PROCEDURES IN CURRICULUM MAKING

BULLETIN, 1932, No. 17

MONOGRAPH No. 18

UNITED STATES DEPARTMENT OF THE INTERIOR
OFFICE OF EDUCATION

NATIONAL SURVEY OF SECONDARY EDUCATION

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UNITED STATES DEPARTMENT OF THE INTERIOR
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PROCEDURES IN CURRICULUM MAKING

BY

EDWIN S. LIDE

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NOTE

Edwin S. Lide, the author of this monograph, is specialist in the curriculum of the NATIONAL SURVEY OF SECONDARY EDUCATION. *William John Cooper, United States commissioner of education, is director of the Survey; Leonard V. Koos, professor of secondary education at the University of Chicago, is associate director; and Carl A. Jessen, specialist in secondary education of the Office of Education, is coordinator.*

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LETTER OF TRANSMITTAL

DEPARTMENT OF THE INTERIOR,
OFFICE OF EDUCATION,
Washington, D. C., March, 1933.

SIR: Within a period of 30 years the high-school enrollment has increased from a little over 10 per cent of the population of high-school age to more than 50 per cent of that population. This enrollment is so unusual for a secondary school that it has attracted the attention of Europe, where only 8 to 10 per cent attend secondary schools. Many European educators have said that we are educating too many people. I believe, however, that the people of the United States are now getting a new conception of education. They are coming to look upon education as a preparation for citizenship and for daily life rather than for the money return which comes from it. They are looking upon the high school as a place for their boys and girls to profit at a period when they are not yet acceptable to industry.

In order that we may know where we stand in secondary education, the membership of the North Central Association of Colleges and Secondary Schools four years ago took the lead in urging a study. It seemed to them that it was wise for such a study to be made by the Government of the United States rather than by a private foundation; for if such an agency studied secondary education, it might be accused either rightly or wrongly of a bias toward a special interest. When the members of a committee of this association appeared before the Bureau of the Budget in 1928, they received a very courteous hearing. It was impossible, so the Chief of the Budget Bureau thought, to obtain all the money which the commission felt desirable; with the money which was obtained, $225,000, to be expended over a 3-year period, it was found impossible to do all the things that the committee had in mind. It was possible, however, to study those things which pertained strictly to secondary education, that is, its organization; its curriculum, including some of the more fundamental subjects, and particularly those subjects on which a comparison could be made between the present and

earlier periods; its extracurriculum, which is almost entirely new in the past 30 years; the pupil population; and administrative and supervisory problems, personnel, and activities.

The handling of this survey was intrusted to Dr. Leonard V. Koos, of the University of Chicago. With great skill he has, working on a full-time basis during his free quarters from the University of Chicago and part time during other quarters, brought it to a conclusion.

This manuscript reports a study that was made of procedures in curriculum building. It was written by Edwin S. Lide, a regularly employed specialist on the staff of the National Survey of Secondary Education. Doctor Lide discovered that there were three general types of curriculum revision aside from revision in a very few independent schools. These types were a city-wide type, a county-wide type, and a state-wide type. The first was found in a great many of our cities varying in size and in location. The county-wide type was found best exemplified in the State of Maryland where county revision secures the assistance of a State supervisor. The state-wide type was found in approximately a third of the States and varied greatly in effectiveness.

When the cost of curriculum revision was investigated it was discovered that very few schools keep an exact record; some superintendents do not attempt to keep any sort of account of expenditures for curriculum revision. The range of expenditures reported varied from nothing to twenty-five or thirty thousand dollars per year with an average of less than four hundred dollars per year. In nearly all cases the revision of the curriculum is made a part of the work of supervision. This means that superintendents, principals, and supervisors are the most important directing officers. Specialists from without the system are, however, employed in about one-fourth of the programs. In some cases provision is made for a review of the course of study which is developed. In other cases it is merely put into effect on the theory that it is being tried out pending a future revision. In state-wide revisions a State university is very frequently called in as a cooperating institution. State universities and State teachers associations indicate that they are doing practically nothing except where they are invited by the State superintendent to cooperate. In one or two of the States tests have been given

on a state-wide basis and studies of the occupations of recent high-school graduates have been investigated. Regional conferences on curriculum revision are also reported in 15 of the 19 States replying.

This manuscript is concerned with detailed minutia of curriculum making. The concrete reporting of practices will, it is believed, be very helpful to those who are now attempting reconstruction of the curriculum. Therefore it is recommended that it be published as one of the monographs in the National Survey of Secondary Education.

Respectfully submitted.

WM. JOHN COOPER,
Commissioner.

THE SECRETARY OF THE INTERIOR.

PROCEDURES IN CURRICULUM MAKING

CHAPTER I : THE PROBLEM

1. PURPOSE OF THE STUDY

The purpose of this study is to indicate the details of organization and the specific procedures through which programs of curriculum revision are conducted on city-wide, county-wide, and state-wide scales and to reveal the influence of certain central agencies on such programs. The study does not enter into the reasons for curriculum revision, or the philosophies upon which the programs rest. The concern is rather with the administrative arrangements which have been adopted in order that the curriculum may be brought and kept up to date.

2. CURRICULUM MAKING IN PRIVATE SCHOOLS

While an effort was made to secure information concerning methods of revising the curriculum in private and laboratory schools, the returns were too meager to justify treatment. A general inquiry form sent to private schools contained questions regarding whether a plan of curriculum revision had been in progress within the past five years. An analysis of almost 800 returns indicated affirmative reports from 90 schools. Special inquiry was made of each of these schools, but the forms devised for data on curriculum making were returned by only four schools. Since these four schools were small, curriculum making was largely an informal, family affair among the faculty members of each. We may conclude, therefore, that plans for curriculum revision among such schools are far from numerous.

3. RESEARCH IN THE FIELD

Research needed.—In the early period of the Survey, the feeling among curriculum leaders of the need of more extended investigations in this field was indicated in their response to requests that they recommend problems which they consid-

ered important for the curriculum project. Several letters suggested a study of plans and procedures for conducting curriculum revision.

Studies of city-wide revision.—Most of the studies which have been made relate to curriculum making in single schools or systems. The principal sources of such reports are two yearbooks of the Department of Superintendence [1] concerned with revision in the elementary grades and a yearbook published in 1927 for the National Society for the Study of Education [2] which includes a section devoted to revision in the secondary field.

In these reports separate accounts are given of procedures in a number of city-school systems, as well as practices in laboratory schools. In the Second Yearbook of the Department of Superintendence an analysis of replies from 81 cities as to the relation of the principal to the revision program is made. A more detailed set of data for public high schools is reported by Counts in the Twenty-sixth Yearbook of the National Society for the Study of Education, based on replies from 111 senior and 73 junior high schools.

Patterson [3] reported, in an unpublished study in 1928, the results of a study of the curriculum revision program in seven Oklahoma cities. Another unpublished study is one made by David [4] in 1930, in which practices in 34 cities and towns, well distributed over the United States and ranging in population from 3,000 to 1,300,000, were analyzed.

The most detailed study of procedures in curriculum revision is that made by Cocking [5] in 1928. While only 12 cities are represented in the investigation, 36 "chief factors" in curriculum making were studied intensively. In no one of the studies just mentioned except that of Counts, was a distinction made between revision on the elementary and revision on the secondary-school level.

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[1] Second and Fourth Yearbooks, 1924 and 1926, Department of Superintendence, National Education Association, Washington, D. C.

[2] Twenty-sixth Yearbook, National Society for the Study of Education, Pt. I, Bloomington, Ill., The Public School Publishing Co.

[3] Patterson, John W. The Organization and Administration of a Program of Curriculum Revision. M. S. Thesis (unpublished), University of Oklahoma, Norman.

[4] David, F. L. Selecting and Organizing Personnel for Curriculum Revision. Cleveland, Ohio.

[5] Cocking, Walter D. Administration Procedures in Curriculum Making for Public Schools, Teachers College, Columbia University, Contributions to Education, No. 329, New York City.

Studies of county and state-wide revision.—A few accounts of curriculum making on a county-wide or state-wide basis in individual counties or States are also to be found in the yearbooks previously mentioned. No published or unpublished account of studies of such procedures involving more than one center, however, has come to the attention of the writer.

While a few schools report their organization for revision in the form of monographs, and while a few reports of practices in individual schools are contained from time to time in periodical literature, the scarcity of published data in this field is indicated by the accounts just given.

4. METHODS OF LOCATING THE CENTERS

Selection of cities.—An effort was made to select for the study those schools and systems whose procedures in curriculum revision were considered the most outstanding. A general inquiry form which was sent at the beginning of the survey to several thousand city superintendents and high-school principals contained three and one-half pages of questions specifically related to the curriculum. These questions were designed to enable a careful selection of schools. Based on an analysis of the general forms, together with suggestions of State departments of education and those derived from an analysis of the literature, special inquiry forms were prepared and sent to 467 officials connected with schools reporting programs of revision in progress within the past five years.

Selection of counties.—Three methods were used for selecting counties to be approached with regard to plans for curriculum making. The literature in this field was first examined, but little came of this. A few suggestions were obtained from the general inquiry form referred to in the preceding paragraph. Finally a short form developed for this specific purpose was sent to the State superintendent or commissioner of education in all States employing a county system of schools. From such procedures, however, a list of only 38 county superintendents was derived.

Identifying the States.—A list of 12 States which had within the past five years been organized for the revision of the secondary-school curriculum was secured from general inquiry

forms similar to those used in the first approach to city schools, and which were returned from each of the 48 States. All State departments of education (except the 12 conducting revision), all State universities, and all State teachers associations were approached on a form devised to ascertain the influence of central agencies on curriculum making.

5. METHODS OF COLLECTING DATA

Nature of forms.—As far as possible, the special inquiry forms on which data were collected from cities (or from individual schools within cities), from counties, and from States engaged in curriculum revision were similar. The separate forms with which approach was made to three central agencies to ascertain their influence on local curriculum making were likewise similar. Two types of forms were prepared—(1) those for schools reporting revision as *completed* and (2) those for schools reporting revision as *in progress*. In order to secure the reaction of educators to the plans they had followed, after each item space was provided in which they were requested to indicate (1) an evaluation of the plan followed; (2) changes thought advisable were they to undertake a new program. This fact, together with the attempt to prepare a form adapted to returns from all types of organizations, gave each form an approximate length of 20 pages. Such length may have given a somewhat formidable appearance to the blank in centers employing a simple plan of organization. On the whole, however, the returns indicate careful efforts by respondents to supply all information at hand.

Visits.—The conclusion just stated is enforced by conferences at the time visits were made to officials and teachers in a selected few of the centers from which forms were received. Such centers were chosen through analysis of all forms returned. Replies to inquiries made during such visits indicate that much care and attention were given to filling in the forms.

6. OUTLINE OF PRESENT STUDY

The body of the following study is treated within four principal divisions: (1) Curriculum making on a city-wide scale, with separate chapters devoted to general features of

programs of revision, to details of organization, and to specific procedures for separate elements; (2) curriculum making on a county-wide scale; (3) curriculum making on a state-wide scale; (4) central influences on local curriculum making. A single chapter is devoted to each of the last three divisions.

CHAPTER II

CURRICULUM MAKING ON A CITY-WIDE SCALE: GENERAL FEATURES OF PROGRAMS OF REVISION

1. OUTLINE OF THE CHAPTER

Considered in this chapter, as general features of the programs of revision, are (1) the size and location of the schools represented; (2) the types of schools and grades represented; (3) the number of years revision plans were in operation; (4) the subject fields revised; (5) the general plans of attack employed; (6) the stages into which the work developed; (7) the time taken for the first general revision. These features will be considered in the order named.

2. SIZE AND LOCATION OF THE CITIES REPRESENTED

The size of the cities represented by the 162 schools whose returns were analyzed is as follows: Group I—more than 100,000 population, 45 cities; Group II—30,000 to 100,000 population, 57 cities; Group III—10,000 to 30,000 population, 27 cities; Group IV—less than 10,000 population, 33 cities. The New England area is represented by 14 cities, the Middle Atlantic section by 25, the North Central by 59, the South by 31, and the West by 33.

3. TYPES OF SCHOOLS AND GRADES REPRESENTED

In some of the schools from which forms were received, revision was completed, while in others it was still in progress; in some cases, returns were representative of the city as a whole, while in others, individual schools within city systems or independent schools are represented; in some of the schools grades are organized according to the traditional 8–4 plan, while others operate under the 6–3–3 or 6–6 plan. The distribution of these types of schools is shown in Table 1.

In 96 cases, as the table shows, the plans include grades 7 to 12; in 12 cases, only grades 7 to 9 are represented; and in 46 cases, the organization included grades 10 to 12 or grades 9 to 12. In 129 of the 162 organizations revision

TABLE 1.—*Distribution of centers in which revision has been completed or is in progress according to manner of organization of grades*

Grades	City systems		Individual schools in city systems		Independent schools		Total	
	Completed	In progress	Completed	In progress	Completed	In progress	Completed	In progress
1	2	3	4	5	6	7	8	9
7 to 12	43	49	1	2		1	44	52
7 to 9	3	8	1				4	8
10 to 12	1		3	5			4	5
9 to 12	8	15	4	7	6	1	18	23
Unknown	1	1	1	1			2	2
Total	56	73	10	15	6	2	72	90

plans were representative of the city as a whole; in 25 cases the plans represented individual schools within the city which were working independently; and in 8 cases, the organizations were described as independent, since they represented secondary schools in which, as in a union high-school district, the control was distinct from that of the elementary schools. As in the total for all schools, in each of the separate types, the proportion of schools in which the first tentative revision was in progress is slightly greater than the proportion in which revision has been completed.

4. NUMBER OF YEARS REVISION PLANS HAVE BEEN IN OPERATION

While the question was not asked for the program as a whole, respondents were requested to indicate the year when the first revision was begun and completed in each subject field. From these data were calculated the evidence reported in Table 2.

It appears that the average time for which the schools represented have been organized for curriculum revision is only four years. The range is from more than 10 years ago as indicated by four schools, to only a few months as indicated by one school. Among the population groups, the highest average is shown for the largest cities, but the lowest is shown for the schools of Group III rather than for those of Group IV.

TABLE 2.—*Distribution of schools by numbers of years during which a program of revision has been in operation*

Years	Number of schools									
	Population group				Geographical section					Total
	I	II	III	IV	N. E.	M. A.	N. C.	S.	W.	
1	2	3	4	5	6	7	8	9	10	11
10 or more	4				1		1		2	4
8 to 10	2	3		1		1	2		3	6
6 to 8	8	7	1	3	1		6	4	3	14
4 to 6	16	12	6	9	4	12	14	9	4	43
3	7	8	3	4	2	2	8	1	9	22
2	8	9	6	8	3	5	13	4	6	31
1		5	6	1	2	2	5	3		12
Less than 1		1			1					1
Unknown	5	12	5	7		3	10	10	6	29
Total	45	57	27	33	14	25	59	31	33	162
Average number of years	4.9	4.1	1.9	4.0	3.7	4.0	4.0	4.1	4.7	4.1

Not so much variation is shown in the averages for the geographical sections, although the New England group ranks somewhat lower and the Western group somewhat higher than the average for all schools. The data as a whole indicate the recency of concerted attack on the curriculum problem.

5. SUBJECT FIELDS REVISED

An idea of the subject fields receiving most emphasis in the revision programs represented may be gained from Table 3. Here are assembled the numbers of schools indicating work completed and in progress in each subject field, separately for junior and for senior high school. A grand total of 1,921 courses of study are reported as occupying the attention of the schools replying to this question.

English seems to receive attention from the greatest number of schools, followed by mathematics, physical education, social studies, and science, in the order named. Since a greater number of revision programs for senior high school are included in the study, in practically all cases the totals for senior high schools are greater for each subject field than for junior high schools. Despite the fact, however, that a greater number of entire programs are represented as in progress rather than as completed, the totals for the separate

fields are in nearly all cases greater for *completed* than for *in progress*. This may be due in some cases to reluctance on the part of respondents to list subject fields unless revision has been completed.

TABLE 3.—*Number of schools reporting curriculum revision in certain subject fields, completed and in progress*

Subject field	Senior high school			Junior high school			Grand total
	Completed	In progress	Total	Completed	In progress	Total	
1	2	3	4	5	6	7	8
English	69	52	121	53	38	91	212
Social studies	52	48	100	45	36	81	181
Mathematics	63	48	111	50	35	85	196
Foreign language:							
Latin	45	25	70	37	16	53	123
French	35	23	58	20	12	32	90
Spanish	37	15	52	17	7	24	76
German	20	11	31	12	4	16	47
Italian	2	1	3	2	1	3	6
Science	51	42	93	39	35	74	167
Physical education	43	51	94	50	40	90	184
Art	29	25	54	31	21	52	106
Music	26	26	52	33	18	51	103
Commerce	55	33	88	30	15	45	133
Industrial arts	36	37	73	35	24	59	132
Home economics	44	32	76	37	25	62	138
Other	4	9	13	6	8	14	27
Total	611	478	1,089	497	335	832	1,921

6. GENERAL PLANS OF ATTACK

Four types of plans.—On the general inquiry form devised for this study, four questions were asked concerning general plans on which the details of organization would be built: Whether organizations for revision of the secondary and elementary curriculums were distinct; whether revision was made from the standpoint of the traditional grouping of grades (8–4 or 7–4 plan) or of a reorganization of grades (6–6, 6–3–3 plans, etc.); which of three methods named best described the point of departure from which revision proceeded; what major elements the program included.

Distinction between elementary and secondary-school revision.—Of the 146 schools replying to this question 117 stated that elementary and secondary-school revision were entirely distinct; 26 reported that both units were under the same director; and 3 reported that in each subject field one chairman was in charge of both groups. It is likely that some

schools had one director in charge of both groups, even though reporting a distinct organization. The replies indicate, however, that almost all consider revision on the elementary and secondary levels as entirely separate problems. Little distinction in this respect is to be noted as between geographical and population groups.

Asked to describe phases of the organization that did not distinguish elementary and secondary problems, it was explained by some that representatives of both units were on the general, central, or steering committee. Others indicated relationships intended to secure articulation of the work of the separate organizations.

Traditional or reorganized grouping of grades.—The question concerning grouping of grades was asked only on the form going to schools reporting revision as in progress. Replies to this question were found on 77 of the 90 forms; 72 per cent of those replying reported revision as based on a reorganized grouping of grades.

Point of departure.—Respondents were asked to indicate which of three methods best described the point of departure from which revision proceeded, namely, fundamental building of the curriculum from the ground up, revision of old course to conform more nearly to present needs, or adaptation of State course to local needs. The replies are represented in Table 4.

In some cases, as the table indicates under "combination of above," different points of departure were followed within a single school or system, depending on the subject field being revised. The percentages computed to indicate the proportion of schools that in any instance build from the ground up, reveal that this was specified by almost half of all schools. Among the population groups, the variation is from 21 per cent in cities of less than 10,000 to 58 per cent in cities of more than 100,000 population. A consistently greater percentage of schools build from the ground up as the cities increase in size. In the Middle Atlantic, North Central, and Western sections, there is little variation from the average for all schools, but the schools of the New England group rank higher and the schools of the Southern group considerably lower, in the proportion building the curriculum from the ground up.

TABLE 4.—*Number of schools indicating certain points of departure from which revision proceeded*

Point of departure	Population group				Geographical section					Total
	I	II	III	IV	N. E.	M. A.	N. C.	S.	W.	
1	2	3	4	5	6	7	8	9	10	11
1. Building from ground up	16	20	7	6	4	6	21	8	10	49
2. Revision of old course	13	23	11	15	4	10	23	13	12	62
3. Adaptation of State course	1	1	2	4	1	2	4	....	1	8
4. Combination of above:										
1, 2	8	4	2	1	2	3	3	3	4	15
2, 3	5	2	3	4	2	2	4	2	4	14
1, 3	....	3	1	....	....	1	2	....	1	4
1, 2, 3	2	....	1	....	1	1	1	....	....	3
5. Unknown	....	4	....	3	....	....	1	5	1	7
Total	45	57	27	33	14	25	59	31	33	162
Percentage building from the ground up	58	46	41	21	50	44	46	35	45	44

Evaluation.—A summary of the evaluations given by respondents to the preceding question indicates that between 40 and 50 per cent consider their practice satisfactory with no change desired. The few replies attempting a more detailed evaluation pointed out, for the most part, the desirability of building from the ground up, but complained of the need of more time, money, and expert advice for such a procedure. In one or two cities, revision is directed toward a proper reception of State courses by the local staff.

