, were rounded off to the third decimal place. This process gives a more accurate index of importance of each subject. The total of $43 \frac{2}{2}$ credits of public speaking in the year 1936-1937 divided by 77 gives .565 . This has a meaning as to the relative importance of that subject to the 77 schools as a whole.

If 45 schools offered a total of 45 units one year and 43 schools offered a total of 43 units of some subject, the index would be 1.00 as showm in Table VIII. However, in Table IX, the indices would be .584 and $.55 \%$ respectively.

To say that 40 schools, of a total of 77 schools, offer 80 units of eredit for a subject is one thing and has some value; to show the numerical position of this index has a different value.

Table X lists this mumerical position of each subject as a mean of the ten-year period, the beginning year, 1936-1937, and the final year, $1945-1946$. These relative positions are shown in parentheses. The numbers following them are taken from Table IX.

The mean position of English is 1 with an index of 4.005 units. In 1936-1937 it was also 1 with an index of 4.000 units. In 1945-1946 it still holds this position with an index of 4.020 units.

## TABLE IX

AVIERAGE NUMBER OF UNTTS OF EACH SUBJECT OFFERED
BY THE 77 SELECTED HIGH SCHOOLS
OF OKLAHOMA


## TABLE IX--Contimued

| Subiects | $\begin{array}{r} 1936 \\ 1937 \\ \hline \end{array}$ | $\begin{aligned} & 1937 \\ & 1938 \\ & \hline \end{aligned}$ | $\begin{array}{r} 1938 \\ 1932 \\ \hline \end{array}$ | $\begin{array}{r} 1939 \\ 1940 \\ \hline \end{array}$ | $\begin{aligned} & 19 \div 0 \\ & 1941 \\ & \hline \end{aligned}$ | $\begin{aligned} & 194+1 \\ & 1942 \end{aligned}$ | $\begin{aligned} & 19+2 \\ & 19+3 \\ & \hline \end{aligned}$ | $\begin{aligned} & 19+3 \\ & 194 \end{aligned}$ | $\begin{aligned} & 19,4 \\ & 19+5 \end{aligned}$ | $\begin{aligned} & 19+5 \\ & 1946 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18. Phy. Geog. | . 408 | . 392 | . 358 | .324 | . 319 | . 306 | . 273 | . 234 | . 280 | . 292 |
| 19. Com. Geog. | - 384 | . 390 | -344 | -325 | . 306 | . 292 | . 253 | -234 | . 280 | . 299 |
| 20. Biology | . 910 | . 883 | . 858 | . 858 | . 805 | . 810 | . 830 | .838 | . 715 | . 780 |
| 21. Physiology | . 065 | . 065 | . 065 | . 1.95 | . 195 | . 065 | -- | -- |  | - |
| 22. Gen. Sci. | . 950 | . 962 | . 935 | . 910 | . 950 | . 910 | . 935 | . 935 | .935 | . 935 |
| 23. Agriculture | . 818 | . 898 | 1.120 | 1.310 | . 43 | 2.670 | 1.410 | 1.380 | 1.380 | 1.370 |
| 24. Home ES. | 1.105 | 1.220 | 1.420 | 1.640 | 1.870 | 2.000 | 1.985 | 2.110 | 1.985 | 2.140 |
| 25. Ind. Ar ${ }^{\text {a }}$ | . 156 | -221 | . 299 | . 260 | . 325 | .4 .16 | +22 | . 358 | - 377 | . 455 |
| 26. Drawing | .039 | . 026 | . 052 | . 026 | .052 | . 116 | .078 | . 104 | . 078 | . 065 |
| 27. Com. Law | . 195 | . 221 | . 260 | . 202 | . 175 | . 156 | . 149 | .1 .43 | . 110 | . 104 |
| 28. Booklkpg. | .429 | . 573 | . 701 | .754 | . 870 | . 896 | .676 | . 650 | . 689 | . 650 |
| 29. Shorthand | . 312 | . 507 | . 495 | . 572 | . 559 | . 624 | -740 | . 780 | . 755 | . 767 |
| 30. Typing | . 585 | . 84.4 | 1.025 | 1.141 | 1.170 | 1.285 | 1.420 | 1.560 | 1.585 | 1.780 |
| 31. Bus. Eng. | . 214 | . 182 | - 221 | . 156 | . 142 | . 123 | .091 | . 091 |  | . 078 |
| 32. Psychology | . 162 | . 749 | .149 | .110 | . 10. | . 078 |  | . 058 | .058 | . 092 |
| 33. Masic | . 352 | . 351 | .429 | . 429 | .494 | . 572 |  |  | . 267 | -318 |
| 34. Pre-Flight | - | - |  | - | - | - | -318 |  | . 169 | . 130 |
| 35. Gen. Bus. | - | -* | - | - | - | -- |  | . 364 | . 325 | . 390 |

TABLE X

## THE REFATIVE POSTTION OF EACH SUBJECT AS THE AVERAGE MUMBESR OF UIIITS PRE HIGH SCHOOL OF THE 77 SELEECTED HIGH SCHOOLS OF OKTAFOMA

