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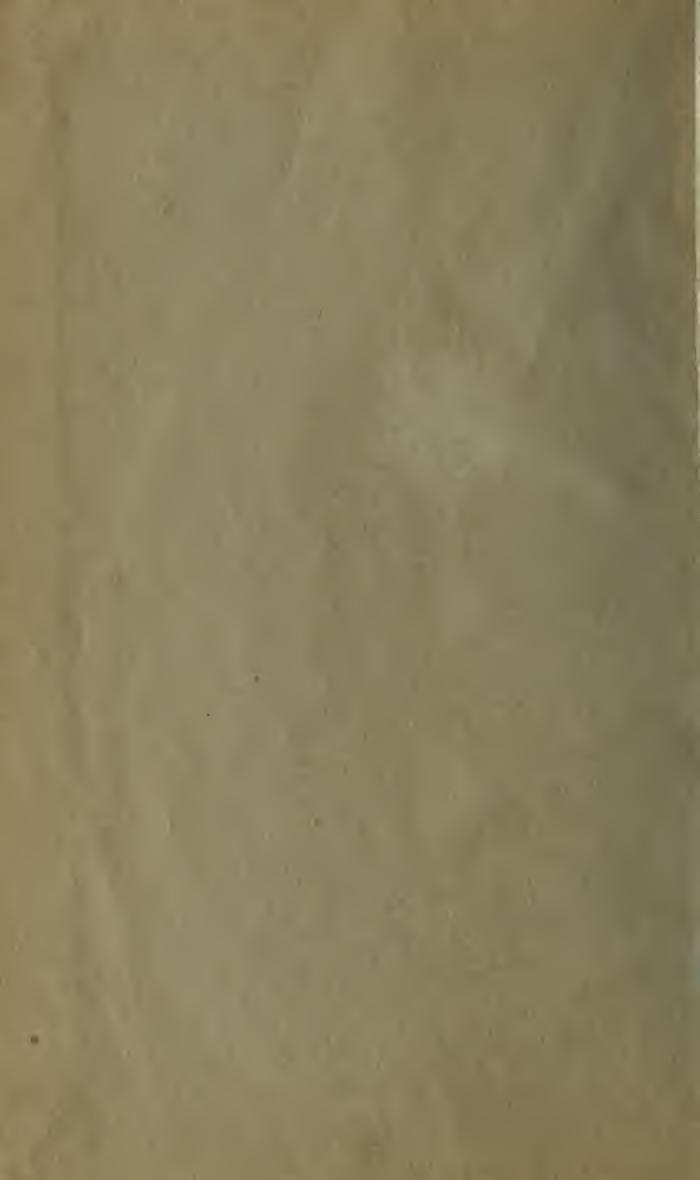


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UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XXVII

OCTOBER 1, 1929

No. 5

[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912. Acceptance for mailing at the special rate of postage provided for in section 1103, Act of October 3, 1917, authorized July 31, 1918.]

EDUCATIONAL RESEARCH CIRCULAR No. 54

BUREAU OF EDUCATIONAL RESEARCH COLLEGE OF EDUCATION

A PROGRAM OF EDUCATIONAL GUID-ANCE FOR HIGH SCHOOLS

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PUBLISHED BY THE UNIVERSITY OF ILLINOIS URBANA

PREFACE

The importance of educational guidance on the high-school level is generally recognized and many of the larger schools have made provision for fulfilling this function. Much less has been done in the medium-sized high schools. In this circular the need for guidance in such schools is shown, and recommendations are made for meeting this need. Although the investigation was confined to the state of Illinois, it is likely that the conditions are not greatly different from those existing elsewhere. Consequently, this report should prove helpful to the principals and teachers in medium-sized high schools who are interested in providing efficient educational guidance for their pupils.

Walter S. Monroe, Director

July 19, 1929

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A PROGRAM OF EDUCATIONAL GUIDANCE FOR HIGH SCHOOLS

CHAPTER I

INTRODUCTION

Under the old régime of limited curriculum offerings, and a highly selected group of students whose careers-in life were already largely determined, the high school needed to give but slight attention to educational guidance. A vast increase in the number of students, varying widely in types and interests, and a corresponding enrichment of the curriculum are making it imperative that the high schools provide some means by which students may be directed into subjects suited to their needs and capacities. What was formerly cared for automatically is now becoming a problem of increasing importance.

The purpose and the scope of this bulletin. The purposes of this bulletin are (1) to present a study of conditions and needs for guidance in a group of secondary schools of medium size; (2) to suggest a desirable educational guidance program to meet these conditions; and (3) to indicate the adaptation of this program to larger schools and to smaller ones than those selected for study.

The limited curriculum offerings of the small rural high school make guidance a relatively simple matter so that a special program is unnecessary. On the other hand, the large urban high schools, in increasing numbers, are already making ample provision for the performance of this important function through the adoption of a comprehensive guidance program. The "in-between" schools present a problem all their own; one that is peculiar to the sources from which they draw their students. Most of these schools are situated in thriving smaller cities, the centers in which the actual change from rural to urban life is taking place. There are two factors that tend to accentuate the need for guidance in these schools. First, the movement toward consolidation and the organization of community and township high schools are adding students from the one-room rural schools in constantly increasing numbers. Second, many large manufacturing concerns are locating plants in these smaller cities where production costs may be materially reduced and better living conditions obtained. These general facts indicate that students of widely varying types may be found in the high schools of these communities.

TABLE	I.—Summary	OF	Data	FOR	THE	TWENTY-FIVE	ILLINOIS	Нісн	Schools
			Inc	LUDE	D IN	THIS STUDY			

School	Number of Teachers Employed	Number of Students Enrolled	Number Units Work Credited by U. of I.
"A"	28	538	40.0
''B''	29	597	40.5
"C"	22	552	36.0
"D"	24	456	26.5
"E"	18	483	25.5
"F"	17	402	29.5
"G"	18	516	29.5
''H''	26	587	37.5
I''	20	420	39.0
"J"	25	530	38.0
''Ř''	23	588	34.5
"L"	$\overline{27}$	582	32.0
"M"	17	418	29.0
"N"	29	584	42.0
"O"	22	520	34.0
"P"	23	451	37.0
"Ô"	25	521	38.5
''Q'' ''R''	28	568	38.0
"Ŝ"	20	463	38.0
''T̃"	20	435	31.5
"ບໍ່"	21	440	37.5
"V"	28	526	39.5
''\\\\''	21	533	40.5
"X"	17	448	30.5
"\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	20	420	36.0

Definition of terms. The term "educational guidance" is used here to refer to the directions given students in the making of satisfactory adjustments to all school conditions, especially in the selection of programs of study. The term "vocational guidance" refers to the guidance given students relative to choosing a vocation. The "guidance program" refers to every activity connected with the guidance function in its relation to the school and the students. A guidance program, therefore, includes the director, counselors, committees, organizations, plans, policies, and records; in fact, everything that has to do with guidance.