The major elements included.—The request that they indicate opposite a list of 22 elements of a revision program, the name of the agency or committee responsible for those elements included in their program, brought information from 132 schools. Only the number of schools which supplied information for each element is indicated (by population groups) in Table 5. The agencies responsible for each element will be presented subsequently. In addition to the 22 elements named, space was provided for listing other elements. In a few cases, indicated in the table under the heading "Other," additional elements, such as providing for extra-curriculum activities and for visual education, were listed.

The table reveals that formulating general plans is the element most commonly indicated, averages for all schools considered, and organizing and conducting experimental classes is designated least often. Altogether, only 11 of the 22

TABLE 5.—*Number of schools in each population group in which certain major elements of curriculum making are included*

Element	Group I (22 schools)	Group II (20 schools)	Group III (49 schools)	Group IV (41 schools)	Total (132 schools)
1	2	3	4	5	6
Formulating general plans	17	13	32	27	89
Formulating guiding principles	16	11	31	28	86
Formulating general aims	19	12	29	28	88
Training teachers for revision	11	8	21	19	59
Investigating community characteristics	13	7	23	18	61
Investigating needs of pupils	16	7	22	22	67
Revising program of studies	17	10	30	25	82
Revising content in subject fields	16	9	25	25	75
Suggesting teaching procedures	12	10	22	24	68
Correlating work of separate departments	13	9	22	21	65
Coordinating work of separate grades	12	8	22	21	63
Determining time allotments	16	8	27	28	79
Determining minimum standards	13	7	25	25	70
Organizing and conducting experimental classes	7	3	14	15	39
Trying out before adoption	8	2	14	18	42
Editing for expression and form	10	4	16	23	53
Editing for content	8	4	19	24	55
Training teachers in use of revised course	9	5	17	23	54
Selecting textbooks	15	7	28	24	74
Selecting other supplies	12	8	23	24	67
Appraising results of revision	13	4	18	23	58
Providing for continuous revision	11	4	17	23	55
Other	7	2	5	14	28

elements are indicated in 50 per cent of the schools. It is rather surprising that fewer than half the schools indicate inclusion of such important elements as training teachers for revision and for use of the revised course, coordinating and correlating the work, and editing and appraising the results.

It is to be expected that more elements would be designated in the larger cities. This is true for the largest group, in which an average of 18 of the 22 elements were indicated by 50 per cent or more of the schools. The smallest cities rank next, however, with 17 of the elements designated, while the cities of Groups II and III are credited with only 7 and 5 elements, respectively, as being included in 50 per cent or more of the schools of their group. The 5 elements designated by 50 per cent or more of the schools in each population group are formulating general plans, formulating general aims, formulating guiding principles, revising the program of studies, and suggesting teaching procedures. Revising content materials was also indicated in 50 per cent of all schools, except those of Group III, in which it is credited to 9 of 20 schools.

7. STAGES OF DEVELOPMENT

Response was made by 109 schools to the request that if, as far as the program of revision had developed, more or less distinct time stages had resulted, each stage be listed separately and briefly described. The replies given were ranked according to the number which the stage was given in the program by each respondent. Results were tabulated by population groups, but since in only one or two cases was there any variation, the average rank for all schools as to the number of the stage is all that is shown below:

Developing policies	1.1
Preparation of teachers	1.3
Surveying local needs	1.6
Perfecting organization	1.7
Formulating objectives	2.1
Selecting and organizing materials, writing	2.5
Securing reaction to tentative course	3.1
Reviewing and editing	3.7
Putting new course into effect	3.8
Checking results of revision	3.9
Continuous revision	4.5

8. TIME REQUIRED FOR FIRST TENTATIVE REVISION

Average number of years spent.—While the specific request was not made that the time required for the first tentative revision be indicated, it is likely that general interest will attach to data compiled to indicate the number of years devoted to the revision of all subject fields listed by any one center. In schools where all listed subject fields were not completed, separate tabulations were made to show the number of years spent up to the time the form was made out. These facts are presented by population groups and geographical sections in Table 6.

The data indicate that in schools where the first tentative revision has been completed, an average of 2.7 years was required to do the job. An average of 3.2 years is shown, however, as already spent by schools in which the revision is not yet completed. For some reason schools in which complete revision has not yet been attained are devoting a longer time to the process.

Variations according to size and location of cities.—In the completed group, cities of more than 100,000 population show the greatest length of time—3.4 years—as being devoted.

TABLE 6.—*Number of schools giving specified length of time to revision of the curriculum*

FIRST REVISION COMPLETED

Number of years required	Population group				Geographical section					Total
	I	II	III	IV	N. E.	M. A.	N. C.	S.	W.	
1	2	3	4	5	6	7	8	9	10	11
8 years or more	2	----	----	----	1	----	----	----	1	2
6 to 8 years	1	----	----	1	----	----	1	1	----	2
4 to 6 years	5	2	----	4	----	3	3	3	2	11
3 years	5	4	1	1	----	4	2	4	1	11
2 years	8	4	2	1	1	1	5	1	6	14
1 year	4	7	5	4	1	3	6	4	6	20
Less than 1 year	1	----	1	2	----	----	3	----	1	4
Unknown	6	13	5	7	----	4	10	10	7	31
Average	3.4	2.2	1.4	2.9	4.3	2.9	2.3	3.1	2.4	2.7

FIRST REVISION NOT YET COMPLETED; TIME REQUIRED TO DATE

6 or more years	----	2	1	----	1	----	----	----	2	3
4 to 6 years	5	11	4	6	3	5	13	4	1	26
3 years	----	3	1	3	1	----	3	----	3	7
2 years	7	5	3	3	----	3	9	3	3	18
1 year	1	5	4	2	5	2	4	1	----	12
Less than one year	----	1	----	1	1	----	----	----	----	1
Average	3.1	3.4	3.0	3.3	2.7	3.3	3.3	3.4	3.5	3.2
Total	45	57	27	33	14	25	59	31	33	162

Again, however, the next highest average—2.9 years—is shown by cities of less than 10,000 population. By geographical sections, the New England group (with only three cities represented, however) shows the highest average, while the lowest is indicated for the North Central group. Again, the averages differ considerably for schools not yet completing the program. The highest average, according to size of city is shown for cities of from 30,000 to 100,000 population. There is less distinction, however, in the averages for these groups, the range being from 3 to 3.4 years. The Southern group shows a higher average than any of the other geographical sections, but the range here—from 2.7 to 3.5 years—is also less wide.

The range of from less than one year to more than eight years indicates a wide variation in the time required by different schools to complete a revision program. In many centers, however, there is no attempt at simultaneous revision of all fields during one period.

CHAPTER III

CURRICULUM MAKING ON A CITY-WIDE SCALE: DETAILS OF ORGANIZATION

1. OUTLINE OF THE CHAPTER

Having determined upon the general features which the program shall contain, the next problem is that of setting up an organization through which the plans may be effectively realized. Such organizations will vary considerably, depending on the major purposes and means within individual schools for their realization. This chapter presents information concerning the following details of organization: (1) Examples of major phases of organization set up by individual schools or systems; (2) the agencies having direction of revision programs; (3) the agencies having a part in curriculum revision; (4) the types of committees organized; (5) the agencies responsible for different elements of the program; (6) the cost of curriculum revision. These divisions will be considered in the order named.

2. PLANS OF ORGANIZATION IN INDIVIDUAL SYSTEMS

Four plans presented.—Diagrams of the organizations for revision as furnished by Los Angeles, Calif., and Rochester, N. Y., offer opportunity for contrasting details in two large systems, each of which has devoted intensive consideration to the problem. Revision in smaller cities is represented by the plans employed in Bessemer, Ala., and Hamtramck, Mich.

Los Angeles.—The organization for revision in Los Angeles is based on the theory that revision activity may be present in practically all fields at all times. The membership and functions of agencies for revision, as reproduced from one of their publications, is represented graphically in Figure 1. The figure portrays two types of relationships—the solid line in the figure indicates responsibility or authority, while the broken line signifies an advisory-cooperative relationship between the groups or agencies represented.

The memberships and functions of those of the separate groups which are most concerned with curriculum revision are summarized following the figure.

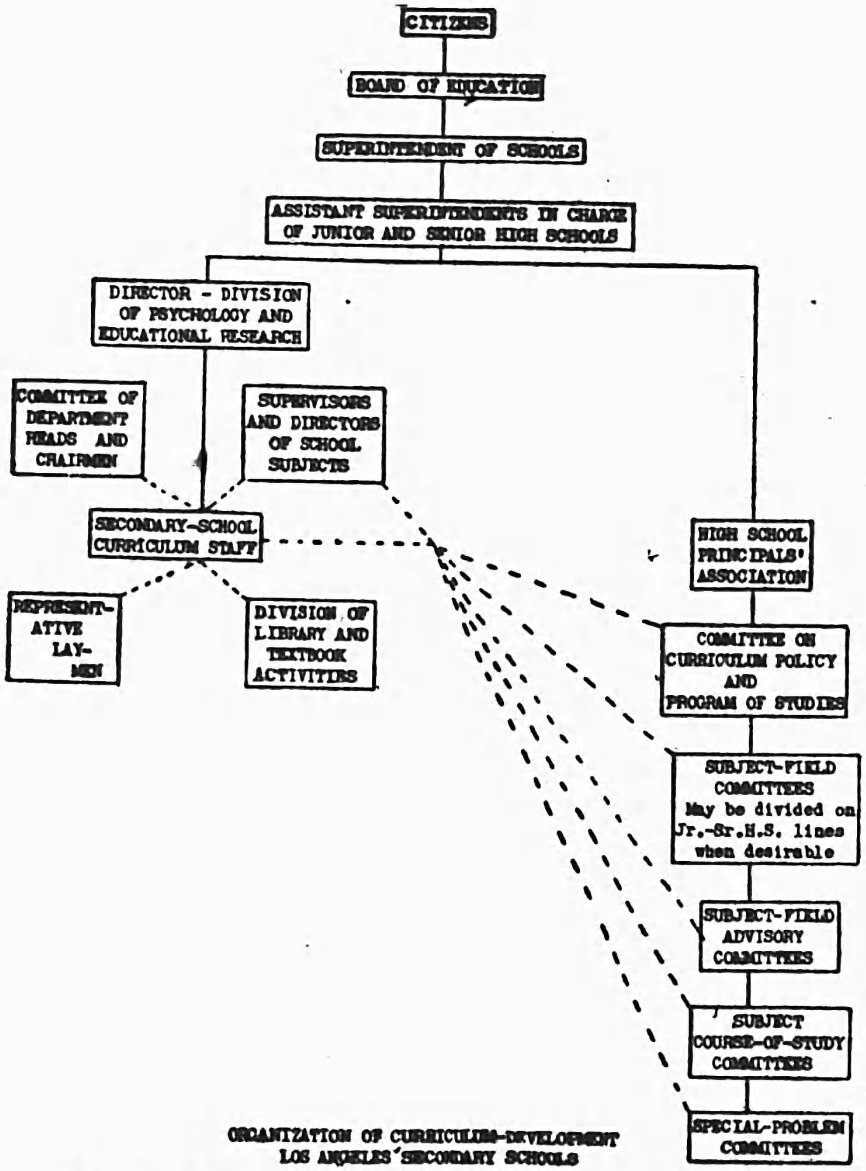

FIGURE 1.—Reproduction of chart of curriculum organization, Los Angeles

It is especially to be noted that many agencies are provided through which there may be an exchange of viewpoint at various times throughout each school year. This applies not only to expert advice, but to provisions through which the

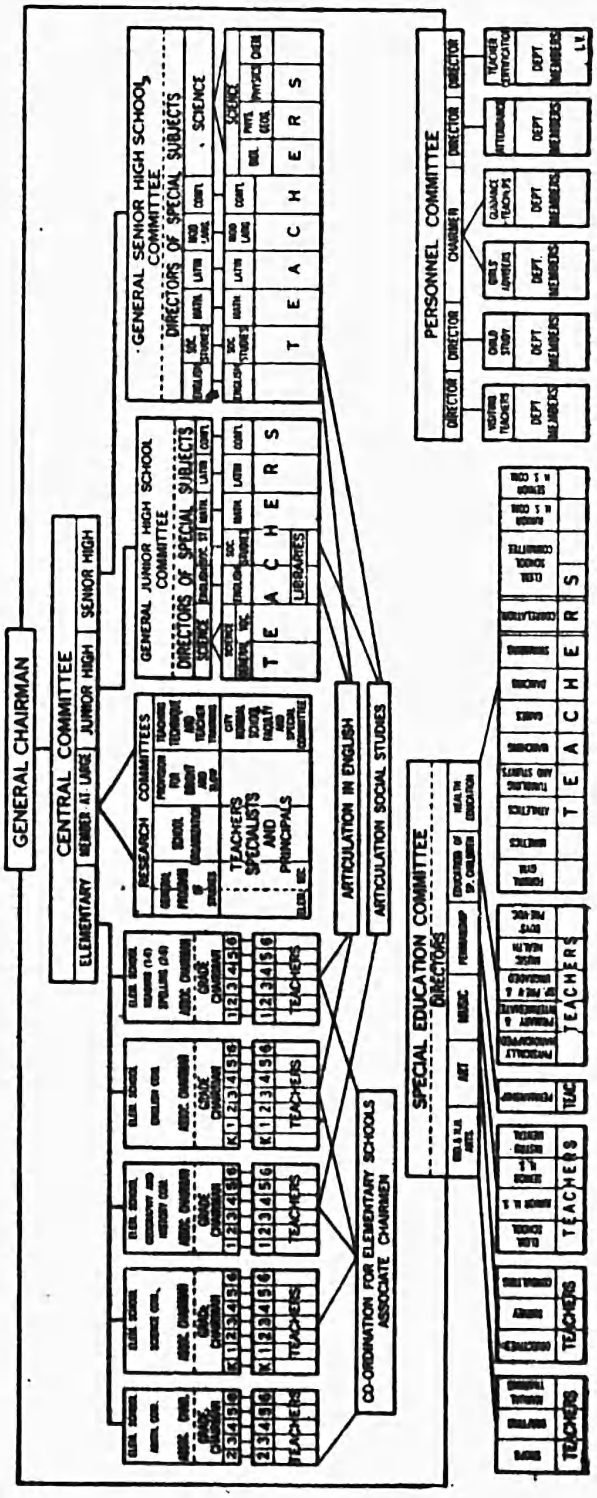

FIGURE 2.—Rochester (N. Y.) organization for curriculum revision, January, 1928

Membership and function of agencies working on secondary-school revision, Los Angeles, Calif.

Agency	Membership	Function
Assistant director, division of psychology and educational research.		Director of program.
High-school principals' association	All junior and senior high school principals and vice principals.	Approve courses of study. Install courses of study.
Committee on curriculum policy and program of studies.	Chairman appointed by high-school principals' association. Chairman of committees on caring for overage pupils, requirements for graduation, coordinating of ninth-grade work, pupil load in junior high schools, pupil load in senior high schools. Member of curriculum staff committee. The assistant superintendents in charge of junior and senior high schools and junior college, and the director of the division of course of study, elementary schools, sit with the committee.	Study and coordinate the activities of other committees.
Subject-field committees	One committee for each major subject-matter field—each school represented; about 50 members to each.	Clearing house for ideas developed in other communities.
Subject-field advisory committees	One committee for each major subject-matter field, 9 members: Supervisor concerned, member of curriculum staff, 7 from junior and senior high schools of the city.	Study and coordinate the activities of each subject-matter committee.

Subject course-of-study committees	One for each division of any subject-matter field for which a course of study is being developed. Approximately 9 members: Supervisor concerned, member of curriculum staff, 1 member from subject-field committee concerned, 6 others, preferably teachers.	Work out the details of the course of study of each subject.
Special problems committees	Formed in accordance with problems that arise; approximately 7 members each.	Study intensively special problems that arise, such as the evaluation of textbooks or the selection of films and maps.
Secondary-school curriculum staff	All members of the staff of the division of psychology and educational research assigned to work upon the secondary-school curriculum.	Advises with all curriculum and course-of-study committees, assisting and directing them in the work.
Supervisors and directors of school subjects.	All supervisors and directors of secondary-school subjects.	Advisory relationship, essentially the same as that of members of the secondary-school curriculum staff.
Division of library and textbook activities.	All members of the staff of this division	Coordinates the administration of school textbooks with the work of the curriculum and course-of-study committees.
Committee of department heads and chairmen.	Standing committee of approximately 30 members: 2 members from each of the subject-field committees and the secondary-school curriculum staff.	Serves in an advisory-consultative capacity to the curriculum staff.
Representative laymen	Services of qualified individuals requested in accordance with the particular tasks to to be performed.	Consulted to help to adjust the demands of the curriculum to the needs of society.

practical reaction of the classroom teacher from each school may be given.

The committee on curriculum policy and programs of studies, subject-field committees, subject-field advisory committees, and committee of department heads and chairmen are all standing committees. The research activities of the system are permanently connected with the curriculum policy through provision for an assistant director in this division, with a curriculum staff whose entire responsibility relates to the curriculum.

Rochester, N. Y.—The organization in Rochester, as reproduced from a chart sent from this city, is presented in Figure 2. It is the hope of those setting up this plan that the courses of study resulting may be sufficiently broad and forward-looking so that no revision will be necessary for 10 years. The membership of the different committees is outlined in the figure. A summary of the work of the different committees, which was returned with the inquiry form from this city, is reproduced herewith.

General summary of the work of secondary-school revision, Rochester, N. Y., 1927–1931

Central committee under chairmanship of deputy superintendent.	Survey of work of the schools. Study of needs revealed. Establishment of organization for revision. Gathering of literature on curriculum building.
University of Rochester cooperating extension course. Members of class were available for faculty meeting presentation in schools desiring service. Faculty and principals' meetings:	Study of curriculum theory and practice.
Subject committees	Analysis of objectives. Selection and arrangement of content to meet objectives. Decisions as to form of curriculum. Development of tentative course.

Central committee	Supplying all teachers with materials for classroom tryout. Providing for acquaintance of teachers and principals with new materials. Definite establishment of certain experimental classes and situations. Provision for teacher comment and criticism. Provision for expert counsel.
Subject committees	Rerevision in the light of a semester's experience. Development of a second edition of the courses embodying valid suggestions and criticisms.
Central committee	Provision for second classroom tryout. Analysis of entire curriculum (all subjects and grades) to eliminate overlapping and poor-grade placement, to determine relative load for ability ranges, to effect horizontal and vertical coordination. Testing program. Study of textbooks.
Subject committees	Final additions and changes as result of second tryout.
Central committee	Editing for printing (delegated to one member). Cooperation with press, and with local organizations for publicity and understanding.

The summary indicates the work done by the two most important committees. The titles of the remaining committees, however, suggest the nature of their duties: Coordination and articulation are provided through general junior and senior high school committees and through special articulation committees in English and social studies; provisions for special problems are indicated by the titles of the research committees. While directors of special education and personnel are members of general junior and senior high school committees, their problems are considered sufficiently distinct from those in academic fields for separate general committees to be organized for each.

It is to be noted that the entire programs in both cities are based on needs revealed by careful surveys of the work of the schools. Perhaps the most striking contrast in the plans of

the two cities is indicated in the more extensive effort at Rochester to secure criticism resulting from actual tryout of courses of study in the classroom. Since no permanent organization is provided through which desired changes may be made for a considerable time after final adoption, very thorough tryouts with rerevision in the light of criticism seem more necessary.

