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Courses needed by members of the 1939 freshman class at Indiana State Teachers College for a cultural background on the basis of work done in high school

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COURSES NEEDED BY MEMBERS OF THE 1939 FRESHMAN CLASS AT INDIANA STATE TEACHERS COLLEGE FOR A CULTURAL BACKGROUND ON THE BASIS OF WORK DONE IN HIGH SCHOOL

by

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CHAPTER I

THE PROBLEM AND DEFINITIONS OF TERMS USED

For some time it has been noticed by educators that high-school graduates entering college usually continue in the same subjects in which they majored in high school. In many cases these graduates repeat the same courses that they have already had.

I. THE PROBLEM

Statement of the problem. It was the three-fold purpose of this study (1) to discover to what extent students take excessive work in some fields of high-school work and a minimum of work in other fields; (2) to discover to what extent college students duplicate work already had in high school, and to what extent colleges help them to duplicate their work; and (3) to present a cultural program for the college.

Importance of the study. The heads of most departments at colleges and universities are anxious that every student be required to take a definite amount of work in their respective departments. It is quite natural that each department head should want this, since it helps perpetuate

that department and gives it an important place in school life. This policy does not, however, treat each student as an individual, different from all others, since each must fulfill the same requirements before he can graduate. This study attempts to show how these requirements affect a student's course of study.

Limitations of the study. Only the records of students enrolled at Indiana State Teachers College were used in this study. The entering freshman class of 1939 was picked, the high-school courses each had taken were listed, and the college courses pursued up to and including the Winter Quarter of 1941 were also noted.

II. DEFINITIONS OF TERMS USED

Cultural background. This term includes every course a student takes, since we believe that every course contributes to an individual's culture. One with a cultural background, then, is one who has such training as to enable him to converse moderately in all branches and fields of education.

High-school major. This was given the same interpretation as found in the Program of Studies and Digest of State Courses of Study for Indiana Schools. A student was considered a major in some field if he had completed three units of work in that department.

Withdrawn student. A student was considered to be withdrawn if he had not enrolled for classes during the Winter Quarter, 1941.

III. SOURCE OF DATA

In the registrar's office at Indiana State Teachers College a record is kept of each student's high-school record and also the courses that he has taken in college. From these records were secured the exact pursuits of each student who enrolled as a freshman in the Fall Quarter, 1939.

IV. METHOD OF PROCEDURE

Small cards were secured (3" x 5") on which were recorded the high-school courses and units of work, and the courses already taken in college up to and including the Winter Quarter, 1941. With this information was also noted the majors of each student. These cards were arranged in alphabetical order and were numbered.

V. TREATMENT OF FINDINGS

All data are arranged in table form, and from these tables certain conclusions that seemed evident were drawn.

VI. ORGANIZATION OF REMAINDER OF THESIS

In Chapter II of this work the data were arranged according to two classifications: (1) pupils who had taken excessive units of work in some particular subject or who had failed to meet the state requirements for graduation, and (2) pupils who had graduated from high school with a minimum number of units in either mathematics, science, music, or art. In Chapter III several case studies are presented graphically. Chapter IV records the summary and recommendations.

VII. PREVIOUS STUDIES

There are no other studies which may serve as a background to this one. This study, then, is experimental and should lead to some unique findings.

CHAPTER II

ASSEMBLING AND ORGANIZING DATA

After securing data from the college records and numbering the cards, ten were eliminated--those who had failed to send in their high-school transcripts and consequently did not get past the enrollment stage. With the disposal of these ten cards, an exact five hundred remained of the original five hundred ten.

I. CLASSIFICATION OF DATA INTO GROUPS

The five hundred cards were divided into three groups: (1) those who graduated from high school with fewer units than the required 16; (2) those who graduated from high school with units ranging from 16 to 16.49; and (3) those who graduated from high school with 16.5 or more units. There were eleven in group 1, ninety-one in group 2 and 398 in group 3 as is indicated in Table I.

An attempt was next made to break down these three groups into sub-divisions. One of the most glaring facts that appeared to the eye was that many pupils graduated from high school without meeting the state requirements for

graduation. There were forty of these pupils as will be noted in Table I which is read in the following manner: one pupil with less than 16 units failed to meet the health and physical education requirement, eight pupils who had from 16 to 16.49 units failed to meet this requirement, and twenty with 16.5 or more units failed to meet the requirement. The total for this one group is twenty-nine.

Of course many of the pupils who failed to meet the state requirements for graduation in Indiana came from other states. Our own state requirements were taken simply as a working basis.

The three groups of cards were sub-divided into three more groups: (1) those with highly excessive units in any subject; (2) those with excessive units in any subject; and (3) those cards which were left which have been designated "average." These groups are also shown in Table I. A pupil was said to have highly excessive units of work in a subject if he had more than five in English, more than four in social studies, more than four in science, etc. Two of the pupils had highly excessive units of work in two subjects as is indicated, and seven pupils had half or more than half of their work in language. The remaining part of Table I is read in the same manner as the first part. As a whole, the purpose of this table is merely to indicate the subject in which a pupil did most of his work.

TABLE I

DISTRIBUTION OF STUDENTS' HIGH-SCHOOL RECORDS ACCORDING TO FOUR CLASSIFICATIONS

	Do not meet requirements for graduation in Indiana high school in the subject of:					Those with highly excessive units in any subject										Those with excessive units in any subject										Average	Total
	H. & P. Ed. 1/2 unit	Eng. 3 units req.	S.S. 2 units req.	Math 1 unit req.	Sci. 1 unit req.	Eng. more than 5	S.S. more than 4	Sci. more than 4	Com. more than 4	Mus. 4 or more	Art 4 or more	H. Ec. more than 4	I.A. more than 4	Ex-cess in 2 sub.	Lang. is 1/2 total	Eng. $4\frac{1}{2}$ and 5	S.S. $3\frac{1}{2}$ and 4	Sci. $3\frac{1}{2}$ and 4	Math $3\frac{1}{2}$ and 4	Com $3\frac{1}{2}$ and 4	Mus. 3 and $3\frac{1}{2}$	H. Ec. $3\frac{1}{2}$ and 4	I.A. $3\frac{1}{2}$ and 4	Art 3 and $3\frac{1}{2}$	Exc. in 2 or more		
A Less than 16 units	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	7	11
B 16 to 16.49 units	8	0	2	2	1	0	1	2	3	1	0	0	0	0	0	6	8	3	3	2	0	0	2	1	4	42	91
C 16.5 or more units	20	1	1	1	3	7	3	4	21	12	2	1	5	2	7	30	39	5	18	18	7	4	4	6	45	132	398
TOTAL	29	1	3	3	4	7	4	6	24	13	2	1	6	2	7	36	48	8	21	21	7	4	6	7	49	181	500

It was next desired to know what line of work these students pursued on entering Indiana State Teachers College.

A. COLLEGE PURSUITS OF STUDENTS WHO FAILED TO MEET HIGH-SCHOOL GRADUATION REQUIREMENTS

Here the three basic groups were added together and treated as a single one. For example, the twenty-nine who failed to meet the requirements for graduation in health and physical education were placed in one stack and then examined to determine in what work they were majoring in college. Table II shows the subjects taken up by the twenty-nine who failed to meet the physical education requirement.

TABLE II

COLLEGE PURSUITS BY STUDENTS WHO FAILED TO MEET HIGH-SCHOOL GRADUATION REQUIREMENTS IN HEALTH AND PHYSICAL EDUCATION

College pursuits	Frequency
1. Special Phys. Ed. major	1
2. Regular Phys. Ed. major	3
3. Others	9
4. Withdrawals	16
	29

It is read in the following manner: one student was a special physical education major, three were regular physical education majors, nine were majoring in other subjects and sixteen had withdrawn: it is significant to note here that four students were majors in a subject which they did not or could not take in high school.

Table III shows that the pupil who failed to meet the state requirement in English had withdrawn.

TABLE III

COLLEGE PURSUITS BY STUDENTS WHO FAILED TO MEET HIGH-SCHOOL GRADUATION REQUIREMENTS IN ENGLISH

College pursuits	Frequency
1. English major	0
2. English electives above requirements	0
3. Other majors	0
4. Withdrawals	1
	1

Table IV shows that one of the three who failed to meet requirements of social studies for graduation in high school was majoring in a field entirely different from social studies, while two had withdrawn.

TABLE IV

COLLEGE PURSUITS BY STUDENTS WHO FAILED TO MEET HIGH-SCHOOL GRADUATION REQUIREMENTS IN SOCIAL STUDIES

College pursuits	Frequency
1. Social studies major	0
2. Social studies elective above requirements	0
3. Other majors	1
4. Withdrawals	2
	3

Table V shows that one pupil who took no mathematics in high school had as yet taken no mathematics in college.

TABLE V

COLLEGE PURSUITS BY STUDENTS WHO FAILED TO MEET HIGH-SCHOOL GRADUATION REQUIREMENTS IN MATHEMATICS

College pursuits	Frequency
1. Mathematics major	0
2. Mathematics electives above requirements	0
3. Other majors	1
4. Withdrawals	2
	3

Table VI compares favorably with the last four indicating that one pupil was majoring in some subject other than science and three had withdrawn.

TABLE VI

COLLEGE PURSUITS BY STUDENTS WHO FAILED TO MEET HIGH-SCHOOL GRADUATION REQUIREMENTS IN SCIENCE

College pursuits	Frequency
1. Science major	0
2. Science electives above requirements	0
3. Other majors	1
4. Withdrawals	3
	4

Tables II, III, IV, V and VI seem to indicate that a student who has omitted these subjects in high school will probably omit them in college if possible.

B. COLLEGE PURSUITS OF STUDENTS WITH EXCESSIVE UNITS IN SOME PARTICULAR SUBJECT

In the next group of tables, the three basic groups have not only been added together as in Tables II, III, IV, V and VI, but also the highly excessive and excessive units have been taken together. For example, the seven students with highly excessive units in English have been treated

with the thirty-six with excessive units in English. This is shown in Table VII which is read as follows: three of the highly excessive group were English majors while seven of the excessive group were English majors, totaling ten; none of the highly excessive and one of the excessive class, while not majoring in English had elected more work in it than the college requires; two of the highly excessive and eight of the excessive were majoring in entirely different subjects; while two of the highly excessive and twenty of the excessive had withdrawn. It is significant to note that of this group, there were as many English majors as there were other majors. The table also shows that more than half the total had withdrawn.

TABLE VII

COLLEGE PURSUITS BY STUDENTS WITH EXCESS ENTERING UNITS IN ENGLISH

College pursuits	Frequencies		
	Highly Excessive	Excessive	Total
1. English major	3	7	10
2. Electives in excess of requirements	0	1	1
3. Other majors	2	8	10
4. Withdrawals	2	20	22
	7	36	43

Table VIII combines the students having highly excessive and excessive units in social studies. The most striking fact here was that almost half of the students decided to major in some other subject. As before, a large per cent had also withdrawn.

TABLE VIII

COLLEGE PURSUITS BY STUDENTS WITH EXCESS ENTERING UNITS IN SOCIAL STUDIES

College pursuits	Frequencies		
	Highly excessive	Excessive	Total
1. Social studies major	1	3	4
2. Electives in excess of requirements	0	1	1
3. Others	1	24	25
4. Withdrawals	2	20	22
	4	48	52

Table IX portrays the pursuits of students with excessive units in science. Here the science majors barely edged out the non-science majors, while 50 per cent had withdrawn.

TABLE IX

COLLEGE PURSUITS BY STUDENTS WITH EXCESS ENTERING UNITS IN SCIENCE

College pursuits	Frequencies		
	Highly excessive	Excessive	Total
1. Science major	2	2	4
2. Science electives	0	0	0
3. No science	1	2	3
4. Withdrawals	3	4	7
	6	8	14

Table X reveals some striking data concerning students with excessive units in mathematics. The mathematics majors tied with the non-mathematics majors, while four pupils elected mathematic courses. Compared with other subjects a smaller percentage of them withdrew.

TABLE X

COLLEGE PURSUITS BY STUDENTS WITH EXCESS ENTERING UNITS IN MATHEMATICS

College pursuits	Frequencies		
	Highly excessive	Excessive	Total
1. Math. major	0	5	5
2. Math. electives	0	4	4
3. No mathematics	0	5	5
4. Withdrawals	0	7	7
	0	21	21

Table XI shows the pursuits of students with excessive units in commerce. The fact most noticeable here is that more than half of the pupils withdrew. Slightly more than one-fourth of the total continued in commercial work.

TABLE XI

COLLEGE PURSUITS BY STUDENTS WITH EXCESS ENTERING UNITS IN COMMERCE

College pursuits	Frequencies		
	Highly excessive	Excessive	Total
1. Special commerce major	4	4	8
2. Regular commerce	2	2	4
3. Others	2	6	8
4. Withdrawals	16	9	25
	24	21	45

Table XII portrays the pursuits of students with excessive entrance units in music. Here, the most striking fact is that 60 per cent withdrew.

TABLE XII

COLLEGE PURSUITS BY STUDENTS WITH EXCESS ENTERING UNITS IN MUSIC

College pursuits	Frequencies		
	Highly excessive	Excessive	Total
1. Special music major	2	2	4
2. Regular music major	0	0	0
3. Others	2	0	2
4. Withdrawals	9	5	14
	13	7	20

Table XIII shows the pursuits of students with excessive units in art. It is noticeable that more than half continued in the Art Department, while only one-third withdrew.

TABLE XIII

COLLEGE PURSUITS BY STUDENTS WITH EXCESS ENTERING UNITS IN ART

College pursuits	Frequencies		
	Highly excessive	Excessive	Total
1. Special arts major	2	2	4
2. Regular arts major	0	1	1
3. Others	0	1	1
4. Withdrawals	0	3	3
	2	7	9

Table XIV reveals the pursuits of students with excessive units in home economics. Although the number is small, it is interesting to note that more than half continued in the Home Economics Department.

TABLE XIV

COLLEGE PURSUITS BY STUDENTS WITH EXCESS ENTERING UNITS IN HOME ECONOMICS

College pursuits	Frequencies		
	Highly excessive	Excessive	Total
1. Special Home Ec. major	0	3	3
2. Regular Home Ec. major	0	0	0
3. Others	0	0	0
4. Withdrawals	1	1	2
	1	4	5

Table XV concerns the pursuits of students having excessive units in industrial arts. The facts revealed here are in striking contrast to the previous table. Only two students continued in the Industrial Arts Department, while two-thirds of the total withdrew.

TABLE XV

COLLEGE PURSUITS BY STUDENTS WITH EXCESS ENTERING UNITS IN INDUSTRIAL ARTS

College pursuits	Frequencies		
	Highly excessive	Excessive	Total
1. Special I. A. major	0	0	0
2. Regular I. A. major	1	1	2
3. Others	0	2	2
4. Withdrawals	5	3	8
	6	6	12

Table XVI takes up the pursuits of students with excessive entrance units in language. Here, the number of withdrawals was small in comparison to some other departments.