| Subiects | Relative Inportance in () and Units per School, 10-7y. Mean | Relative Importance in () and Units per School, $1936-1937$ | Relative Im portance in () and Units per School, $19+5-19+6$ |
| :---: | :---: | :---: | :---: |
| 2. Fnglish | (1) 4.005 | 1) 4.000 | 1) 4.020 |
| 2. Pub. Sple. | (15) . 565 | (12) . 565 | (15) . 480 |
| 3. Comp. Math. | (17) . 717 | (13) .480 | (13) . 635 |
| 4. Algebra | (4) 1.305 | (4) 1.020 | (5) 1.530 |
| 5. Geometry | (8) .852 | (6) .960 | (9) .850 |
| 6. Axithmetic | (20) . 214 | (17) . 390 | (24) . 117 |
| 7. O. H. \& C. | (7) .962 | (5) 1.000 | (7) -943 |
| 8. History | 2) 2.119 | 2) 2.54 .0 | 3) 1.870 |
| 9. Adv. Civ. | (33) .014 | (32) . 030 | (32) .026 |
| 10. Economies | (32) . 063 | (28) .085 | (29) . 072 |
| 11. Sociology | (30) . 072 | (27) .097 | (25) . 110 |
| 12. Prob. Dem. | (13) . 655 | (10) . 695 | (14) . 533 |
| 13. Latin | (23) . 152 | (21) . 286 | (31) .052 |
| 14. Prench | (34) . 004 | (33) $=$ | (33) - |
| 15. Spanish | (21) . 179 | (14) . 442 | (22) . 156 |
| 16. Physics | (25) . 136 | (26) . 130 | (21) . 202 |
| 17. Chemistry | (29) . 091 | (29) . 078 | (31) . 052 |
| 18. Phy. Geog. | (18) 318 | (16) . 408 | (20) . 292 |
| 19. Com. Geog. | (19) . 310 | (18) -384 | (19) . 299 |
| 20. Blology | (10) . 829 | 8) .910 | (10) .780 |
| 21. Physiology | (31) . 065 | (50) . 065 | (33) -- |
| 22. Gon. Sci. | (9) . 836 | (7) . 950 | (8) . 835 |
| 23. Agriculture | (5) 1.290 | (9). 818 | (6) 1.370 |
| 24. Home Ec. | (3) 1.752 | (3) 1.105 | (2) 2.140 |
| 25. Ind. Arts | (17) . 329 | (25) . 156 | (16) .455 |
| 26. Drawing | (32) .064 | (31) . 039 | (30) .065 |
| 27. Com. Lav | (22) .172 | (23) . 195 | (26) .104 |
| 28. Bookkpg. | (12) . 689 | (15) . 429 | (12) . 650 |
| 29. Shorthand | (14) . 611 | (20) . 312 | (11) .767 |
| 30. Typing | (6) 1.240 | (21) . 585 | (4) 1.780 |
| 31. Bus. Fing. | (24) . 139 | (22) .214 | (28) . 078 |
| 32. Psychology | (27) .100 | (24) . 162 | (27) .092 |
| 33. Music | (16) .403 | (19) .351 | (18) .318 |
| 34. Pre-Flight | (28) . 098 | (33) $-\infty$ | (23) . 130 |
| 35. Gen. Bus. | (26) . 108 | (33) - | (17) .364 |

An increase upvard in position was made by sociology, agriculture, home economies, industrial arts, bookckeeping, shorthand, typewriting, music, pre-flight and general business.

A decrease in position was made by public speaking, algebra, geometry, arithmetic, Oklahoma history and commenity civies, history, economics, sociology, problems in democracy, Latin, Spanish, physies, chemistry, physical geography, commercial geography, blology, physiology, general science, conmereial law, business English, and psychology.

Those holding the same relative position were composite mathematics, advanced civics, and French.

In Chapter I, The Development of the Secondary School Gurriculum, pages 20 to 23 were given the approximate percentages of the flelds of the courses of study as recomended by the National Eaucation Association Policies Comnission, Education for All Amorican Youth, and the Harvard Comnittee, Genoral Elucation in a Preo Society.

Tables XI and XII give the total percentage of each of these fields, as found in the seventy-seven selected high schools of Oklahoma, for each of the ten years of this analysis, together with the percentages recomended by both of the above reports. All percentages are at best approximations, due to the difficulty in interpreting the subject matter of a course by the name given it in the high school accrediting 1ists. Groupings were made after close study of the recomendations of the above two reports and derinitions and explanations in the ten Annual High School Bulletins for Aecrediting of the Oklahoma Department of Bducation.
table XI
THE TOTAL NUMBER OF UNITS OF SUBJECT MATTER OFFERED IN THE 77 SELECTED HIGH SCHOOLS OF OKLAHOMA INTERPRETED AS A PER CEENT OF THE TOTAL IUUMER OF UNITS

OF SUBJECT OFFERINGS GROUPRD ACCORDIMG TO THE HARVARD COMMITTEE REPORT OF 1945

|  | $\begin{array}{r} 1936 \\ 1937 \\ \hline \end{array}$ | $\begin{array}{r} 1937 \\ 1938 \\ \hline \end{array}$ | $\begin{array}{r} 1938 \\ 1939 \\ \hline \end{array}$ | $\begin{array}{r} 1939 \\ 1940 \\ \hline \end{array}$ | $\begin{array}{r} 1940 \\ 1941 \\ \hline \end{array}$ | $\begin{aligned} & \frac{19}{194}+1 \\ & \hline \end{aligned}$ | $\begin{aligned} & \frac{194+2}{194+3} \end{aligned}$ | $\begin{aligned} & 1943 \\ & 1044 \end{aligned}$ | $\begin{aligned} & 1944 \\ & 194+5 \end{aligned}$ | $\begin{aligned} & 1945 \\ & 194+6 \end{aligned}$ | Harvard Curriculum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. English | 23.0 | 22.2 | 21.8 | 21.5 | 21.8 | 20.8 | 21.0 | 20.1 | 20.6 | 20.3 | 18.75 |
| 2. Social studies | 22.4 | 20.6 | 19.3 | 19.0 | 18.0 | 17.1 | 16.6 | 16.4 | 16.5 | 16.1 | 12.5 |
| 3. Sci. and Math. | 24.0 30.5 | 24.7 32.5 | 23.4 35.5 | 22.5 37.0 | 21.2 38.8 | 20.7 41.4 | 20.8 41.6 | 20.6 | 20.9 42.0 | 20.8 42.8 | 35.4 33.3 |

TABLE XII
THE SAME INTERPRETATION AS TABLE III EXCEPT T THAT THE GROUPINGS ARE MADE IN ACCORDANCE WITH TEE NATIONAL EDUCATION ASSOCIATION, EDUCATIONAL POLICIES COMMISSION REPORT OF 194.

|  | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 | No E. A. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | Curriculum |

The most significant fact disclosed is the conspicuous absence of health and physical fitness courses offered in the seventy-seven selected high schools. Health and physical pitness education is either taught under some other subject name, or not at all as such for credit.

A comparison of the present analysis with some similar study of the past proved quite interesting. As noted in Table XIII, there have been made some notable changes since 1860-1865, 1906. 1911 and 1936-194+6.

All seventy-seven schools of this study offer sncial studies while only ninety per cent of the 1860-1865 study offered social studies.

Latin has decreased from 80 per cent of the schools offering three years to 9.2 per cent offering two years.

Commercial subjects have increased from a very insignificant place to a highly important one.