The data. A study including all high schools of medium size in the country as a whole would be far beyond the possibilities of this report. Reliable data from so large a number would be difficult if not impossible to secure within the time available. For a number of reasons, high schools accredited by the North Central Association of Colleges and Secondary Schools seemed to offer the most promising basis for the study. By limiting the study to high schools within the State of Illinois, other sources of data became available: namely, the official report of the High School Visitor of the University of Illinois, the factual material on file in the office of the High School Visitor, and the Illinois State School Directory, issued by the State Department of Education. Accordingly, a group of Illinois high schools accredited by the North Central Association of Colleges and Secondary Schools is used as the basis of this study. (See Table I.) The list includes all public

high schools in the state enrolling from four hundred to six hundred students, as shown by the official report of the Association published in June, 1927. The data relating to the number of students enrolled and the number of teachers employed were taken from the official reports of these schools as published in the *North Central Association Quarterly*. Although there is nothing in this report in any way derogatory, the identity of the schools is not revealed in the body of the study. A key letter was assigned to each of the schools, and any principal wishing to identify his own school may secure the key letter by making application to the Bureau of Educational Research, University of Illinois, Urbana, Illinois.

The data concerning the number of entrance units credited to each of these schools by the University of Illinois were taken from the official report of the High School Visitor² at that institution. The report states that the credits granted are correct to June 30, 1926. The data relative to the number of subjects required for graduation were secured from material on file in the office of the High School Visitor. Data concerning the restrictions placed upon students registering for elective subjects were gleaned from published and mimeographed material furnished by individual schools. Part of this material was secured through the cooperation of the principals of the schools and part of it from the High School Visitor.

¹North Central Association Quarterly, 2:63-70, June, 1927. ²"Report of the High School Visitor," University of Illinois Bulletin, Vol. 23, No. 47. Urbana: University of Illinois, 1926, p. 8-30.

CHAPTER II

THE STUDENTS AND THE CURRICULUM

The increase in student population in the schools studied. United States Bureau of Education reports that in 1890 the free public high schools enrolled 202,968 students and that by 1926 the enrollment had reached 3,757,466; an increase of 1751.26 per cent.

The schools listed in this study are receiving their share of this great influx of students as Table II reveals. The official reports of the North Central Association show that in 1917-18 the total number of students enrolled in twenty-four² of them was 7,112. With the exception of School "L," which included the junior high school in its report, only two enrolled more than 400 students, the lowest number of the group as it now stands. The average enrollment was 296. In 1921-22, the twenty-four schools enrolled 9,980, fourteen being over the 400 mark and six over the 500 mark. The average enrollment was 416. The total enrollment at present is 12,578 for twenty-five schools; the smallest school enrolling 402, and the largest 597. The average enrollment is 503 and the median is 520. This represents an increase of 77 per cent in nine years.

The significance of the increase in the number of students. significance of this enormous increase in the number of secondaryschool students is indicated both by the comments of educational writers and by a number of studies relative to the intelligence of secondaryschool students. Monroe's comment is typical:

"As the number entering high school has increased, the average general intelligence of each age group has been lowered because of the fact that more children on the lower levels of intelligence than on the higher have been admitted. The decrease in the average of general intelligence is, however, not as significant as the increase in the range of intelligence. Instead of having a group which is relatively homogeneous with reference to capacity to learn we now have to deal with pupils ranging from the very bright to the slow and dull."

It happens that students from slightly more than one-half of the twenty-five schools listed in Table II were included in Odell's4 study relative to the intelligence of Illinois high-school students. This report

^{1&}quot;Biennial Survey of Education," U. S. Bureau of Education Bulletin, 1926, No. 23.

Washington: Government Printing Office, 1926, p. 800.

2School "E" was organized later.

3Monroe, W. S. "Educational Guidance in High Schools," University of Illinois Bulletin, Vol. 21, No. 15, Educational Research Circular No. 23. Urbana: University of Illinois, 1923, p. 4.

4Odell, C. W. "Conservation of Intelligence in Illinois High Schools," University of Illinois Bulletin, Vol. 22, No. 25, Bureau of Educational Research Bulletin No. 22. Urbana: University of Illinois, 1925, p. 22-23.

TABLE II.—GROWTH OF TWENTY-FIVE ILLINOIS HIGH SCHOOLS INCLUDED IN THIS STUDY

School Number of teachers employed			mployed	Number of students enrolled		
School	1917-18	1921-22	1926-27	1917-18	1921-22	1926-27
. "A"	21 15 15 8	26	28	318	444	538
"B"	15	17	29	211	363	597
"B"	15	14	22	224	310	552
יירויי	8	14 8	24	150	108	456
"E" "F" "G" "H" "I" "J" "K"			18			483
"F"	8*	14*	17	222*	328*	402
"G"	18	19	18	353	541	516
"H"	18 16 12	25	26	358	556	587
"I"	12	16	20	251	388	420
"J"	14	20	25 -	297	501	530
"K"	12*	21	23	300*	501	588
"L"	30	24	27	515	540	582
"L" "M" "N"	13	14	17	292	465	418
"N"	12	19	29	267	502	584
"O"	10	20	22	246	425	520
"P"	20	19	23	434	470	451
"Q"	18	21	25	468	475	521
"R"	18 16	16	28	312	410	568
"S"	14 12	16 15	20	123	259	463
"T"	12	15	20	275	355	435
"O" "P" "O" "R" "S" "T" "U" "V"	15	18	21	293	386	440
"V"	14	20	28	332	422	526
"W" "X" "Y"	20	19	21	361	452	533
"X"	13	15	17	263	384	448
"Y"	12	16	20	257	395	420
Totals	358	431	568	7,112	9,980	12,578