TABLE XVI

COLLEGE PURSUITS BY STUDENTS WITH EXCESS ENTERING UNITS IN LANGUAGE

College pursuits	Frequencies		
	Highly excessive	Excessive	Total
1. Foreign language major	3	0	3
2. Foreign language electives	0	0	0
3. No foreign language	2	0	2
4. Withdrawals	2	0	2
	7	0	7

Table XVII shows the pursuits of students with highly excessive units in two subjects or more. The table is read in the following manner: in the excessive group, there were twelve students who had excessive units in English and social studies; of this number two students continued to major in both English and social studies in college, three students continued to major in one of these two subjects, two students had entirely different college majors, and five withdrew. Of the grand total of 51, only five continued the same two majors as in high school, while seventeen majored in one of the two subjects. However, almost 40 per cent withdrew.

TABLE XVII

COLLEGE PURSUITS BY STUDENTS WITH EXCESS ENTERING UNITS IN TWO OR MORE SUBJECTS

College Pursuits	Highly Excessive	Excessive																		Total
	English & Commerce	Eng SS	Math SS	Sci SS	Eng Com	SS Com	Eng Sci	Math Sci	SS Art	Sci Com	Math Art	Com Art	SS Mus	Com Mus	Eng Math	Math SS-Mus	Sci-SS IA	Eng SS-Math	Eng SS-Mus	
1. Has same 2 major subjects as he had in high school		2	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	5
2. Has 1 of the major subjects he had in high school		3	5	3	1	0	2	0	1	0	0	0	1	0	0	1	0	0	0	17
3. Entirely different majors	1	2	1	0	0	0	0	0	0	1	0	1	0	1	0	0	0	1	0	8
4. Withdrawn	1	5	3	1	0	2	2	2	0	0	1	0	1	0	2	0	0	0	1	21
TOTAL	2	12	10	4	1	2	4	2	1	1	1	1	2	2	2	1	1	1	1	51

From the foregoing tables, four features appear to be the most striking: (1) more than half of the pupils from all departments who failed to meet the high-school graduation requirements of Indiana withdrew; (2) half or more than half of the pupils who had excessive entrance units in English, science, commerce, music, and industrial arts withdrew; (3) half or more than half continued in the same field when they had their excessive units in art and home economics; and (4) a large per cent of college students continued to major in the same subjects in which they majored in high school.

II. CLASSIFICATION OF DATA INTO GROUPS WITH A MINIMUM OF REQUIRED UNITS

The data was next broken down into new groups to show in which subjects the pupil had taken only a minimum of required units. Only the four fields of mathematics, science, music, and art were considered, since the minimum requirements here are either one or no units. Table XVIII portrays the new data and is read in the following manner: there were no pupils having less than 16 units who had only one unit in mathematics, one unit in science, zero units in music and zero units in art; there were three pupils having from 16 to 16.49 units who had a minimum in all four subjects; there were ten pupils having 16.5 units or more who had a minimum in all four subjects. The total of these, thirteen all together, had a minimum in all four subjects. It is

TABLE XVIII

TABLE OF STUDENTS TAKING A MINIMUM OF WORK IN MATHEMATICS, SCIENCE, MUSIC, AND ART IN HIGH SCHOOL

	1 Math 1 Sci 0 Mus 9 Art	1 Math 1 Sci 0 Mus	1 Math 1 Sci 0 Art	1 Math 0 Mus 0 Art	1 Sci 0 Mus 0 Art	1 Math 1 Sci	1 Math 0 Mus	1 Sci 0 Mus	1 Math 0 Art	1 Sci 0 Art	0 Mus 0 Art	1 Math	1 Sci	0 Mus	0 Art	Those taking more in all four subjects than state requirements	Total
Less than 16 units	0	1	0	1	2	1	1	0	0	0	3	0	1	0	1	0	11
16 to 16.49 units	3	0	3	2	7	0	2	7	2	3	37	0	3	9	10	3	91
16.5 units or more	10	2	13	2	46	5	6	24	9	69	107	3	16	15	65	6	398
TOTAL	13	3	16	5	55	6	9	31	11	72	147	3	20	24	76	9	500

noticeable that of the four columns showing a minimum of three subjects, the largest was the science, music, art column with fifty-five. These fifty-five, of course, had more than one unit's work in mathematics. In the two-subject section, the largest was the music, art column with 147. Here, these pupils had more than a minimum of work in mathematics and science. In the one-subject section, the largest was the art column with seventy-six. Out of the entire 500 only nine had more than one unit of mathematics, one unit of science, no units in art, and no units in music.

The following tables show the college pursuits of the students as arranged on the minimum basis. Here again the three basic groups of (1) less than 16 units, (2) from 16 to 16.49 units, and (3) 16.5 or more units, have been added together so as to consider the column as a whole.

Table XIX portrays the college pursuits of the thirteen pupils who had a minimum of work in all four subjects. One immediately notices that a large per cent withdrew and also that four pupils took electives above college requirements in only one of the four fields--science.

TABLE XIX

COLLEGE PURSUITS BY STUDENTS WITH A MINIMUM OF REQUIRED UNITS IN MATHEMATICS (1), SCIENCE (1), MUSIC (0), AND ART (0)

College pursuits	Frequencies
1. Major in any of above four	0
2. Electives in any of above four over college requirements--science	4
3. Others	1
4. Withdrawn	8
	13

Table XX shows the fact that all students with a minimum of high-school work in mathematics, science, and music withdrew.

TABLE XX

COLLEGE PURSUITS BY STUDENTS WITH A MINIMUM OF REQUIRED UNITS IN MATHEMATICS (1), SCIENCE (1), AND MUSIC (0)

College pursuits	Frequencies
1. Major in any of above three	0
2. Electives in any of above three	0
3. Major in entirely different subjects	0
4. Withdrawn	3
	3

Table XXI shows that students with a minimum in mathematics, science, and art either withdrew or were majoring in entirely different fields.

TABLE XXI

COLLEGE PURSUITS BY STUDENTS WITH A MINIMUM OF REQUIRED UNITS IN MATHEMATICS (1), SCIENCE (1), AND ART (0)

	College pursuits	Frequencies
1.	Major in any of above three	0
2.	Electives in any of above three over college requirements	0
3.	Others	4
4.	Withdrawn	12
		16

Table XXII shows the pursuits of students with a minimum of units in mathematics, music, and art. More than half had withdrawn and the other students were majoring in entirely different fields.

TABLE XXII

COLLEGE PURSUITS BY STUDENTS WITH A MINIMUM OF REQUIRED UNITS IN MATHEMATICS (1), MUSIC (0), AND ART (0)

College pursuits	Frequencies
1. Major in any of above three	0
2. Electives in any of above three over college requirements	0
3. Others	2
4. Withdrawn	3
	5

Table XXIII which portrays the pursuits of students with a minimum in science, music, and art, is an interesting one for several reasons. Three pupils who had no music in high school were majoring in music in college. Again, science was the elective chosen above the college requirements. Seventeen were majoring in subjects other than the three for this group, while more than half had withdrawn.

TABLE XXIII

COLLEGE PURSUITS BY STUDENTS WITH A MINIMUM OF REQUIRED UNITS IN SCIENCE (1), MUSIC (0), AND ART (0)

College pursuits	Frequencies
1. Major in any of above three	
a. Special music	2
b. Regular music	1
2. Electives above college requirements--science	5
3. Others	17
4. Withdrawn	30
	55

Table XXIV listing the students with a minimum in mathematics and science shows that all but one had withdrawn, and that one was majoring in some other department.

TABLE XXIV

COLLEGE PURSUITS BY STUDENTS WITH A MINIMUM OF REQUIRED UNITS IN MATHEMATICS (1) AND SCIENCE (1)

College pursuits	Frequencies
1. Major in either of above two	0
2. Electives above college requirements	0
3. Others	1
4. Withdrawn	5
	6

Table XXV lists the pursuits of students with a minimum of units in mathematics and music. Here again a large number withdrew while the others were majoring in other departments.

TABLE XXV

COLLEGE PURSUITS BY STUDENTS WITH A MINIMUM OF REQUIRED UNITS IN MATHEMATICS (1) AND MUSIC (0)

College pursuits	Frequencies
1. Major in either of above two	0
2. Electives above college requirements	0
3. Others	3
4. Withdrawn	6
	9

Table XXVI portrays the interesting data that two students with a minimum of required units in science and music were majoring in science in college while one took electives in science above college requirements. The number withdrawn was slightly less than half.

TABLE XXVI

COLLEGE PURSUITS BY STUDENTS WITH A MINIMUM OF REQUIRED UNITS IN SCIENCE (1) AND MUSIC (0)

College pursuits	Frequencies
1. Major in either of above two--science	2
2. Electives above college requirement--science	1
3. Others	13
4. Withdrawn	15
	31

Table XXVII shows the pursuits of students with a minimum in mathematics and art. Only one student was majoring in either of the two subjects. Slightly more than half withdrew.

TABLE XXVII

COLLEGE PURSUITS BY STUDENTS WITH A MINIMUM OF REQUIRED UNITS IN MATHEMATICS (1) AND ART (0)

College pursuits	Frequencies
1. Major in either of above two--regular art	1
2. Electives above college requirement	0
3. Others	4
4. Withdrawn	6
	11

Table XXVIII shows the pursuits of students with a minimum in science and art. There were four majoring in science, while seven in science and two in art were taking electives above college requirements. However, most of the students were majoring in other fields or had withdrawn.

TABLE XXVIII

COLLEGE PURSUITS BY STUDENTS WITH A MINIMUM OF REQUIRED UNITS IN SCIENCE (1) AND ART (0)

College pursuits	Frequencies
1. Major in either of above two--science	4
2. Electives above college requirement	
a. Science	7
b. Art	2
3. Others	28
4. Withdrawals	31
	72

Table XXIX shows college pursuits of students with a minimum in music and art. More than half were majoring in entirely different fields, while a large number had withdrawn.

TABLE XXIX

COLLEGE PURSUITS BY STUDENTS WITH A MINIMUM OF REQUIRED UNITS IN MUSIC (0) AND ART (0)

College pursuits	Frequencies
1. Major in either of above two--special art	1
2. Electives above college requirement--music	1
3. Others	80
4. Withdrawals	65
	147

Table XXX shows the college pursuits of students having a minimum of units in mathematics only. As usual, most of the students were majoring in a different department.

TABLE XXX

COLLEGE PURSUITS BY STUDENTS WITH A MINIMUM OF REQUIRED UNITS IN MATHEMATICS (1)

College pursuits	Frequencies
1. Major in mathematics	0
2. Electives above college requirement	0
3. Others	2
4. Withdrawals	1
	3

Table XXXI shows the pursuits of students with a minimum in science only. More than half had withdrawn, while most of the others were majoring in entirely different departments.

TABLE XXXI

COLLEGE PURSUITS BY STUDENTS WITH A MINIMUM OF REQUIRED UNITS IN SCIENCE (1)

College pursuits	Frequencies
1. Major in science	1
2. Electives above college requirements	1
3. Others	6
4. Withdrawals	12
	20

Table XXXII shows pursuits of students with a minimum in music only. More than half had withdrawn, while the rest were majoring in entirely different departments.

TABLE XXXII

COLLEGE PURSUITS BY STUDENTS WITH A MINIMUM OF REQUIRED UNITS IN MUSIC (0)

College pursuits	Frequencies
1. Major in music	0
2. Electives above college requirement	0
3. Others	9
4. Withdrawals	15
	24

Table XXXIII shows pursuits of students with a minimum in art only. Two pupils having no art in high school were majoring in art in college. However more than half the students were majoring in other departments, and a large number had withdrawn.

TABLE XXXIII

COLLEGE PURSUITS BY STUDENTS WITH A MINIMUM OF REQUIRED UNITS IN ART (0)

College pursuits	Frequencies
1. Major in art--regular arts major	2
2. Electives above college requirement	1
3. Others	44
4. Withdrawals	29
	76

Table XXXIV shows the college pursuits of students who had more units in mathematics, science, music, and art than the state requires. Most of these nine were majoring in one or more of the four departments.

TABLE XXXIV

COLLEGE PURSUITS BY STUDENTS HAVING MORE UNITS IN MATHEMATICS, SCIENCE, MUSIC, AND ART THAN STATE REQUIRES

College pursuits	Frequencies
1. Major in music	2
2. Major in special art	1
3. Major in special art and regular music	1
4. Major in mathematics and science	1
5. Electives above college requirements--science	1
6. Others	1
7. Withdrawals	2
	9

After examining the foregoing tables, these facts seem to be evident: (1) a pupil who takes a minimum of work in some high-school subject is most likely to take only a minimum of work in the same subject in college; (2) students with a minimum of required units in mathematics and science seem more likely to withdraw than the others.

CHAPTER III

CASE STUDIES

I. STUDENTS CHOSEN

Several of the pupils' records were examined individually to see how closely their college courses followed the courses they had taken in high school. Those pupils picked for this study had excessive units of work in some department in high school. Two from each department were taken, and their work put in table form as is indicated in Table XXXV, which is read as follows: Case I, a pupil with excessive units of work in music did 21.9 per cent of his high-school work in English, 9.4 per cent in social studies, 12.5 per cent in mathematics, 6.3 per cent in science, commerce, and health, and 37.5 per cent in music; in college he had 9.8 per cent of his credit in philosophy and education, English and health and physical education, 19.5 per cent in commerce, and 51.2 per cent of his work in music.