Home economics was offered by 10 per cent of the schools in 1860-1865 with an undetermined number of years. Seventy-five and five-tenths per cent of the seventy-seven schools offer two and one-helf years of the work.

Table XIV is the list of the total mumber of the seventyseven schools that are accredited for each of the subjects in the lists of the Annual High School Bulletin numbered 112-I to 112-U issued by the Oklahoma Department of Eafucation.

English is offered for credit ky all seventy-seven high schools. The regulation referred to in Section (a), Part (1I), Chapter III of this thesis states that four units of English are required for graduation.

## TABLE XIII

## COITRRAST BETWEEIN CURRICULUM OFTERTIGS OF THE 77 SBLEECTED OKAAHOMA HIGH SCHOOLS OF 1936-1946 AND THOSE OF FORTY SEIECTILD NORTH CEMIRAL STATES HTGH SCHOOLS OF 1860-1865 AlD 1906-1911*

| Subjects | Forty North Central States High Schools |  |  |  | $\begin{aligned} & 77 \text { Selected } \\ & \text { Oklahoma High } \\ & \text { Sehools } \\ & 1936-1946 \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1860-1865 |  | 1906-1911 |  |  |  |
|  | \%** | Mode | \% | Mode |  | Yoce |
| Mathematies | 100 | 3 | 100 | 4 | 100 | 3.00 |
| English | 100 | 2 | 100 | 4 | 100 | 4.00 |
| Science | 100 | 2.33 | 100 | 4 | 100 | 2.50 |
| Social Studies | 90 |  | 100 | 3 | 100 | 4.00 |
| Latin | 80 |  | 98 | 4 | 9.2 | 2.00 |
| Other Languages | 90 |  | 100 | 6 | 12 | 2.00 |
| Commercial | 45 |  | 88 |  | 91 | 3.50 |
| Mamual Arts | 0 | 0 | 58 | (2) $(4$ |  | 1.00 |
| Home Economies | 10 | ? | 45 | 2 | 75.5 | 2.50 |

*J. B. Stout, The Develonment of High-School Curxicula in the Morth Central States Sran 1860 to 1918. (The North Central Schools data are based upon tables from Stout.)
**Percentages show the proportions of schools offering each subject; modes show number of years in courses.
***Bi-modal

TABLE XIV
TOTAL NUMBER OF THE SCHOOLS OF THE 77 SELECTED HIGH SGHOOLS OF OKLAHOMA OFFERIIG BACH SUBJECT

| Subject | 1936193719371938 |  |  |  |  |  |  |  | $\begin{aligned} & 194+\frac{1945}{194+5} \frac{1946}{} \\ & \hline \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. English |  |  |  |  |  |  |  |  |  |  |
| 2. Pub. Spk. | 48 |  | 51 | 43 | 59 | 51 | 45 | 5 | 33 | 39 |
| 3. Comp. Math | 37 | 52 | 60 | 61 | 60 | 65 | 65 | 58 | 45 | 9 |
| 4. Algebra | 74 | 76 | 76 | 76 | 76 | 77 | 77 | 77 | 77 | , |
| 5. Geometry | $\begin{aligned} & 72 \\ & 66 \end{aligned}$ | $\begin{aligned} & 52 \\ & 52 \end{aligned}$ | 4 | $\begin{aligned} & 61 \\ & 37 \end{aligned}$ | $\begin{aligned} & 60 \\ & 30 \end{aligned}$ | $\begin{aligned} & 60 \\ & 27 \end{aligned}$ | 29 | 18 | 14 | 18 |
| 7. $0 . \mathrm{H}$, \& C. | 77 | 77 | 77 | 75 | 70 | 72 | 71 | 75 | 1 | 73 |
| 8. History | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 6 |  |
| 9. Adv. Civ. | 13 | 10 | 10 | 12 | 3 | $\frac{1}{8}$ |  | -8 | 7 | 11 |
| 11. Sociology | 15 | 17 | 9 | 13 | 9 | 12 | 7 | 6 |  | 17 |
| 12. Prob. Dem. | 54 | 57 | 54 | 53 | 54 | 51 | 51 | 48 | 4 | 41 |
| 13. Latin | 14 | 12 | 10 |  | 8 | 6 | 5 | 4 | 3 | 2 |
| 14. French | -- | - | 1 |  |  |  |  | - |  | - |
| 15. Spanish | 22 | 14 | 10 | 7 | 6 |  | 6 | 4 | 6 | 7 |
| 16. Physies | 10 | 8 | 7 |  | 6 | 7 | 11 | 18 | 15 | 15 |
| 17. Chemistry |  |  |  |  | 9 | 12 | 9 |  | 7 |  |
| 18. Phy. Geog. | 63 | 60 | 55 | 50 | 49 | 47 | 42 | 36 | 3 | 5 |
| 19. Com, Geog. | 59 | 59 | 53 | 50 | 47 | 45 | 39 | 36 | 43 | 46 |
| 20. Biology | 70 | 68 | 66 | 66 | 62 | 62 | 64 | 62 | 54 | 57 |
| 21. Physiol. |  |  | , | 3 | 2 | 1 | $\square$ | - |  |  |
| 22. Gen. Sci. | 73 | 74 | 72 | 71 | 70 | 73 | 70 | 72 | 2 | 2 |
| 23. Agri. | 4 | 32 | 41 | 40 | 40 | 42 | 40 | 40 | 39 |  |
| 25. Ind. Arts | , | 12 | 14 | 14. | 15 | 20 | 20 | 17 | 16 | 19 |
| 26. Drawing |  | 2 | 4 | 2 | 4 | , | 6 | 7 | 5 | 5 |
| 27. Com. Law | 30 | 34 | 40 | 37 | 27 | 24 | 23 | 22 | 17 | 6 |
| 28. Bookkpg. | 32 | 4 | 54 | 56 | 5 | 58 | 52 | 50 | 3 | 0 |
| 29. Shorthand |  | 3 |  | 4 | 42 | 47 | 56 | 59 | 7 |  |
| 30. Typing | 43 | 28 | $\begin{aligned} & 69 \\ & 34 \end{aligned}$ | 72 24 | 71 | 76 | 75 | 77. | 77 | 77 |
| 32. Psych. | 25 | 23 | 2 | 17 | 16 | 12 |  | 9 | 9 | 15 |
| 3. Music | 24 | 23 | 27 | 27 | 29 | 28 | 24 | 18 | 21 | 5 |
| 34. Pre-Flight |  |  |  |  |  |  | 25 | 29 | 14 | 10 |
| 35. Gen. Bus. | -- | - | - | - | -- | - | - | 28 | 25 | 0 |

History was offered by each high school with the exception of the year $1944-1945$ when it was offered by seventy-six schools. Section (b), Part (11) of Chapter III of this thesis states that American history is required by state law. Section (d), Part (16) of the same chapter presents a policy of alternation which makes it possible to offer some subjects in alternate years; therefore, every high school does not have to offer American history every year.