*Data taken from High School Visitor's Report. Schools approved for membership in North Central Association later.

showed the distribution of the intelligence quotients of 11,321 seniors to be as follows:

Intelligence Quotient	Boys	Girls	Totals
60–70	6	9	15
70–80	38	65	103
80–90	277	540	817
90–100	1,214	1,878	3,092
100-110	1,826	2,364	4,190
110-120	1,145	1,227	2,372
120–130	415	266	681
130-up	34	17	51
Total	4,955	6,366	11,321
Median	105	103	104

If intelligence quotients of 110 and above are considered high, those below 90 as low, and those between as medium, then 935 or 8.25 per cent of these high-school seniors will be classified as of low intelligence, 7,282 or 64.33 per cent as of medium intelligence, and 3,104 or 27.42 per cent as of high intelligence. Studies by Dickson, Proctor, and Thorndike indicate substantially the same distribution of intellectual abilities among high-school students.

TABLE III.—TWENTY-FIVE ILLINOIS HIGH SCHOOLS RANKED ON THE BASIS OF THE Number of Entrance Credits Granted by the University of Illinois, 1926–1929

School	Number of Units Credit	School	Number of Units Credit
"E"	25.5	''P''	37.0
"D"	26.5	''H''	37.5
"М.,	29.0	"U"	37.5
"F"	29.5	"J"	38.0
"G"	29.5	"Ř" "S"	38.0
X.,	30.5	"S"	38.0
"W"	31.5	''O''	38.5
"T"	31.5	''Q'' ''I''	39.0
"L"	32.0	"V"	39.5
"O"	34.0	"A"	40.0
"K"	34.5	"B"	40.5
"Y"	36.0	"N"	42.0
"C"	36.0		

Units for which the University of Illinois grants entrance credit.

The extent to which the schools listed in this study are attempting to respond to the demand for more varied courses is indicated by the number of units which the University of Illinois accepts for entrance. The number of such entrance credits, granted to each of these schools as shown in Table III, was secured from the "Report of the High School Visitor." Other data indicate clearly that the number of subjects for which entrance credit is granted do not include all the curriculum offerings in many of these schools. The catalogs and bulletins available from certain schools list the following: education, psychology, public speaking, industrial subjects, shop courses, band, orchestra, glee clubs, printing, and physical training. With the exception of physical training, these subjects are not required in any of the schools, vet it is evident that students in considerable numbers are taking them.6

Number of units offered in each of the twenty-five schools. cording to the facts presented in Table III, the school offering the least number of acceptable units is School "E" with twenty-five and onehalf, which is ten and one-half more than the number required for entrance to the University. School "L," the median school, offers thirty-six units, more than twice the number required, and School "N" with forty-two, the largest number of accepted units of the group, lacks but three of exceeding the requirements three times.

It must not be inferred that the number of subjects accepted for credit in any given school represents the number of free electives or that the individual student is wholly unrestricted in the selection of

^{5&}quot;Report of the High School Visitor," *University of Illinois Bulletin*, Vol. 23, No. 47. Urbana: University of Illinois, 1926.

6The large number of extra-curricular activities maintained in all schools of the group complicate the situation still further.

his program of study. The specific requirements range from three units in School "F" and School "G" to nine and one-half units in School "C" and School "R." In some of the schools the selection must be made from certain groups classified in much the same manner as the class A, class B, and class C units in the entrance requirements of the University of Illinois; in others there must be an arrangement of majors and minors acceptable to the administration of the school, the usual arrangement being two majors of three units each and two minors of two units each.

Four of the schools offer the students a choice of four or five courses, such as the college-entrance course, the commercial course, and the scientific course. Even here, however, some opportunity is given for variation in the subjects. For example, in the college-entrance course, a student may elect four years of Latin, or two years of Latin and two years of French or of Spanish, or he may select two years of science in place of either Latin or modern language in his third and fourth year of school.

While the major portion of the curriculum offerings of the schools in question is in the form of whole units representing the work of an entire year in the subject, in each school about one-third of the offerings are in half-units or credits, representing the work of one semester in the subject.

Number of choices that the student is called upon to make. An individual student, in making up his course of study for the opening semester, must first satisfy the specific requirements of his school for the grade in which he is registering. He may then choose the remainder of his course from the electives, some of which may extend over the entire year, and some for the semester only. If he succeeds in his work, his selection at the beginning of the second semester will be limited to the half-units only. The student is called upon to exercise the right of choice quite as much in the selection of the half-units as of whole units.

The number of such choices that a student in any of the twenty-five listed schools is permitted to make during his four-year course may be determined approximately in the following manner. If from the number of "whole units" offered, the number of units specifically required for graduation is taken, the remainder will represent the number of whole units from which he may make free choice. The sum of this remainder and the number of "half-units" offered will represent the total number of free choices that he may make. For example, School "T" offers twenty-seven "whole units" of work and six units are re-

TABLE IV.—TWENTY-FIVE ILLINOIS HIGH SCHOOLS RANKED ON THE BASIS OF THE
Number of Free Choices Offered Students in the
SELECTION OF SUBJECTS

School -	Number subj	ects offered	Number units	Subjects from
	Year	Half-Year	specifically required	which choice may be made
"D" "E" "M" "X" "W" "G"	24 21 24 26 27 26	5 9 10 9 9	7 4 8 9 8 3	22 26 26 26 28 30
"T" "E" "K" "P" "C"	27 26 24 30 33 30	9 12 11 9 8 12	6 7 3 7 9 9.5	30 31 32 32 32 32 32,5
"O"	29	10	6	33
"R" "Y" "A" "S" "J" "U"	33 31 35 33 33 33	10 10 10 10 10 10	9.5 7 9 9 8 7	33.5 34 36 34 35 35
"V" "O" "B" "I" "H" "N"	36 33 37 34 33 36	7 11 7 10 9	8 8 7 6 4 8	35 36 37 38 38 40

quired. There is therefore a free choice from twenty-one units of work; add to the twenty-one units the nine "one-half" units offered and the total number of free choices is found to be thirty. It is possible that in a few instances the units required for graduation may be made up of two half-units; in such instances the number of free choices will be reduced by one.