Bessemer, Ala.—The plans at both Los Angeles and Rochester involve the expenditure of funds for obtaining expert advice from specialists from without the system. A method through which the same type of aid is secured in a smaller school with less funds available is illustrated by the 3-year plan begun at Bessemer, Ala., in September, 1930. Through arrangement with the division of field studies of the College of Education of the University of Alabama, various members of this faculty will meet monthly with the Bessemer public-school faculty over the 3-year period and guide and coordinate the work of curriculum reorganization. No charge, other than transportation expense, is made for such expert service.

The following activities are contemplated by the University of Alabama for the separate years.

1930–31:

1. Orientation through a series of lectures.
2. Direction of the incidental collection of materials.
3. Unification and coordination of all work.

1931–32:

1. Lectures on special topics.
2. Survey of various aspects of education in Bessemer.
3. Examination of present curriculum practices; collection and evaluation of curriculum material.

1932–33:

1. General discussion by selected leaders on curriculum reorganization and adjustment.
2. Survey results and materials made available to all workers.
3. Preparation, testing, and revision of materials.
4. Unification and coordination of all work.
5. General review, revision, and adoption of tentative curriculum.

All teachers of the Bessemer public schools participate in the program. The junior high school principal was selected as director to work with an advisory council, elementary-curriculum council, secondary-curriculum council, and com-

mittees in the various subject fields. A regular schedule of five meetings per month is provided.

Hamtramck, Mich.—Although not working under such an elaborate arrangement, the schools of Hamtramck, Mich., have an agreement with one of the professors at the University of Michigan according to which he spends one day of each week in consultation with individual staff members. Curriculum making in these schools is the direct responsibility of subject supervisors, who make the most use of the time given by the outside specialist.

3. AGENCIES DIRECTING REVISION PROGRAMS

Of the 162 schools, 154 indicated the name of the agency having direction of the revision program. Their designations are assembled by population groups and by geographical areas in Table 7. Altogether, 13 different agencies are shown. Those selected in 20 or more centers are, in the order named, superintendent, principal, assistant or deputy superintendent, and general committee. A director of curriculum is employed in only 10 of the systems and direction is under the division of research in only 8.

TABLE 7.—*Number of schools in which certain agencies have direction of the curriculum-revision program*

Agency	Population groups				Total
	I	II	III	IV	
1	2	3	4	5	6
Superintendent	6	13	6	10	35
Assistant or deputy superintendent	16	7			23
Board of superintendents	2				2
Director of curriculum	6	2	2		10
Director or supervisor of secondary education	1	4			5
Division of research	4	4			8
University staff			1	1	2
Department of instruction		1	1	1	3
Director of educational and vocational guidance	1				1
Principal	2	8	5	12	27
Administration staff	2	3	8	2	15
Department heads	1	2			3
General committee	4	10	2	4	20
Unknown		3	2	3	8
Total	45	57	27	33	162

Considerable variation in direction appears as the cities increase in size. In Group IV, the superintendent or the principal directs the program in two-thirds of the centers;

in Group III, the administration staff, superintendent, or principal directs the program in an equal proportion of the schools; in Group II, the assistant superintendent and general committee join the superintendent or principal for purposes of direction in two-thirds of the centers represented; while in Group I, two-thirds of the schools assign direction to the assistant or deputy superintendent, director of curriculum, superintendent, or division of research. The chief distinction among the geographical areas is that in the New England and Western sections the assistant superintendent is more often director than is the superintendent.

Evaluation.—Fifty-seven respondents reported the plan followed to be satisfactory with no changes desired. These replies represent 50 per cent or more of each of those designating a director of curriculum, supervisor of secondary education, general committee, or division of research directing the curriculum program. In the 24 plans for which more descriptive evaluation was attempted, the point most often emphasized is the need of special training or of expert advice by the director; or, if funds are available, the securing of a full-time director of curriculum. In three instances, the desirability of a single director, to prevent friction where direction is under a committee, is indicated. Reports in one or two instances indicate that the connection of curriculum revision more directly with the department of instruction or supervision is considered more desirable than its connection with the strictly administrative department.

4. AGENCIES HAVING A PART IN REVISION

Local staff agencies.—On all but 2 of the 162 forms, reports were made of the names of local staff agencies utilized on the curriculum project. As shown in Table 8, principals, teachers, superintendents, and department heads, in the order named, were checked on 100 or more of the forms. Supervisors of special subjects, deputy or assistant superintendents, assistant or vice principals, and general supervisors were utilized in 50 to 100 centers. A department of research and a department of supervision were reported respectively in only 49 and 48 instances, while a department of teacher training and of curriculum were in use in only 16 centers each. Perhaps the greatest recognition given curriculum making is repre-

sented at Tulsa where the position of associate superintendent in charge of curriculum administration was created.

TABLE 8.—*Number of schools or systems in which certain local staff agencies are utilized (160 schools or systems)*

Agency	Population groups				Geographical sections					Total
	I	II	III	IV	N. E.	M. A.	N. C.	S.	W.	
1	2	3	4	5	6	7	8	9	10	11
Principals	45	52	26	28	14	22	55	29	31	151
Teachers	43	52	23	28	12	23	55	26	30	146
City superintendent	42	49	26	24	13	21	53	27	27	141
Department heads	31	43	17	10	9	16	33	20	23	101
Supervisors of special subjects	29	33	13	5	6	14	26	17	17	80
Associate, deputy, or assistant superintendents	42	22	2	----	5	14	19	12	16	66
Assistant or vice principals	18	24	8	3	4	10	19	5	15	53
General supervisors	17	22	10	3	4	6	18	12	12	52
Department of research	28	18	2	1	3	9	13	10	14	49
Department of supervision	21	19	7	1	2	9	21	10	6	48
Department of instruction	9	13	4	2	1	3	13	8	3	28
Director of measurement	13	13	2	----	3	6	8	7	4	28
Department of administration	6	11	2	3	1	3	12	4	2	22
Director of curriculum	10	7	2	1	1	2	8	3	6	20
Department of teacher training	9	4	1	2	2	2	8	4	----	16
Department of curriculum	10	3	2	1	------	3	5	3	5	16
Director of supervision	4	6	4	1	------	3	5	3	4	15
Department of standards	1	2	----	----	1	------	1	1	----	3
Other	3	5	2	2	3	2	2	2	3	12

The number of agencies utilized shows an increase as the cities increase in size. In Group IV, only the city superintendent, principals, and teachers (which are likely the only agencies employed in such schools) were checked by a majority of the respondents. To this list, for Group III, department heads are added; for Group II, the same, plus supervisors of special subjects; to Group I, the same, plus assistant or deputy superintendents and the department of research.

The chief increments in different geographical sections from the total averages described are in the number of assistant or vice principals and supervisors of special subjects in the Middle Atlantic group; the number of departments of teacher training and of administration in the North Central group; the number of directors of measurement and supervisors of special subjects in the Southern group; and the number of assistant or vice principals, departments of research and curriculum. and directors of curriculum in the Western group.

Evaluation.—Forty-nine respondents indicated that the practices followed were satisfactory and no changes were desired. Of the 29 additional cases in which more detailed judgments were recorded, the majority emphasize the importance of getting as wide a range of participants as possible. Attention is also frequently called to the need of more research activities and of expert advice.

Professional agencies from without the system.—The need felt for expert advice has been indicated to some extent in the evaluations given by different schools. In schools and systems having sufficient funds, specialists, most often from colleges and universities, are brought in for this purpose. Sometimes, through extension courses paid for by the teachers and possibly through arrangements similar to these indicated at Bessemer, such advice is had with little cost to the school district. In other cases, specific funds have been provided in the school budget for this service. Of the 162 centers represented, 58 indicated that such service was provided. The types of service made available to these centers is shown in Table 9.

TABLE 9.—*Number of schools in which various types of specialists from without the city were utilized (58 schools or systems)*

Type of specialist	Population group				Total
	I	II	III	IV	
1	2	3	4	5	6
General field of education	10	12	3	4	29
Curriculum construction	10	13	5	1	29
General field of psychology	6	3	1		10
General field of sociology	4	1	1		6
Subject specialists	16	18	4	2	40
Other specialists	4	5	1	3	13

Of the 127 provisions recorded, specialists in various subject fields are represented in 40 cases, while specialists in the general field of education and in curriculum construction are utilized in 29 cases each. By population groups, the proportion utilizing outside advice increases as the cities increase in size. The Middle Atlantic and Western groups seem to make use of such services more often than do the other three geographical sections.

Evaluation.—It was indicated on 32 of the forms simply that the practice followed was considered satisfactory with no desired change. In 38 cases, answers were more detailed, and for the most part they indicate that contacts with more specialists are desirable. In a few cases it is suggested that the specialists need to be carefully selected, and one respondent proclaims that only a few of those acting as specialists are so qualified. On the other hand, many of those indicating a desire for more of this type of service attest the value resulting through motivation in the general meetings and through expert criticism to special groups or committees.

Other agencies cooperating.—To the request that they indicate any manner in which lay citizens were utilized in developing the program, 42 replies were received. As indicated in Table 10, they reveal that the most common use of such agencies is simply through consulting members of the community individually. Business men are interviewed concerning the commercial curriculum and men in industries concerning vocational curriculums in seven and five centers, respectively. Alumnæ, board members, and professional men were also indicated in a few cases. On the whole lay agencies seem to be consulted very little.

TABLE 10.—*Number of schools in which the cooperation of certain nonprofessional agencies was secured (42 schools or systems)*

Nonprofessional cooperators	Number of schools
Alumnæ	1
Board members	4
Business men:	
Commercial curriculum	7
Success of high-school graduates	1
Community:	
Certain members consulted individually	13
Advisory committee of citizens	4
Survey	3
Meetings	1
Industry:	
Vocational curriculum	5
Advisory committee for vocational subjects	1
Survey of employment service	1
Professional men	1

As one school points out, it is rather difficult to get in touch with individuals who have a general idea of the prob-

lems of group instruction and who, at the same time, have broader contacts with vocational life. A most extensive use of laymen, however, was reported in the development of the curriculum at Saginaw, Mich., where the respondent reports it as "the most valuable thing we did." Both questionnaire and conferences were used in a survey of the community and of such establishments as the Manufacturers' Association, Board of Commerce, Wholesale-Retail Dealers' Association, and Employment Managers' Association. Each of these organizations furnished a committee to cooperate with the school committee.

Evaluation.—In 22 cases, the practice followed was considered satisfactory with no change desired. More detailed comment is ventured by only a few schools which have found the practice successful and would extend it further if beginning again.

b. ORGANIZATION OF COMMITTEES

Types of committees employed on curriculum revision.—The agencies having a part in curriculum revision have been indicated. Usually some of these agencies are organized into committees with specific duties assigned. The committees of most frequent occurrence are the subject-matter or production committees which have charge of gathering and arranging the materials for the separate courses. Details with respect to the organization of such committees which are considered in this section are average number of classroom teachers and of the administrative and supervisory staff represented, position of member selected as chairman, and the agencies supervising the work of these committees. In the second part of this section are considered all other committees which have been chosen by different schools and systems.

(1) *Production committees*

Number of classroom teachers represented.—The replies of 55 schools or systems to the question concerning number of classroom teachers represented are shown in Table 11. Where the number of teachers on the separate committees varies in the same school or system, the results shown are averages for that school or system. For the academic subjects, the range is from fewer than 5 to more than 20 teachers

to a committee. Since 33 of the 55 organizations have fewer than 10 teachers to a committee, the smaller committee appears to be preferred. Results in the special subject fields where 22 organizations have fewer than 5 on a committee indicate even smaller committees in use by the average school or system. While the average committee for the smallest group naturally has fewer members than that of the largest group of cities, there is little distinction in the averages for the cities of Groups I and II. Little distinction likewise appears in the different geographical areas.

TABLE 11.—*Number of schools having specified numbers of teachers on the production committee (55 schools or systems)*

Size of committees	Population group				Total
	I	II	III	IV	
1	2	3	4	5	6
Academic subjects					
No subject committee organization	1	1		2	4
All teachers in department	2	3	1	2	8
Fewer than 5	4	4	4	4	16
5 to 10	6	7	4	1	18
10 to 15	4	1			5
15 to 20	2				2
More than 20	1	1	1		3
Special subjects					
No subject committee organization	1	1		2	4
All teachers in department	3	1	1	2	7
Fewer than 5	6	7	4	5	22
5 to 10	4	5	2		11
10 to 15	3				3
15 to 20	3				3
More than 20	1	1	1		3

Number of administrative and supervisory staff represented.—Few schools indicated the extent to which members of the administrative and supervisory staff were represented on production committees. In most of the schools answering, as shown in Table 12, it seems to be the policy to have one or more from this staff represented on each committee. This is true both for academic and for special subjects. Little distinction in the policies of cities of different size and in different areas was observable.

Usual chairman.—Of the 55 centers from which replies were received, results as presented in Table 13 indicate that in the academic subjects a department head in some high

TABLE 12.—*Number of schools having specified numbers of administrators and supervisors represented on production committees (57 schools or systems)*

Number from administrative and supervisory staff	Number of schools
ACADEMIC SUBJECTS	
None	18
One or more, in less than half of all committees	3
One or more, half of committees	
One or more, majority of committees	4
One or more, all committees	31
Majority of each committee	1
SPECIAL SUBJECTS	
None	18
One or more, in less than half of all committees	
One or more, half of committees	1
One or more, majority of committees	3
One or more, all committees	31
Majority of each committee	1

school is selected more often to act as chairman of the committee. A classroom teacher is usually selected in nine of the centers. This is the same frequency as that shown for the principal and superintendent. Supervisors are employed more often in the special subject fields, and these officials show equal rank with department heads in the frequency with which they act as chairmen for the special subjects. The same frequencies for classroom teachers as for principals and superintendents are again revealed.

TABLE 13.—*Number of schools in which certain officers are designated as usual chairman of production committee (55 schools or systems)*

Officer	Population group				Geographical sections					Total
	I	II	III	IV	N. E.	M. A.	N. C.	S.	W.	
1	2	3	4	5	6	7	8	9	10	11
Academic subjects										
Department head	6	7	3	2	2	3	5	5	3	18
Classroom teacher	5	3	2	2	----	2	4	3	3	12
Principal or vice principal	2	3	2	2	1	1	3	3	1	9
Supervisor	4	1	----	----	----	----	4	----	1	5
Superintendent	----	----	----	2	----	----	2	----	----	2
Combination of above	4	4	1	----	1	1	4	----	3	9
Special subjects										
Department head	2	3	3	2	1	2	5	5	2	15
Classroom teacher	5	5	1	1	----	4	2	3	3	12
Principal or vice principal	2	2	1	2	1	1	3	1	1	7
Supervisor	11	1	2	1	1	2	6	1	5	15
Superintendent	----	----	----	2	----	----	2	----	----	2
Combination of above	1	3	----	----	----	----	4	----	----	4

Evaluation.—Since the three items immediately preceding were recorded in the same table on the inquiry form, they were also reported in one evaluation. The detailed evaluations as recorded on 30 of the forms, vary considerably. The chief point of emphasis is the importance of choosing the committees with especial care on account of the expertness needed for performance of the task involved. Attention is also called to the inclusion of teachers from other divisions of the system and to the inclusion of the administrative and supervisory staff on the membership of each committee as methods of securing coordination and correlation.

Agencies supervising production committees.—The replies to this question as reported for 118 centers in Table 14 indicate that for the most part supervision of the work of the production committee is shouldered by some one connected with the committee. Committee chairmen and department heads are the officials who most often assume this responsibility. In only a few cases are subject specialists designated for this work. A tendency to have this work supervised by more than one agency is noted in the larger cities.

TABLE 14.—*Number of schools in which certain officers supervise the work of the production committee (118 schools or systems)*

Officer	Population group				Geographical sections					Total
	I	II	III	IV	N. E.	M. A.	N. C.	S.	W.	
1	2	3	4	5	6	7	8	9	10	11
Committee chairman	30	19	8	5	5	9	28	8	12	62
Director of general program	27	12	7	3	3	7	15	10	14	49
Department heads	16	18	4	6	4	6	14	12	8	44
Subject supervisor	15	11	3	2	1	4	12	7	7	31
Subject specialists	4	1	3	----	1	2	1	1	3	8
Principal	1	1	1	2	1	1	1	----	2	5
Other	7	3	4	3	2	5	8	----	2	17

Evaluation.—In the very few instances in which an evaluation is attempted, attention is called to the need of expert supervision of this work.

(2) *Other committees*

Next to the production committee, the administrative, general, or steering committee appears to be the one most commonly organized, as revealed by results shown in Table

15. Only a few additional committees were given. A reviewing and editing committee, which is next in order, was reported by only five schools. Additional committees are reported more frequently by schools in the larger population groups and by the Western section among the geographical groups.

6. RESPONSIBILITY FOR DIFFERENT ELEMENTS

The agencies indicated by different schools responsible for 22 separate elements of the curriculum program are listed in Table 16. That there is considerable variation in the number of schools from which replies concerning each element were received has already been indicated in Table 6.

TABLE 15.—*Number of schools in which certain committees, other than production committees, were organized (56 schools or systems)*

Committee	Population group				Total
	I	II	III	IV	
1	2	3	4	5	6
Administrative, general, or steering	14	5	5	.....	24
Reviewing and editing	5	.....	.....	.....	5
Library	1	1	1	1	4
Coordinating	4	.....	.....	.....	4
Counseling or guidance	1	3	.....	1	5
Program of studies	1	.....	.....	.....	1
Visual education	.....	1	.....	.....	1
Special features committee	1	.....	.....	.....	1
Other designations	6	3	.....	2	11

The totals for the present table indicate that in the order named the agencies which are most often designated, considering all elements, are the principal, the central (executive or general) committee, and the superintendent. The agencies assigned responsibility for the separate elements in 10 or more reports may be summarized as follows:

Formulating general plans: Superintendent, principal, central committee.

Formulating guiding principles: Superintendent, principal, central committee.

Formulating general aims: Central committee, principal, superintendent.

Training teachers for revision: Principal.

Investigating community characteristics: Principal, central committee, special committee.

TABLE 16.—*Number of schools designating certain agencies as responsible for different elements of the revision program*

Agency responsible	Formulating general plans	Formulating guiding principles	Formulating general aims	Training teachers for revision	Investigating community characteristics	Investigating pupil needs	Revising program of studies	Revising content	Suggesting teaching methods	Correlating work of separate departments	Coordinating work of separate grades	Determining time allotments	Determining minimum standards	Organizing and conducting experimental classes	Trying out before adoption	Editing for expression and form	Editing for content	Training teachers in use of revised course	Selecting textbooks	Selecting other supplies	Appraising results	Continuing revision	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Central committee	17	20	23	8	11	10	8	4	5	11	16	15	13	5	5	6	4	5	10	9	4	9	218
Special committee	3	4	7	1	10	10	9	3	2	5	6	11	7	1	2	6	11	2	16	14	1	5	136
Subject committee	4	5	4		5	6	5	35	23	6	4	5	11	3	2	6	4	3	6	4	1	5	147
Committee chairman	6			1				2	1		1					2	4						17
Superintendent	31	22	19	5	5	4	17	4	7	9	9	13	11	4	1	7	6	5	7	6	9	15	216
Assistant or deputy superintendent	9	8	6	2	2	2	8		1	4	4	6	2	2	1	2	2	3			2	2	68
Principal	20	20	21	13	13	23	37	12	15	21	18	28	19	10	9	13	12	16	14	12	27	10	383
Supervisor	1	2	1	1				2	2								10						19
Other Administrative and supervisory staff	9	7	7	7	6	4	10	2	7	7	5	7	3	4	4	4		15	6	8	10	5	137
Curriculum department	4	7	6	7	1	1	1	2	2	2	1		3	3	2	4	1	1				3	51
Research department	5	1	1	2	4	2	1	1	1	1	1	1	4	5	2	4	1	1	2	1	12	2	55
Outside expert	1	3	1	2	1	1	1		2			1	2	1	1	1			1	1			20
Extension classes				5														1					6
Director of program							1									2			2	2		1	8
Department heads	3	4	5	7	5	4	8	9	8	9	7	6	9	4	4	6	9	11	10	14	12	6	160
Teachers	1	3	6	2	3	11	7	13	9	5	6	5	8	14	19	5	4	1	15	16	4	2	159
State department				2								1	1					1	2		1		8
All agencies					1	2													2	1			6

Investigating pupil needs: Principal, teachers, central committee, special committee.