In all, the number of cases taken was twenty-two. In examining the records of these students, one must remember that they have had only five terms of school work

TABLE XXXV

DISTRIBUTION OF SUBJECT MATTER OF TWENTY-TWO STUDENTS OF THE HIGHLY EXCESSIVE AND EXCESSIVE GROUP AT INDIANA STATE TEACHERS COLLEGE WHO WERE STILL ENROLLED THROUGH THE WINTER QUARTER 1941

Subject-matter Division	Case I Excessive in Music		Case II Excessive in Music		Case III Excessive in English		Case IV Excessive in English		Case V Excessive in Language		Case VI Excessive in Language		Case VII Excessive in Science		Case VIII Excessive in Science		Case IX Excessive in Math		Case X Excessive in Math		Case XI Excessive in Commerce		Case XII Excessive in Commerce		Case XIII Excessive in Ind. Arts		Case XIV Excessive in Ind. Arts		Case XV Excessive in 2 Subjects		Case XVI Excessive in 2 Subjects		Case XVII Excessive in Soc. Stud		Case XVIII Excessive in Soc. Stud.		Case XIX Excessive in Home Ec.		Case XX Excessive in Home Ec.		Case XXI Excessive in Art		Case XXII Excessive in Art	
	%HS	%Col	%HS	%Col	%HS	%Col	%HS	%Col	%HS	%Col	%HS	%Col	%HS	%Col	%HS	%Col	%HS	%Col	%HS	%Col	%HS	%Col	%HS	%Col	%HS	%Col	%HS	%Col	%HS	%Col	%HS	%Col	%HS	%Col	%HS	%Col	%HS	%Col	%HS	%Col
Philosophy & Education	0	9.8	0	9.8	0	10	0	9.8	0	9.1	0	4.4	0	9.8	0	5.3	0	11.8	0	10.5	0	14.6	0	14.6	0	0	0	10.3	0	14.3	0	10.8	0	5.5	0	14	0	9,5	0	4.7	0	15	0	15
THE ARTS																																											
Art	0	0	0	14.6	0	5	1.7	0	0	0	0	8.9	0	0	0	0	0	3.9	0	0	0	4.9	0	0	16.9	59.2	0	0	0	4.8	0	5.4	0	5.5	0	0	0	4.8	0	4.7	18.2	40	24.2	30
Ind. Art	0	0	0	0	0	0	0	0	0	0	0	0	17.6	0	0	0	0	0	0	10.5	0	0	0	0	28.2	22.2	30.8	56.3	0	0	0	0	6.3	0	0	0	0	0	0	15.9	5	0	0
Home Ec.	0	0	5.2	4.9	11.1	0	5.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.1	0	0	0	0	0	0	0	0	0	0	0	0	0	23.5	28.6	23.5	27.9	0	0	0	5
LANGUAGE																																											
English	21.9	9.8	20.8	4.9	30.6	55	34.5	34.1	26.3	18.2	25	24.4	17.6	4.9	21.9	5.3	17.6	7.8	23.3	10.5	18.2	4.9	22.8	24.4	16.9	7.4	15.4	5.1	31.6	14.3	30.3	37.8	25	5.5	23.5	4.7	23.5	4.8	23.5	4.7	15.9	25	18.2	25
French	0	0	0	0	0	0	0	9.8	21.1	22.7	0	31.1	0	0	0	0	0	0	13.3	0	0	0	0	0	0	0	0	0	0	0	0	0	12.5	0	0	0	0	0	0	9.1	0	0	0
Spanish	0	0	0	0	0	0	0	0	0	0	18.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Latin	0	0	10.4	0	0	0	0	0	15.8	0	25	13.3	0	0	12.5	0	11.8	0	0	0	0	0	0	0	2.8	0	0	0	0	0	18.2	16.2	6.3	0	11.8	0	11.8	0	11.8	0	0	0	12.1	0
Social Studies	9.4	0	10.4	0	16.7	10	15.5	4.9	15.8	27.3	0	8.9	17.6	9.8	21.9	0	20.6	0	16.7	10.5	18.2	29.3	11.4	4.9	11.3	0	15.4	0	10.5	23.8	24.2	0	28.1	33.3	26.5	23.3	17.6	0	17.6	9.3	13.5	10	18.2	20
Mathematics	12.5	0	10.4	0	11.1	0	10.4	0	10.5	0	12.5	0	11.8	0	12.5	0	23.5	23.5	26.6	10.5	12.1	0	5.7	0	0	0	10.3	10.3	10.5	9.5	12.1	0	12.5	0	11.8	0	5.9	0	5.9	0	9.1	0	15.2	0
Science	6.3	0	5.2	0	11.1	10	5.2	0	5.3	13.6	12.5	4.4	29.4	48.8	25	68.4	8.8	3.9	13.3	36.8	12.1	0	5.7	0	9.9	0	10.3	0	10.5	23.8	12.1	16.2	9.4	38.9	11.8	27.9	5.9	19	5.9	18.6	4.5	0	6.1	0
Commerce	6.3	19.5	7.8	0	11.1	0	13.8	34.1	0	0	0	0	0	0	0	5.3	11.8	23.5	0	5.3	30.3	39	28.6	43.9	5.6	0	0	0	31.6	0	0	5.4	0	0	5.9	0	5.9	19	5.9	9.3	4.5	0	0	0
Music	37.5	51.2	24.7	58.5	2.8	5	0	0	0	0	0	2.2	0	0	0	0	0	7.8	0	0	3	4.9	0	0	0	0	10.3	0	0	4.8	0	0	0	0	2.9	4.7	0	4.8	0	0	4.5	5	0	5
Health & Phys. Ed.	6.3	9.8	5.2	7.3	5.6	5	13.8	7.3	5.3	9.1	6.3	2.2	5.9	26.8	6.3	15.8	5.9	17.6	6.7	5.3	6.1	2.4	8.6	12.2	8.4	11.1	7.7	17.9	5.3	4.8	3	8.1	0	11.1	5.9	25.6	5.9	9.5	5.9	20.9	4.5	0	6.1	0

in Indiana State Teachers College, and that these cases include work done up to and including the Winter Term of 1941.

II. METHOD OF PRESENTATION

Case I is shown in graphic form in Figure 1. The left-hand division indicates the per cent of all high-school credit, while the right-hand division shows the per cent of college credit. The subject matter is shown in the middle column. Graphically portrayed, one can compare the work done in music with other subjects. There was a barren spot in the division called THE ARTS, while only a little work had been taken in social studies and science.

The remaining graphic case studies present much the same situation. One notices that the courses pursued in college were merely an extension of work taken in high school, while courses slighted in high school were also slighted in college.

FIGURE 1

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN MUSIC IN HIGH SCHOOL AND WHO IS A SPECIAL MUSIC AND COMMERCE MAJOR IN INDIANA STATE TEACHERS COLLEGE

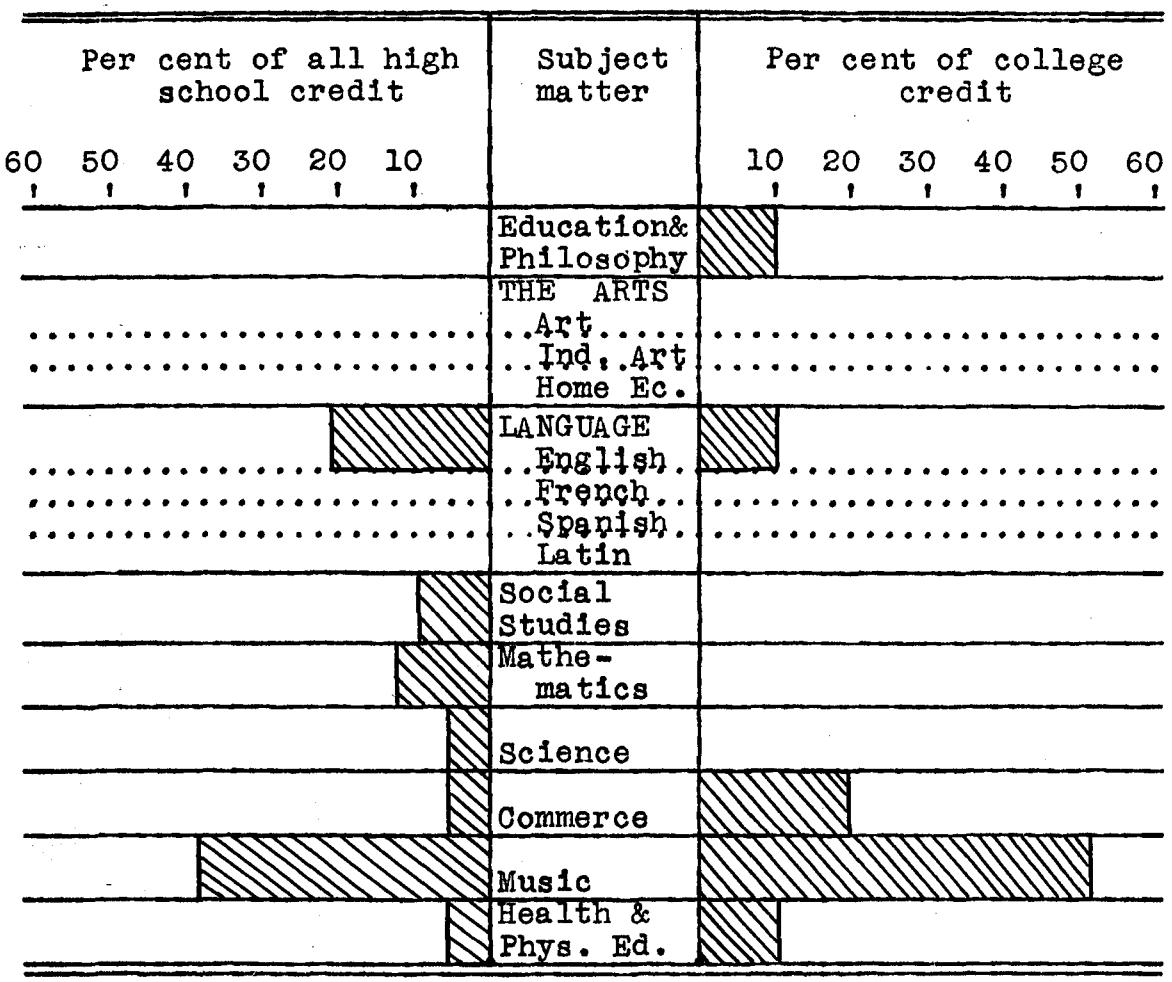


FIGURE 2

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN MUSIC IN HIGH SCHOOL AND WHO IS A SPECIAL MUSIC AND COMMERCE MAJOR IN INDIANA STATE TEACHERS COLLEGE

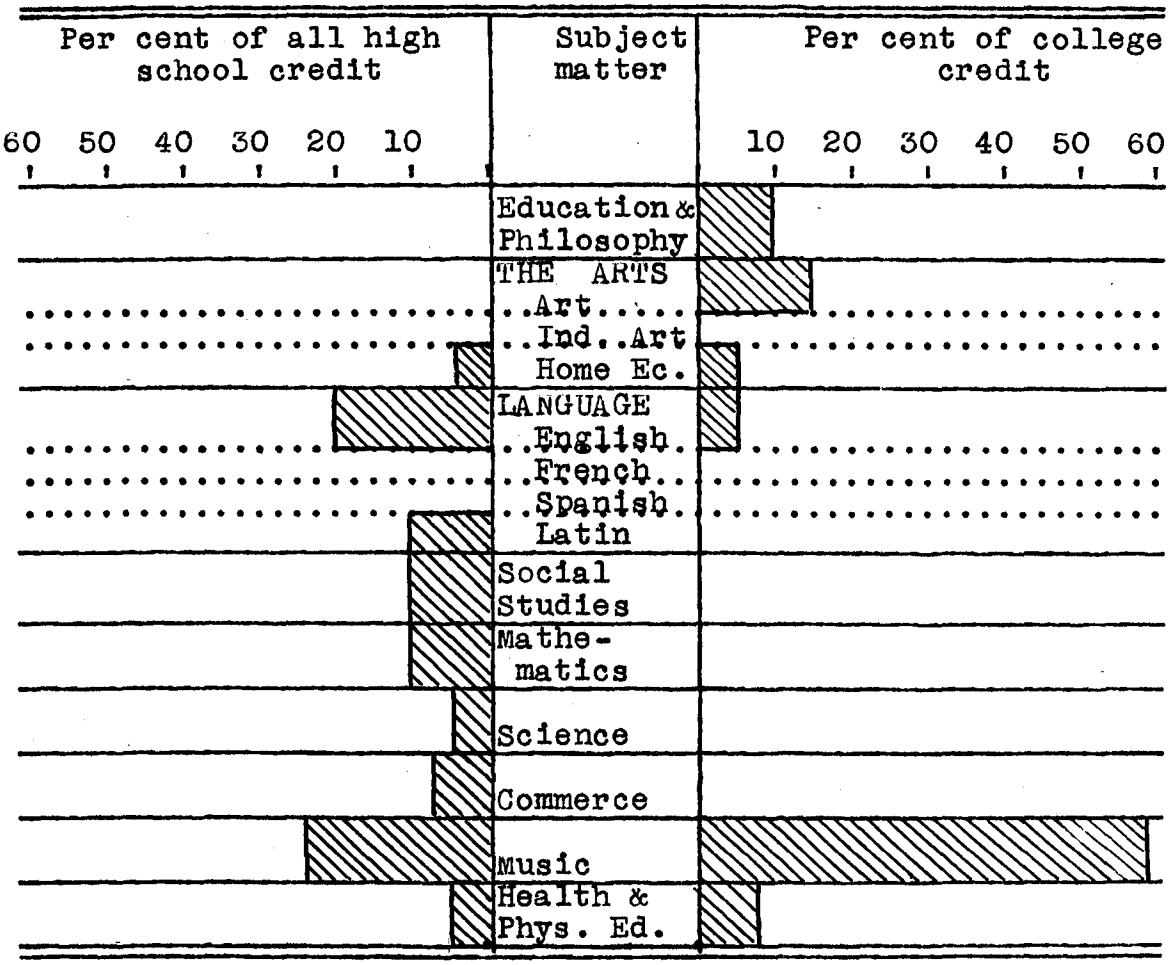


FIGURE 3

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN ENGLISH IN HIGH SCHOOL AND WHO IS MAJORING IN ENGLISH IN INDIANA STATE TEACHERS COLLEGE

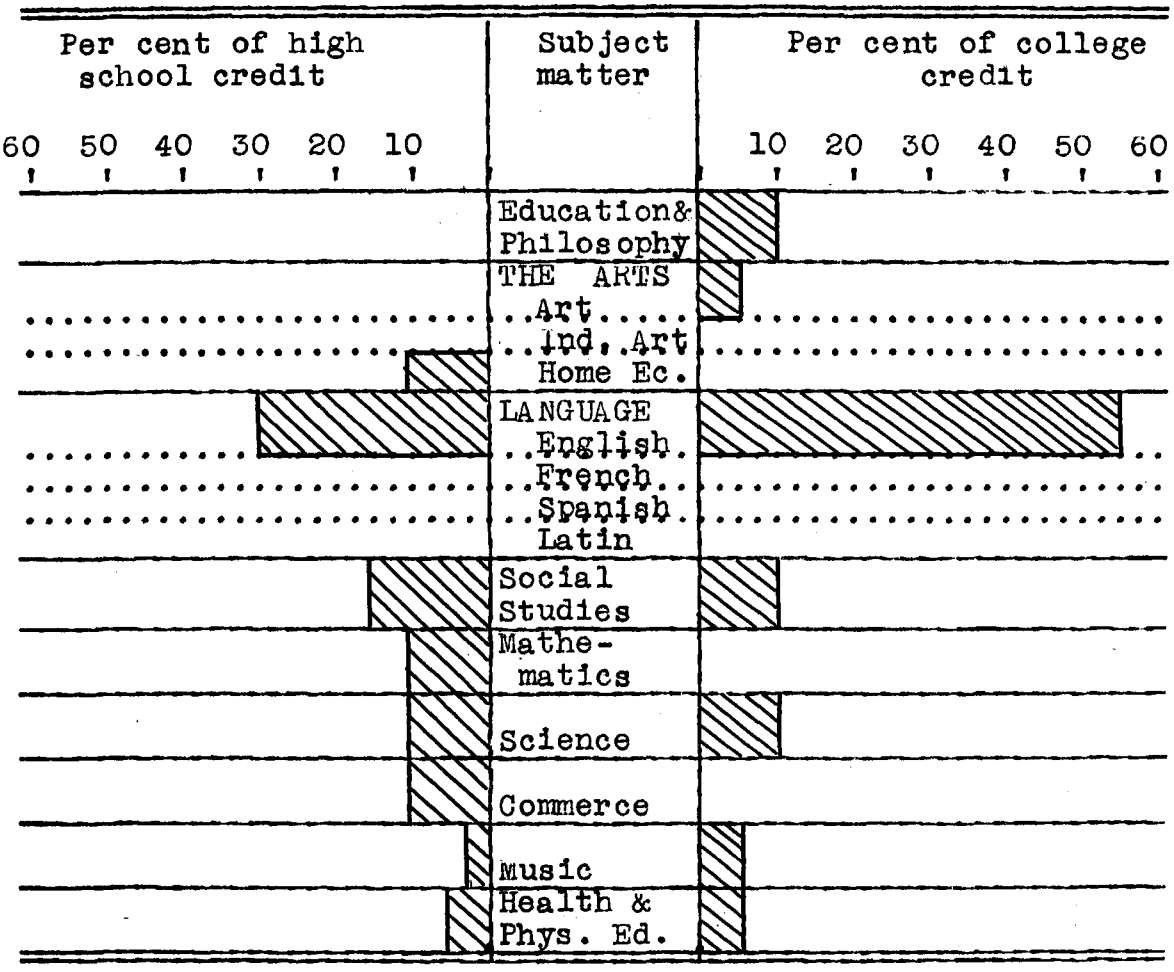


FIGURE 4

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN ENGLISH IN HIGH SCHOOL AND WHO IS MAJORING IN ENGLISH AND COMMERCE IN INDIANA STATE TEACHERS COLLEGE