The most common mathematics course among the seventy-seven schools is algebra; the most comon science course is general science. Typewriting is offered by more schools than any other comercial subject. More schools offer Spanish than any other foreign language. Other than history, the most popular whole unit social science course is problems in American democracy.

Table XV indicates the total number of the seventy-seven selected schools that offer each subject. This is expressed as a per cent of the seventy-seven schools. By referring to the table it can be seen that in 1936-1937, 61.1 per cent of the seventyseven schools offered public speaking for credit, 48.1 per cent offered composite mathematics.

The last colum in the table is the arithmetic mean for the ten-year period.

Table XV was derived from Table XIV. By letting the number 77 represent 100 per cent, the calculations were made for each subject offered for credit for each of the years of the ten-year period. A percentage relation gives a much better interpretation of a mass of data. All percentages are rounded off to the nearest tenth of one per cent.

THE TOTAL NUMBER OF SCHOOLS OF THE 77 SETECTED HIGH SCHOOLS OF OKLAHOMA OFFERING EACH SUBJECT INTERPRETED AS A PER CENT OF THE 77 SCHOOLS

| Subilects. | $\begin{aligned} & 1936 \\ & 1937 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1937 \\ & 1938 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1938 \\ & 1939 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1939 \\ & 1940 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1940 \\ & 1941 \end{aligned}$ | $\begin{aligned} & 1941 \\ & 1942 \end{aligned}$ | $\begin{aligned} & 1942 \\ & 1943 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1943 \\ & 1944 \end{aligned}$ | $\begin{aligned} & 1944 \\ & 1945 \end{aligned}$ | $\begin{aligned} & 1945 \\ & 1946 \end{aligned}$ | $\begin{aligned} & \text { Arith: } \\ & \text { Mean } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. English | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 2. Pub. Spk. | 61.1 | 70.1 | 66.1 | 55.8 | 76.6 | 66.3 | 58.5 | 49.4 | 42.9 | 50.6 | 59.7 |
| 3. Comp. Math. | 48.1 | 67.5 | 78.0 | 79.4 | 77.9 | 84.5 |  | 75.4 | 58.5 | 63.7 | 71.5 |
| 4. Algebra | 96.1 | 99.0 | 99.0 | 99.0 | 98.6 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 99.2 |
| 5. Geometry | 93.6 | 67.5 | 81.6 | 79.4 | 77.9 | 78.0 | 83.1 | 82.0 | 87.0 | 80.5 | 81.0 |
| 6. Arith. | 85.5 | 67.5 | 4 | 47.1 | 38.9 | 35.1 | 37.7 | 23.4 | 18.7 | 23.4 | 43.6 |
| 7. O. H. \& C. | 100.0 | 100.0 | 100.0 | 97.4 | 90.9 | 93.6 | 92.3 | 97.5 | 96.1 | . 8 | 6.3 |
| 8. History | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 98.7 | 100.0 | 100.0 |
| 9. Adv. CIV. | 6.5 | 3.9 | 3.9 | 3.9 | 3.9 | 1.3 | - | $\cdots$ | -- | 5.2 | 2.9 |
| 10. Economics | 16.9 | 13.0 | 13.0 | 15.6 | 11.7 | 10.4 | 6.5 | 10.4 | 9.1 | 14.3 | 13.0 |
| 11. Sociology | 19.5 | 22.1 | 11.7 | 16.9 | 11.7 | 15.6 | 9.1 | 7.8 | 9.1 | 22.1 | 14.5 |
| 12. Prob. Dem. | 70.2 | 74.1 | 70.0 | 68.8 | 70.1 | 66.3 | 66.2 | 62.4 | 57.2 | 53.2 | 65.8 |
| 13. Latin | 18.2 | 15.6 | 13.0 | 9.1 | 10.3 | 7.8 | 6.5 | 5.2 | 3.9 | 2.6 | 9.2 |
| 14. French | - | - | 1.3 | 1.3 | 1.4 |  | , | - | -- | - |  |
| 15. Spanish | 28.6 | 18.2 | 13.0 | 9.1 | 7.8 | 10.4 | 7.8 | 5.2 | 7.8 | 9.1 | 11.7 |
| 16. Physies | 13.0 | 10.4 | . 1 | . 1 | 7.8 |  | 14.3 |  | 19.5 | 19.5 | 13.5 |
| 17. Chemistry | 7.8 | 7.8 | 9.1 | 7.7 | 11.7 | 15.6 | 11.7 | 5.2 | 9.0 | 5.2 | 9.1 |