Revising program of studies: Principal, superintendent, other administrative and supervisory staff.

Revising materials of instruction: Subject committees, teachers, principal.

Suggesting teaching methods: Subject committees, principal.

Correlating work of separate departments: Principal, central committee.

Coordinating work of separate grades: Principal, central committee.

Determining time allotments: Principal, central committee, superintendent, teachers.

Determining minimum standards: Principal, central committee, superintendent, subject committee.

Organizing and conducting experimental classes: Principal.

Trying out before adoption: Teachers.

Editing for expression and form: Principal.

Editing for content materials: Principal, special committee.

Training teachers in use of revised courses: Principal, other administrative and supervisory staff, department heads.

Selecting textbooks: Special committee, teachers, principal, department heads, central committee.

Selecting other supplies: Teachers, department heads, special committee, principal.

Appraising results: Principal, department heads, other administrative and supervisory staff.

Continuing revision: Superintendent, principal.

It will be noted that the principal is assigned responsibility on 10 or more reports for 21 of the 22 elements. Subject committees are, however, more than any other agency, responsible for revision of content materials and teaching methods. The chief variation in the largest cities from the summary just given is in the inclusion to a greater extent of the deputy or assistant superintendent and the department of research, and in the lesser delegation of responsibility to the principal. In the smallest cities, on the other hand, there is even greater centralization of authority in the superintendent and the principal.

7. COST OF REVISION

Reports concerning amounts expended for curriculum revision indicate that in some cases careful records are kept of such expenditures, while in others the amounts indicated are merely estimates. The total sums expended, together with

the number of years over which the expenditure was distributed as reported by 62 schools, are shown in Table 17. Of the remaining 100 centers 63 made no reports, while 37 indicated that no definite budget was made of such expenditures.

TABLE 17.—*Number of schools reporting complete expenditures for curriculum revision and years over which distributed (62 schools or systems)*

Total expenditure	Distributed over—					Total schools
	1 year	2 years	3 years	4 years	More than 4 years	
1	2	3	4	5	6	7
$1 to $100	2	4	3		3	12
$100 to $250	2	3	2	1		8
$250 to $500	2					2
$500 to $1,000	4	1	3		2	10
$1,000 to $5,000	3	2	4	1	4	14
$5,000 to $10,000	1		2		3	6
$10,000 to $50,000	2	2			3	7
$50,000 to $100,000					1	1
More than $100,000			1		1	2

The results assembled in the table indicate a range from less than $100 to more than $100,000 spent for curriculum revision. For the median school, however, the expenditure is less than a thousand dollars for three years' work. The items for which expenditures are most often made are shown in Table 18.

TABLE 18.—*Number of schools designating certain items for which funds were expended (61 schools or systems)*

Item	Population group				Geographical sections					Total
	I	II	III	IV	N. E.	M. A.	N. C.	S.	W.	
1	2	3	4	5	6	7	8	9	10	11
Printing and mimeographing	11	20	7	3	1	6	15	7	12	41
Library material	9	10	5	4	1	3	12	8	4	28
Extra clerical help	11	8	2	2		4	7	4	8	23
Outside specialists	7	9	2	2		3	7	5	5	20
Substitute teachers	10	5	1	2		4	6	2	6	18
Director of revision	5	4	1		1	2	3	1	3	10
Additional pay for regular staff	4	1					1	3	1	5
Conduct local research	2			1		1	1	1		3
Conduct local experiment	1			1			1	1		2
Other	4	3		2	1		3	1	4	9

Printing and mimeographing, designated in 41 cases, is the item most frequently mentioned. Library materials, extra clerical help, and outside specialists come next in order with frequencies of 28, 23, and 20, respectively. The employment of substitute teachers is designated in only 18 cases and a director of revision in only 10. Few reports mention expenditures for additional pay to regular staff or for local research and experiment.

Evaluation.—Most of the comments made are explanations rather than evaluations. They indicate that much more money than was designated was used, but that it comes out of funds or supplies provided for other purposes which can not always be separated. Reports from many schools emphasize that more money is needed for such items as outside specialists, substitutes for teachers, and extra clerical help.

CHAPTER IV

CURRICULUM MAKING ON A CITY-WIDE SCALE: SPECIFIC PROCEDURES FOR SEPARATE ELEMENTS

1. OUTLINE OF THE CHAPTER

When the personnel and its organization for the curriculum-making program have been determined the next concern of the responsible official is the procedures which shall be employed in order that certain elements of the program may be brought to successful completion. In the present chapter procedures for the following elements are considered: (1) Securing the cooperation and interest of certain groups; (2) selecting committees; (3) providing conditions of work; (4) selecting and organizing teaching materials; (5) coordinating and correlating the work; (6) trying out courses before adoption; (7) preparing courses for publication; (8) training teachers in the use of the new course outlines; (9) appraising the results of revision; (10) caring for continuous revision; (11) general evaluation.

2. SECURING COOPERATION AND INTEREST

Securing cooperation and interest of the local teaching staff.—In the various schools or systems the cooperation and interest of the same groups are not always desired nor are the methods employed for securing it always the same. In Table 19 are tabulated the procedures indicated as being followed by 127 schools or systems before launching the revision program and by 61 schools or systems after launching the program, in order that desirable activities of the local teaching staff may be concentrated on curriculum revision.

Of the 127 schools, 28 indicated that no efforts were made before launching the program. In 88 of the remaining 99 centers, meetings were held with the administrative staff, and in 52 discussions with representatives of the central curriculum staff were reported. Of more interest, however, are procedures of a specific nature, such as checking against educational objectives in 45 centers, preliminary

TABLE 19.—*Number of schools using certain procedures to secure cooperation and interest before and after launching the program (127 schools before, 61 schools after)*

Procedure	Before launching program					After launching program				
	Population group				Total	Population group				Total
	I	II	III	IV		I	II	III	IV	
1	2	3	4	5	6	7	8	9	10	11
No special effort	10	9	5	4	28	2	3	1	3	9
Meeting with administrators	33	28	13	14	88	15	19	2	2	38
Discussion with representatives	22	19	6	5	52	13	16	3	2	34
Checking against objectives	14	18	6	7	45	10	10	4	5	29
Preliminary survey	10	15	5	2	32	4	5	2	2	13
Meeting with specialists	10	12	5	5	32	2	1			3

surveys of the whole school, and meetings with curriculum specialists reported in 32 schools or systems each. Procedures of this nature are reported more frequently in the larger than in the smaller groups, and in the South more often than in any other geographical section.

In some centers extensive surveys are made preliminary to active revision. An example is Beaumont, Tex., where the survey was made by the school of education of one of our large universities and two members of the staff were retained for 2 years on a part-time basis to help in building a curriculum to fit the needs revealed. At Tulsa, Okla., a survey of the educational attitudes of 700 teachers was made in order to ascertain their fundamental thinking as revealed by choice from 32 pairs of contradictory statements. At Denver, Colo., a newly appointed director of curriculum revision spent three months visiting classes and getting acquainted before engaging in the details of revision.

Approximately the same proportions are shown for each procedure after launching the program as has been described for those before launching the program, but frequencies are representative of a smaller number of schools.

Evaluation.—Practices followed by 34 centers before revision and by 37 centers after revision were indicated as satisfactory with no change desired. Of the 14 schools whose comments were not so favorable, the majority pointed out the inadequacy of their present program and the need of

keeping the idea of curriculum revision continually before the teachers.

Publicity.—In some cities, care is taken not only to acquaint the entire teaching staff, but the general public as well, with the major activities of the revision program. Replies to questions calculated to reveal such procedures were made on 119 of the forms; 53 of these replies were that no special effort was made to give publicity before revision, while 16 reported no effort given after revision. The replies, as assembled in Table 20, indicate that efforts through the local press and through parent-teacher associations, resorted to in 43 and 42 cases, respectively, are made most often. Publicity is also given through local school publications and through local addresses in a number of cases. Few efforts of any other nature are made.

TABLE 20.—*Number of schools using certain procedures for giving publicity before and after revision (119 schools or systems)*

Procedure	Before revision—Population group					After revision—Population group				
	I	II	III	IV	Total	I	II	III	IV	Total
1	2	3	4	5	6	7	8	9	10	11
No special effort	15	18	12	8	53	4	7	2	3	16
Local press	14	14	4	11	43	10	16	4	1	31
Parent-teacher association	14	15	6	7	42	12	13	2	2	29
Local school publications	13	17	2	4	36	12	9	3	4	28
Local addresses	8	8	3	7	26	9	9	3	4	25
National educational publications	2	2	....	1	5	5	4	1	....	10
Radio	2	....	....	2	4	2	....	....	....	2
Other	4	2	....	2	8	3	....	1	....	4

Evaluation.—Efforts at publicity were recorded as satisfactory in 41 cases before revision and in 29 cases after revision with no changes desired. In the 30 additional cases in which evaluation was made, the majority pay tribute to what has been accomplished and report that a more systematic procedure would be followed if a revision were again undertaken.

3. ORGANIZING COMMITTEES

Grades for which responsible.—Although the specific question was not asked, information was often available from the manner of listing the committees, as to the divisions of

the school for which the separate committees were responsible. The results obtained are indicated separately for the academic and for the special subjects in Table 21. Little distinction exists between the academic and the special subject groups in the types of committees organized. In most cases, committees for the junior and for the senior high school grades work separately.

TABLE 21.—*Number of schools employing certain bases for the organization of production committees (71 schools or systems)*

Bases of organization	Number of schools
Academic subjects:	
Not indicated	10
No subject committee organized	4
One committee, all subjects	5
One committee, each subject, 12 grades	2
One committee, each subject, secondary grades	8
One committee, each subject, junior or senior division	26
One committee, each subject, 4-year high school	13
One committee, each course	3
Special subjects:	
Not indicated	12
No subject committee organized	4
One committee, all subjects	5
One committee, each subject, 12 grades	3
One committee, each subject, secondary grades	7
One committee, each subject, junior or senior division	24
One committee, each subject, 4-year high school	12
One committee, each course	4

Criteria for determining membership.—Of the 136 centers reporting 66 replied that they did not use objective criteria for determining committee memberships. The criteria employed by the schools using such procedures are shown in Table 22. The character of professional training and rating as to success in teaching are the criteria most often employed.

Evaluation.—Objective methods are reported less often in the smaller cities. This is accounted for to some extent by the fact that the entire teaching staff is working on curriculum revision in many of the smaller centers. Many do not consider criteria for determining membership as objectively applied an essential procedure, although the value of such factors as interest, training, and success in teaching is admitted. On 46 of the inquiry forms, the practice reported

as being followed (16 of which did not follow any criteria) was considered satisfactory.

TABLE 22.—*Number of schools using certain criteria for determining committee membership (136 schools or systems)*

Criteria	Number of schools
Seniority within local system	10
Total years experience all schools	7
Length of professional training	22
Character of professional training	43
Correspondence of college work and work taught	15
Rating as to success in teaching	50
Ex officio	21
Other	9
No criteria used	66

Agencies determining membership.—Considerable variation among schools is indicated in the agencies which nominate and approve candidates for committee memberships. The replies received to this question are indicated in Table 23. The question was not answered by 30 schools, one-half of which are in the smallest centers. The central office most often exercises its authority in this matter and in the majority of cases both the nominating and approving is done by the administrative staff. In a few cases, however, the nomination of the entire personnel is made by fellow teachers.

TABLE 23.—*Number of schools using certain methods for selecting members of production committees (132 schools or systems)*

Method of selection	Population group [1]				Total
	I	II	III	IV	
1	2	3	4	5	6
Nominated by fellow teachers, approved by central office	5	5	1		11
Nominated by principal, approved by central office	14	14	9	7	44
Nominated by special committee, approved by central office	7	5	1		13
Selected by central office, approved by principal	11	11	5	4	31
Selected by central office from teacher preference	5	3	3		11
Selected by teachers	7	5	6		18
Selected by central office	8	4	2	4	18
Selected by department heads	3	2			5
All teachers serve	1	3		3	7
Other	5	5	1	2	13

Evaluation.—On 62 of the 132 forms, the practice followed was considered satisfactory with no change desired. Very few additional evaluations were made. In some of the larger cities attention is called to the need of careful selection.

4. PROVIDING CONDITIONS OF WORK

Conditions considered.—Curriculum making is usually the responsibility of the teacher with a schedule of regular work, and it is often considered desirable to arrange special conditions for the curriculum work. Considered in this connection, in the order named are (1) training teachers for revision work; (2) provisions for contact with curriculum literature; (3) provisions for committee meetings; (4) provisions for release from regular work.

Training teachers for the work.—Efforts are made in some centers not only to secure a healthy morale of the teaching staff with respect to curriculum making, but also to give them such specific training as will enable them to do a better job. In some cases such training is carried on by the local staff entirely, while in others, specialists from without the system are brought in to give special advice or conduct classes. Replies on this matter as received from 138 schools or systems are assembled in Table 24.

TABLE 24.—*Number of schools using certain methods for training teachers for revision work (138 schools or systems)*

Procedure	Population group				Geographic section					Total
	I	II	III	IV	N. E.	M. A.	N. C.	S.	W.	
1	2	3	4	5	6	7	8	9	10	11
No organized effort	15	13	3	2	5	4	12	4	8	33
Local extension course	18	17	9	6	3	13	15	13	6	50
Special summer-school training	13	7	5	3	.....	3	10	11	4	28
Training school under regular employees	5	7	2	2	1	2	7	5	1	16
Training school under specialists	2	5	2	1	.....	1	2	4	3	10
Individual training under regular employees	17	12	4	3	3	6	12	8	7	36
Faculty meetings	29	27	17	21	6	14	37	21	16	94
Other	...	3	1	.....	.....	2	1	....	1	4

In 33 of these schools, no organized effort was made to give training. Faculty meetings naturally appear often in such a program. They are listed in 94 cases. They are followed

by local extension classes which are listed in no less than 50 cases. It is perhaps surprising to note that colleges and universities have connected so intimately with this work. Training is given by regular employees, in individual cases in 36 instances and through regular classes in 16 instances. Teachers from 28 schools or systems receive special summer-school training.

Evaluation.—Sixty-six schools or systems reported that the practice followed was satisfactory and no changes desired. More extended comment was received on 30 additional forms. In nearly all cases the importance of this training is emphasized; more of it is indicated as needed and specific suggestions are given as to methods of securing it in such ways as through study of research materials, interschool visitation, use of summer school, classes under a trained expert, and the like.

Illustrative plans.—The emphasis which respondents place on this element of curriculum revision may make a few examples not out of place. Perhaps the most available methods of securing expert advice are through extension courses given by colleges and universities. In Sedalia, Mo., the board of education appropriated $600 a year for three years in order that all teachers might have the benefit of such classes. At Dallas, Tex., two years of preparation were spent before any extensive revision was undertaken. At Newark, N. J., experts were employed for six months to direct the reading and organization of committee work. The experience at Johnstown, Pa., is that teachers get the most out of such extension courses if they are not begun until after teachers have been working at revision for a year.

Making literature accessible.—Closely akin to provisions for training teachers are those intended to give them access to desirable literature in their field. Provisions for this purpose are shown in Table 25. Replies were received from 132 schools or systems, of which 25 reported no special provisions for this purpose. In most cases—82, to be exact—such literature was provided through a centrally organized library. Materials were mimeographed in 40 instances. In some cities a considerable amount of material is mimeographed and distributed as service bulletins for teachers' use.

TABLE 25.—*Number of schools using certain methods for making curriculum literature accessible (132 schools or systems)*

Method	Population group				Total
	I	II	III	IV	
1	2	3	4	5	6
No special provisions	3	11	4	7	25
Centrally organized library	31	29	15	7	82
Library, each building	9	15	5	2	31
Public and private libraries	14	15	3	3	35
Materials mimeographed	15	11	9	5	40
Other	7	5	2	1	15

In Oakland, Calif., a 75-page handbook for course-of-study committees has been developed by the council of supervision. Public and private libraries are utilized in 35 centers and a curriculum library is afforded for each school in 31 cases. Fewer facilities are afforded in cities whose population has not reached 10,000.

Evaluation.—Approximately half the schools reported plans followed as satisfactory. In the 20 instances in which more extended comment is made, the need of more literature is emphasized in almost all cases. Preference is expressed for a centrally organized library. One respondent probably voices the sentiments of others when he says: "An organized study of curriculum literature for all committee members should have been arranged. Mere accessibility or even distribution is not enough."

Provisions for meetings.—Respondents were asked to indicate the extent to which school hours were used, the schedule of meetings provided, and the housing arrangement for committee meetings. The replies, as shown in Table 26, indicate that of 111 cases, school hours were not used at all in 65, they were used one or more days or weeks as needed in 38, and continuously for weeks or months in 8. No regular schedule of meetings was arranged in 76 centers. Weekly meetings, shown for 26 schools, were most often provided, followed by biweekly meetings in 16 instances, and continuous meetings for a short period in 11 instances. Special quarters for meetings were provided in 38 cases. No special arrangement for quarters was reported by 76 respondents.

TABLE 26.—*Number of schools making certain provisions for committee meetings (111 schools or systems)*

Provision	Number of schools
Use of school hours:	
Continuously, weeks or months	8
One or more days or weeks	38
Not at all	65
Schedule of meetings:	
No regular schedule	76
Semiweekly	5
Weekly	26
Biweekly	16
Monthly	9
Bimonthly	1
Continuous, short period	11
Discretion of the committee	1
Housing facilities:	
No special arrangement	75
Special quarters	38

Evaluation.—The practice followed with respect to use of school hours was reported as satisfactory in 30 cases, the schedule of meetings in 32 cases, and housing facilities were all right in 28 cases. In the 16 instances reporting otherwise, stress is given to the need of use of school time, a regular schedule, and suitable quarters for meetings.

Relation to regular duties.—In the majority of schools, the curriculum work of teachers is an added responsibility for which no allowance is made. The chairmen of committees were reported as released to some extent (and at times for long periods) from their regular duties by 46 respondents as against 83 who reported no release; members were released in 39 instances as against 112 in which they were not released. Work was reported as continued during the summer in 43 instances and as mainly done in the summer in the case of two reports. Only one school reported that teachers were paid for extra time.

Evaluation.—Some indication has already been given that administrators think teachers should not take on this work entirely as an added responsibility. On 61 reports, however, the practice followed was considered satisfactory with no change desired. Of the 43 cases in which a different reaction was given, many apologies are made to the effect that while

economy makes such added duties necessary, release from some of the regular duties is desirable.

All school boards can not follow the example set at Tulsa where committees of 20 members each are paid $25 a week to attend summer school and write courses of study. This school system reports that curriculum making is "too important a task to be undertaken as a 'tag-end' piece of work at the close of a day of classroom teaching." If districts are not able to distribute the teacher load to include curriculum work as is done at Montclair, N. J., they can, as is done at Boston, give credit for professional cooperation to candidates seeking promotion in the service.

5. SELECTING AND ORGANIZING MATERIALS

Respondents were asked to indicate influences having some weight and those having most weight in the selection and organization of the materials of instruction. The results are presented in Table 27. Such influences as practices elsewhere, expert opinion, committee discussion, reported research and suggestions from the State department of education are each shown to have some weight in from 60 to 70 schools. Local research and administrative orders are not employed so frequently.