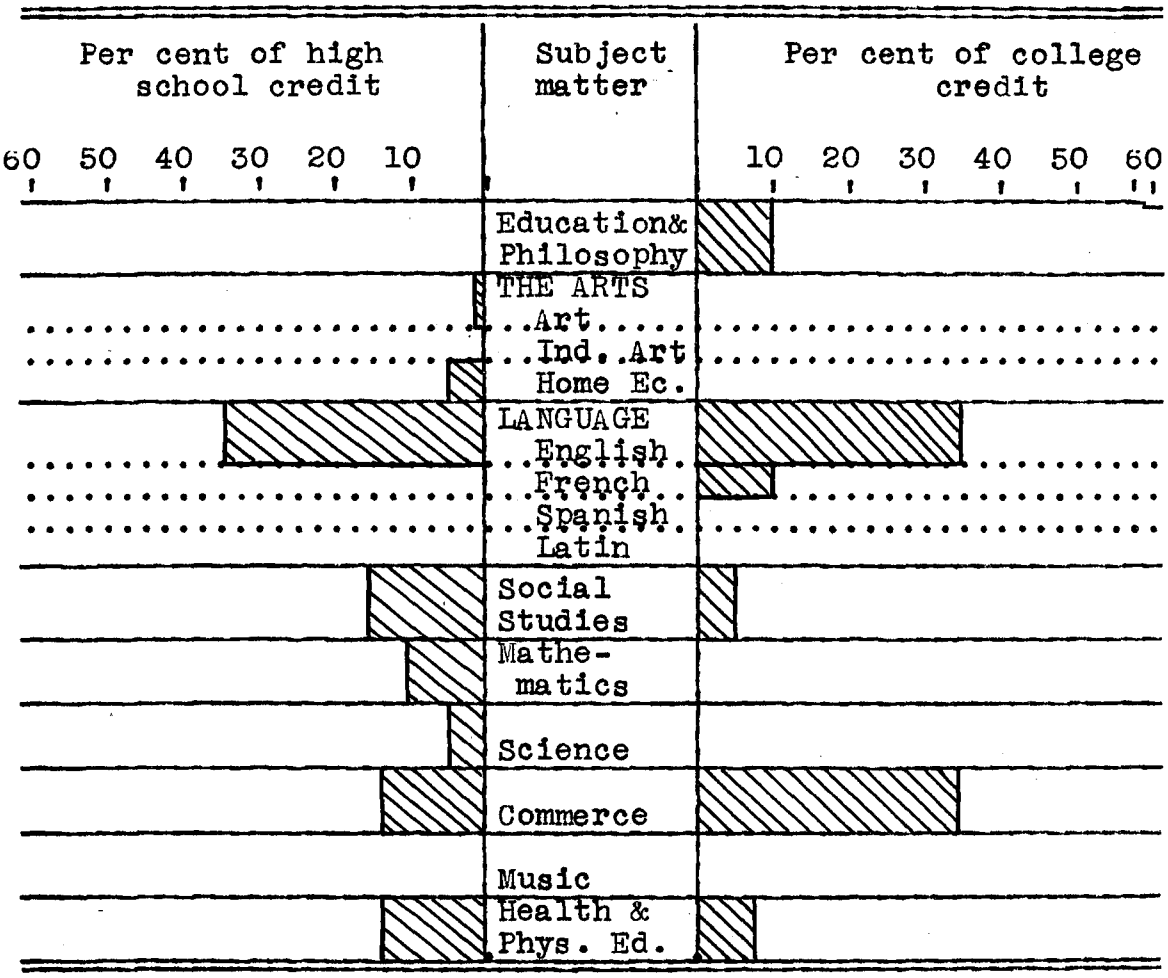


FIGURE 5

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN LANGUAGE IN HIGH SCHOOL AND WHO IS MAJORING IN SOCIAL STUDIES, ENGLISH, AND FRENCH IN INDIANA STATE TEACHERS COLLEGE

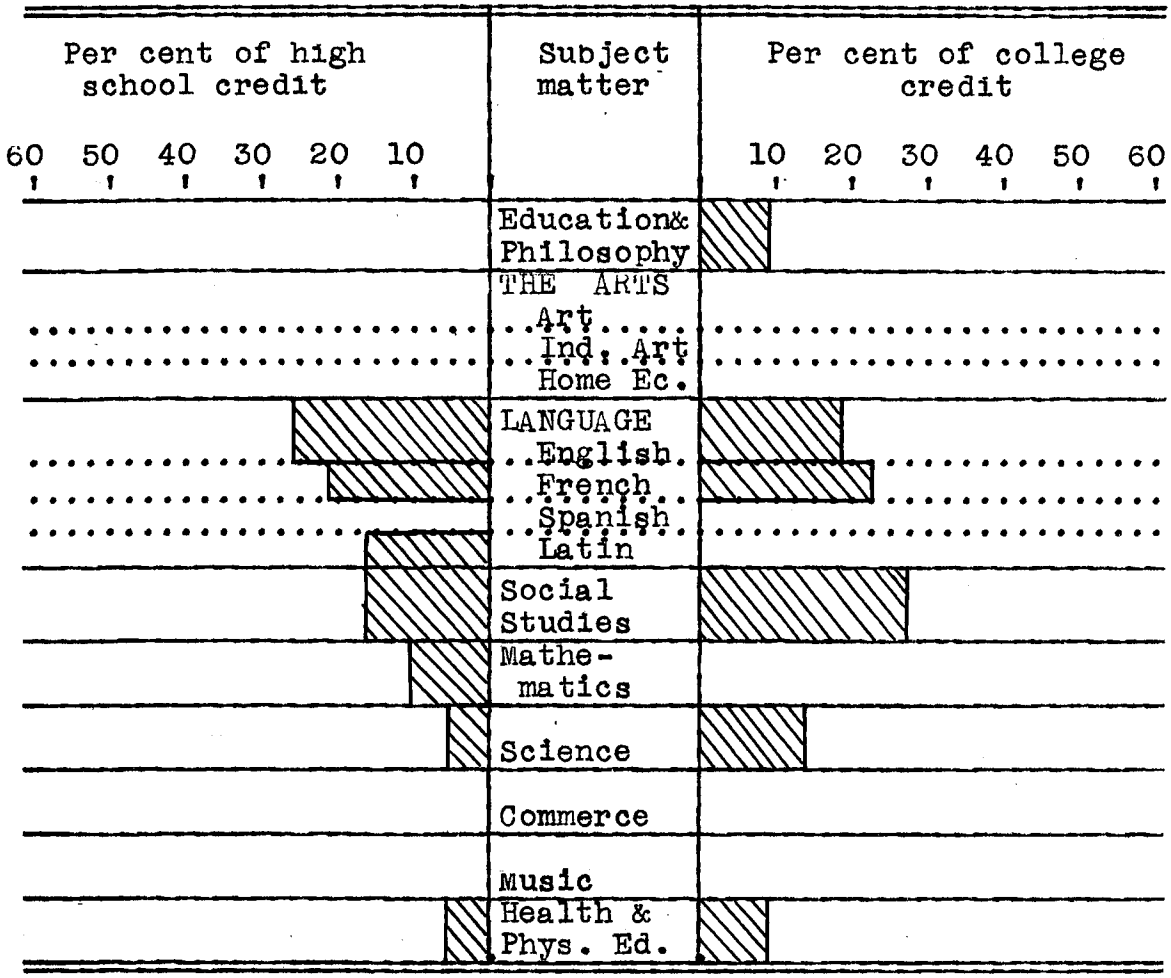


FIGURE 6

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN LANGUAGE IN HIGH SCHOOL AND WHO IS MAJORING IN FRENCH, ENGLISH, AND LATIN IN INDIANA STATE TEACHERS COLLEGE

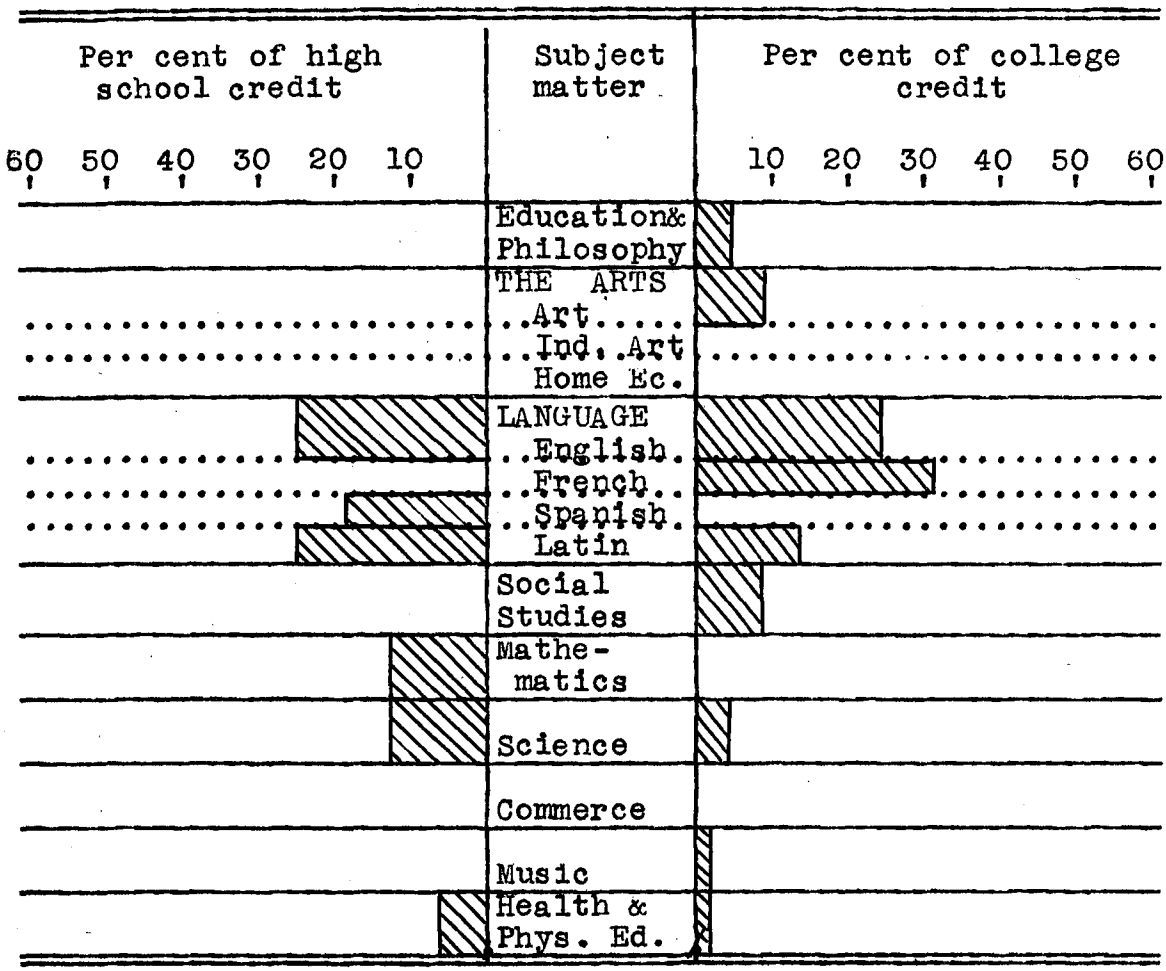


FIGURE 7

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN SCIENCE IN HIGH SCHOOL AND WHO IS MAJORING IN SCIENCE AND PHYSICAL EDUCATION IN INDIANA STATE TEACHERS COLLEGE

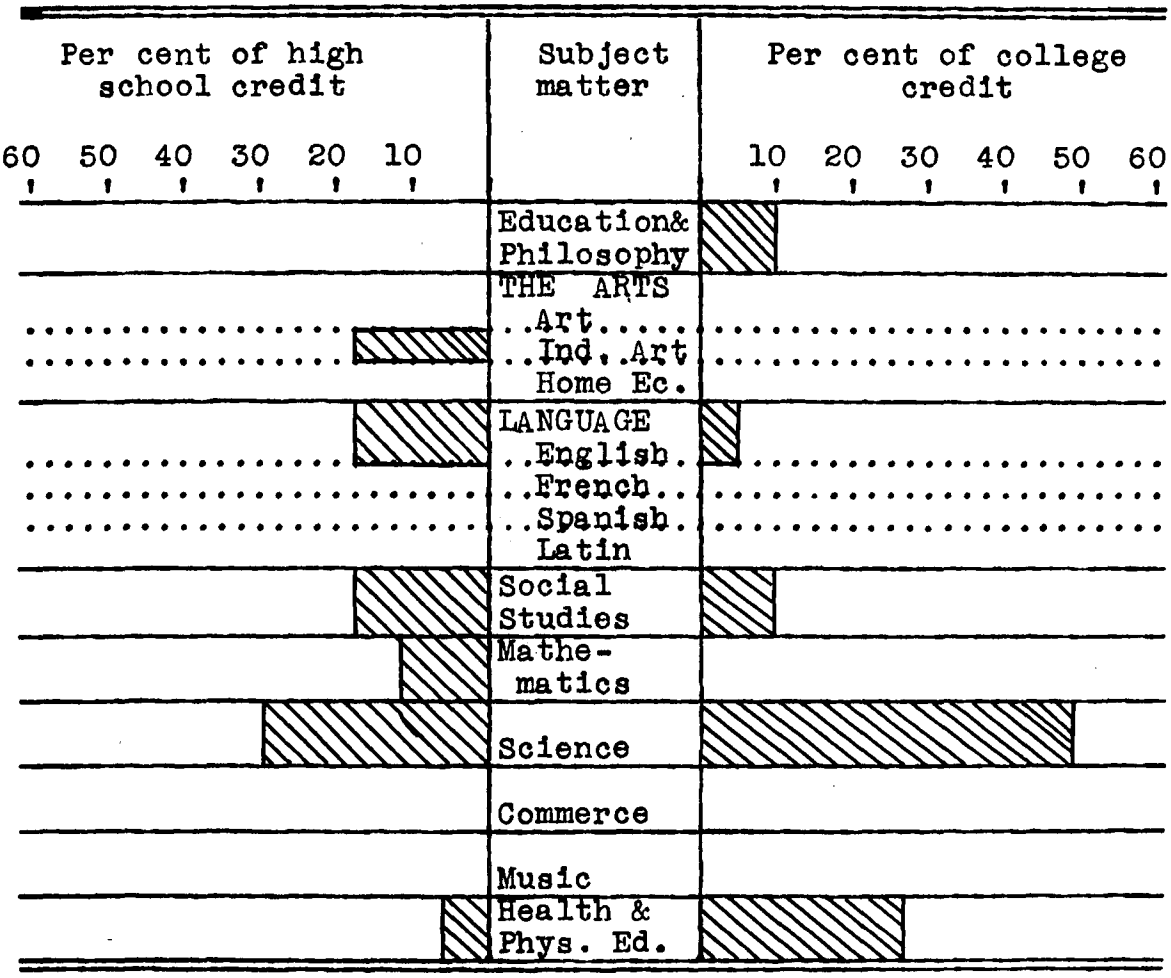


FIGURE 8

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN SCIENCE IN HIGH SCHOOL AND WHO IS MAJORING IN SCIENCE AND MATHEMATICS IN INDIANA STATE TEACHERS COLLEGE