TABLE XV-Continued

| Subiects | $\begin{aligned} & 1936 \\ & 1937 \end{aligned}$ | $\begin{array}{r} 1937 \\ 1938 \\ \hline \end{array}$ | $\begin{aligned} & 1938 \\ & 1939 \end{aligned}$ | $\begin{aligned} & 1939 \\ & 1940 \end{aligned}$ | $\begin{aligned} & 1940 \\ & 19+1 \end{aligned}$ | $\begin{aligned} & 1941 \\ & 1942 \end{aligned}$ | $\begin{aligned} & 1942 \\ & 1943 \end{aligned}$ | $\begin{aligned} & 1943 \\ & 1944 \end{aligned}$ | $\begin{aligned} & 1944 \\ & 1945 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1945 \\ & 19+6 \end{aligned}$ | $\begin{aligned} & \text { Arith. } \\ & \text { Mean } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18. Phy Geog. | 81.8 | 77.9 | 71.4 | 65.0 | 63.6 | 61.1 | 54.5 | 46.8 | 55.8 | 58.4 | 63.6 |
| 19. Com. Geog. | 76.7 | 76.6 | 68.9 | 65.0 | 61.0 | 58.4 | 50.6 | 46.8 | 55.8 | 69.7 | 63.0 |
| 20. Biology | 91.0 | 88.4 | 85.8 | 85.8 | 80.5 | 80.6 | 83.1 | 80.5 | 70.2 | 74.1 | 82.0 |
| 21. Physiol. | 1.3 | 0.5 | 1.3 | 3.9 | 2.6 | 1 |  | -- | -- |  | 2.0 |
| 22. Gen. Sei. |  | 96.0 | 83.4 | 92.4 | 90.9 |  | 91.0 | 93.5 | 93.5 | 93.5 | 92.4 |
| 23. Agri. | 44.2 | 41.6 | 53.3 | 52.0 | 51.9 | 54.6 | 51.9 | 52.0 | 50.7 | 49.5 | 50.2 |
| 24. Home Ec. | 59.8 | 65.0 | 72.7 | 74.2 | 79.2 | 79.3 | 81.7 | 80.5 | 81.8 | 80.5 | 75.5 |
| 25. Ind. Arts | 11.7 | 15.6 | 18.2 | 18.2 | 19.5 | 26.0 | 25.9 | 22.1 | 20.8 | 24.7 | 19.7 |
| 26. Drawing | 3.9 | 2.6 | 5.2 | 2.6 | 5.2 | 9.1 | 7.8 | 9.1 | 6.5 | 6.5 | .8 |
| 27. Com. Law | . 0 | 4.2 | 52.0 | 40.0 | 17.5 | 31.2 | 29.8 | 28.6 | 22.1 | 20.8 | 34.5 |
| 28. Bookkpg. | 41.6 | 55.9 | 70.2 | 72.8 | 87.0 | . | 57.5 | 65.0 | 68.9 | 65.0 | 65.9 |
| 29. Shorthand | 29.9 | 50.6 | 49.4 | 57.2 | 51.6 | 61.1 | 72.6 | 76.6 | 74.2 | 75.4 | 59.8 |
| 30. Typing | 57.2 | 76.7 | 89.6 | 93.5 | 92.3 | 98.8 | 97.3 | 100.0 | 100.0 | 100.0 | 90.5 |
| 31. Bus. Fing. | 42.8 | 6.4 | 4.2 | 31.2 | 28.6 | 24.7 | 18.2 | 18.2 | 18.2 | 15.6 | 27.8 |
| 32. Psych. | 32.5 | 29.8 | 28.6 | 22.1 | 20.8 | 15.6 | 9.1 | 11.7 | 11.7 | 19.5 | 20.1 |
| 33. Music | 31.2 | 29.8 | 35.1 | 35.1 | 27.7 | 36.4 | 31.2 | 23.4 | 27.3 | 32.4 | 32.0 |
| 34. Pre-Flight |  |  |  |  |  |  | 32.4 | 37.6 | 18.2 | 13.0 | 10.1 |
| 35. Gen. Bus. | $\infty$ | - | - | - | - | - | , | 36.3 | 32.5 | 39.0 | 10.8 |

In summarizing the tabular data some significant facts in trends will be given.
(1) There is a trend to hold fairly constant the number of units offered for credit in the subjects of English, oklahoma history and commuity civics, and general science.
(2) There is an increase that is noticeable, but not so notable, in the number of units in composite mathematies, sociology and physies.
(3) There is also a noticeable, but not notable, decrease in number of units in public speaking, geometry, history, economics, problems in democracy, physical geography, comercial geography, biology, general science, and music.
(4) There is a mariked and notable increase in the number of units offered in algebre, agriculture, home economies, typewriting, bookkeeping, shorthand, and industrial arts.
(5) In number of units compared with the total, certain subjects tend to remain relatively insignificant. They ares advanced civies, economics, French, chemistry, physiology, and drawing.
(6) There is a notable decrease in the number of units offered In Latin, comereial law, Spanish, and business English.

In the flelds of related subject matter the following trends In total number of units were noteds
(1) English. A small decrease from $350 \frac{2}{2}$ units to $246 \frac{2}{2}$ units. This is a change from 22.70 to 20.25 per cent of the total number of units of the seventy-seven selected high schools.
(2) Mathematics. A decrease from $219 \frac{1}{2}$ units to $230^{2}$ units, or from 14. 20 to 13.45 per cent of the total number of units.
(3) Social science. A decrease from $3^{4} 2$, or 22.20 per cent, to $274 \frac{1}{2}$, or 16.05 per cent.
(4) Foreign language. A decrease from 56 units to 16 units, or from 3.60 to .09 per cent.
(5) Vocational agriculture. An increase from a total of 40 to 93 units, or from 2.58 to 5.45 per cent of the total number of units offered.
(6) Vocational home economics. An increase from 4 to 100 units, or from . 25 to 5.86 per cent.
(7) Comnercial. An increase from $133 \frac{2}{2}$ units to 290 units, or an increase from 8.55 to 17.00 per cent.
(8) Industrial Arts. An increase from 12 to 35 units, or from .77 per cent to 2.05 per cent.
(9) Music. A decrease from 27 to $24 \frac{2}{2}$ units, or from 1.73 per cent to 1.43 per cent.
(10) Miscellaneous. A decrease from 147 units to $110 \frac{2}{2}$ units, or from 9.55 to 6.48 per cent.
(11) Science. A decrease from 220 to 197 units or from 14.30 to 11.54 per cent.
(12) Total number of units. The total mumber of units offered by the seventy-seven high schools increases from 1,551글 to 1,717 This is an increase of 10.68 per cent.

The relative positions in importance of the mean number of units offered, in relation to the seventy-seven selected high schools over the ten-year period are as follows: (1) English, 4.000 units; (2) history, 2.540 units; (3) home economies, 1.105 units; (4) algebra, 1.020 units; and (5) 0klahoma history and comrunity civies, 1.000 units.

The same relative positions in 1936-1937, the beginning of the study are: (1) Inglish, 4.005 units; (2) history, 2.119 units; (3) home economies, 1.752 units; (4) algebre, 1.305 units; and (5) agriculture, 1.290 units.

The following subjects hold the Pirst five positions in 19451946, the final year of the study: (1) Bnglish, 4.020 units; (2) home economics, 2.140 units; (3) history, 1.870 units; (4) typewriting, 1.780 units; and (5) a.lgebra, 1.530 units.