TABLE 27.—*Number of schools in which certain influences have some weight and in which certain influences have most weight in the selection and organization of materials (144 schools or systems)*

Influence	Influences having some weight					Influences having most weight				
	Population group				Total	Population group				Total
	I	II	III	IV		I	II	III	IV	
1	2	3	4	5	6	7	8	9	10	11
Practices elsewhere	18	29	8	7	62	23	23	12	17	75
State department	23	18	11	16	68	6	3	5	7	21
Local research	15	16	9	7	47	19	19	7	12	57
Reported research	23	24	13	6	66	15	8	6	4	33
Expert opinion	24	22	7	11	64	6	9	5	4	24
Committee discussion	19	21	13	11	64	23	23	7	5	58
Administrative orders	11	10	7	8	36	2	3	2	1	8

The frequencies are somewhat different; however, for influences having most weight. Practices elsewhere are far ahead of other influences, while this with committee discussion and local research are the only practices having most weight in 50 or more centers. The remaining practices range in frequency from 8 to 33. Committee discussion is more of a determining influence in the larger schools. Practices elsewhere and local research are, however, reported with almost as high frequency in the schools of Group IV as in Groups I and II.

Evaluation.—Practices were reported as satisfactory with no changes desired in approximately one-fourth of all cases. In the evaluations of 15 respondents criticism was made of the practice followed and in a majority of cases the criticism related to the lack of local research. These schools say they would do more of it if beginning again.

Coordination and correlation of materials.—Of the 162 centers, 125 reported the procedures followed in the coordination and correlation of the work of the various committees. As presented in Table 28, the results indicate that no special effort was made in 22 instances. In the order named, joint committee meetings, conferences with the director, skeleton outlines, and special committees for vertical correlation were employed with frequencies varying from 64 to 46. Special committees for horizontal correlation were organized in 37 centers.

TABLE 28.—*Number of schools using certain procedures for coordinating and correlating the work (125 schools or systems)*

Procedure	Population group				Total
	I	II	III	IV	
1	2	3	4	5	6
No special effort	8	7	2	5	22
Special committee for vertical correlation	14	19	8	5	46
Special committee for horizontal correlation	12	16	7	2	37
Joint committee meetings	27	19	7	11	64
Skeleton outline	18	17	2	9	46
Conference with director of revision program	20	20	10	3	53
Other	4	4	1	.....	9

Evaluation.—Again, about a fourth of the schools recorded practices followed as satisfactory. Twenty respondents indicate dissatisfaction with the plan followed because

sufficient correlation was not secured. Special committees and a skeleton outline are the two procedures most commended.

Where vertical supervision is employed, as at Hamtramck, Mich., the supervisor can very easily correlate the work of all committees. Adequate coordination should also obtain at Pasadena, Calif., where each committee is composed of five persons, three of these working in the grades being revised and two in that field at other levels.

6. TRYING OUT COURSE OUTLINES

Procedures for try out of courses before formal adoption were indicated on 132 of the 162 inquiry forms. The practices followed in these schools are shown in Table 29. In 22 cases, respondents indicated that no provision for try out was followed. The procedure most often followed, which was indicated by 80 schools, is the try out of the tentative course in the classroom by all teachers of that course. In 48 schools, teachers criticize the outline, but without the classroom try out. In 35 schools experimental classes were organized to test the results of instruction in the new courses.

TABLE 29.—*Number of schools using certain procedures to try out the course of study (132 schools or systems)*

Procedure	Population group				Total
	I	II	III	IV	
1	2	3	4	5	6
No provision	3	8	3	8	22
Teachers criticize without tryout	17	14	9	8	48
Experimental classes	13	12	4	6	35
Tryout of tentative course by all teachers	34	31	11	4	80
Tryout by selected teachers	1			1	2

To insure a course of study which will not be too far over the heads of the teachers, each teacher at Saginaw, Mich., hands in to the committee an outline of her work, which is used as a point of departure. It was planned in this system to have committee members take a seminar course at the university before the course is prepared in its final form. An unusual procedure for getting expert reaction to the course is that followed at Beaumont, Tex. The outline was placed

in the hands of a university professor with authority to secure reactions from his summer school classes. At Rochester, N. Y., teachers were called together in subject groups at the close of each semester to present their discussions and criticisms both orally and in writing on the tentative copies, which were then called in and studied. In some schools, however, the tentative courses are tried out only by a few strong teachers in each department.

Evaluation.—Fifty-four responses were received indicating satisfaction with practices followed. More detailed evaluations on the part of 28 schools, in all but one instance, express need of more careful tryout of the course of study. The use of experimental classes is especially recommended, in most instances by schools which did not organize them.

7. *ASSEMBLING COURSE OUTLINES*

The plan followed in assembling the course of study reflects to some degree the permanency with which the product is regarded. Replies from 140 of the schools on this question are presented in Table 30. The majority of the courses are printed or mimeographed, 31 falling within the former class and 73 within the latter. More of the printed courses are bound than are loose-leaf, while the reverse is true of the mimeographed courses. The large number of mimeographed courses may reflect an attitude on the part of school men that courses of study as published are tentative rather than final or they may reflect an effort at economy. Courses are printed more often in the larger than in the smaller cities.

TABLE 30.—*Number of schools using certain methods of assembling courses of study (140 schools or systems)*

Procedure	Population group				Total
	I	II	III	IV	
1	2	3	4	5	6
1. Printed in pamphlet form	10	8	4	1	23
2. Mimeographed and bound	9	11	7	3	30
3. Printed, loose-leaf	2	1	2	2	7
4. Mimeographed, loose-leaf	7	16	8	12	43
5. Combinations of 1, 2, 3, 4	17	13	1	2	33
6. Typed	.....	2	.....	2	4

Evaluation.—The practice followed was considered satisfactory in 43 of the schools, with no changes desired. In 19 cases the evaluations were not so final. Where printed courses are considered desirable, it is explained for the most part that this will be done only after considerable tryout, and, in some cases, blank pages will be included for teacher notes. In most cases school authorities seem careful to guard against a consideration of the course of study as a fixed or crystallized product.

8. TRAINING TEACHERS IN USE OF NEW COURSE

The necessity for training teachers in the use of the new course of study increases as schools become larger, since in the smaller schools all teachers more often have a part in the work of revision. These facts are reflected in Table 31 in which practices in 138 schools are summarized. It is significant that no formal provisions for teacher training are reported in almost half the schools. While such reports are found more often in the smaller schools they are included with considerable frequency in the schools of Group I. In the large schools, particularly, this work is usually delegated to the supervisors who perform it either through regular visits or through special meetings in which the teaching of the new course is demonstrated. In only 28 cases was such training placed in the hands of teacher committees. Included under the heading "Other" are cases in which each principal is made responsible for installing the new course.

TABLE 31.—*Number of schools using certain methods in training teachers in the use of new courses of study (138 schools or systems)*

Method	Population group				Geographical section					Total
	I	II	III	IV	N. E.	M. A	N. C.	S.	W.	
1	2	3	4	5	6	7	8	9	10	11
No formal provision	14	18	14	21	10	5	27	12	13	67
Visits of supervisors	26	21	8	5	6	10	25	10	9	60
Supervisor demonstration meetings	32	21	8	2	5	11	22	14	11	63
Teacher committee instruction	10	15	2	1	1	6	9	7	5	28
Department heads responsible	3	3					2	3	1	6
Other	4	7	4			3	3	6	3	15

Evaluation.—Sixty-three schools report practices followed as satisfactory, 17 of which are among those reporting no formal provisions. In 18 instances, however, serious complaints are made against present practices. One respondent thinks that in a school where there are no special supervisors, the authors should be released from their regular work to aid teachers with the new courses. Most of the others insist that every effort be made to insure acquaintance of all teachers with the new course. The report from one school points out that better results were obtained in junior than in senior high school because the work in the former was in charge of a director of junior high school grades.

9. APPRAISING RESULTS

Of the 162 schools, 139 responded to inquiry concerning attempts made to measure the results of instruction in the new courses. Of this number 23 reported that no appraisal was made and 9 reported the procedure they had planned to follow. The results as presented in Table 32 indicate that most of the appraisal is of an informal nature conducted by the administrative and supervisory staff. Fewer than 50 schools make formal special appraisal through use of questionnaire, standardized tests, or specially prepared tests.

TABLE 32.—*Number of schools using certain methods in appraising the results of instruction (139 schools or systems)*

Procedure	Population group				Geographical section					Total
	I	II	III	IV	N. E.	M. A.	N. C.	S.	W.	
1	2	3	4	5	6	7	8	9	10	11
No appraisal made	10	5	3	5	5	2	9	4	3	23
Specific courses only	3	8	1	1		3	6	3	1	13
Informal, by administrative and supervisory staff	24	26	9	13	6	10	23	13	20	72
Informal, by teaching staff	2	3				1		1	3	5
Formal special appraisal by—										
Questionnaire	13	8	3	2	1	5	7	6	7	26
Standardized tests	17	20	6	6	2	9	18	10	10	49
Specially prepared tests	13	15	5	4	2	5	14	8	8	37
Other	2	1	1	1			1	2	2	5

Evaluation.—Of the 52 schools reporting present plans as satisfactory, 4 were in the group making no appraisal and 15

were included among those whose appraisal was informal. In 29 instances respondents are less satisfied with their present program and point out the need of making appraisal more definite through use of expert advice, questionnaire, and tests. Suggestions resulting from extensive evaluation in the elementary field as carried on at Teachers College, Columbia University, have been published by Stratemeyer and Bruner.[1]

10. CONTINUOUS REVISION

Of the 162 schools and systems represented, 102 reported that their program included plans for continuous revision, 7 reported that continuous revision was not contemplated, and 53 did not answer. Continuous revision is more often planned for the larger cities. The percentages of schools in each group not answering or not contemplating continuous revision are as follows: Group I, 29 per cent; Group II, 36 per cent; Group III, 44 per cent; Group IV, 45 per cent.

Questions were asked on the inquiry form relating to (1) the agencies responsible for continuous revision; (2) methods of securing criticisms and suggestions based on the old course; (3) methods of conducting experiments with a view to course-of-study revision; (4) agencies responsible for deciding changes to be made in adopted courses, looking toward immediate revision. The data secured will be considered in the order named.

Agency responsible for continuous revision.—It is the policy of most schools to assign responsibility for continuous revision to the same committee which assumed responsibility for general revision. As indicated in Table 33, 73 schools follow this practice. No definite assignment had been made in 15 schools. This responsibility was delegated to the research department in 22 cases, to the curriculum department in 20, and to a special committee in 12. The superintendent and the principal each retains this authority in 8 schools. The research and curriculum departments are assigned responsibility more often in the larger cities and the superintendent and principal more often in the smaller.

Evaluation.—The agency designated is considered satisfactory in 47 cases. Fifteen reports contain other sugges-

[1] Rating Elementary School Courses of Study. Bureau of Publications, Teachers College, Columbia University, New York City, 1926.

tions, most of which indicate a desire for a department of research or of curriculum to conduct this work.

TABLE 33.—*Number of schools in which certain agencies are responsible for continuous revision (132 schools or systems)*

Agency	Population group				Geographical section					Total
	I	II	III	IV	N. E.	M. A.	N. C.	S.	W.	
1	2	3	4	5	6	7	8	9	10	11
No definite assignment	----	8	2	5	1	4	5	3	2	15
Committee same as general revision	22	28	13	10	5	8	31	12	17	73
Research department	13	9	----	----	2	5	9	4	2	22
Permanent curriculum department	9	6	4	1	1	2	7	5	5	20
Special committee	5	4	2	1	1	1	5	1	4	12
Superintendent of schools	1	2	1	4	----	2	3	2	1	8
Principals	3	1	1	3	----	2	4	2	----	8
Other	7	4	----	4	1	2	8	3	1	15

How criticism is secured.—Reports as to how criticisms of the old courses were brought to focus are indicated in Table 34. Twenty-six schools made no report and 18 replied that they had no organized provisions. With reported frequencies varying from 64 to 46, the following methods are reported in descending order: Initiated by supervisory staff, initiated by administrative staff, interpretation of regular testing, initiated by general revision committee. In the smaller cities, the administrative staff more often initiates the movement, while in the larger cities the supervisory staff and the general revision committee have this responsibility more often.

TABLE 34.—*Number of schools having certain provisions for securing criticisms to be used in continuous revision (136 schools or systems)*

Procedure	Population group				Geographical section					Total
	I	II	III	IV	N. E.	M. A.	N. C.	S.	W.	
1	2	3	4	5	6	7	8	9	10	11
No organized provisions	4	6	5	3	4	2	5	4	3	18
Interpretation of regular testing	20	16	6	9	3	10	21	7	10	51
Initiated by special committee	4	2	2	3	----	1	5	3	2	11
Initiated by general revision committee	19	18	8	1	3	6	14	9	14	46
Initiated by supervisory staff	28	25	6	5	4	11	25	13	11	64
Initiated by administrative staff	22	18	8	11	4	12	27	7	9	59
Initiated by central office	15	10	2	5	2	8	11	3	8	32
Other	2	1	----	1	----	----	3	1	----	4

Evaluation.—Nineteen respondents consider the plan they followed inadequate mostly because plans were not definite enough, and did not secure enough teacher criticism. It is suggested that criticism can best be requested through individuals responsible for building the course. In 68 cases the practices followed were considered satisfactory with no changes desired.

How experiments are conducted.—Thirty-one schools made no answer as to how experiments were conducted with a view to curriculum revision; 27 reported no organized efforts. The results are presented in Table 35. In only 35 instances are special experimental classes organized. While 100 respondents report that teachers are encouraged and assisted in conducting experiments in connection with regular classroom work, the degree to which they respond to such encouragement is unknown.

TABLE 35.—*Number of schools having certain procedures for conducting experiments (131 schools or systems)*

Procedure	Population group				Geographical section					Total
	I	II	III	IV	N. E.	M. A.	N. C.	S.	W.	
1	2	3	4	5	6	7	8	9	10	11
No organized effort	7	11	7	2	2	4	8	5	8	27
Teachers encouraged as regular work	38	29	14	19	10	14	39	19	18	100
Special classes organized	15	13	3	4	2	4	14	8	7	35
Other	2	2	1	1	.....	3	2	....	1	6

Evaluation.—Of the 16 cases in which existing practices were not considered satisfactory, it is pointed out that definite leadership is needed since teachers are as a rule poorly trained for such work. In all instances, more experimental work is considered desirable. Forty schools report practices followed as satisfactory.

Agency responsible for deciding changes.—In most cases, decision as to what changes are to be made in the old course is the responsibility of the administrative and supervisory staff or of the committee responsible for making the general revision. A total of 77 and 66 frequencies are reported respectively for such agencies in Table 36. The central office

has this responsibility in 39 schools and a special committee is assigned it in 23 cases. Reports were received from 129 of the 162 schools.

TABLE 36.—*Number of schools relying on certain specified agencies for deciding changes looking toward revision of adopted courses (129 schools or systems)*

Agency	Population group				Geographical section					Total
	I	II	III	IV	N. E.	M. A.	N. C.	S.	W.	
1	2	3	4	5	6	7	8	9	10	11
Special committees	12	8	1	2	1	1	7	7	7	23
Same committee as general revision	26	22	11	7	4	10	23	12	17	66
Administrative and supervisory staff	30	27	11	9	5	14	28	15	15	77
Central office	17	7	4	11	4	8	10	7	10	39
Teachers	....	3	....	2	.....	1	2	1	1	5

Evaluation.—Sixty-one schools reported practices followed as satisfactory, but only eight offered other comment. By these it is suggested that persons making such decisions be well trained and that the work be definitely organized.

II. GENERAL EVALUATION

As distinguished from the specific evaluation sought after each item, it was attempted at the end of the form to secure a general evaluation concerning the revision program. Conclusions were asked as to (1) steps preliminary to launching the program; (2) extent of teacher participation; (3) capacity in which services of different agencies are best utilized; (4) factors operating to prevent the construction of an ideal curriculum; (5) benefits of a general nature; (6) conclusions as to the program as a whole.

The replies are summarized in a general way. They indicate that the following specific conclusions are given by most respondents: There should be more thorough preliminary instruction; as far as possible, all teachers should participate in the program; practical work is best done by classroom teachers; lack of teacher training, money, and time are the factors which most often hamper the construction of an ideal curriculum; the professional growth of teachers is the greatest benefit derived. In general, it is concluded that teachers

should be relieved in part from other duties, that continuous revision is an indispensable basis of procedure, and that there should be more adequate provision for testing and research. The count of detailed findings and recommendations in appraisal is—

(1) Steps preliminary to launching program:
- More thorough instruction of teachers needed (25 schools).
- More stress on the necessity for revision (7 schools).
- More careful study of local needs (7 schools).
- More expert advice (6).
- Provision of more of a common background (6).
- More publicity (3).
- Other replies (9).

(2) Extent of teacher participation:
- Desirability of participation by as many teachers as possible (55 schools).
- Need for care in selecting a well-trained group for committees (8 schools).
- Need for relieving participants from some of regular duties (6).
- Work on revision invaluable training for teachers (4).
- Other replies (7).

(3) Services performed best by different agencies:
- Teachers for practical work (9 schools).
- Outside agencies in an advisory capacity (5 schools).
- Service of capable director most essential (5 schools).
- Cooperation of all agencies needed (3).
- Experts for writing and editing (2).
- Research agencies for collecting information (2).
- Assignment of increased responsibilities to outside agencies (2).
- Principals for evaluating and administering (2).
- Other replies (4).

(4) Factors preventing an ideal curriculum:
- Lack of teacher training (31 schools).
- Lack of money (19 schools).
- Lack of time by teachers with other duties (17 schools).
- College-entrance requirements (7).
- Lack of objective data (7).
- Lack of educational philosophy (6).
- Lack of coordination of home and school (4).
- Other replies (6).

(5) Benefits of a general nature:
- Professional growth of teachers (42 schools).
- Better courses of study (13 schools).
- Better articulation of work (3 schools).
- Other replies (3).

(6) The program as a whole:

Teachers relieved in part of other duties (9 schools).
Continuous revision an indispensable basis of procedure (8).
More adequate provision for testing and research (8).
More time allowed (7).
Greater teacher participation (6).
Greater use of specialists (6).
More attention to trained leadership (4).
More definite provisions for teacher training (3).
Complete responsibility in a permanent curriculum staff (3).
Development from a tentative outline made by experts (3).
Other replies (14).

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CHAPTER V : COUNTY-WIDE REVISION

1. OUTLINE OF THE CHAPTER

Of the 38 centers approached with special inquiry forms for plans of curriculum making on a county-wide scale, replies were received from only 7; 3 of these were too limited for use. In addition, however, to accounts of revision from the remaining four counties, this chapter treats of the results of personal interviews with the three State high school supervisors of the State of Maryland and inquiry forms returned from each of their supervisory districts.

2. CURRICULUM MAKING IN ASHTABULA COUNTY, OHIO

County Superintendent Graves reported that he is using curriculum revision in Ashtabula County, Ohio, largely as a device for training teachers in service. Revision is a continuous process in which every teacher of the 4-year high schools in his county is engaged. In 1929–30 there were 16 committees with membership of 4 to 7 teachers each. The committees are reorganized each year. The assistant superintendent in charge of high schools directs the work. In 1929–30 about two months were spent in organizing, two months in determining objectives, two months in selecting and organizing content materials, and three months in determining teaching procedures. About $150 was spent, most of which was for mimeographing.

3. CURRICULUM MAKING IN ARKANSAS AND KENTUCKY

Inquiry forms were returned from Marion County in Arkansas and from Harrison and Henderson Counties in Kentucky. Revision in these counties is controlled to a considerable extent by the State departments of education and consists for the most part in the adaptation of State courses of study to local needs. It is largely an informal procedure in which one committee revises the curriculum in all fields. Much discussion and cooperation results, however, for all teachers of the county. No expense is involved

except as a part of the regular budget. The results have satisfied the respondents that the time given to the work is well spent.