Table IV shows the number of whole units offered, the number of half-units offered, the number of units required for graduation, and the approximate number of free choices that are possible for the students in each of the twenty-five schools to make. As suggested on page 12 of this study, this is not the whole story. It is certain that many, and possibly all, of the twenty-five schools offer courses for which entrance credit is not granted.

Conclusions. From the discussion and from the facts presented in Tables III and IV of this chapter, it appears that the students of the group of schools studied are forced to make a large number of choices in the selection of their programs of study. The number of free choices listed in Table IV indicates that in some instances individual students must elect as much as three-fourths of their programs,

and in a majority of the schools the students elect one-half or more of their programs. In order to understand the full significance of the situation, there must be added to the above list the courses offered in the twenty-five schools for which no entrance credit is allowed but which must be considered in the selection of a course of study. Therefore it appears that some form of guidance service is imperative.

CHAPTER III

A TENTATIVE PROGRAM

The chief objective of a program of educational guidance. The first step to be taken in formulating a guidance program in a school system is to define the purpose that it is expected to fulfill. The most important objective for such a program in this particular group of schools should be to supply the students with the fullest possible information and wise counsel relative to the selection of their courses of study and to the making of other necessary and desirable adjustments.

The policy of educational guidance. A review of the literature on the subject of guidance indicates that the prevailing policies may be classified into three types: namely, "enlightenment," "monitory," and "pigeon-hole." The chief functions of the "enlightenment" policy are to acquaint the student with the educational-vocational advantages, opportunities, and possibilities that a given course or subject offers and to awaken his interest in other courses, institutions, and activities. The final choice is left to the student himself.

The "monitory" policy embodies the essential features of the enlightenment policy and, in addition, involves a sufficiently complete record of the personal history, past achievement, and intellectual ability of the student to offer him pertinent advice or warning as to the probability of his success or failure in a particular subject or institution. Again, the final choice is left with the student.

The "pigeon-hole" policy differs radically in its method of application from either of the above policies in that the student is assigned to certain courses and subjects, definitely selected by the school, on the basis of the data suggested in connection with the monitory policy. The writer believes that of the three, the monitory policy gives promise of the largest returns and offers opportunity for rendering the most effective service.

Information concerning the student needed by the counselor. In order that the guidance program may function properly, those in charge of it should have for each student as complete a personal history as possible. The more elaborate the program attempted, the more detailed the information must be. It appears, however, that medium-sized schools should collect data on the items suggested in the paragraphs that follow.

Knowledge of the family history has an important bearing on the work of the counselor. The influence of the vocational setting of the parents of the student upon the probability of his successful completion of his high-school course is indicated in a recent study by Counts.¹

There should be a complete record of the student's elementary-school career, including his attendance. Teachers' estimates of his ability are quite as essential as his school marks, since frequently the latter may represent absence, illness, favoritism, punishment, or even prejudice. Likewise there should be available the results of his performance on all achievement and intelligence tests taken previously. In the event such records are not obtainable, appropriate tests should be administered as early as possible.

Of equal importance is a progressive study of the personality of the student during the various stages of his high-school career. Special attention should be given to the development of attitudes, interests, moral reactions, and to the formulation of plans for the future. Frequently such a study will result in a different interpretation of the attitude of the student, and hence will afford a new basis on which to give future advice.

Health may be an important factor in the adjustment of the student. Hence a physical examination is desirable. Since the recreational habits of the student are so closely related to his health, the records should indicate specifically the sports in which he has vital interest as well as those in which he is an active participant.

Knowledge of the school policies and of the community needed by the counselor. It is evident that even full knowledge of the individual student will be inadequate unless the counselor possesses an equally thorough understanding of the plan under which the school is organized. He needs to know the various courses offered, the general and specific requirements for graduation, what courses are free electives, and what ones are restricted in one way or another, as in the formation of major and minor sequences, or as prerequisites to other courses. Since under the instruction of different teachers the content, or the emphasis on the content in a given subject, varies considerably, the counselor needs information in regard to the subject as taught in the particular school and by a particular teacher.

A knowledge of the entrance requirements and offerings of colleges and technical schools is essential in order that the counselor may properly advise students expecting to continue their education beyond the high school. The counselor needs to have at hand a wealth of infor-

¹Counts, G. S. "The Selective Principle in Secondary Education," School Review, 30:95-109, February, 1922.

mation concerning the opportunities that various vocations promise for advancement.

Since in many instances the student cannot be properly understood or wisely directed apart from the conditions under which he has lived and to which he will probably return, the counselor needs a thorough understanding of the social, economic, and industrial setting of the community in which the school is situated.

Duties of the counselor. The specific duties of the counselor will be governed in large measure by the type of guidance program adopted and by the particular service that the school proposes to render. medium-sized schools, it appears that the entire guidance program should be in charge of a chief counselor who is responsible to the principal. Under such an arrangement the major duties of the counselor (1) Gathering the data concerning each individual student as indicated on pages 16 and 17, and also data relating to the community in its social and vocational setting. The securing of these data will involve the use of surveys, tests of various kinds, many personal investigations, visits, and conferences, and the taking of a school census. (2) Recording data in such a form that a complete history of each student may be available to the principal, counselor, or teacher without loss of time. For each individual student there should be a card of sufficient size on which to record all data previously mentioned, and also space for notations concerning his after-school career. (3) Actual work of counseling by means of personal and group conferences, interviews, assembly talks, publications, student activities, and perhaps by devoting a limited amount of time each week to class instruction in "try-out" courses and "vocations." (4) Cooperating with the principal and teachers in making curriculum changes, as well as in the classification of students. (5) Conducting follow-up work in the adjustment of graduates and former students. (6) Conducting and assisting in such educational research problems as time and the financial resources will permit, particularly in making available the results of educational research conducted in other institutions.²

Occasions under which counsel should be available. In all schools, large as well as small, the most effective guidance service is rendered at registration times. Perhaps this is because the students are more keenly aware of the need then than at other times. But there are other occasions in the life of the student, quite as critical, in which the need

²Those desiring a more comprehensive list of the duties that counselors are likely to be called upon to perform under varying local conditions are referred to Edgerton's study of guidance and counseling in 143 cities. Edgerton, A. H. Vocational Guidance and Counseling. New York: The Macmillan Company, 1926, p. 49-50.