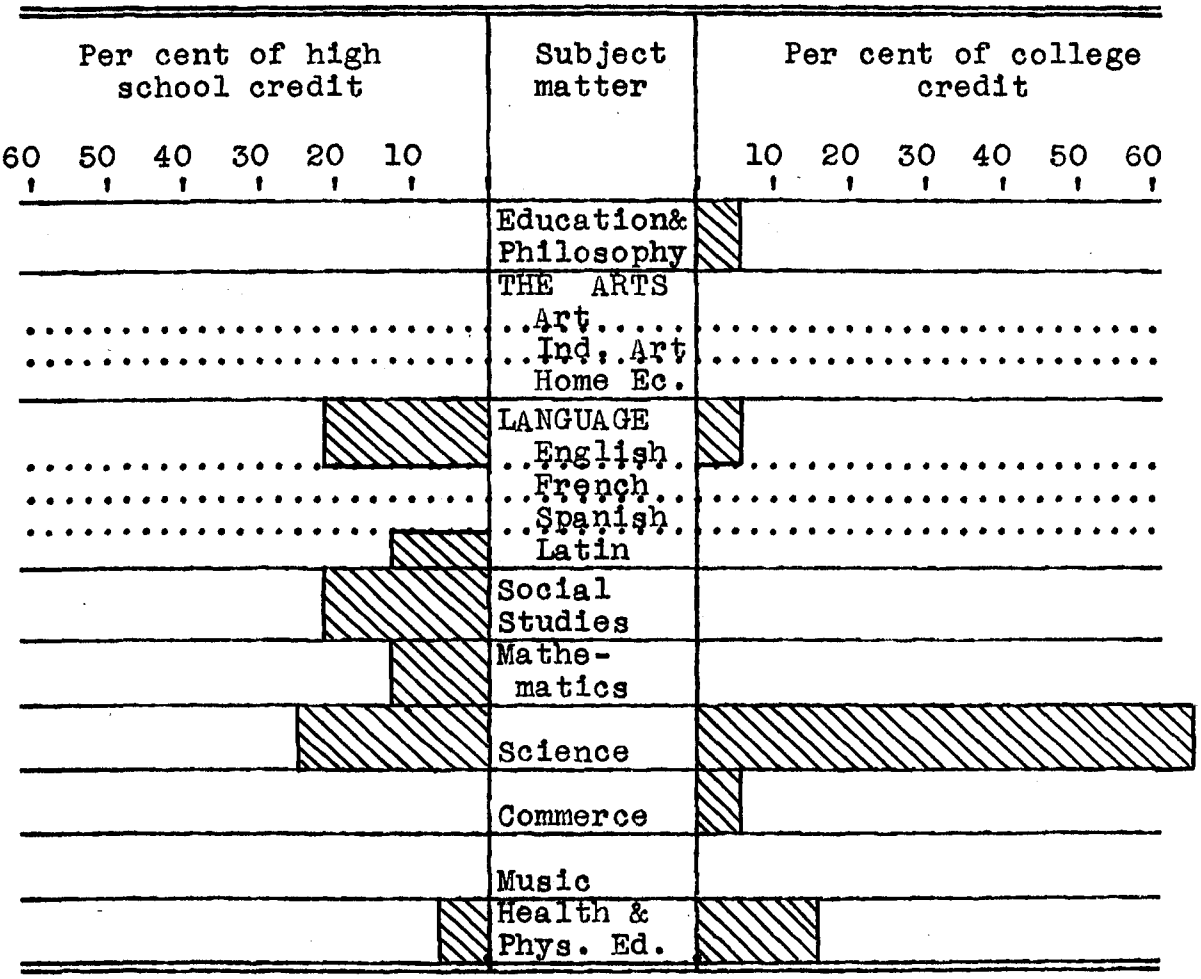


FIGURE 9

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN MATHEMATICS IN HIGH SCHOOL AND WHO IS MAJORING IN MATHEMATICS, COMMERCE, AND PHYSICAL EDUCATION IN INDIANA STATE TEACHERS COLLEGE

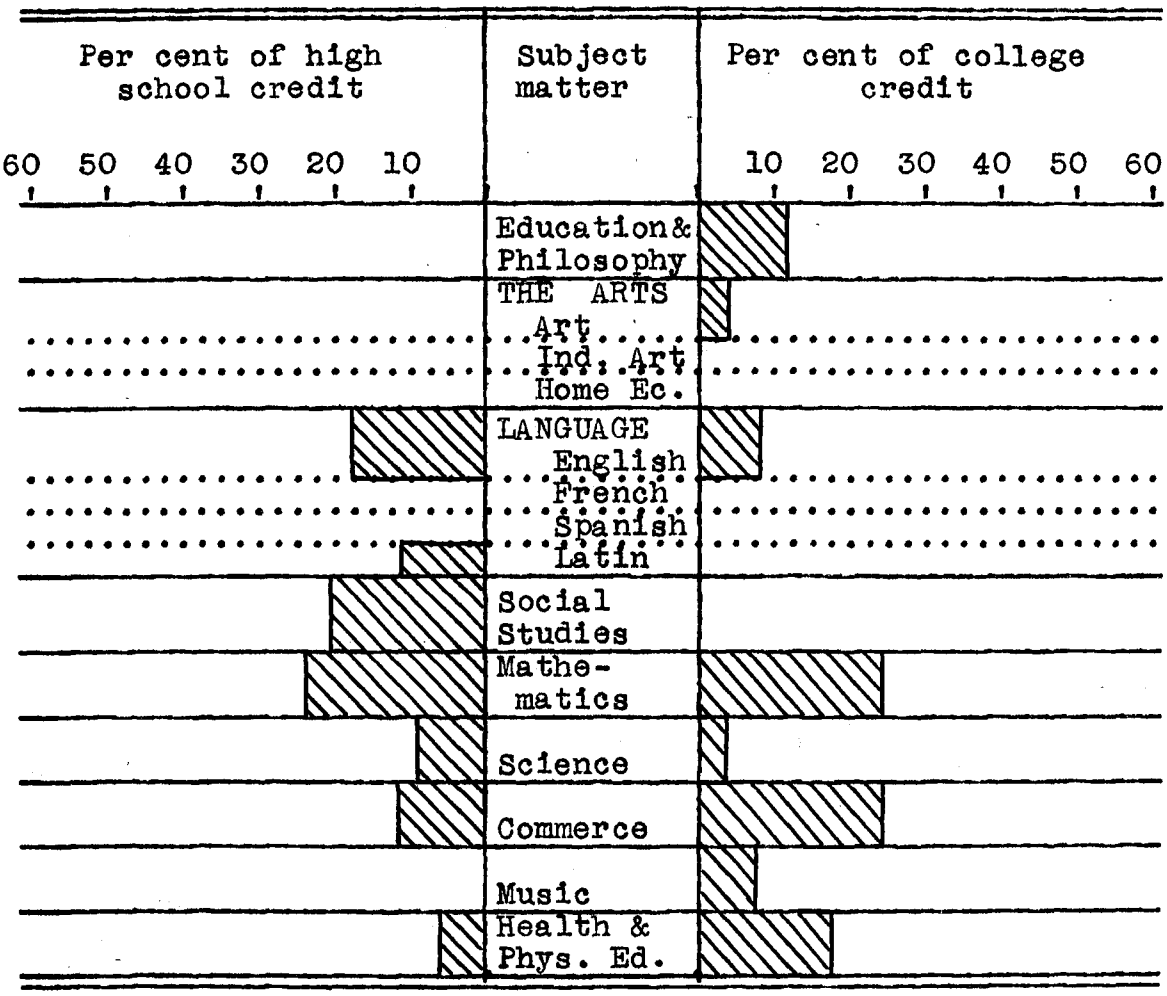


FIGURE 10

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN MATHEMATICS IN HIGH SCHOOL AND WHO IS MAJORING IN MATHEMATICS AND SCIENCE IN INDIANA STATE TEACHERS COLLEGE

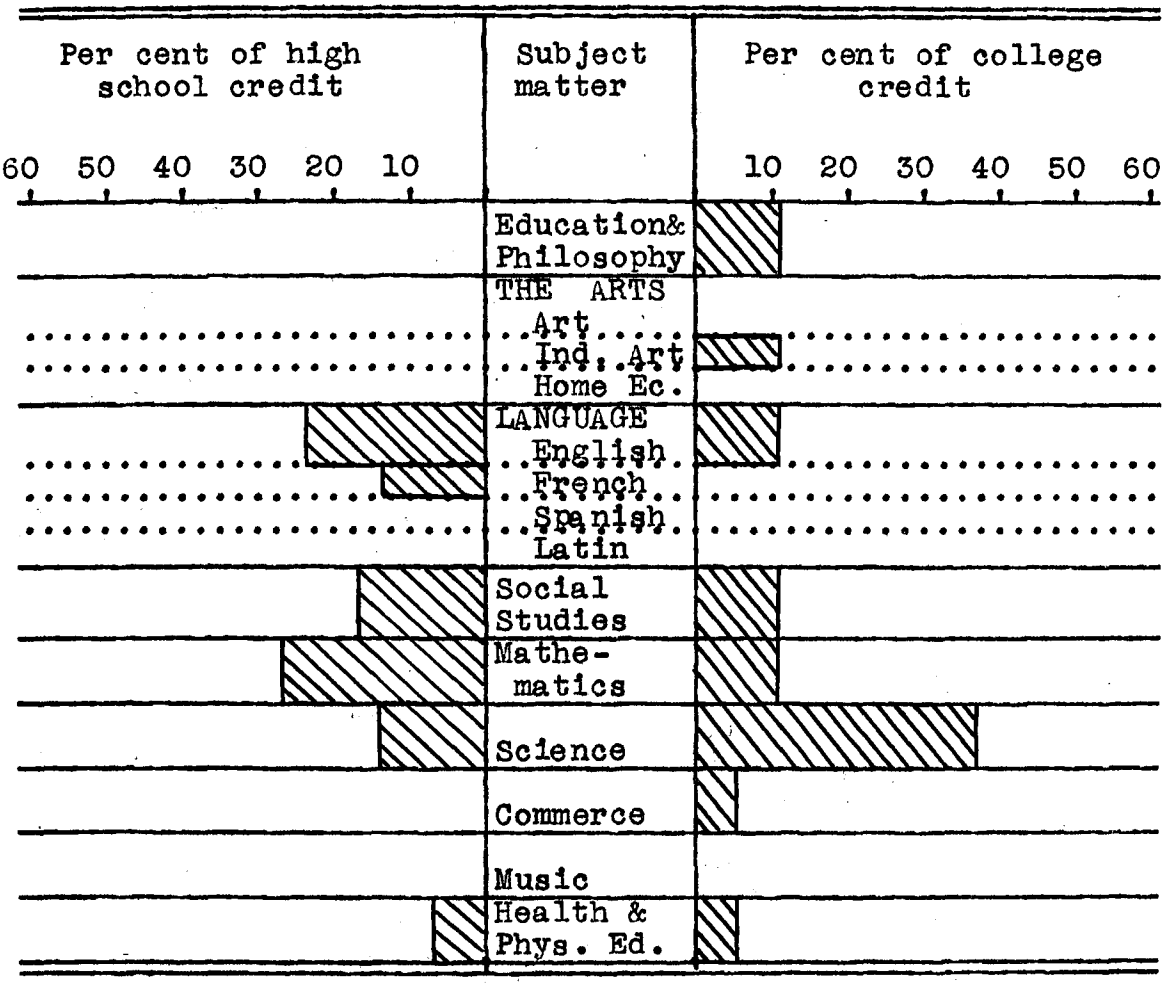


FIGURE 11

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN COMMERCE IN HIGH SCHOOL AND WHO IS A SPECIAL COMMERCE AND SOCIAL STUDIES MAJOR IN INDIANA STATE TEACHERS COLLEGE

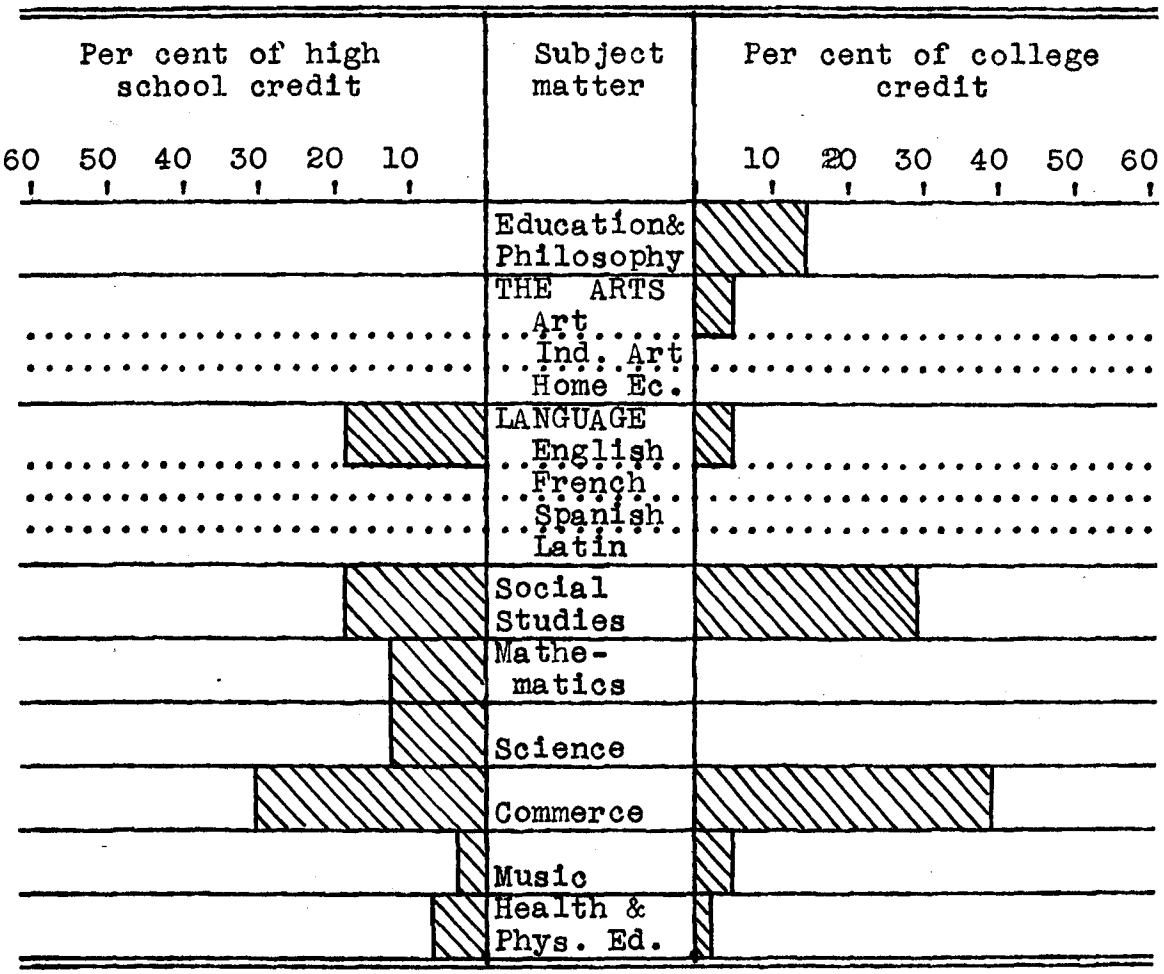


FIGURE 12

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN COMMERCE IN HIGH SCHOOL AND WHO IS A SPECIAL COMMERCE AND ENGLISH MAJOR IN INDIANA STATE TEACHERS COLLEGE