4. CURRICULUM MAKING IN MARYLAND

Attitude of State department.—The examples just given from Arkansas and Kentucky indicate that revision of the curriculum in States with a county system of schools is sometimes a joint undertaking of State and county agencies. It is in Maryland, however, that the cooperation of these two agencies has been developed to the greatest extent. Curriculum making in Maryland is both a State and a county project, but since every county works as a separate unit in the process, it is probably more accurately considered in this division of the study.

Instead of preparing and circulating a single course of study, the State department takes the attitude that the different social and economic characteristics of different sections of the State make it more desirable that each county build its own course of study in accordance with its peculiar needs. The construction of county courses of study is considered an essential element of the State high school supervisory program. The program varies, however, according to the professional level of the teachers of each county. In the more backward counties, supervision consists in correcting fundamental teaching faults. When a higher level has been attained, supervision will be exercised largely through opportunities afforded in curriculum making.

Background for revision.—The State Department of Maryland can take a more positive attitude toward county curriculum making than most States for several reasons. In the first place, authority is highly centralized in the State department of education. It has approval of the appointment of all teachers and officials, including county superintendents. Two-thirds of the salary of the county superintendent is paid by the State. No life certificates are issued. Teachers are appointed for three years, and they must attend summer school once during the period. Each high-school teacher has a college degree. Principals are encouraged to develop and keep alive a professional spirit among teachers. The tenure of principals is long. The

State is small, roads are good, and teachers know fairly well what is going on in other sections of the State. County superintendents are liberal in furnishing teachers with literature and other material needs.

Approach to revision.—The present policy of the State toward curriculum making was put into effect in 1921 after two additional high-school supervisors had been added to the central staff. Previously to that time courses were prepared at the central State office. From 1921 to 1925 attention was devoted for the most part to teacher preparation of lesson plans. In 1925 the work of all teachers of the various counties was united toward constructing for each county separate courses in each subject field. Specialists from without the State were brought in to make talks, especially on the unit plan of organization.

Organization for revision.—The State, comprising 23 counties, is divided into 3 supervisory districts, with each State supervisor responsible for approximately 8 counties. In a few of the more wealthy counties, a county supervisor, subject to the authority of the State supervisor but shouldering much of the detail ordinarily cared for by that official, has been provided. The State supervisor with the county superintendent directs the revision in each county except in industrial arts and home economics for which special State supervisors are provided. All teachers in the county engage in some way in the undertaking. A meeting of all teachers is held at the beginning of the year in each county at which time it is decided what courses will be made that year. Teachers, however, have in many cases been working on specific units in the course for two or three years preliminary to the organization of committees.

Extent of revision.—The extent to which Maryland teachers are engaged in any one year in making courses of study on a county-wide basis may be gathered from a report furnished by one of the State supervisors concerning work accomplished in his district in 1929–30.

County A: English, modern history, general science, biology.

County B: Ninth-grade composition, general science.

County C: Ninth-grade English, modern history.

County D: Ninth and tenth grade English, ancient history, algebra.

County E: Work more directly under county supervisor.

Counties F, G, and H: No work undertaken on county-wide basis. Teachers working independently, but not up to standards of other counties.

It must be borne in mind that, while organized committees are not working in each subject field in each county during each year, all teachers are working on some units each year with the idea that they will soon organize for revision. The teachers of one county sometimes purchase courses developed in other counties and adapt them to their needs. Accomplishment tests, based on suggestions of outstanding teachers and prepared by the State staff each year, are given over the entire State and the results widely circulated and discussed.

Curriculum making in Allegany County.—Each of the three State supervisors had one of the county superintendents of his district fill in and return the inquiry form prepared for revision on a county-wide basis. The details of the organization and procedures outlined for Allegany County will be considered and the general variation from Allegany County plans of the other two counties will be noted.

(1) *General plans.*—While most schools in Maryland are organized on the traditional basis, revision was made in Allegany County from the standpoint of the 6–3–3 organization of grades. Revision in the elementary and secondary fields is entirely distinct. The curriculum is being built from the ground up rather than as a revision of the old courses of study. The stages of the program up to the time information was supplied for this study were: (1) Fifteen lectures by curriculum specialists from Columbia University covering a school year; (2) organization of committees and reading for orientation, one-half year; (3) production of units of instruction, now in progress. Periodic conferences will be held with curriculum specialists from Columbia. The program was begun in 1928 and is expected to be finished in 1932. All subject fields in junior and senior high school are being revised.

(2) *Details of organization.*—The county superintendent, aided by the State supervisor, directs the program. Other

agencies having a part in the work are the curriculum specialists and the teachers and principals of the county. The production committees consist usually of five classroom teachers and one member of the county supervisory staff. The State high-school supervisors and the university specialists act in an advisory capacity. The chairmen of committees are usually classroom teachers. They, together with the county supervisor and the outside specialists, supervise the work. The program also provides for (1) a review committee consisting of four classroom teachers and two from the county supervisory staff and (2) an articulation committee consisting of three from each of these groups. The responsibility for the different elements of the program is assigned as follows:

Formulating general plans: County superintendent, curriculum specialists, supervisors.
Formulating guiding principles: Same.
Formulating general aims: Same.
Providing materials for committees: County superintendent.
Investigating community characteristics: Supervisors, research director.
Investigating pupil characteristics: Research director.
Revising program of studies: County superintendent and supervisors.
Revising materials of instruction: Production committees.
Revising teaching procedures: Production committees and supervisors.
Correlating departmental work: Curriculum specialists and production committees.
Coordinating grade work: Curriculum specialists.
Determining time allotments: County superintendent and supervisors.
Determining minimum standards: County superintendent, supervisors, and production committees.
Conducting experimental classes: Supervisors.
Trying out courses before adoption: Teachers.
Editing for content: Committee chairmen.
Editing for expression and form: Committee chairmen.
Training prospective teachers in use of new courses: Supervisors.
Training teachers in service in use of new courses: Supervisors.
Selecting instructional supplies: Supervisors and teachers.
Selecting textbooks: Supervisors.
Developing new type tests: Supervisors and research director.
Appraising results: County superintendent and supervisors.

It is estimated that the cost of the program will be $5,000 per year, $2,000 of which is a fee to the university directing the program and $2,400 for the employment of specialists. About $200 is estimated for the purchase of library materials and $400 for printing or mimeographing.

(3) *Specific procedures for separate elements.*—The interest of teachers in the program was obtained through questionnaires to local schools concerning the old courses of study and through discussion meetings. Newspapers and bulletins aided in the publicity secured.

No objective criteria were used as a basis for selecting the committees. The members were nominated by a special committee and approved by the county superintendent. They were trained for the work through special efforts of the director and by specialists brought into the city. Central headquarters was provided with a library and members were also furnished individually with needed literature. A room in the administration building was reserved as a place of meeting. Meetings were held continuously for short periods, but on no regular schedule. When engaged in curriculum making, teachers were paid for extra work or time was taken from their regular work. In some cases work was done during the summer.

Expert opinion and committee discussion were of most weight in the selection and organization of materials, although the results of reported research were of some influence. The work of separate committees was correlated through skeleton outlines provided by each committee and through conferences with the director.

In order that benefit might be secured from tryout of courses before adoption, tentative copies were circulated throughout the county with request that classroom teachers report their criticisms. After adoption, county and district meetings were held for the express purpose of acquainting teachers with their use. The county supervisors also discussed them on their regular visits and the county furnished the aid of its staff on special trips to aid local adaptation. The courses are appraised through standardized and specially prepared tests. In order to keep them up to date, regional conferences are held and organized efforts are made to collect criticisms.

It was the general conclusion of the respondent that the procedures employed are for the most part satisfactory. He believes, however, that specially trained teachers should be released from classroom duties for more extended periods to produce the units of instruction.

Comparison with other Maryland counties.—Reports from Carroll and Wicomico Counties differ chiefly from that just presented in that specialists are not brought in from the outside to assist in the program. As a consequence, expenditure is confined largely to employment of extra clerical help and purchase of library materials and hardly runs more than $300 per year; nor, as in Allegany County, is it attempted to make all courses of study at the same time. The courses are begun and completed in one year's time, but only two or three are undertaken each year. The work done by curriculum specialists in Allegany County is, in these counties, done for the most part by the State high-school supervisor and the county superintendent. The teachers work at curriculum making in addition to their regular duties and without additional pay.

CHAPTER VI : STATE-WIDE REVISION

1. NATURE OF THE INFORMATION SECURED

The States represented.—An inquiry form, similar to the one devised for cities, was addressed to the superintendent of public instruction or commissioner of education in each of the 12 States indicating an organization within the past five years for curriculum making. Replies were received from 11 States as follows: Connecticut, Florida, Idaho, Indiana, Iowa, Minnesota, Missouri, New Mexico, Oklahoma, South Dakota, and West Virginia. Most of these States, it will be noted, are in the middle or far-western groups. These replies are the bases of the analyses which are presented in the pages which follow. In almost all particulars the study is conducted similarly to the one on curriculum revision in cities. The chief variance is in the evaluation. On some questions no evaluation was made by the authorities in any State, and as a consequence this is not included after the basic treatment of all topics.

Officials making returns.—The 20-page inquiry forms were filled in by the following officials: In 6 States by the supervisor of secondary education; in 2, by professors of the State universities; in 1, by a State superintendent; in 1, by a special curriculum director; in the eleventh State no name was given. In 3 of the States, respondents report revision as completed, while in the remaining 8 it was still in progress at the time the form was returned.

Subjects complete and in progress.—The scope of revision in the 11 States considered is indicated in Table 37, showing the number of States in which revision in the separate subject fields has been completed and is in progress. The total represents 151 courses of study, 50 of which are in junior high school and 101 in senior high school. More work is being done in mathematics, science, English, social studies, Latin, physical education, domestic arts, and manual arts than in other subject fields. Art, music, and commerce do not fall far behind, however. It is of interest to note that a

few States are also publishing courses in character, in visual education, and in guidance.

TABLE 37.—*Subject fields in which revision was completed and in progress in 11 States*

Subject field	Junior high school		Senior high school		Total
	Completed	In progress	Completed	In progress	
1	2	3	4	5	6
English		5	2	6	13
Social studies	1	3	3	6	13
Mathematics	2	4	2	6	14
Science	1	4	4	5	14
Physical education	1	4	2	5	12
Art		3	1	6	10
Music		3	1	6	10
Latin		3	2	5	10
Spanish		1	2	2	5
German		1	2	3	6
Commerce		2	1	6	9
Manual arts	2	1	3	5	11
Domestic arts	1	4	2	5	12
Agriculture				2	2
Character		1		2	3
Visual education		1		1	2
Guidance		1		1	2
Administration and supervision		1	1	1	3
Total	8	42	28	73	151

2. GENERAL PLANS FOR REVISION PROGRAMS

General plan of attack.—In 7 of the 10 States replying to the question revision of the elementary and secondary fields of education was kept entirely distinct, while in the remaining 3 the general program included both. In 6 States the curriculum was revised from the standpoint of organization on the 6–3–3 or 6–6 plans, while in 4 States procedure was on the basis of the traditional 8–4 plan. Responses from 6 States indicated that they were building the curriculum from the ground up, while in 4 States revision was more of an adaptation to present needs of the old courses of study.

Major elements included.—A general idea of what curriculum revision in the several States involves may be had from Table 38, in which are assembled the responses from the States as to what major elements were included in the program. The elements listed are practically the same as those included on the form to city schools. Little variation is to be noted in the extent to which different elements are included or omitted, a frequency of from six to eight States

being shown for each element. In most States the first six elements listed in the table had been completed, but the remaining 18 were still in progress or were merely contemplated in most of the States at the time the report was made. This may account in some measure for the small amount of variation in the degree to which different elements are included. Contemplated elements are sometimes neglected in the end on account of lack of time or for other reasons. The agencies responsible for each of these elements will be considered in another connection.

TABLE 38.—*Number of State programs in which certain elements of curriculum revision were included*

Element	Number of States		
	Completed	In progress	Total
1	2	3	4
1. Formulating general plans	8	1	9
2. Formulating guiding principles	7	1	8
3. Formulating general aims	6	2	8
4. Providing materials for committee work	4	3	7
5. Investigating community characteristics	5	2	7
6. Investigating characteristics secondary-school population	5	2	7
7. Revising programs of studies	4	4	8
8. Revising content materials	3	5	8
9. Suggesting teaching procedures	3	5	8
10. Correlating work of separate departments	3	5	8
11. Coordinating work of separate grades	3	5	8
12. Determining time allotments	3	5	8
13. Determining minimum standards	3	5	8
14. Organizing and conducting experimental classes	3	4	7
15. Trying out courses before adoption	3	4	7
16. Editing tentative courses for content	2	4	6
17. Editing tentative courses for expression and form	3	4	7
18. Training prospective teachers in use of new courses	3	4	7
19. Training teachers in service in use of new course	3	3	6
20. Selecting instructional supplies related to new course	3	5	8
21. Selecting textbooks	3	3	6
22. Developing new type tests	3	3	6
23. Appraising results of instruction	3	3	6
24. Providing for continuous revision	3	4	7

Stages involved.—Replies to a request that if, as far as the program of revision had progressed, more or less distinct time stages had resulted, such stages be described briefly, are summarized as follows:

First stage

Discussion of curriculum revision—preparing the ground (6 States).
Preliminary organization (5 States).

Second stage

Organization of committees (5 States).
Deriving objectives or guiding principles (5 States).
Revising subject matter (1 State).

Third stage

Perfecting plans—conferences, seminar classes (4 States).
Deriving objectives and guiding principles (1 State).
Revising subject matter (1 State).
Synthesis of individual contributions by committee as a whole (1 State).

Fourth stage

Survey of classroom situations—check-up (3 States).
Revising subject matter (2 States).
Reviewing work of committees (1 State).

Fifth stage

Reviewing and editing (3 States).
Revision of first tentative draft (2 States).
Revising subject matter (1 State).

It was also indicated in three States that a tryout of the courses of study in the classroom was contemplated at a later date.

The summary perhaps suggests the fact that the committees of all States do not proceed at the same rate in revising courses of study. In one State where revision was completed in one year it is complained that the time was too short. Two further suggestions which were indicated as evaluations are worthy of note. In a State where some experiment was made to test the course in the classroom it is reported that the "experimental tryout features were most valuable. Would spend much less time in committee discussions and more in actual work and observation." In another State courses of study were developed by seminar groups, and the plan is reported to have worked admirably.

Time required for general revision.—The average time of three years, which seems to be required for completion of revision on a state-wide scale, is about the same as the average shown for city revision. In two States revision was accomplished in one year, but the need of more time was indicated in each instance. In four States revision was completed—or practically so—in three years. In the remaining five States revision had been in progress for less

than a year in one, for one year in two, and for two years in one State. It seems that a period of at least three years is required for complete revision in the average State. Reports from two States suggest, however, that probably a 5-year program would be better, with fewer courses revised each year.

3. DETAILS OF ORGANIZATION

Plans followed in Idaho.—Because of the widespread cooperation from many sources which it seems to enjoy, the details of the organization for the State of Idaho are presented in this connection. An outline of the membership and functions of the committees organized for this program as furnished by the curriculum advisor is reproduced herewith.

A plan for constructing a high-school curriculum for the State of Idaho

A State board of education is responsible for the revision of curriculums for all the schools in the State. Consequently final authority rests with them. All committees, therefore, are working directly or indirectly under the direction of the State board.

There shall be four committees, namely, a nomination committee, a supervision committee, a production committee for each group of subjects, and a promotion committee.

1. The nomination committee.
   - A. This committee shall be composed of the following members:
     - (1) The commissioner of education, chairman.
     - (2) The secretary of the State teachers association.
     - (3) The State superintendent of public instruction.
     - (4) The dean of education at the University of Idaho.
     - (5) The head of the department of education in each normal school.
   - B. This committee will have the sole duty of recommending through the chairman all non ex-officio members of the supervisory committee for approval or disapproval by the State board of education.
2. The supervisory committee.
   - A. This committee shall be composed of the following members:
     - (1) The commissioner of education, chairman.
     - (2) The secretary of the State teachers association.
     - (3) The State superintendent of public instruction.
     - (4) The dean of education at the university.
     - (5) The head of the department of education at the normal schools.
     - (6) A curriculum adviser.
     - (7) The chairman of all production committees.

B. The importance of this committee can not be overestimated. The success or failure of the undertaking will depend upon the diligence of its members.

C. It shall be the duty of this committee with the aid of the curriculum adviser to supervise the work of the production committee throughout the entire procedure. Some illustrations are:

(1) To appoint members of the production committee.
(2) To establish a set of criteria to guide the production committee.
(3) A determination of general aims and objectives.
(4) How to provide for individual differences.
(5) Should the curriculum be organized as a series of projects?
(6) What relative emphasis will be given to methods and subject matter in the new curriculum?
(7) Will the objectives be stated in terms of teachers' goals or pupils' goals?
(8) What correlations of subjects are advisable?
(9) What outline should be used in each course of study?
(10) Will the curriculum be published in one large book or in separate booklets for each group of subjects?
(11) What shall be the subjects required of all pupils and those that are elective?
(12) How much teacher initiative will be allowed?
(13) What organization of the day's activities is desirable?
(14) What kind of teaching units are best?
(15) The organization of teaching units.
(16) The use to be made of tests.
(17) A marking system.
(18) Many others.

3. The production committees.

A. There shall be 15 production committees, some of which will include subcommittees.

B. The chairmen in some of these committees will be superintendents or principals from independent districts and of the others superintendents or principals from smaller districts.

C. The personnel of each committee will be—

(1) Superintendent or principal, chairman.
(2) A curriculum adviser.
(3) Classroom teachers in the various subjects considered, divided approximately equally between independent and small districts.
(4) Other administrators in public schools.
(5) The commissioner of education, an ex-officio member of all production committees.

D. It shall be the duty of these committees to write the course of study with the aid of the curriculum adviser under the supervision of the supervisory committee.

4. The promotion committee.
   A. This committee will be composed of the executive committee of the State teachers association with the secretary acting as chairman.
   B. It will be the duty of this committee to promote the proceedings of the other committees by a campaign of publicity and assistance in raising the amount of money required.
   C. Fifteen or twenty cents per pupil contributed by each high-school board should furnish the necessary amount of money for initiating this piece of work.
   D. Legislative appropriation will complete it.

The program in Idaho is planned as a 3-year project with the following stages: (1) Formulating plans; (2) educating committees and public-school people; (3) deriving objectives; (4) writing courses; (5) trying out of new courses by teachers of the State. It was initiated by the superintendents of the State as a result of dissatisfaction with the old courses of study. Prof. R. D. Russell, of the University of Idaho, with the title "Curriculum adviser," was placed in charge of the program.

As noted in the outline, a considerable part of the expense of the undertaking is being borne by local school districts. The cooperation of the university is indicated by the fact that it pays the salary of the curriculum adviser who is granted leave of absence from his regular duties. That the superintendents are cooperating is shown by their attendance at summer school. One-half of the superintendents of the State were enrolled in 1930 in classes organized by the curriculum director, and three-fourths of the superintendents were expected to attend the summer session in 1931. Six hours' credit is given by the university to each member of the production committees upon completion of his work. A considerable amount of research work has been undertaken by the school people of the State.

Agency directing the program.—With the complete program of Idaho as a background, details are considered singly and for all States in the sections which follow. While State superintendents or commissioners of education no doubt retain general oversight of the revision program, active responsibility for directing the work is delegated in 6 States to a member of the State department of education, usually

the supervisor of secondary education, and in 5 States to a professor at the State university. The director does not devote full time in all cases but expression from one or two States indicate that this is due to lack of funds rather than to absence of felt need for full-time service.

Organization of production committees.—In 7 of the 11 States information was given regarding the organization of production committees. The average size of these committees is 7 members, with a range of from 4 to 12. On an average, 3 or 4 of these members are classroom teachers, 1 to 3 are from the administrative and supervisory staff of local schools, 1 from the higher institutions of learning in the State, and 1 from the State department of education. The chairmen of these committees may be selected from any one of the latter three groups mentioned, but are seldom classroom teachers. Supervision of committee work is usually the responsibility of the chairman. This duty may be exercised in some cases by the director of the whole program.