English maintains first place; second place is lost by history to home economies; third place is lost by home economics to history; fourth place is lost by algebra to typewriting; and fifth place is lost by olclahoma history and community eivies to algebra. In the first five places the trend is upward in home economics.

There is little comparison of the curriculum of the seventyseven selected schools with either the Harvard Comittee recommended curriculum, or the National Baucation Association Policies Comission recomended curriculum. The trend is toward the Harvard curriculum in English and social studies, away from it in. science and mathematies, and above it in specialized subjects. In the curpiculum of the policies Commission there is the conspicuous absence of subject matter for credit in health and physical fitness. There is a downward trend in the common learnings, more offerings in vocational learnings with the trend upvard. The electives stay below that recomended by the Comission with a very small decrease.

Concerning the number of the seventy-seven schools in offerIng the subjects for credit are the following trends:
(1) Constant in English and history
(2) Increase in composite mathematies, algebsa, sociology, physics, agriculture, home economies, industrial arts, drawing, bookkeeping, shorthand, typewriting
(3) Decrease in public speaking, geometry, axithmetic, okclahoma history and communty civics, economies, sociology, problems in democracy, Latin, Spanish, chemistry, physical geography, commercial geography, biology, general science, commercial law, busIness English, psychology and pre-flight
(4) Relatively insignificant in advanced civics, French, and physiology
(5) Very little change in music and general business

## GHAPTER IV

sumalary and conclusions

The primary purpose of this study is the assembly and presentation of data concerning high school accrediting practices in selected high schools of 0klahoma. These accrediting practices are governed by two factors. The Pirst factor is establishod by the High School. Inspection Department of the Oklahoma Department of Bducation. It includes the minimum requirements, general policies and regulations for accrediting high schools of the state. It serves as a criterion for the accrediting of the high schools of the state by the High School Inspection Department. The second factor is the anmual request for accrediting. It is made by each high school in the state to the Department of Education. The request is for the number of units of eredit in each subject or course for which the high school wishes to be aceredited. The second factor is governed by the degree of compliance of the high school to the premises of the first factor.

The data in this study are presented in two parts that correspond with the above two factors. The flrst part of the study concems the minimam requirements, general policies and regulations and any changes or additions that were made during the ten-year period of the study. The second part is tabular data and related interpretations of the data dealing with the number of units of eredit in each subject or course as foffered in each and all of the seventy-seven selected high schools of oklahoma for each of the years of the ten-year study.

An attempt has been made to present the data in a meaningful and useful manner for the use of those engaged in high school curricula study and construction. The basic data compiled deal with the number of units of eredit in each subject or course offered by the seventy-seven selected high schools and the number of high schools offering for credit these various subjects or courses. This information was compiled for each of the years of the study and presented in a well organized mamer.

From the basic data have been given several interpretations. Bach subject or course is interpreted as a percentage of the total number of units of eredit for the entire seventy-seven selected high schools for each year. The total mumber of schools offering any one of the subjects or courses is given as a percentage of the total seventy-seven selected high schools. The subjects or courses have been grouped into fields of related subject matter and given as the total mumber of units of credit and as percentages of the total number of units of credit offered in all subjects or courses by all the seventy-seven selected high schools. The axithmetic mean of the number of units of credit of each subject or course for the ten-year period was determined and given a numberical relation. The subject or course with the highest mean was given first position and the remaining subjects or courses ranked accordingly. The same interpretation was given for the first and the last year of the study for comparison.

A comparison is also made with current accrediting practices of the selected high schools of Oklahoma with the proposed curricula of both the Hasvard Committee report and the National Education Association Policies Comission report.

The secondary purpose of this study is an attempt to discover from the collection of data some trends in curricula offerings by the seventy-seven selected high schools of Oklahoma.

The base for accrediting high schools in oklahoma is subject units.

> Oklahoma is one of the fow states that contimue to accredit schools by subject units.
> A definite procedure whereby the school is accredited as a whole might serve to emphasize its contimous improvement in all major respects.

This statement was made by the Superintendent of Public Instiruction In 1938. From an analysis of the Ammal High School Bulletins there has been no trend away from this method of accrediting high schools. There have been a number of changes in the regulations, policies and requirements that tend to minimize the importance of subject matter as a criterion for evaluation of the quality of work done by a high school. However, the base still remains to be subject units. The trends are vertical and horizontal from this base. There were more requirements and regulations at the end of the tenyear study than at the beginning. This is showm in the ilirst part of Chapter III, The Study and Analysis of Data. Most of the changes are efther for claxification of previous requirements and regulations or additions to the existing ones. There is a trend toward recognizing factors other than subject units in the evaluation of the quality of work done by high school students and quality of teaching done by the teachers.

[^9]Some of the changes and additions made to the minimum requirements, general polieles and regulations during the ten-year period of this study are given in sumary.
(1) The combination of the high school and mural school inspection departments should more closely coordinate the programs of inspection of each department.
(2) Raising of standards and qualifications of teachers will tend to produce a better quality of instruction in the classroom. It serves as encouragement for advancement in the profession of education.
(3) The recommendation that teachers contime professional preparation by attending college was changed to the recomendation that teachers contirue their professional preparation and growth. This indicates a trend away from the Idea that professional growth is obtained only in college toward the idea that it might be obtained otherwise. It might suggest professional growth by travel or in-service training.
(4) The words "academic" and "core" were eliminated in the descriptions of certain subjects. If by these deseriptions is meant that those subjects are more important than others and should be taken by all students, then by their elimination recognition is given to a moxe equal value of all subjects or courses.
(5) The increase made in the number of required books to be read and an increase in the mumber of lines of poetry or prose to be memorized by high school students of English might tend to broaden the reading habits of these students. At the same time, it delimits the initiative of the teacher.
(6) The increase in the required mumber of library books per pupil should broaden the sources of information and the reading habits of all pupils.
(7) An increase in the mumber of periods per weelc devoted to certain courses would indicate that either more time was needed or expansions were made in the subject matter of those courses.
(8) The lack of harmony among teachers and school boards as a factor in considering a school for acerediting was an addition made to the policies for accrediting. This now policy recognizes value of cooperation among the teaching staff, school board and commuity as an important factor, in addition to subject units, for the accredtting of a high school.
(9) The initiation of a program of accrediting work done during sumer terms by high schools broadens the field of service of the high school to the cormunity for which it serves.
(10) The program of accrediting certain correspondence courses by the Department of Education recognizes other agencies of education than the local high school. It serves to broaden the selections of courses of subjects by the student. It permits a student to study courses or subjects that are not offered by the local high school.
(11) The selection of subjects or courses by the high school student is broadened by the program of alternation of certain high school subjects. The small school, with a small corps of teachers, may offer a broader selection of subjects or courses than could be done otherwise.