for wise counsel is as clearly recognized. Guidance service should be available to the student when he is engaged in the following:

- 1. Choosing attendance or non-attendance at high school
- 2. Selecting a curriculum
- 3. Selecting elective subjects within the curriculum
- 4. Considering the dropping of a subject on account of low marks
- 5. Considering the taking of an additional subject or the undertaking of a special project for extra credit
- 6. Considering the changing of curricula
- 7. Determining the sequence of subjects
- 8. Determining whether to repeat elective subjects in which he has failed
- 9. Making adjustments in the curricula in order to meet specific graduation requirements
- 10. Considering leaving school for any reason
- 11. Transferring to another school
- 12. Seeking part-time work out of or within school hours
- 13. Seeking temporary employment
- 14. Considering attendance at a higher institution
- 15. Making selection of the particular higher institution

An adequate teaching staff essential to the adoption of a guidance program. A guidance program of any type must necessarily be dependent in large measure upon the adequacy of the teaching force. In a small school where the entire time of the teachers, including the principal, is absorbed in the preparation of numerous lesson plans and the hearing of recitations, there is no time available to study the needs of individual students or to give them assistance and advice in the decisions that they are called upon to make. The teacher's contact with the student is limited to the recitation period, during which the materials of instruction, rather than the subject of instruction, hold the right of way. Unless there is time for individual study and personal conference, little can be accomplished in the way of guidance. The need may exist, but an adequate teaching staff will be one of the first requisites in meeting the need. Before an attempt is made to introduce a guidance program, the teaching staff should be of such size, in proportion to the number of students, that one or more teachers would have time available for the study of individual student problems and for consultation whenever the necessity demands.

The pupil-teacher ratio in the twenty-five Illinois high schools enrolling 400 to 600 students. Table V shows that all twenty-five of the schools studied are within the pupil-teacher ratio of 30 to 1, and

TABLE V.—TWENTY-FIVE	ILLINOIS HIGH	H Schools	RANKED	ON TH	HE BASIS	OF THE
P	UPIL-TEACHER	RATIO, 19	26-1927			

School	Pupil-Teacher Ratio	School	Pupil-Teacher Ratio
"A"	19:1	"T"	22:1
"D"	19:1 19:1	"H" "S"	23:1 23:1
"È"	20:1	"Ō"	24:1
"N" "R"	20:1 20:1	"F" "M"	24:1 25:1
		ı	
"B"	21:1 21:1	"C"	25:1 25:1
"Ō" "Ŭ"	21:1	"K"	26:1
"Y"	21:1	"X"	26:1 27:1
"Ĵ"	21:1	"E" "G"	29:1
"L"	22:1		

Median.....22:1

that three-fourths of them are within the ratio of 25 to 1, the standards recommended by the North Central Association. It will be observed that Schools "A," "D," and "V" have the lowest ratio of the group, 19 to 1, and that School "G" has the highest ratio, 29 to 1. School "L," the median, has a ratio of 22 to 1.

There are data from only a few of the schools which show the exact number of subjects and classes for which each teacher is responsible. The same is true of the data regarding the actual assignment of students to teachers in respect to advisory groups, home-rooms, and study halls. The reports indicate, however, that the schools use both home-rooms and study halls to care for students during periods between classes. The number of study halls in these schools ranges from one to four, in which number the assembly room and the library reading room are frequently included. The number of home-rooms is not given for any school. Hence it appears that from the standpoint of the pupil-teacher ratio, all schools of the group have a teaching force sufficiently adequate to enable them to seriously consider the adoption of a guidance program. Other data indicate that the internal organization furnishes an equally satisfactory basis for the service.

General organization of a guidance program. There are certain features that are essential to the successful operation of any guidance program whether it is established in a large city or in a small rural high school. First, the guidance program should be under the direction of a trained counselor or director who understands thoroughly the aims, purposes, and technique of guidance procedures. Training for counseling also requires certain personal qualifications relative to dealing with students, teachers, and administrators. Tact and sympa-

thetic understanding are necessary in order to inspire confidence on the part of students, and cooperation on the part of school officials. Briefly, "it is a task that demands the very best in personality, in vision, in training."

Second, the counselor should have the assistance of a small group of judiciously selected teachers, who, with the counselor, will constitute the educational guidance council. The teachers may be organized into committees to each of which is assigned a definite task for study, such as home conditions, citizenship and ethical attitudes, recreations, health, vocational and educational opportunities. Because of their close contacts, the teachers are the best possible source of information concerning the general conduct and personal attitudes of the students. Likewise the teachers supply the medium through which much of the guidance program may function. Work on the guidance committees will give the teachers valuable training in guidance procedures.

Third, in order to give permanency and definiteness to the program, there must be an adequate system of recording and filing of the data relating to each student. The forms selected should be so designed that the counselor or principal may readily obtain the complete history of any student.

Fourth, there should be sufficient clerical help provided to care for all minor routine duties in the collection and recording of data, securing of bulletins, and the like, so that the counselor may devote his time and attention to more important matters.

An educational guidance program adaptable to the medium-sized high school. In the light of the needs presented in the preceding chapter and of the apparently favorable conditions relative to the faculty in this, the following tentative guidance program is suggested.

In medium-sized schools, having an enrollment of less than five hundred students, the principal should have general charge of the guidance program. The data indicate that the principals in the majority of these schools are not required to teach, and of those that do, only a few of them are responsible for more than one class per day. The principals, therefore, have time to devote to administrative and supervisory duties of which guidance is now coming to be recognized as a very real and necessary responsibility. The adoption of a specific guidance program will enable the principal to render this service to his students most efficiently. In order to do effective counseling, however, it is important that the principal should qualify himself through special study of educational and vocational guidance procedures.

Medium-sized schools enrolling five hundred or more students may well consider the employment of a special educational guidance director. The administrative and supervisory duties of the principal will increase in direct proportion to the enrollment, and the amount of time available for directing a guidance program and for counseling with the students will decrease in the same proportion. As a result the principal will need the assistance of a director in order that the work may receive adequate attention. Moreover, if the program calls for a continuous study of all of the students and involves considerable research relative to curriculum adjustments, additional assistants will be needed as the scope of the work expands. If it is found that part-time service will be adequate, two schools may cooperate in the employment of a director, or it may be possible for the principal to delegate the responsibility for the direction of the work to a vice principal, trained for counseling, or to a teacher so qualified.