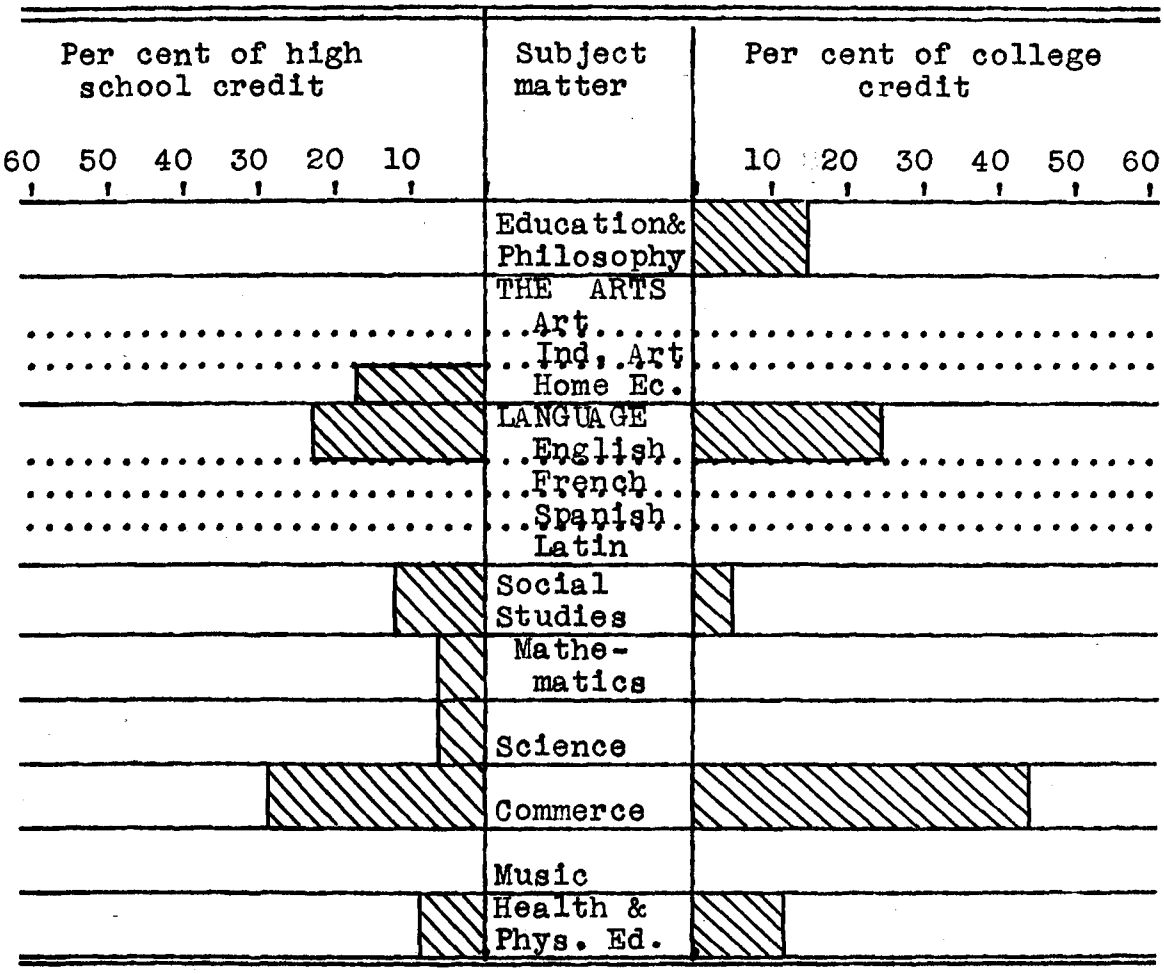


FIGURE 13

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN INDUSTRIAL ARTS IN HIGH SCHOOL AND WHO IS A SPECIAL ART AND SPECIAL INDUSTRIAL ARTS MAJOR IN INDIANA STATE TEACHERS COLLEGE

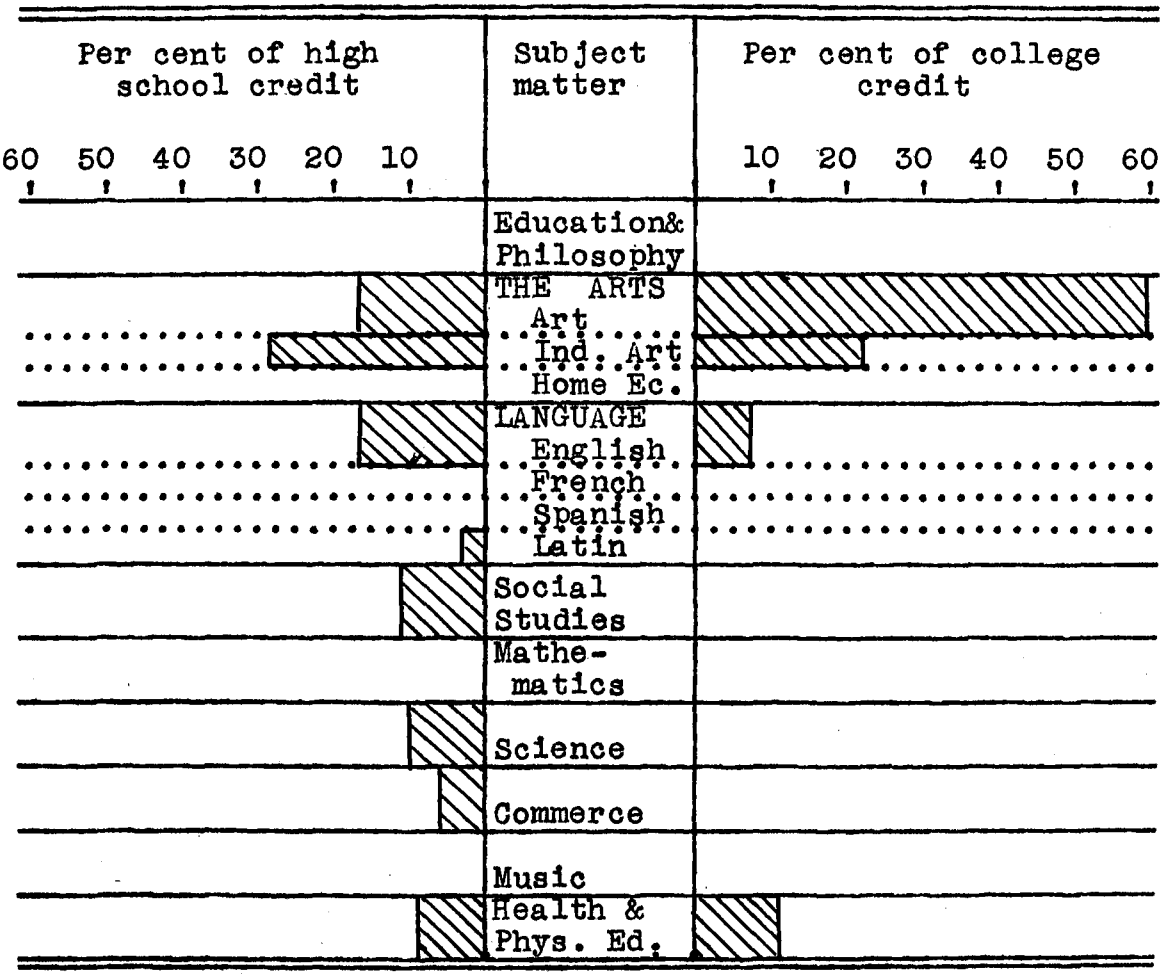


FIGURE 14

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN INDUSTRIAL ARTS IN HIGH SCHOOL AND WHO IS MAJORING IN INDUSTRIAL ARTS, PHYSICAL EDUCATION, AND SOCIAL STUDIES IN INDIANA STATE TEACHERS COLLEGE

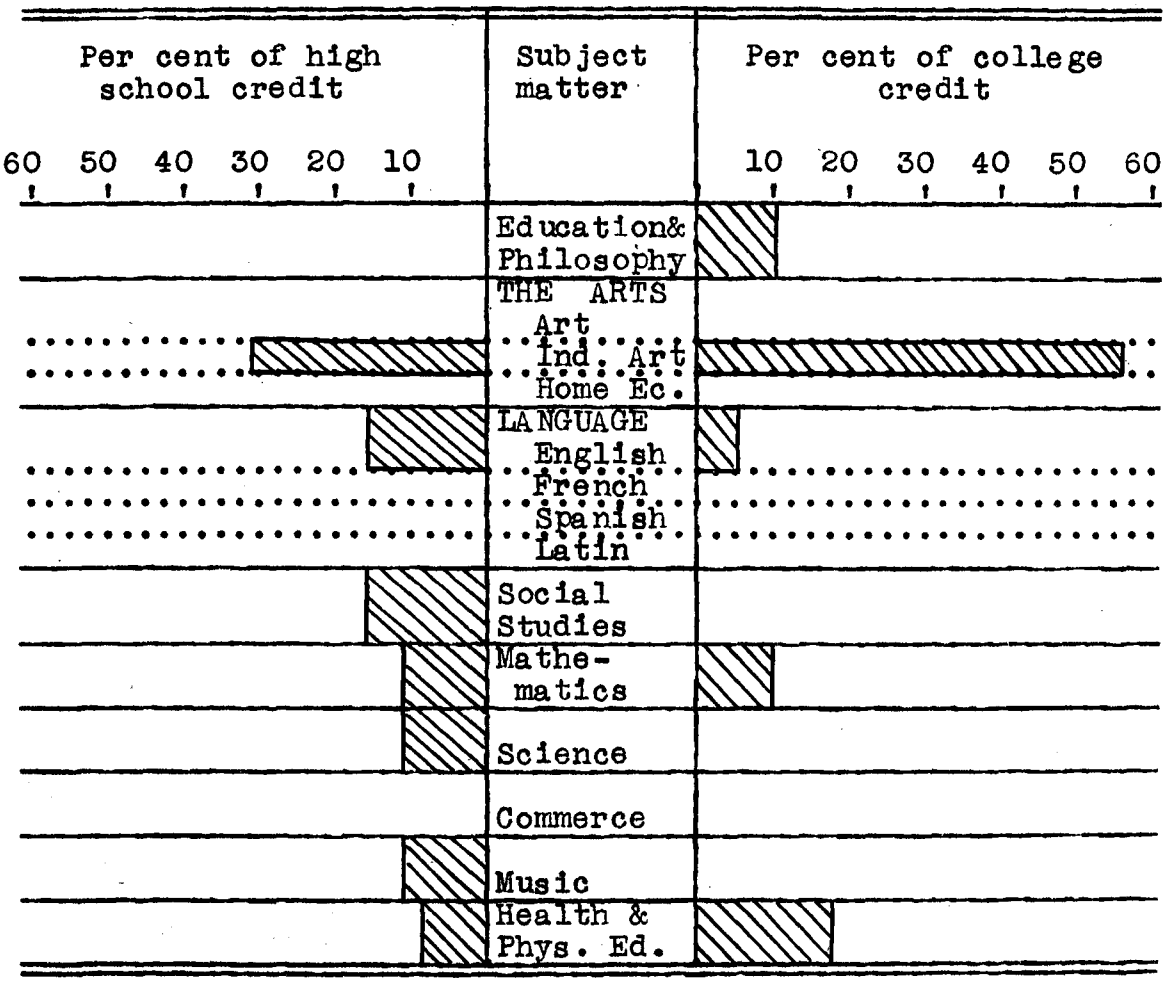


FIGURE 15

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN TWO SUBJECTS, ENGLISH AND COMMERCE, IN HIGH SCHOOL AND WHO IS MAJORING IN SCIENCE AND SOCIAL STUDIES IN INDIANA STATE TEACHERS COLLEGE

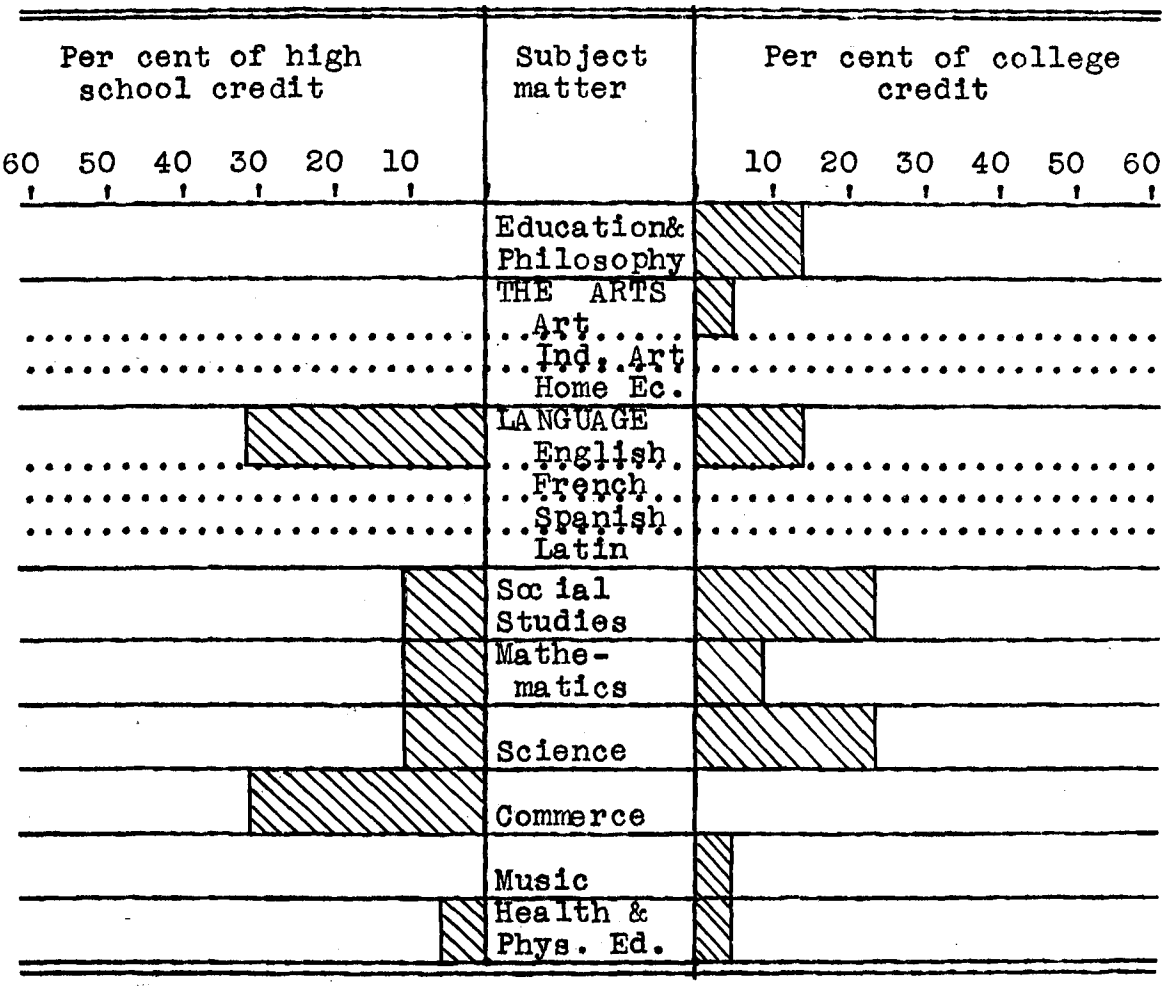


FIGURE 16

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN TWO SUBJECTS, ENGLISH AND SOCIAL STUDIES, IN HIGH SCHOOL AND WHO IS MAJORING IN ENGLISH IN INDIANA STATE TEACHERS COLLEGE