Respondents, for the most part, consider their organization as satisfactory. The desirability of having a larger number of classroom teachers is mentioned, but the expense involved prohibits it. Hence the need of careful selection.

Other committees.—Among the other committees selected in the various States may be mentioned committees on aims, time allotments, correlation, nomination, promotion, publicity, standard materials, adaptation, and central, steering, or executive committees. None of these except the last mentioned, which is represented in all programs, is designated in more than 1 State. The average size of the central, steering, or executive committee is 13 members, with a range of 6 to 20. In all cases, such membership includes representatives of the State department, of higher institutions, and of the administrative and supervisory staff of local schools. Classroom teachers, however, are represented on this committee in only 3 States. The functions described for this committee in the Idaho plan are fairly representative.

Individuals acting in other capacities.—Respondents were asked to indicate other individuals besides committee members who acted in some capacity with respect to (1) general plans for revision; (2) the detailed construction of the ten-

tative course; (3) reaction to the completed tentative course; (4) keeping the new course of study up to date. The replies are summarized in Table 39.

(1) *With respect to general plans.*—In 8 States it was indicated that expert advice with respect to general plans was contributed by other than committee members. In 6 States such advice was contributed by an average of three members from the State department of education; in 7 States, by an average of nine members from higher institutions; in 5 States, by an average of eight members of the administrative and supervisory staff; in 1 State, by 13 classroom teachers; and in 5 States, by an average of five members from other professional groups. Advice from everyday experience was contributed by 150 members of the administrative and supervisory staff in Indiana and by 100 classroom teachers each in Oklahoma and in South Dakota.

(2) *With respect to details of construction.*—Classroom teachers and nonprofessional groups are the agencies which, more than any others aside from committee members, contributed to the detailed construction of tentative courses. In Oklahoma, 100 teachers contributed advice from their everyday experience, while in South Dakota advice of a similar nature was contributed by farm clubs, American Legion posts, commercial clubs, Rotary and Kiwanis clubs, parent-teacher associations, and the W. C. T. U.

(3) *With respect to reaction to tentative course.*—In Indiana especially, where 900 were reported, widespread reaction of classroom teachers was secured to the tentative course of study. In this State, a 23-page booklet was sent to city, town, and county school districts over the State for securing the reaction of each group to each course of study. The booklet, after giving a general explanation of each of 12 major phases of each course of study leaves space for suggested evaluation.

(4) *With respect to keeping the new course up to date.*—In only a few States were reactions from different groups in keeping the new course up to date reported. A great variety of agencies for this purpose is named for South Dakota; but the greatest number, with 500 classroom teachers indicated, is reported for Indiana. In Connecticut, the only

TABLE 39.—*Individuals connected with State curriculum programs acting in capacities other than as committee members (8 States)*

Function	State department		Higher institutions		Administrative and supervisory staff		Classroom teachers		Other professional groups		Nonprofessional groups	
	Number of States	Average number per State	Number of States	Average number per State	Number of States	Average number per State	Number of States	Average number per State	Number of States	Average number per State	Number of States	Average number per State
1	2	3	4	5	6	7	8	9	10	11	12	13
General revision plans:												
Expert advice	6	3	7	9	5	8	1	13	5	5		
Advice from everyday experience					1	150	2	100				
Details of construction:												
Data and materials	4	3	1	1	3	9	4	166	3	2		
Expert advice	3	3	3	9	3	4	1	13	3	1		
Advice from everyday experience					3	20	2	57			2	200
Reaction to tentative course:												
Based on classroom tryout	2	3	1	2	3	52	3	342	1	1		
Expert criticism	1	7	1	8	1	12	1	25	2	4		
Keeping new course up to date:												
Appraisal, state-wide	2	6	1	30	1	24	1	200	1	2		
Suggestions to central authorities	2	6	2	17	1	24			1	2		
Observation under laboratory conditions			1	25			1	500				

other State reporting, only a few agencies as compared with the other 2 States are indicated. In the States from which an evaluation was received apology was frequently made for not using more extensive plans to secure the reaction of the classroom teacher. In 1 State it is reported that much constructive criticism was received from teachers who tried out the courses.

Responsibility for different elements.—The agencies to which responsibility for each of 24 elements of the revision program was assigned are indicated in Table 40. The total shows that for 9 States responding there is a variation of from 2 to 9 States in the responses received for the different elements. For such elements as appraising results, trying out of courses before adoption, training prospective teachers and teachers in service in the use of the new courses, and selecting textbooks responses were received from only 2 or 3

TABLE 40.—*Number of States in which certain agencies were assigned responsibility for different elements of the revision program*

Agency	Central or executive committee	Production committee	Special committee	State officials	Director of program	Other	Total
1	2	3	4	5	6	7	8
General plans	6				1	1	8
Guiding principles	5	1	1		1		8
General aims	7	1	1				9
Providing materials	2			1	3		6
Investigating community characteristics		2				1	3
Investigating pupil characteristics	2	1	1				4
Revising program of studies	5	1	2				8
Revising content materials	1	6	1				8
Suggesting teaching procedures		5	1	1	1		8
Correlating departmental work	2		2	1	1	1	7
Coordinating grade work	2		2	1	1	1	7
Determining time allotments	8	1					9
Determining minimum standards	3	3		1		1	8
Experimental classes	2	1	1				4
Tryout of courses before adoption	1	1	1				3
Editing for content	1	3	2		1		7
Editing for expression and form	1	1			2	1	5
Training prospective teachers in use of			1			2	3
Training teachers in service in use of	1		1	1			3
Selecting instructional supplies	2	2	1			1	6
Selecting textbooks		1	1	1			3
Developing tests		1	3	1			5
Appraising results			1	1			2
Continuous revision	1	1		3			5
Total	52	32	23	13	11	9	139

States. It is likely that these elements were absent from the programs of a number of the States for which responses were not indicated.

The central or executive committee is the agency to which was assigned responsibility in a greater number of States for most of the elements of the revision program. The only elements assigned more frequently to other agencies were the providing of materials for the separate committees which was assigned most often to the director of the program and responsibility for investigating community characteristics, revising content and teaching procedures, and editing for content, in all of which the responsibility was placed more often on the production committees. Aside from the executive and production committees responsibility was assigned to special committees, to State officials, to the director of the program, and to other agencies in the order named.

Cost.—For only 6 of the 11 States is indicated the cost of the curriculum making program. In 4 cases the expense was borne entirely by the State; in 1, it was borne by the State teachers association; and in the sixth, it was divided, but not equally, between the State and local school districts. The total cost ranged from $600 to $30,000. The largest expenditure in most instances was for printing. In 2 other States no funds were set aside specifically for curriculum revision. Respondents undertaking evaluation complain of the scarcity of funds.

4. SPECIFIC PROCEDURES

Steps preliminary to launching the program.—Several questions were asked on the inquiry form to ascertain the procedures which were followed in different States in order to accomplish certain features of their program. The first of these related to those efforts which were made on a state-wide basis in order to secure the cooperation and interest of a large group of school people. Three questions of this nature were asked: (1) Description of state-wide investigations of characteristics of the secondary-school population; (2) methods used to secure reaction of teachers to old course of study looking toward immediate revision; (3) methods of securing publicity relative to the revision program.

(1) *State-wide investigations.*—Few investigations of a state-wide nature were reported. An age-grade survey was reported in 1 State; a study of achievement in specific subject fields in 2 States; and a survey of the social characteristics of certain sections of the State was reported in 1 State.

(2) *Reaction of teachers.*—The State educational journal was used in 1 State to request suggestions from all teachers regarding curriculum making. A more direct appeal was made in 3 States through the use of a questionnaire and in 4 States through letters inviting suggestions. The number of such requests varied from 200 in one State to 6,000 in another.

(3) *Securing publicity.*—Reports were made from 9 States concerning methods used to secure publicity, 1 of which, however, indicated no special effort. The methods which were indicated are summarized, with the number of States from which listed, as follows:

Explanation of program before groups of teachers (8 States).
Discussion of program with groups of teachers (7 States).
Use of State journals (6).
Use of State bulletins (5).
Use of newspapers (4).
Curriculum-study groups organized over the State (2).
Circular letters (1).
Questionnaire to general public (1).
Meetings with farm organizations and civic clubs (1).

More efforts were evidently made to secure publicity than were made to secure suggestions or to investigate conditions on a state-wide basis. In two or three instances, the lack of time and money was blamed for the lack of greater effort along these lines.

Organization of production committees.—In 8 States the selection of production committees is to some extent in the hands of the State superintendents; in 2 States, he nominates such committees, while in 6 States he approves them. In 2 States such selection is entirely in the hands of the executive committee. In 1 State reply to this question was omitted. Other agencies which are designated as taking some part in the selection of such committees—usually their nomination—are a special committee, the State supervisor of secondary education, the State teachers association, local superintendents, and committee chairmen.

In 5 States effort was made to have different sections of the State represented on these committees, in 3 States no such effort was made, while for the remaining 3 States the question was not answered. It was reported for 3 States that such a provision is difficult to carry out because of great distance and lack of funds.

The supervision of the work of production committees is in the hands of the committee chairman in 7 of the 9 States replying. In 4 States he may be aided, however, by the director of the general program. Other agencies designated in 1 State each are the chairman of the executive committee, the executive committee, the State supervisor of secondary education, and the university specialist.

Conditions of work.—Questions were asked concerning the training of teachers, provisions for making literature accessible, and provisions for committee meetings. Answers were received from 9 States concerning the training of teachers, 5 of which reported no special organization. In 2 States this was done through the efforts of the curriculum director; in 1 State, through the organization of study groups; and in 1 State, through seminar classes in summer school. Respondents from 9 States report provisions for making literature accessible, in 6 of which members were supplied individually while in the remaining 3, central headquarters were established.

Of respondents in the 2 States which evaluated their procedure in training teachers, one doubted the value of the imported specialist, while the other felt that such training should have been more intensive and of longer duration. In 4 States it was felt that more opportunity for access to curriculum literature should be given to committees.

Committee meetings.—Such meetings were not regularly scheduled in 8 of the 9 States reporting. In the other State regular meetings were scheduled monthly. In only 3 States was it reported that special quarters were provided for such meetings. Reports from 2 States, however, indicate a feeling that such provision should be made if funds are adequate.

Coordination and correlation.—Procedures through which coordination and correlation of the work of separate depart-

ments and grades were attained were reported in 8 States. The summary indicates that in most States this is done through joint committee meetings.

Joint committee meetings with a skeleton outline (5 States).
Conferences assisted by guidance materials (1 State).
Joint meetings of special committees (1).
Conferences (1).

Reports from 3 States indicate that work along this line is effective. They suggest a greater interchange of ideas and plans.

Tryout before adoption.—Respondents from only 5 of the States report that there was some tryout of courses of study before adoption. In 1 State such omission was attributed to lack of funds and time. Experimental classes were organized and the courses were sent to classroom teachers over the State in two instances; in 2 States copies were sent to classroom teachers without the organization of experimental classes; and in the fifth State the reverse was true.

Training teachers in use of the new course.—Some attempt was being made to train teachers in the use of the new course of study in 7 States, with reports from 2 States indicating that this would be done later. In 2 States the only training provided is that which may be done by the State supervisor during his regular visit. Respondents from 4 States report, in addition to what the State supervisor may do, efforts to acquaint teachers with the use of these materials in the teacher-training schools of the State. In 4 States also it is reported that teacher institutes or State and district meetings are held for this particular purpose. In the only State in which an evaluation was attempted it was reported that encouraging results were secured where it was possible to discuss the new courses with the teachers directly.

Adaptation of State course to local needs.—The replies to this question, which may be somewhat related to the one just considered, indicate that little is being done of this specific nature. In 4 States no reply was indicated, in 2 that plans were not yet made, and in 1 that the State encouraged it but actually did little else. Respondents in 4 States report the circulation of a monograph containing suggestions of this nature. This is supplemented in 2 States with the work of

the departmental staff. In another State certain suggestive researches are circulated from time to time.

Appraising the results.—The replies received indicate that little is being done in the different States to appraise the results of instruction in the new courses of study. In the 9 States replying one-third of the respondents reported no appraisal and another third no appraisal up to the time of report. In the remaining 3 States all report the appraisal as being of an informal nature, but 2 indicate the use of a questionnaire for this purpose.

Keeping up to date.—Little is being done by States to keep courses of study up to date. In 4 States no reply to this query was made and 3 of the respondents reported no plans. Regional conferences are reported in the remaining 4 States, 3 of which also make organized efforts to collect criticisms regarding the old course of study.

5. GENERAL EVALUATION

In order to get conclusions of a general nature and changes thought advisable by those having first-hand experience with curriculum making on a state-wide scale, respondents were asked at the conclusion of the form to give reactions to the following elements: (1) Capacity in which services of different agencies are best utilized; (2) methods of keeping the course of study up to date; (3) methods of putting the new course into effect; (4) factors operating to prevent the construction of an ideal curriculum; (5) benefits of a general nature; (6) conclusions in general. In many cases respondents felt that the program was not far enough advanced to permit general conclusions. The replies that were made, however, are presented in summary:

(1) Best utilization of different agencies—

(a) Executive committee used more to formulate objectives and guiding principles.

(b) Actual production done in seminar classes.

(c) State department, directive and advisory; central committee, advisory; teachers, actual construction of units; college professors, advisory.

(d) More controlled and experimental classes in different areas. Better evaluation.

(2) Keeping course of study up to date—
  (a) Permanent committees (2 States). High-school supervisors should keep its membership completed and seek a semiannual report.
  (b) Constant suggestions and criticisms from teachers who used the course.
  (c) Collection of specimen units from teachers.
  (d) Laboratory tryouts. More time and money needed.
  (e) Study of research materials.
(3) Putting new courses into effect—
  (a) Tentative drafts used.
  (b) Mailing courses to local superintendents does not insure their distribution and proper use. Courses of study should be explained to teachers by some one who helped to make the course.
  (c) Special meetings with all teachers who will use the course (4 States).
(4) Factors preventing ideal curriculum—
  (a) Placing subject-matter experts on production committees.
  (b) Differences as to objectives of education; inertia and ignorance.
  (c) Lack of time and money (4 States).
(5) Benefits of a general nature—
  (a) Stimulation of local authorities to give more attention to curriculum work.
  (b) Help to new and relatively unprepared teachers.
  (c) Training of teachers in service; fairly uniform program provided.
(6) Conclusions in general—
  (a) Make greater effort to secure additional financial support (2 States).
  (b) State program of revision is very desirable.
  (c) From the first regard the course as suggestive and continuously growing.

CHAPTER VII : INFLUENCE OF CENTRAL AGENCIES ON CURRICULUM MAKING

1. PURPOSE AND METHODS OF THE INQUIRY

Purpose of study.—The preceding division of the study has indicated how 11 States have conducted a state-wide revision of the secondary-school curriculum. The influence of such work has no doubt been felt to a considerable degree in each of these States. While all States do not construct a curriculum on a centralized plan, many of them influence curriculum making in other ways. This is done not only by State departments of education, but to some extent by State universities and by State teachers associations as well. It was for the purpose of ascertaining such influences in States other than the 11 considered in the preceding chapter that the investigation represented in this division was undertaken.

Other influences.—While national committees, such as those working in modern foreign languages and the social studies, and organizations such as the North Central Association of Colleges and Secondary Schools and the College Entrance Examination Board are exerting considerable influence on local curriculum making, no account of such practices is made in this study. The concern in this project is with local and State programs only.

Methods of study.—Three distinct but similar forms, seven pages long, were prepared and sent to State departments of education, deans of schools of education of State universities, and secretaries of State teachers associations in each State where such units existed. The form sought to ascertain two major types of influence. First, the actual preparation on the part of the central agency of more or less detailed outlines to guide or wholly determine the nature of the secondary-school curriculum of local districts. Such practices might relate to the program of studies, to outlines of courses of study, or to both. The second line of inquiry related to practices calculated to assist those local systems which are themselves working out the details of the curriculum. Such practices are divided into those in which the field service of

specialists is provided and those in which information is collected and circulated over the State. Through one form or the other or all three, only 6 States are not represented. Returns were made by 26 State departments, 22 universities, and 23 teachers associations. The replies from each of these are considered separately.

2. STATE DEPARTMENTS OF EDUCATION

Programs of studies.—Only 2 of the 26 States reported no policy calculated to influence the program of studies offered in local schools. As represented in Table 41, such influences are exerted in three major ways: Through publication of recommended types of programs of studies in 11 States; through publication of prescribed types of programs in 10 States; and through publication of general suggestions relative to the organization and administration of the program of studies in 13 States.

TABLE 41.—*Policy of State departments of education with respect to programs of studies in local districts*

Policy and size of school	Type of organization					
	All types	4-year high school	6-year high school	Senior high school	Junior high school	Total
1	2	3	4	5	6	7
State recommends programs (11 States):						
All sizes	1	1	1	2	2	7
Small, in general	1	2	4	2	2	11
Small, varying in size	1	5	3	1	3	13
Large	1	.....	1	1	1	4
State prescribes programs (10 States):						
All sizes	4	2	.....	1	1	8
Small, in general	1	.....	2	1	1	5
Small, varying in size	1	4	3	2	3	13
Large	1	.....	.....	.....	.....	1
State suggests organization and administration (13 States):						
All sizes	2	10	9	6	9	36
Total	13	24	23	16	22	98

These practices vary with types of high schools, divided according to size and according to grades included in the organization. While the State makes suggestions on organization and administration that are applicable to schools whether large or small, the specific programs of studies which are recommended or prescribed are applicable in most cases to

small rather than to large high schools. Such programs are also applicable more often to 4-year, 6-year, and junior high schools than to senior high schools alone.

An attempt to aid the small high school in Oklahoma is represented by an 83-page bulletin entitled "High-School Reorganization" which was issued by the State department of education in 1928. Programs of studies and suggested daily schedules are outlined for the 1-year high school; the 2-year high school; the 3-year high school; and the 4-year high school with four, five, and six teachers, respectively. In each of the 4-year high schools, six separate programs are outlined. Materials of a similar nature were received from Kentucky and from Pennsylvania.

Courses of study.—Of the 26 States, 22 indicated a policy with respect to the centralized construction of secondary-school courses of study in the different subject fields. Two States made no answer, while the remaining two had not yet formulated a policy. Of the 22 States indicating a policy, 13 merely set up minimum essentials; 10 publish bare outlines of content and method; 8 publish detailed outlines which may constitute the entire course of study for districts not constructing their own course. These data are shown in Table 42. As distinguished from programs of studies, in most cases the same courses of study are published for schools of all sizes and of all types of organization.

TABLE 42.—*Policies of State departments of education with respect to centralized construction of courses of study (22 States)*

Policy	Number of States influencing curriculum making in—	
	All secondary schools	Small and rural secondary schools
Sets up minimum essentials for schools organized on:		
4-year basis	4	1
6-year basis	3	1
Senior high school basis	3	----
Junior high school basis	2	----
Junior college basis	1	----
Without distinction as to organization	6	1
Publishes objectives in various subject fields	1	----
Directs preparation of outlines of content and method	10	----
Directs preparation of outlines of content only	2	----
Directs preparation of detailed syllabi which may be used as courses of study	8	----

Field service.—Twenty-one respondents indicated that State departments of education undertake to provide certain types of field service for local school districts working on the curriculum. The types of service rendered, together with the agencies usually rendering such service, are indicated in Table 43. In most cases, it will be noted, such service consists of advice given to local educators by the State director or supervisor of secondary education. Directing local investigations and directing local experiments are engaged in less often, but this is also done for the most part by the same officials. Training local teachers is very seldom done and even then vocational teachers are mostly affected. The replies of State departments to the request that they describe briefly the nature of the service rendered are summarized herewith for each type.