In respect to the organization of a guidance program from the standpoint of the function that the teachers are expected to perform, the schools in this group appear to be equally well adapted. The homeroom organization, maintained in a number of these schools, furnishes an excellent basis on which to establish a guidance system. No radical changes in the system will be necessary; in many cases there need be none at all. In addition to her regular duties, the home-room teacher will be called upon to observe the individual students closely and report regularly to the director or chief counselor in order to supplement and check the information relative to the school attitudes, conduct, and general progress of the students in her group. On the other hand, she frequently will act as the medium through whom many of the features of the guidance system may function, particularly in the giving of directions and information to student groups.

A guidance program may be adjusted equally well to schools operating under other forms of organization. The functions noted above can be performed quite as efficiently by appointing each member of the faculty as the advisor of twenty-five or thirty students; in fact, this plan is sometimes used as a supplement to the home-room organization. Minor changes may be necessary under any plan in order to provide for regular meetings in which all members of the various home-rooms or advisory groups may be present. Whenever possible, it is desirable that the same teacher be assigned to the same group from term to term, so that the advisory relationships may become increasingly intimate as the student progresses through his high-school course.

The adoption of a guidance program under either of the above conditions will involve the making of provision for the other features previously mentioned as essential to all such programs: (1) The forma-

tion of an educational guidance council composed of a small number of carefully selected teachers; whenever possible preference should be given to those teachers in charge of home-rooms or advisory groups; (2) The installation of an adequate filing system by means of which the records of individual students may be readily accessable to counselor, teachers, and principal; the record forms should be so devised that the counselor may easily get a complete picture of the capacities and characteristics of the student; (3) The employment of sufficient clerical help to care for the extra routine duties entailed by the system.

The La Salle-Peru Township High School is a good example of what is actually being accomplished in educational guidance by a medium-sized secondary school. The school has in operation a complete guidance program, known as the Bureau of Educational Counsel. There is a full-time director, an assistant director, and a secretary on the staff. In order that expert service may be available, the Bureau maintains an advisory relationship with the Illinois Institute of Juvenile Research. As a means of comparison, attention should be called to the fact that the student enrollment in this school is 587 and that there is a faculty of 26 members. Therefore the pupil-teacher ratio is 23 to 1, which is only slightly greater than that of the median school.

Educational guidance programs in operation. The data available from the twenty-five schools show that a limited number of them are making definite attempts to meet in some measure the guidance needs of their students. School "H" has made ample provision through a complete organization. School "A" also has a guidance system in operation although it differs from School "H" in that the chief emphasis is placed on vocational guidance. Bulletins and letters from the schools indicate that in several instances there are faculty committees cooperating with the principal for guidance purposes. As would be expected, in the majority of the schools particular stress is placed upon guidance at registration times. The following selected letters are representative of what the principals say their schools are doing with respect to guidance. The principal of School "G" writes:

"I make talks before the high-school and the junior high-school students, relative to choosing their courses of study. These talks are made as a rule during the month of April; the election cards for the following year being released during the latter part of the month. Teachers and group advisors also encourage pupils to come to them and talk over their courses."

The principal of School "P" says:

"We rely very largely on our method of registration for student guidance. We take four days for this purpose in the beginning of the year when the entire faculty is divided into committees and well organized to give students every help in the selection of their programs. We do not have mid-year promotions in this town so the registration problem in the middle of the year is not serious. At this time, however, the entire list of students is gone over in faculty meetings and cases which need readjustment are taken under advisement by the entire faculty. Such committees as are needed consult with individuals to give them proper guidance."

CHAPTER IV

THE APPLICATION OF THE EDUCATIONAL GUIDANCE PROGRAM TO SMALLER AND TO LARGER HIGH SCHOOLS

The adaptation of the guidance program to schools smaller than those included in the study. In adapting a guidance program to conditions in the small school, only minor changes will be necessary in some cases. Usually a simpler form of organization will be adequate. As in the case of the medium-sized schools, the amount of time available to the principal and the teachers will be a large factor in determining the type of program that can be introduced. It is evident that the small school will be unable to secure the services of a special director who can devote even part time to the management of a program and the counseling with students. The principal is the one school official most likely to be capable of functioning as a director, and he is the one to whom the students are accustomed to go most frequently for direction and advice. The many administrative and supervisory duties, to which some teaching and clerical work are frequently added, leave to the principal but little time to devote to the management of a guidance program. He has the advantage, however, of knowing personally his students and many of their parents, and thus with the assistance of the teachers may do very effective guidance work. Special training in counseling will enable him to find and use to advantage the many opportunities for meeting this need.

There are schools in which scarcity of funds makes it necessary for the guidance program to be incorporated as an integral part of the regular work of instruction. For example, the English and civics classes, through themes, projects, and reading assignments, provide a ready medium for acquainting students with educational opportunities. A series of assembly programs may be devoted to the dissemination of similar information.

The adaptation of the guidance program to the school system of large cities. The school system of a large city affords the best opportunity for the introduction and development of a complete guidance program. Here the many features of the program appear in specialized form as a result of the division of the work into several departments over each of which a special counselor or director is in charge.

For cities in which there is but one high school and no central guidance and research bureau for the entire system, elementary and sec-

ondary, the guidance organization suggested for medium-sized high schools enrolling five hundred or more students will furnish a good pattern. There should be a chief director who is responsible to the principal and one or more assistant directors, depending upon the size of the school. The director, as in the above organization, will be responsible for the direction of the program, for the collection and evaluation of the data, and for as much of the counseling as time will permit. Counselors should be added to the staff in numbers sufficient to care adequately for the students. The assignment of the teachers to student groups, the formation of the educational guidance council, and the other features of the program will likewise need to be arranged and adjusted to the administrative organization of the particular school.