All of the above changes and additions to the existing requirements, policies and regulations indicate a trend toward improvements in quality and methods of instruction, broadening of the service of the high school to a community, and the raising of standards of qualifications of teaching persomel. They do not indicate a trend away from the method of accrediting a high school by subject units. The subject unit still remains as the basis of accrediting. There is no indication toward a mothod of accrediting a high school as a whole for a total number of subject units and permit the high school to exercise a free choice or selection within that limit. Each high school is aceredited for each specific subject unit up to a total number of units that is governed by the minimum requirements, policies and regulations of the High School Inspection Department of the Department of Education.

Data concerning the specific subject units, for which the seventy-seven selected high schools of oklahoma were accredited in each of the years of the ten-year study, are presented in the second part of Chapter III, The Study and Analysis of Data. From the tabular data are indicated the trends in the kinds of subjects or courses and the number of creait units in each for which the selected high schools were accredited by the Department of Bacation. The trends will be given in sumary.
(1) There is an increase in the total number of credit units of all subjects or courses offered. The increase was from 1,551를 units in 1936 to $1,717 \frac{2}{2}$ units in 1946. This is an increase of 10.68 per cent in total number of eredit units for the seventyseven selected high schools.
(2) The greatest increases made in the number of credit units offered by the seventy-seven selected schools are as follows: (a) typerriting, 92 units; (b) home economies, 85 units; (c) agriculture, 42 units; (d) shorthand, 35 units; (e) general business, 30 units; and (f) algebra, 28 units.
(3) The greatest deereases made in the number of credit units offered by the seventy-seven selected high schools are as follows: (a) history, 50 units; (b) Spanish, 22 units; (c) axithmetic, 21 units; (d) Latin, 18 units; (e) problems in democracy, $12 \frac{1}{2}$ units; ( f$)$ business English, $10 \frac{1}{2}$ units; and (g) biology, 10 units.
(4) In the fields of subject matter there is a net increase in: (a) mathematics, 21 units; (b) vocational agriculture, 53 units; (c) vocational home economics, 96 units; (d) commerce, $157 \frac{2}{2}$ units; and (e) industrial arts, 23 units.
(5) In the fields of subject matter there is a net decrease In: (a) English, $4 \frac{1}{2}$ units; (b) social science, $67 \frac{1}{2}$ units; (c) foreign language, 46 units; (d) musie, $2 \frac{1}{2}$ units; (e) science, 23 units; and ( f ) miscellaneous, $36 \frac{1}{2}$ units.

The trends in the number of schools of the total seventyseven selected high schools that offer each of the subjects or courses for the ten-year period from 1936 to 1946 are sumnarized in order of importance.
(1) The greatest net increases in the mumber of schools in offering for credit specific subjects or courses are ins (a) shorthand, from 23 to 58 schools, or an increase of 35 schools; (b) typewriting, from 44 to all 77 schools, or an increase of 33 schools; (c) general business, from none to 30 schools; (d) bookkeeping,
from 32 to 50 schools, or an increase of 18 schools; and (e) home economies, from 46 to 62 schools, or an increase of 16 schools.
(2) The greatest net decreases in the mumber of schools offering for credit specific subjects or courses are ins (a) arithmetic, from 66 to 18, or a decrease of 48; (b) business English, from 33 to 12, or a decrease of 21; (e) physical geography, from 63 to 48, or a decrease of $\mathbf{1 5}$; (d) Spanish, from 22 to 7 , or a decrease of 153 and ( $\Theta$ ) commercial law, from 30 to 16 , or a decrease of 14.
(3) There are no significant changes in the number of schools offering for credit the subjects or courses in Bnglish, Oklahoma history and civics, chemistry, general science, economies, algebra, and history.

From the data on the number of credit units in the subjects or courses that show the greatest changes, and the data on the greatest changes in the number of the seventy-seven schools that offer them, are found some important trends that will be sumnarized.
(1) Agriculture shows a net increase from 1936 to 1946 of $42^{2}$ units, but only a net increase of 4 new schools offering one or more subject units in the courses. This shows an increase in number of units for credit in those schools offering agriculture at the beginning of the ten-year period, since no school offers mose than a total of four units of eredit.
(2) There is an increase of 92 credit units in typewriting. There is a net increase of 33 schools from 1936 to 1946. This also shous an increase in the number of units of credit per school, since no school offers more than two units of credit in typewriting.
(3) Home economics shows an increase of 85 subject units with
an increase of 16 schools in the ten-year period. Here is also an increase in the number of credit units per school, since no school offers more than four eredit units in home economies.
(4) General business was introduced for credit the Pirst time in 1943. The cousse was offered by 28 of the selected high schools. This might indicate an increased interest in cormercial subjects. Since a high school is accredited by the State Department of Education upon a request from the school, the introduction of a new course or subject could indicate a demand by certain high school students for more work in that particular field of study.
(5) In 1936, 36 schools offered a total of 56 units of credit In foreign language. In 1946, 17 schools offered a total of 16 units of credit. This was a decrease of 20 schools and 40 units of credit. This is a mariked decrease in both number of units of credit and number of schools offering foreign language for credit.

The general trend in the above changes indicates that more schools are offering a greater number of units of credit in agriculture, home economies, comnercial courses and mathematics, while a smaller number of schools are offering a smaller number of units of credit in foreign language, history, certain science courses and certain social science courses.

## BIBLIOGRAPHY

## Allen, Richard D. "Required Subjects in Secondary Schools," Junior-Sonior High School cloaring House, VI (October, 1931), 712-16.

Beatley, Bancroft. "The Comittee on College ratrance Requirements, Juniox-Sentior Hich School cleaning House, VI (February, 1932), 345 +8.

Bobbitt, Franklin. The Curpiculum of Modern pducation. New Yorks MeGraw-ilill Book Company, Inc., 124 I.

Briggs, Thomas H. "The Comittee of Ten," Junior-Sentox High School Clearing House, VI (Tovember, 1931), 134-41. - Cumpiculum Problems. NTev Yorks The Macmillan Company, 1927.