TABLE 43.—*Types of field services rendered to local districts engaged in curriculum revision by agencies connected with State departments of education*

Agency rendering service	Advising with local agencies	Directing local investigations	Directing local experiments	Training local teachers
1	2	3	4	5
Director or supervisor of secondary education	13	4	3	1
Vocational educational bureau	3	1	1	2
Subject directors	3	1	1	1
Research department	2	1	2	1
Assistant or deputy commissioner	2	1	1	----
Division of rural education in city secondary schools	1	----	----	----
Commissioner of education	1	1	1	----
Various officials and divisions	1	----	----	----
Teacher-training division	----	----	----	1

(1) *Advising local agencies.*—A total of 19 statements were listed to indicate services of an advisory nature on the part of State officials to local curriculum workers. These statements may be listed with number of States as follows: Regional conferences, 1; help of State subject specialists, 1; detailed surveys, including recommendations, 1; adaptation of curriculum offered to local needs, 2; regular supervisory visits, 4; and advice concerning local program, 10.

It may be that advice concerning the local program was given in some States only upon regular supervisory visits,

but statements were listed under the latter heading only when a visit of such nature was already indicated. Help of State subject specialists and detailed surveys, including recommendations, seem to indicate extended efforts on the part of the State department. The other services listed, however, may mean much or little expenditure of time.

(2) *Directing local investigations.*—Eight types of services, classified as follows, were listed under the heading "Directing Local Curriculum Investigations": Conferences with and use of local committees, 5; developing typical materials for later state-wide distribution, 1; service for Smith-Hughes offerings, 1; and testing program and curriculum research, 1.

(3) *Directing experiments.*—Only 6 State departments indicated activities calculated to assist local agencies in conducting experiments. In 4 cases this service was in an advisory capacity to the local set-up, in 1 State it was confined to health and physical education, and in another conferences were had with superintendents and principals about such matters.

(4) *Training teachers.*—Under the caption "Training Teachers," services were listed by 3 State departments of education. In 1 State the director of teacher training visits all teacher-training institutions of the State and advises with them. In another State this service applies only to the Smith-Hughes field. In the third State members of the State department of education give extension and summer courses in curriculum making and guidance.

On the whole, the summaries just given indicate only a few cases which the description justifies considering as specific rather than incidental efforts to provide field service for local curriculum workers. As an example of the former class, the work in California may be offered. This State is committed to the "conference" method of aiding curriculum making and in furtherance of this purpose one of the employees of the State department devotes considerable of his time. A list of methods by which this policy is carried into effect should be of interest in this connection:

1. By developing materials dealing with the application of the conference method to curriculum making.

2. By establishing relationships between the secondary schools and the State university designed to establish and to maintain the conditions which enable the secondary schools to develop the most effective collegiate and noncollegiate curricula. . . .
3. By developing curricular materials in typical schools with a member of the State department of education acting as leader, these materials to be printed and distributed to the schools as practical aids in curriculum building.
4. By developing, in regional conferences of deans and counselors, guidance materials designed to aid in curriculum making.
5. By providing materials designed to develop conference leaders in regional conferences of principals and representatives of the California Congress of Parents and Teachers.
6. By providing suggestive and helpful materials through the California Curriculum Commission.
7. By rules and regulations dealing with graduation from the secondary school, formulated by the State department of education and prescribed by the State board of education.
8. By providing conferences dealing with curricular problems, at the annual convention of the secondary-school principals, and printing the conclusions of these conferences in the proceedings of the convention.
9. By having members of the State department of education give summer session courses dealing with curriculum making and guidance.
10. By having members of the State department of education give extension courses in curriculum making and guidance.
11. By arranging conferences with local advisory committees of laymen to develop practical aids in building courses in vocational education.
12. By writing pertinent articles for publication in the California Quarterly of Secondary Education.

Collecting and disseminating information.—The final type of influence about which data were obtained is that relating to practices through which information is collected and spread to local districts. In the 19 States from which data were secured, the following practices were indicated: (1) Holding regional conferences for the discussion of problems related to curriculum revision, 15; (2) compilation and circulation of materials obtained at second hand, 8; (3) publication of results of original investigations, 8; (4) compilation and circulation of best practices being followed throughout the State or elsewhere, 7; and (5) publication of results of original experiments, 3.

The specific nature of each of the preceding influences, in so far as they are described by the respondents, is of some interest in this connection. No reports were made, however, as to the results of original experiments.

(1) *Holding regional conferences.*—Nine States submitted the descriptions listed below concerning the nature of assistance with regional conferences on curriculum problems: Discussed at annual State institute or regional conference, 4; State topic for county institute, 1; discussed at group meetings of county principals, 1; conferences with county superintendent on the small high school, 1; discussed at district meetings, 1; prepared materials designed to develop leaders in regional conferences, 1.

(2) *Materials obtained at second hand.*—No 2 States follow the same practice in circulating material obtained at second hand. In 1 State materials relating only to commercial education have been circulated, while in 4 States materials of several types are regularly published through a monthly journal, supervisory bulletins, mimeographed materials, and as a part of the bulletin on the program of studies. In the sixth State the central curriculum committee circulates materials collected.

(3) *Results of original investigations.*—Replies indicate that original investigations on a state-wide basis are confined for the most part to a study of high-school graduates and to the results of tests in the different subject fields. Each of these was listed by 3 States. In addition, 1 State reports the results of an intelligence test given to high-school pupils of the State.

(4) *Descriptions of best practices.*—While 3 States report occasional publication of certain practices which are considered outstanding, more serious efforts to acquaint schoolmen with exemplary practices are seemingly made in New York and in California. In the former State a study was made of curriculum offerings and courses of study in all junior high school subject fields. After indicating general practices, more detailed accounts were given for each subject field of practices in certain cities thought to be doing an excellent job. In California, with a member of the State department as leader, curriculum materials are developed in typical schools which are later to be published and distributed as an aid to

other districts within the State. Two leaflets already issued in this State are Some Philosophical Considerations Basic to Curriculum Making and Formulating a Plan for Making High-School Curricula.

5. STATE UNIVERSITIES

Introduction.—It is to be expected that among the central agencies considered, the major influence on curriculum construction will for the most part be exercised by State departments of education. Although the form sent to universities and to teachers' associations parallels closely that sent to State departments, it also requested that respondents indicate any relationship of their policy to that of the other central agencies. The influence of the university is considered with respect to the same four items treated under State departments; that is, with respect to programs of studies, courses of study, field service, and collection and dissemination of information. In such States as Michigan and New Mexico where the inspection of high schools is assumed to some extent by the university, the connection of the university with high-school problems may be expected to be closer than in States where this function is exercised exclusively by the State department of education.

Program of studies.—Two of the 22 State universities represented recommend programs of study to small high schools while 2 universities make suggestions on the organization and administration of programs of study. In no State, of course, does a university attempt to prescribe programs for high schools. While 2 of the universities represented make suggestions to State departments as a result of inspection of high schools, in all other cases such influence is only indirect or is upon request. Five universities claim to exercise an indirect influence through entrance requirements and 4 indicate an indirect influence through instruction in the school of education. In 8 cases respondents say that State departments sometimes ask for cooperation in such matters as service on committees, expert advice, and the like.

Courses of study.—State universities likewise indicate very little with respect to centralized construction of courses of study. In 2 States, Kentucky and Michigan, the university

sets up minimum essentials which must be followed if secondary schools are accredited by the university. The University of Maine sets up minimum essentials applicable only to junior colleges. The Universities of New Mexico and Washington, in cooperation with the State departments of these States, direct the preparation of outlines of content and teaching method in the various subject fields.

Again, as indicated in 8 States, the relation of universities to State departments is for the most part one of cooperation at the request of the State department. Two universities claim an influence as a result of inspecting high schools, while 2 others state that their relation is only an incidental one. One university, however, issues bulletins on courses of study in certain high-school subjects.

Field service.—The field service rendered by State universities is mostly of an advisory nature. In 10 cases the service is rendered by some agency in the department of education. Directing local investigations or experiments or training local teachers are indicated in only 7 States. In some cases, where extension classes are organized, the service may be quite detailed.

The type of advisory service rendered is described in 6 States as conferences with local officials or committees. In 2 additional States services of a special type are offered in that a subject-matter specialist for each field is provided in one and in the other a professor spends half of his time in field work. On call most departments of education seem glad to release staff members for field work. The 2 States represented in which high-school inspection is done by the university report the services of members of this division.

The type of local investigations which were made were indicated in only 1 State in which university staff members, without charge, made a survey of schools in one of the large cities of the State. Four States report offering extension courses and giving regular classes in curriculum construction for training of teachers in such work.

Collecting and disseminating information.—Of the 22 universities represented, 10 report activity in collecting and disseminating information. In 5 States regional conferences are held; in 2 States, the results of original investigations are

published; in 1 State publication is made of the results of original experiments; in 1 State a description of methods of curriculum construction is published; and a tenth State reports that faculty members contribute such materials to the journal of the State teachers association.

The regional conferences seem for the most part occasional rather than regular, although one university reports an annual educational measurement conference. Members of the staff are often called upon, too, to make talks at scheduled meetings. One university reports a considerable amount of advice given through correspondence. Original investigations made at the State laboratory school are reported in one State while another mentions the report to different high schools of grades made by their graduates. It seems that in most instances information has been circularized by universities at the request of high-school authorities rather than on the initiative of university officials.

4. STATE TEACHERS ASSOCIATIONS

Services mostly cooperative.—Reports from 23 State teachers associations indicate that little is being done to influence local curriculum revision. As with State universities, their efforts are largely cooperative with projects credited to State departments of education. In most cases it is perhaps as one respondent reports, "Unofficial and informal, but the association has considerable influence." The activities of State teachers associations are presented as they relate to the four elements already indicated as engaged in by the other two centralized agencies.

Program of studies.—Michigan and Nebraska are the only States reporting activities with respect to local programs of studies. In these States, the teachers association publishes recommended programs. Associations, officially and through individual members, however, cooperate most actively upon suggestion of State departments, according to reports from 8 States. The publications of teachers associations are often used and outside speakers who are brought in advise with State department committees. New Hampshire has an educational council which cooperates in many ways. Committees from teachers associations are reported as working

cooperatively in 4 States, and 4 other States mention that reports from committees of State teachers associations are helpful to State departments in planning their program.

Courses of study.—State teachers associations direct the preparation of outlines of content and teaching method in 2 States, while in 3 additional States the program for which the State department of education has responsibility is reported to be a result of recommendations of the association. Types of activities reported in which they cooperate with the State department are as follows: Through activities of committees, 4 States; publicity, 2; bringing in curriculum experts, 1; outlining the status of work in various subjects to State department, 1; making suggestions at request of State superintendent, 1.

Field service.—Activities in providing field service were not reported in any State.

Collecting and disseminating information.—Regional conferences for discussing matters relating to curriculum revision are reported in 1 State as being conducted by the teachers association. The best practices of various schools are reported in the official magazine in 2 States, while in Nebraska the State teachers association published in mimeographed form the results of a state-wide English survey test in grades 9 to 12. All together, activities in collecting and disseminating information were reported in only 4 States. The most significant of these is probably the one reported in North Carolina in which the association is making 28 studies contributing to one major investigation entitled "An Adequate Program of Education for North Carolina."

CHAPTER VIII : SUMMARY AND CONCLUSION

1. CITY-WIDE REVISION

Types of organization.—The data which have been presented represent several types of organization for curriculum making. In a few cases, largely in systems which were earliest in the work, the complete curriculum had, by the time this investigation was conducted, undergone one general revision and efforts were then directed toward continuous revision. In most instances, however, a complete general revision had not yet been effected in all fields. The plan then in operation was directed toward simultaneous revision in all subject fields for the most part. In some instances, however, only a few subject fields were being revised during any one year. The plans outlined for continuous revision were, therefore, oftentimes contemplated plans rather than those which had been tried out. In other cases, continuous revision was not even contemplated.

Sometimes the plan outlined applied to one school only in a city system, the school working independently. In other cases, only simple organizations were provided for slight changes such as making certain adaptations of State courses of study to local needs. Curriculum making seemed on an especially firm foundation in those systems where it was definitely and permanently connected with the work of agencies responsible for the supervisory and research activities of the system. Too often organizations had the appearance of something tacked on rather than a permanent undertaking of the school.

Cost of revision.—Few schools or systems keep as exact a record of the cost of curriculum making as might be desired for comparative study. Some superintendents do not attempt to keep account of expenditures made for such purposes, while others keep account of the major items alone, allowing the cost of such items as supplies, clerical help, substitutes for teachers, and the like to be included under other items of the budget. The chief items for which expenditures

are listed are printing and mimeographing and library materials. The range of expenditures is from nothing to $25,000 or $30,000 per year. The average is less than $400 per year.

Agencies having a part.—Superintendents, principals, and teachers were indicated on practically all forms as having a part in revision. In the larger systems special agencies and departments such as assistant superintendents, supervisors, and departments of curriculum or of research are also employed. In fact, on several forms was plainly indicated the purpose that all agencies within the system should participate in some manner in the curriculum-making program.

Specialists from without the system were employed in about one-fourth of all programs. For the most part such specialists worked in specific subject fields, although numerous cases appeared of employment of specialists in curriculum construction and in general education. Laymen acted in an advisory capacity on few programs.

Organization of agencies.—More concern is expressed by respondents over the selection of a director than over any other feature. Emphasis is placed on the need of special training for this official. In the smaller systems, the superintendent or principal serves most frequently in this capacity. In the larger systems, responsibility is placed most often on the assistant superintendent or on officials employed for that particular purpose.

In most cases production committees are selected for revising content and teaching procedures in each subject field. In a few instances in which the program was not very widely extended, one committee served for all fields. Central or steering or executive committees were also organized in many systems. They act for the most part as a clearing house for ideas and in some cases formulate guiding principles and objectives, revise the program of studies, and review or edit each course of study. In some programs separate committees are appointed to review or edit all courses and others are selected to install new courses or to assume responsibility for continuous revision. Few cases indicative of thorough research, experiment, or appraisal were recorded; where found the principal is usually designated as director of such

work. The results given are, however, expressive of frequencies which are oftentimes dictated by limitations in the facilities of small schools rather than by freedom of choice.

Procedures followed most often.—The superintendent or principal interested in having his system or school follow practices selected by the most schools would proceed in the following manner. He would secure cooperation and interest of his staff through faculty meetings and publicity through the local press and parent-teacher associations. The central office would determine the membership of committees, and although criteria would not be applied objectively, professional training and success in teaching would enter largely into the choice. Teachers would be trained for revision work through faculty meetings, and literature would be provided through a centrally organized library. Meetings would be held whenever called by the chairman, but teachers would not be excused from regular duties for this purpose.

In the selection and organization of materials of instruction, the practices in other schools would be the determining factor. The work of different committees would be correlated through discussion at joint meetings. All teachers would try out the tentative course of study in classroom and react to the results secured. The course of study would then be published in mimeographed form. Supervisory demonstration meetings would be held to train the teachers in the use of the new materials. The course of study would be appraised informally by the administrative and supervisory staff.

In providing for continuous revision, the same subject committees which made the first general revision would be in charge. The administrative and supervisory staff would see that criticisms resulting from the old courses were made and collected. Teachers would be encouraged to perform experiments which might lead to improvement, but the changes to be made in the old course would be decided by the administrative and supervisory staff.

Procedures suggested from evaluation.—The procedures as outlined, however, would not be suitable in each instance. Procedure followed may sometimes be influenced by lack of time or facilities. That this is the case is evidenced in the

evaluations made by respondents. Attention was called to the necessity of keeping the problem constantly before teachers in order that the utmost cooperation and interest be secured. Those following more specific procedures such as checking results against carefully formulated objectives or making a preliminary survey of the work of the schools recommend these procedures highly. Since the committees selected are to lead the teachers in the work of instruction, some authority granted them in the selection of the committee may prove desirable.

The necessity for careful training of teachers was often pointed out by respondents. More extended training will probably result from extension classes than from ordinary faculty meetings. Greater necessity for teacher-use of literature indicates the need of more careful provision than merely its inclusion in a centrally organized library. The need for more attention to committee meetings than is provided where teachers meet whenever the chairman calls, outside of regular school hours, is also indicated.

In the selection and organization of materials there is need of more local investigation, as many respondents testify. They also point to the advantages of providing special committees with skeleton outlines for coordinating and correlating the work. The need of rerevision after classroom tryout is evident when it is recalled that teachers can not do effective work unless the course of study is practical. That it is likely to need revision is also suggested in the practice of mimeographing rather than printing the copies distributed.

While appraisal is for the most part of an informal nature, many respondents call attention to their lack of satisfaction with such a procedure. If an effective program of continuous revision is established, it appears also that there is need of more definite responsibility for the direction of this program than will ordinarily result from the efforts of subject committees.

These suggestions point to the need of careful consideration by the central committee of each of the procedures which are indicated as having been practiced in different centers. That which is desirable in one community may

be less so in another. Local conditions should determine each procedure. The general evaluations indicate the need of active participation by as many as possible of a well-trained teaching staff and affirm the professional growth resulting from such participation.

2. COUNTY-WIDE REVISION

In only one State among those that maintain the county plan does there seem to be much effort given to curriculum making. As contrasted with city plans greater variety obtains in the nature of the schools, and provisions for central meetings are not so easily made. As indicated in Maryland, however, where leadership is provided through the State department of education, such a program may be made state-wide as a part of the supervisory program.

3. STATE-WIDE REVISION

One-fourth of the States have within the past five years undertaken a program of curriculum making on the secondary level. That the legislature need not be the sole source of revenue for such a program is evidenced by the example of Idaho. The State programs, as compared with city programs, reveal less teacher training preliminary to revision, less research in building the curriculum, less tryout before adoption, less appraisal, and less continuous revision. Since the whole State is usually the range for the selection of committees the teachers can usually be selected who have least need for training. The research being done in connection with the Idaho program is on an extensive scale and will, for this reason, be watched with interest. In Indiana, careful provisions were made to secure tryout of the tentative course. Extensive efforts at appraisal or continuous revision are lacking, but are included in the plans of one or two States which have not yet completed their program.

4. CENTRAL INFLUENCES ON CURRICULUM MAKING

Inquiry to the State departments of education, State universities, and State teachers associations indicate that little is being done by the latter two groups in influencing local curriculum making. Probably the greatest influence of universities results from extension courses given in various

localities. The influence of teachers associations is usually of a cooperative nature under the leadership of the State department of education.

The activities of State departments relate to programs of studies, courses of study, field service, and the circularization of information. In most States information regarding programs and courses of study are published, but they apply most often to small schools. State departments usually have a limited staff and their field service is more incidental than specific. In one or two States tests have been made on a state-wide basis and investigations of occupations of high-school graduates have been made. Regional conferences are reported in 15 of 19 States reporting.

5. CONCLUSION

Replies assembled from school administrators reflect a felt need for curriculum revision in all types of schools whether organization is individual, city-wide, county-wide, or state-wide. Plans and procedures vary considerably, and evaluations indicate that while all are not able to proceed as they would like, they have attempted to formulate plans conforming to their own limitations and needs. The need is often expressed, especially in the smaller schools, for trained leadership. Less than half of the schools studied included provisions for coordinating and correlating work of separate departments and grades, for appraising the results of revision, or for training teachers in revision or in the use of revised courses. In many cases the felt need is expressed, but such factors as lack of time and training on the part of the local staff, or lack of funds to provide more satisfactory leadership have been obstacles. Larger systems appear more conscious of lack of adequate training in the use of revised courses, of formal appraisal, and of adequate provisions for continuous revision.

Central agencies make only slight effort at furnishing needed leadership and funds enabling smaller organizations to provide a curriculum based on their peculiar needs, or to measure objectively what they are getting. It is evident, however, that until such provisions are made, smaller systems attempting revision must continue largely to follow

reported practices in other schools rather than to build from the ground up. State-wide plans in operation in Maryland, California, and Idaho indicate efforts to meet such needs.