The plan of the guidance organization used in the Senior High School of 2,000 students in Berkeley, California, is suggestive. staff consists of a chief counselor and six "teaching counselors." teaching counselors devote two periods each day to regular classroom instruction, and the remainder of the time to counseling duties. Miss Elsie Martens,1 the Assistant Director, reports that four of the six teaching counselors are each assigned to the guidance of the students of a given class. For example, all the "low-X" students are directed by the "low-X" teaching counselor. Likewise, the "high-X," the "low-IX," and the "high-XI" are each under the care of a teaching coun-The "low-XII" and the "high-XII" students are under the guidance of the chief counselor, the group advisors, and the assistants in the principal's office. The other two of the six teaching counselors have charge of the attendance, a man being responsible for the boys' attendance and a woman for that of the girls. Attendance problems are considered inseparable from counseling problems because the attendance of a student has an important bearing on his scholarship and high-school plans. Accordingly, there is the closest possible cooperation between the two types of counselors.

Cities in which there are several large high schools will require the services of a central bureau from which the guidance programs in all of the schools are directed. A director, or chief counselor, who is responsible to the superintendent of schools, should have charge of the entire organization. It is generally desirable to divide the work of the bureau into several departments of which the following are the most common: educational guidance, vocational guidance, and educational research. The work in some cities is divided on a basis that provides for departments of attendance, scholarship, psychology, and placement,

¹Martens, E. H. "A High School Counseling System in Operation," Journal of Educational Research, 11:17-24, January, 1925.

these departments either supplementing or replacing the ones named above. In any case the elaborateness of the organization depends upon the amount and the character of the service to be rendered. The chief director and the heads of the various departments constitute the guidance staff, to which, in an increasing number of cities, the full-time services of a specially trained psychologist, and frequently those of a psychiatrist are added.

The central bureau is responsible for the collection, evaluation, and preparation of all factual material and sees that it is made available to the principals, counselors, and teachers in the several schools. The central bureau assigns the counselors and directs their work in the various high schools of the city. The number of counselors placed in a given school is determined by the enrollment, the type of service to be rendered, and the special needs of the particular community in which the school is situated. At times it will be necessary for the central bureau to function as a training agency for the counselors new to the system as well as for prospective counselors.

The counselor has immediate charge of the counseling program in the school to which he is assigned; he is expected to give to the principal expert assistance relative to guidance functions, and to devote the major part of his time to the actual work of counseling. The official relationship of the counselor to the principal is usually placed on the same basis as that of the general and special supervisors working out of the office of the superintendent of schools. The principal is the recognized executive head of his school, and thus the work, the daily schedule, and all individual and group conferences called by the counselor are subject to his approval.

The work of the educational guidance councils in each of the schools will be limited largely to the consideration of the personal problems of the students. Frequently the councils may act as mediums or clearing houses for the reception and transmission of information relative to individual and community needs. All matters pertaining to the administration of the guidance program in large cities will be the concern of the central bureau and the superintendent of schools, rather than of the councils.

BIBLIOGRAPHY

- ALLEN, R. D. "Use of Intelligence Tests in Educational Administration in the Providence Schools," School and Society, 18:335-39, September 22, 1923.
- Bean, C. H. "Psychological Factors in Vocational Education," Educational Review, 54:148-63, 1910.
- Beckington, L. B. "Experiences with a Vocations Program in Home-room Organization," *Teachers College Record*, 28:563-79, February, 1927.
- BIXBY, H. D. "Organizing Classes for Gifted Children," Educational Review, 67:96-99, April, 1924.
- Breed, F. S. "Shall We Classify Pupils by Intelligence Tests?" School and Society, 15:406-9, April 15, 1922.
- Brewer, J. M. "Organizing the School for Guidance," School and Society, 21:609-14, May 23, 1925.
- Brewer, J. M. "Recent Progress and Problems of Vocational Guidance," School and Society, 23:62-70, January 16, 1926.
- Buswell, G. T. "The School Treatment of Mentally Exceptional Children," Elementary School Journal, 23:683-93, May, 1923.
- CAMERON, E. H. "Some Misconceptions of Vocational Guidance," *Proceedings* of the High School Conference, November, 1925. Urbana: University of Illinois, 1926, p. 275-78.
- CAMPBELL, C. M. "The Nervous Child," School and Society, 18:391-97, October 6, 1923
- CARDOZO, F. L. "Guidance in Education," Education, 46:179-87, November, 1925. COLVIN, S. S. "The Role of Intelligence Tests in the Selection, Elimination, and Guidance of College and High School Students," Ohio State University
- Bulletin, Vol. 28, No. 2. Columbus: Ohio State University, 1923, p. 133-39. Counts, G. S. "The Selective Principle in Secondary Education," School Re-
- view, 30:95-109, February, 1922.

 Counts, G. S. "The Social Purpose of the Education of the Gifted Child,"

 Educational Review, 64:233-44, October, 1922.
- Cowing, H. H. "The Four Year Home-room," School and Society, 15:627-29, June 10, 1922.
- Dearborn, W. F. "The Study of Individual Abilities—The Normal Child," School and Society, 18:331-35, September 22, 1923.
- Dickson, V. E. "The Need for a Counseling Program in Secondary Schools," Journal of Educational Research, 11:12-16, January, 1925.
- DICKSON, V. E. "The Use of Mental Tests in the Guidance of Eighth-Grade and High-School Pupils," Journal of Educational Research, 2:601-10, October, 1920.
 - ENGLE, A. M. "Characteristic and Significant Differences between X and Z Pupils in the Detroit Public Schools," *Elementary School Journal*, 24:747-54, June, 1924.
 - FERNALD, W. E. "The Subnormal Child," School and Society, 18:397-406, October 6, 1923.
- Freeman, F. N. "Sorting the Students," Educational Review, 68:169-74, November, 1924.
- vember, 1924.

 Freeman, F. N. "The Treatment of the Gifted Child in the Light of Scientific Evidence," *Elementary School Journal*, 24:652-61, May, 1924.
 - French, W. C. "A Plan of Organization for Taking Care of Bright Pupils," Elementary School Journal, 24:103-8, October, 1923.
 - FRYER, DOUGLAS. "Occupational-Intelligence Standards," School and Society, 16:273-77, September 2, 1922.

Geyer, D. L. "The Reliability of Rankings by Group Intelligence Tests," Journal of Educational Psychology, 12:43-49, January, 1922.

GILES, F. M. "Vocational Guidance in High School," (DeKalb) School Review,

22:227-34, April, 1914.