Brown, Elmer E11sworth. The Making of Owe Middle Schools. New York: Longmans, Green and Company, 1924.

Byrne, Lee. "The Committee on Correlation of Studies, JumiorSentor High School clearing House, VI (December, 1931), 197201.

Caswell, Hollis Io and Doak S. Campbell. Readings in Cuxpriculum Development. New York: American Book Company, 1937.

Cook, William Adelbert. High School Administration. Baltimore: Warvick and York, 1926.

Cubberly, Ellwood P. Changing Concoption in Pducation. Boston: Houghton Misflin Company, 1909.

Davis, Gaivin O. "The Report of the Comitttee of $151 \mathrm{ne},{ }^{1911}{ }^{19}$ Junior-Senior Hiph School clearing House, VI (May, 1932), 550-55.

Douglas, Aubsey A. Yodern Secondary Education, Exincinies and practices. Bostons Houghton Merlin Compeny, 1938.

Fingelhardt, Fred and Alfred Victor Overn. Secondary Education, Pxincinles and Practices. New Yorks D. Appleton-Centuxy Company, Inc., 1937.

Garrett, Henry Edward. Statistics in Psychology and Pducation. New Yoric: Iongmans, Green and Company, 1936.

Grizzell, Buil D. Oxigin and Develonment of the High School in Nev England before 1865. Now Yorks The Macmillan Company, 1923.

Harvard Compittee on the Objectives of a General Bducation in a Free Soeiety. Gonorat Fiucation in a Free Society. Cambridge, Massachusetts: Harvard University Press 1945.

Holzinger, Karl John. Statistical Methods for Students in Education. Bostons Ginn and Company, 1928.

Hortz, Henry Ge, Secretary. "Proceedings of the Commission of Secondary Schools, "The Horth Central Association Quarteriy, VIII (June, 1933), 109-15.

Inglis, Alexander J. The Rise of the High School in Massachusetts. New York: Teachers College, Columbia University, 1911.

Odell, Charles Waters. An Introduction to Educational Statisties. New Yorks Prentice-मี11, 1946.

Oklahoma Department of Education. Annual High School Bulletin, Jumber 112-l. Oklahoma Clty: Oklahoma Department of Education, 1937. - Anmual High School Bulletin, Number 112-M. Okelahoma City: Oiclahoma Department of Education, 1938.

- Ampual Hich School Bulletin, Number 112-N. Oklahoma city: oklahoma Department of Education, 1939. - Ammal High School Bulietin, Irumber 112-0. Oklahoma city: Oklahoma Department of Education, 1940.
- Annual High School Bulletin, Number 112-P. Oklahoma Citys Oclahoma Department of Education, 1941.
- Anmal High School Bulietin, Tumber 112-Q. Oklahoma City: oklahoma Department of Education, 1942.
- Annual High School Bulietin, Whaber 112-R. Oklahoma Citys Otclahona Department of Education, 19\%3. - Annual HIgh School Burletin, Humber 112-S. OrJahoma Gity: Oklahoma Depaxtment of Education, 19\%. - Annual H1gh School Bulletin, Wumber 112-I. Oklahoma Citys Oklahoma Department of Education, 1945.
- Anmual Hich School Bulletin, Wumber 112-U. Oklahoma City: Oklahoma Department of Education, 19\%6.

Rugg, Harold Ordway. Amorican Life and the School curpiculum. Bostons Ginn and Company, 1936.

State superintendent of Public Instruction. Seventeenth Biemaial Beport of the state Deoartment of public Instmiction. Ocla homa Citys Okiahoma Departmont of Education, 1938.

- 0kiahoma Educational Directory. Oklahoma CLtys Oklahoma Departnent of Education, 1947 .

Stout, J. E. The Development of High School Curpicula in the North Central states from 1860 to 1218. Chicagos University of Chicago Press, 1921.

Thayer, V. T. "The Report of the Commission on the Reorganization of Secondary Education," Junior-Senior High School cloaping House, VII (September, 1932), 49-55.

Uhi, Willis H. "The Comittee of Economy of TIme in Education," Junior-Sonior High School Clearing House, VI (April, 1932), 499-501.

- Secondary School curpicula. New Yorls: The Maemillan Company, 1927.

Wright, Frank L. wHigh School Graduations Requirements and How Detormined," Junior-Seniox High School Clearing House, $V$ (May, 1931), 558-63.

Typust:
Drle Veatch


[^0]:    ${ }^{1}$ Fred Engelhardt and AlPred Victor Overn, Secondary Bducation, Pxincinles and Bractices, p. 42.

[^1]:    ${ }^{3}$ Aubrey A. Douglass, Modexn Secondary Education, Principles and Practices, $p .19$.

    4
    nold.

[^2]:    17 Lee Byrme, "The Cormittee on the Correlation of Studies," Junior-Senior Hich School Clearing House, VI (Decomber, 1931)s 197-201.

[^3]:    18 Bancroft Beatley, "The Committee on College Fntrance Requirements, ${ }^{n}$ JumiormSenior High School cloaring Douse, VI (rebruaxy, 1932), 345-78.

[^4]:    19 Willis $L$. Uhz, "The Cormittee of Economy of Time in Bluca$\mathrm{tiOn}_{2}$ " Junlor-Sonior High School Clearing House, VI (April, 1932), 499-501.

[^5]:    ${ }^{21}$ V. T. Thayer, "The Report of the Commission on the Reorganization of Secondary Education," Junior-Senior High School Cleaxing House, VIII (September, 1932), 49-55.
    ${ }^{22}$ Bducational Policies Commission of the National Education Association and the American Association of School Administrators, Education for Al1 American Xouth, pp. 33-170, 229-308.

[^6]:    ${ }^{24}$ Eaucational Policies Comission, on. eft., pp. $240-81$.

[^7]:    ${ }^{1}$ State of Oklahoma, Department of Education, Efohteenth Biennial Report of the Department of Education, 1938-1940, 1941, p. 132.

[^8]:    *The perrentages aro calculated and rounded off to the nearest hundredths per cent; the total, therefore, is not eractiy one hundred per cent.

[^9]:    ${ }^{1}$ State Superintendent of Public Instruction, Seventeenth Biannial Report of the State Superintendent of public Instruction, p. 42.