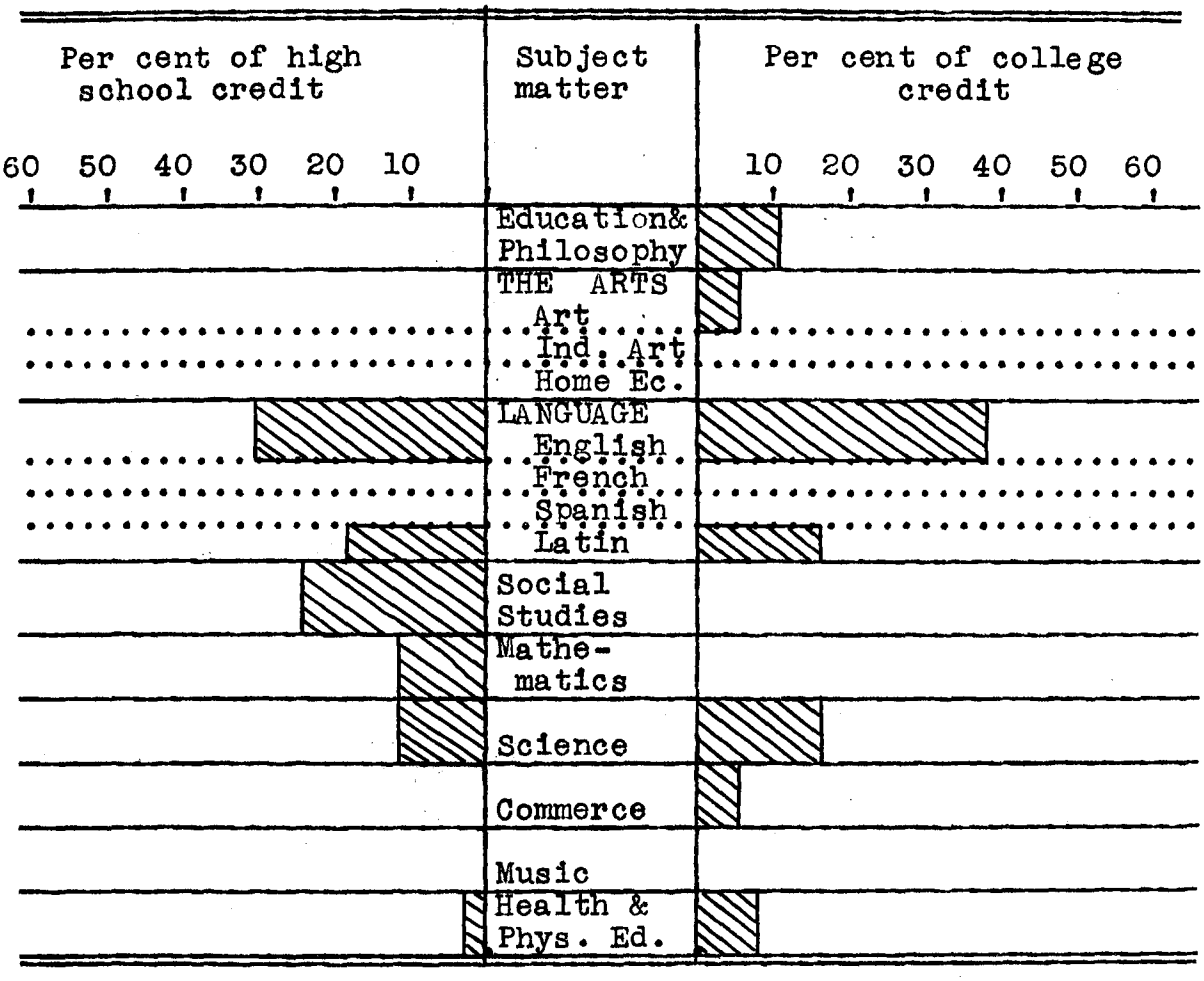


FIGURE 17

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN SOCIAL STUDIES IN HIGH SCHOOL AND WHO IS MAJORING IN SOCIAL STUDIES, PHYSICAL EDUCATION, AND SCIENCE IN INDIANA STATE TEACHERS COLLEGE

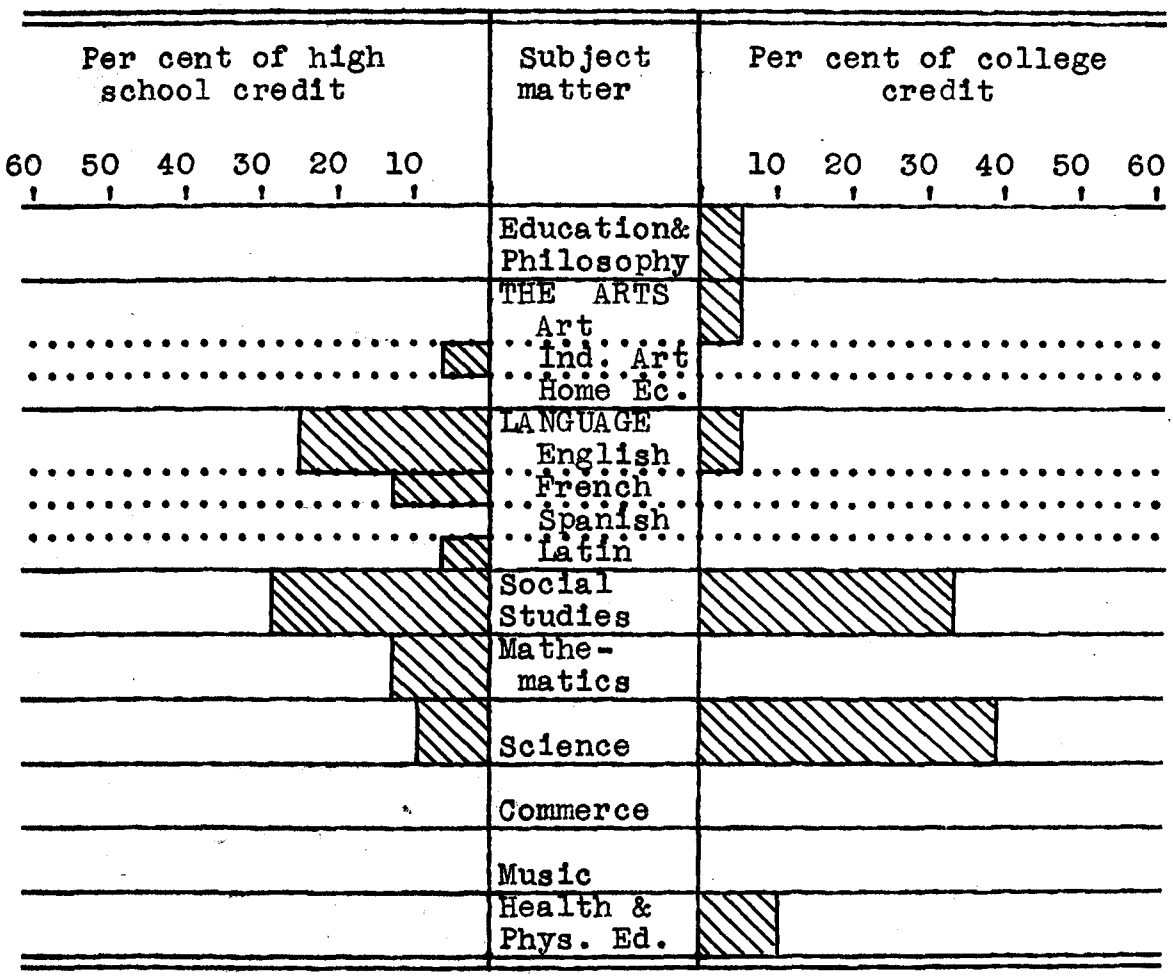


FIGURE 18

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN SOCIAL STUDIES IN HIGH SCHOOL AND WHO IS MAJORING IN SOCIAL STUDIES, PHYSICAL EDUCATION, AND SCIENCE IN INDIANA STATE TEACHERS COLLEGE

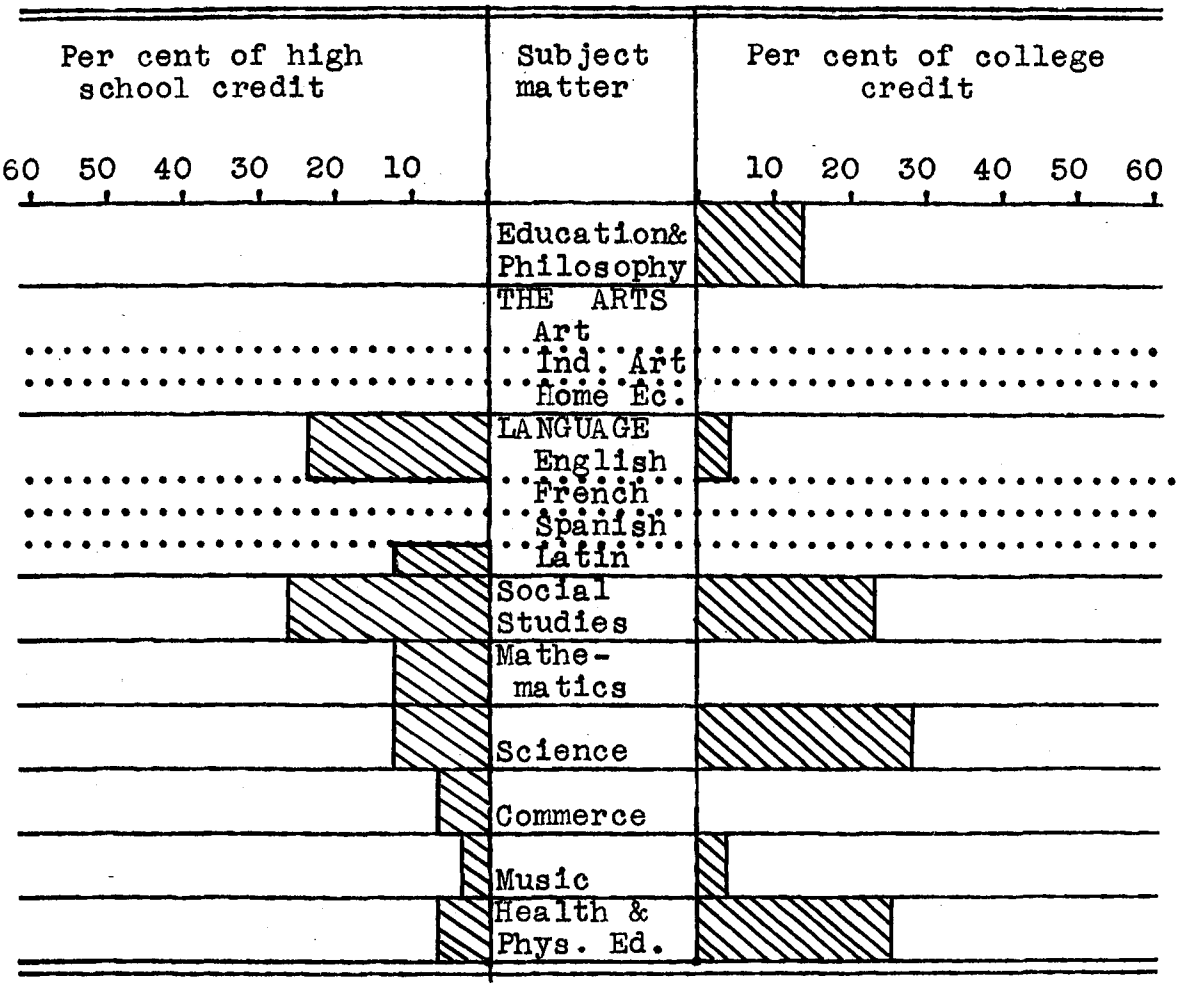


FIGURE 19

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN HOME ECONOMICS IN HIGH SCHOOL AND WHO IS A SPECIAL HOME ECONOMICS AND COMMERCE MAJOR IN INDIANA STATE TEACHERS COLIEGE

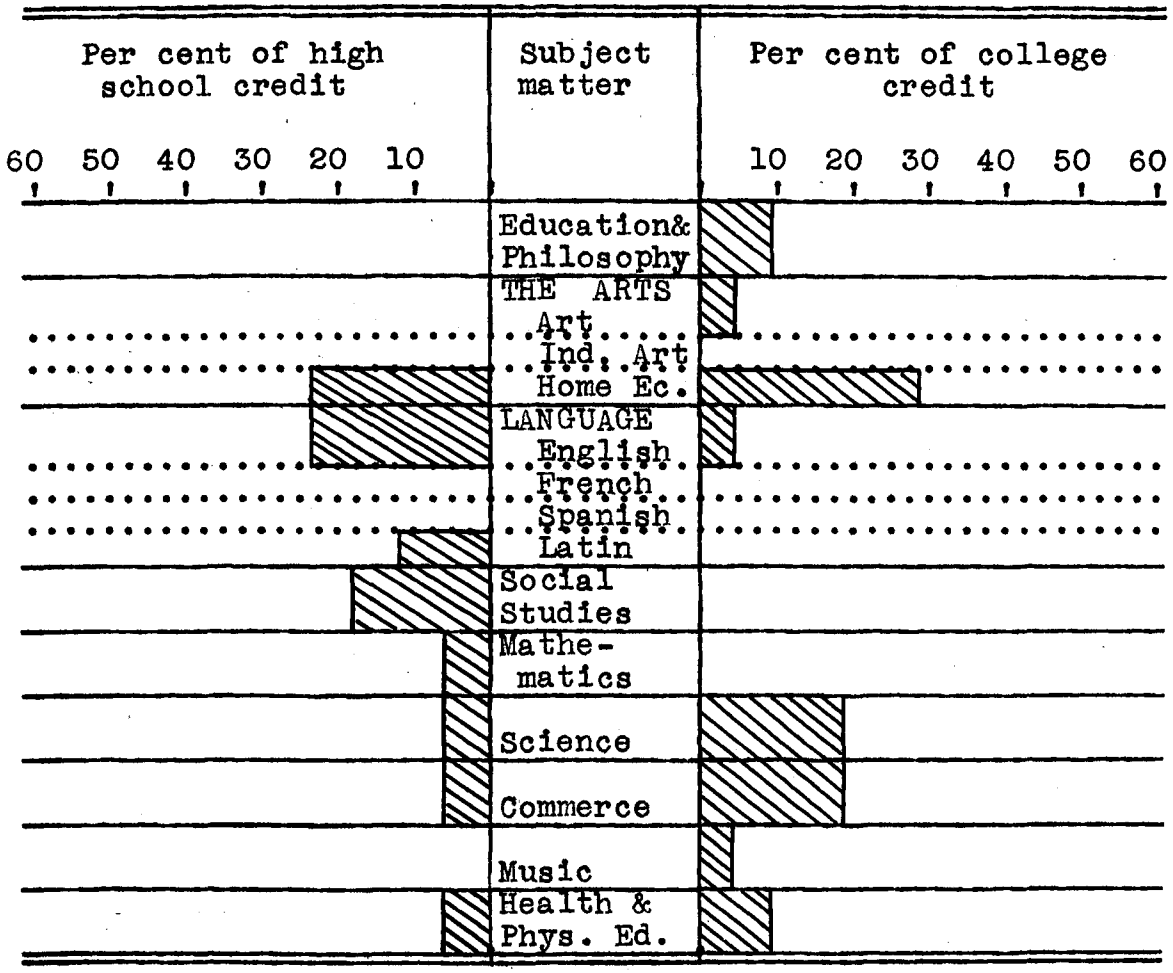


FIGURE 20

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN HOME ECONOMICS IN HIGH SCHOOL AND WHO IS A SPECIAL HOME ECONOMICS AND COMMERCE MAJOR IN INDIANA STATE TEACHERS COLLEGE