GODDARD, H. H. School Training of Gifted Children. New York: World Book Company, 1928. 226 p.

HAGGERTY, M. E. "Recent Developments in Measuring Human Capacities,"

Journal of Educational Research, 3:241-53, April, 1921.

Hanna, J. V. "Some Administrative Problems Involved in the Guidance of High School Pupils," Vocational Guidance Magazine, 4:14, October, 1925.

HAWKES, F. P. "Educational Guidance Through Organization and Supervision of a College Week," *Journal of Educational Method*, 6:342-52, April, 1927. HAWKES, F. P. and McDermont, T. M. "Educational Guidance Through As-

HAWKES, F. P. and McDermont, T. M. "Educational Guidance Through Assembly Programs," *Journal of Educational Method*, 6:248-52, February, 1927. Henmon, V. A. C. "The Measurement of Intelligence," *School and Society*,

13:151-58, February 5, 1921.

Hill, H. C. "Individual Guidance in Voluntary Reading," School Review, 33:365-69, May, 1925.

Hollingworth, L. S. The Psychology of Subnormal Children. New York: The Macmillan Company, 1922. 288 р.

Hollingworth, L. S. Special Talents and Defects. New York: The Macmillan

Company, 1923. 216 p.

HOLY, T. C. and Cocking, W. D. "A Permanent Record and Efficiency Card for High Schools," *American School Board Journal*, 67:49-50, 141, August, 1923.

JENSEN, D. W. "The Gifted Child," Journal of Educational Research, 15:34-45, 126-33, 198-206; January, February, March, 1927.

JORDAN, R. H. "An Example of Classification by Group Tests," Educational Administration and Supervision, 6:198-201, April, 1920.

Kelley, T. L. "Distinctive Ability," School and Society, 18:424-28, October 13, 1923.

Kitson, H. D. "Psychological Measurements of College Students," School and Society, 6:307-11, September, 1917.

LEAVITT, F. M. Examples of Industrial Education. Boston: Ginn and Company, 1912.

LINEHAN, W. F. "Opportunities in the English Class for Educational Guidance," School and Society, 18:162-66, August 11, 1923.

LYMAN, R. L. "The Guidance Program of the Holmes Junior High School," School Review, 32:93-104, February, 1924.

MARTENS, E. H. "A High School Counseling System in Operation," Journal of Educational Research, 11:17-24, January, 1925.

MILLER, H. L. "Educating Up to Capacity," High School Teacher, 2:6-8, January, 1926.

MILLER, JOSEPH. "Program of a Psychologist in a High School," School and Society, 26:367-68, September 17, 1927.

Monroe, W. S. "Educational Guidance in High Schools," *University of Illinois Bulletin*, Vol. 21, No. 15, Educational Research Circular No. 23. Urbana: University of Illinois, 1923. 14 p.

O'Brien, F. P. "High School Failures," Teachers College, Columbia University Contributions to Education, No. 102. New York: Bureau of Publications,

Teachers College, Columbia University, 1919. 97 p.

Odell, C. W. "Conservation of Intelligence in Illinois High Schools," *University of Illinois Bulletin*, Vol. 22, No. 25, Bureau of Educational Research Bulletin No. 22. Urbana: University of Illinois, 1925, p. 15.

ODELL, C. W. "A Glossary of Three Hundred Terms Used in Educational Measurement and Research," *University of Illinois Bulletin*, Vol. 25, No. 28, Bureau of Educational Research Bulletin No. 40. Urbana: University of Illinois, 1928, p. 24.

ODELL, C. W. "Provisions for Individual Differences of High School Pupils," University of Illinois Bulletin, Vol. 21, No. 4, Bureau of Educational Research Circular No. 22. Urbana: University of Illinois, 1923. 15 p.

- Olson, Elma. "Report of the Bureau of Educational Counsel." La Salle-Peru Township High School. La Salle, Illinois: Board of Education, 1927.
 - PROCTOR, W. M. Educational and Vocational Guidance. Boston: Houghton Mifflin Company, 1925. 342 p.
- PROCTOR, W. M. "Psychological Tests and Guidance of High School Pupils," Journal of Educational Research Monographs, No. 1, June, 1921. Bloomington, Illinois: Public School Publishing Company. 70 p.
 - REAVIS, W. C. "Accounting for the Progress of Superior Students," Supplementary Educational Monographs, No. 26. Chicago: University of Chicago Press, 1925, p. 1-13.
 - Streitz, Ruth. "Educational Diagnosis," University of Illinois Bulletin, Vol. 21, No. 41, Bureau of Educational Research Circular No. 27. Urbana: University of Illinois, 1924. 16 p.
 - STREITZ, RUTH. "Gifted Children and Provisions for Them in Our Schools," *University of Illinois Bulletin*, Vol. 20, No. 13, Bureau of Educational Research Circular No. 14. Urbana: University of Illinois, 1922. 12 p.
- TERMAN, L. M. "Feeble-minded Children in the Public Schools of California," School and Society, 5:161-65, February 10, 1917.
- THORNDIKE, E. L. "On the Changing Quality of Pupils Entering High School," School Review, 30:355-59, May, 1922.
- THORNDIKE, E. L. "The Diversity of High School Students' Programs," Teachers College Record, 24:8-30, March, 1923.
- THWING, C. F. "The Superior Student in the College," School and Society, 22:345-50, September 19, 1925.
- Toops, H. A. "An Individual Educational Guidance Card for College Students," School and Society, 20:125-28, July 25, 1924.
- Town, C. H. "The Superior Child in Our Schools," Educational Review, 65:17-21, January, 1923.
- Townsend, H. G. "The Discovery and Education of the Gifted," School and Society, 23:132-36, January 30, 1926.
- Trabue, M. R. "Some Pitfalls in the Administrative Use of Intelligence Tests," *Journal of Educational Research*, 6:1-11, June, 1922.
 - VAN SICKLE, J. H., et al. "Provision for Exceptional Children in Public Schools," U. S. Bureau of Education Bulletin, 1911, No. 14. Washington: Government Printing Office, 1911. 92 p.
- VITELES, M. S. "Psychological Tests in Guidance: Their Use and Abuse," School and Society, 22:350-56, September 19, 1925.



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