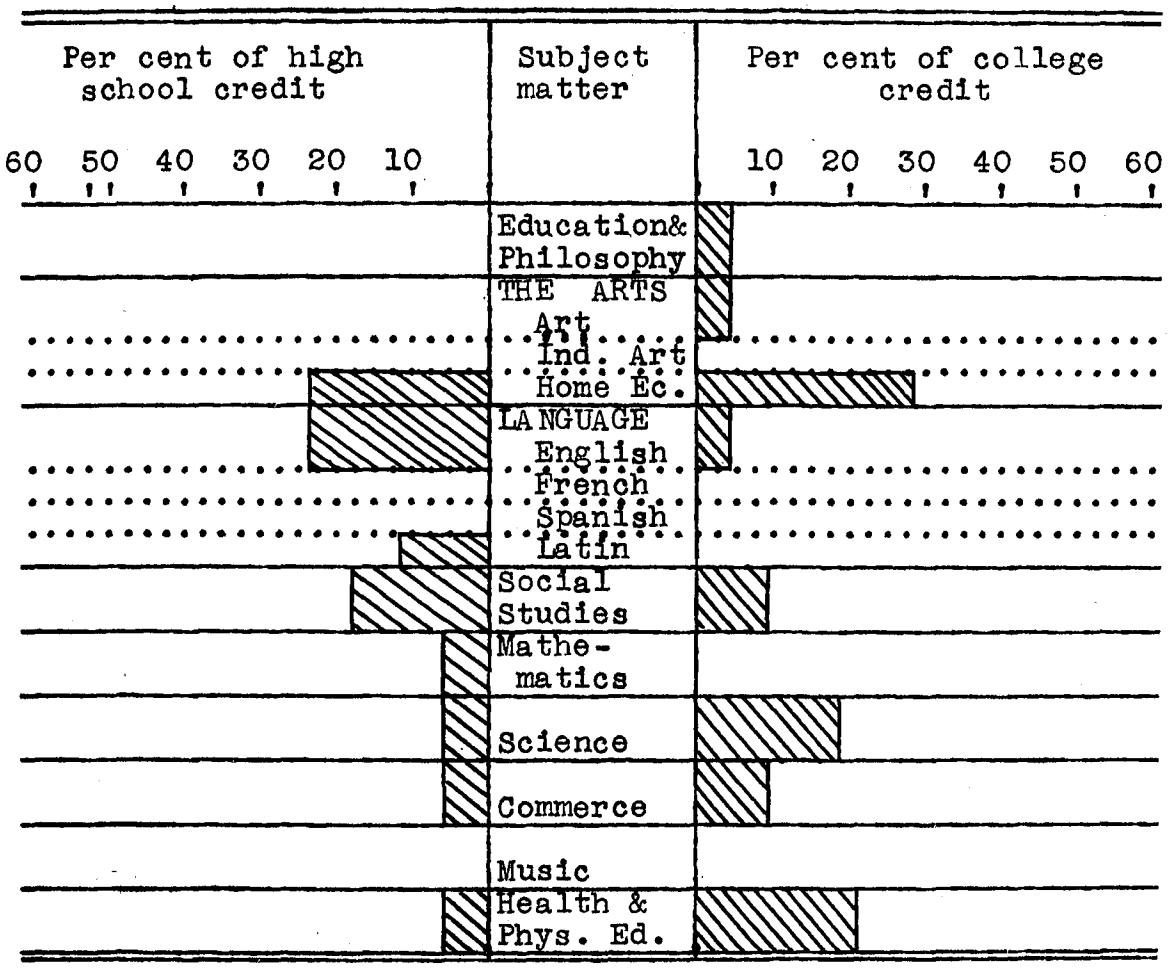


FIGURE 21

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN ART IN HIGH SCHOOL AND WHO IS A SPECIAL ART AND ENGLISH MAJOR IN INDIANA STATE TEACHERS COLLEGE

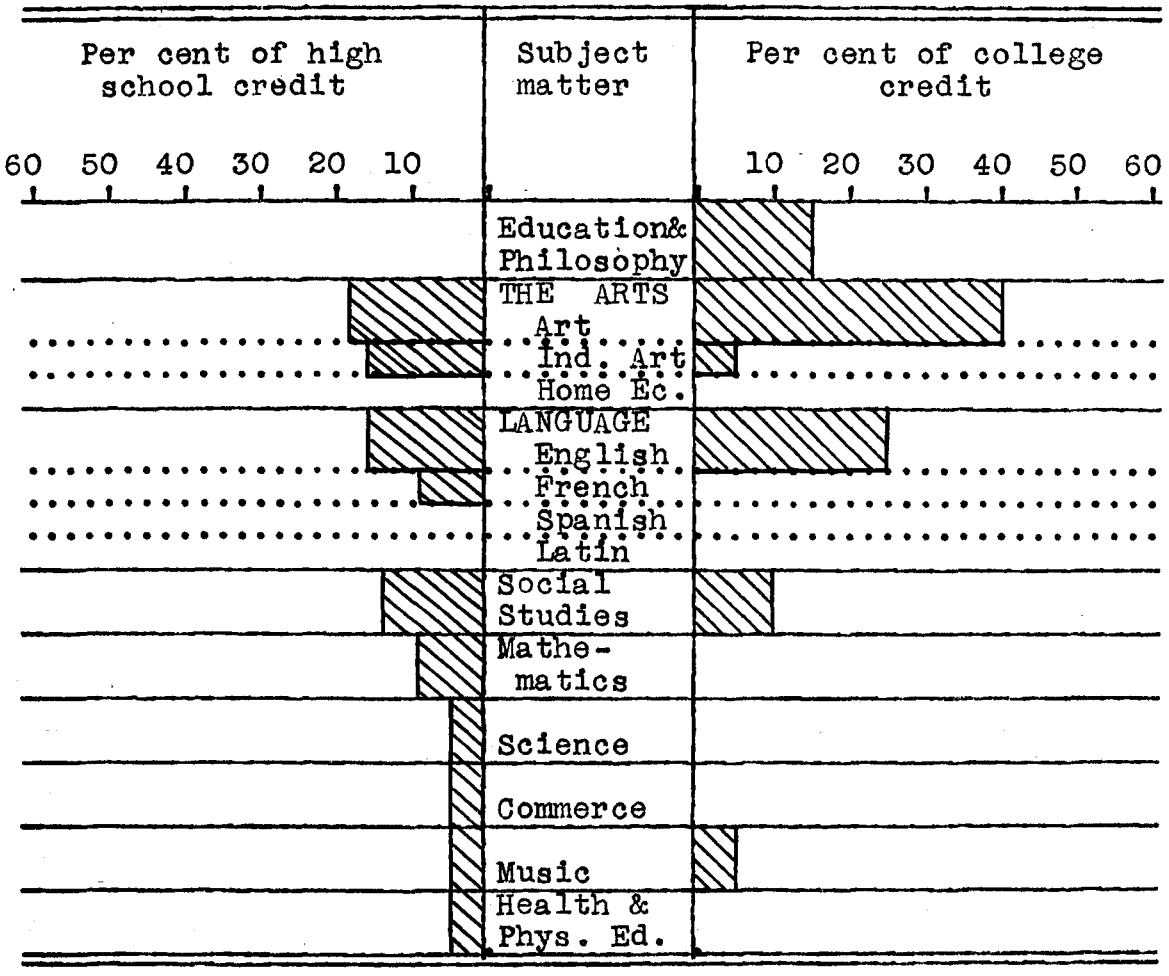
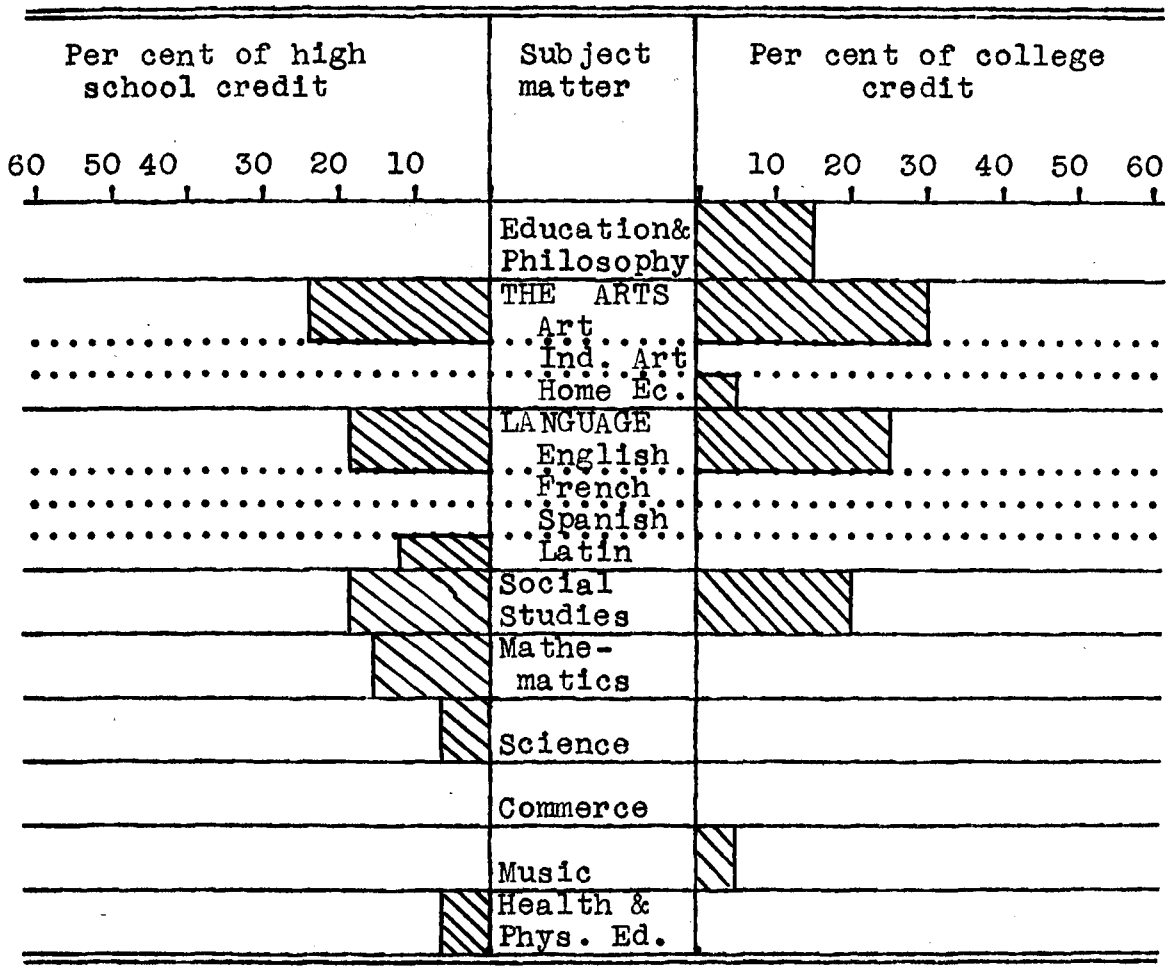


FIGURE 22

DISTRIBUTION OF SUBJECT MATTER OF HIGH SCHOOL AND COLLEGE CREDIT OF A STUDENT HAVING EXCESSIVE UNITS IN ART IN HIGH SCHOOL AND WHO IS A SPECIAL ART AND ENGLISH MAJOR IN INDIANA STATE TEACHERS COLLEGE



CHAPTER IV

SUMMARY AND RECOMMENDATIONS

I. SUMMARY OF FINDINGS

1. Exactly 8 per cent of the pupils who are graduating from high school fail to meet the state requirements for graduation.

2. Most students who enter Indiana State Teachers College tend to pursue the subjects in which they majored or had excessive units in high school.

3. Most students who enter Indiana State Teachers College tend to shun those subjects in which they had a minimum of units of work in high school.

4. There were 42.5 per cent of the students listed as average who withdrew.

5. Exactly 60 per cent of the students who failed to meet requirements for graduation in an Indiana high school withdrew from Indiana State Teachers College.

6. There were 47.7 per cent of the students with excessive units of work who withdrew from Indiana State Teachers College.

II. RECOMMENDATIONS

1. Assuming that all courses are cultural, a freshman in college should be encouraged to take courses in a number of well-chosen subject-matter areas so as to get a greater cultural background.

2. An advisory board should be set up by the college to study each pupil's high-school record individually.

The high-school backgrounds of students vary so greatly that proper care requires individual treatment of cases. This board should consider the needs of each individual student, and direct the student so as to supply these needs.

As a further help to the student, the advisory board should prevent the pupil from repeating those subjects which he has already had in high school, and should encourage him to branch out in as many subject-matter areas as possible.

3. The aim of a college in giving a cultural background cannot be achieved by merely setting up an arbitrary list of required courses. This causes repetition of courses already had in the high school and prevents individual treatment of each student's case.

Elimination of this requirement would give the student more opportunities to branch out in slighted subject-matter areas.

In certain cases where students have had sufficient high-school work in special areas to provide a cultural background and yet prove woefully weak therein, a system of examinations could well be set up, and, as in the case of English at the present time, pupils failing to show proper knowledge in such areas could be required to take additional courses without college credit.

4. Another possible solution for the students to obtain a cultural background would be to require five years of training before the student could graduate.

Under such a plan, care should be taken that the student does not repeat any subject-matter, and that he does not continue his specialization by taking excessive work in any particular department.

5. If at all possible, each department should present one or two courses based upon the assumption that such courses would be the only ones in the department which could stress general cultural values for that area.

The advisory board should recommend to each student that he take as many of these special courses as possible except in the case where the student is a major in that department.