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John Franklin Bobbitt

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WHAT THE SCHOOLS TEACH AND MIGHT TEACH

by

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1915

CLEVELAND EDUCATION SURVEY

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Cleveland, Ohio

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FOREWORD

This report on "What the Schools Teach and Might Teach" is one of

the 25 sections of the report of the Education Survey of Cleveland

conducted by the Survey Committee of the Cleveland Foundation in

1915. Twenty-three of these sections will be published as separate

monographs. In addition there will be a larger volume giving a summary

of the findings and recommendations relating to the regular work of

the public schools, and a second similar volume giving the summary of

those sections relating to industrial education. Copies of all these

publications may be obtained from the Cleveland Foundation. They may

also be obtained from the Division of Education of the Russell Sage

Foundation, New York City. A complete list will be found in the back

of this volume, together with prices.

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PREFATORY STATEMENT

For an understanding of some of the characteristics of this report it

is necessary to mention certain of the conditions under which it was

prepared.

The printed course of study for the elementary schools to be found

in June, 1915, the time the facts were gathered for this report, was

prepared under a former administration. While its main outlines were

still held to, it was being departed from in individual schools in

many respects. Except occasionally it was not possible to find record

of such departures. It was believed that to accept the printed manual

as representing current procedure would do frequent injustice to

thoughtful, constructive workers within the system. But it must be

remembered that courses of study for the city cover the work of twelve

school years in a score and more of subjects, distributed through a

hundred buildings. Only a small fraction of this comprehensive program

is going on during any week of the school year; and of this fraction

only a relatively small amount could actually be visited by one man in

the time possible to devote to the task. In the absence of records of

work done or of work projected, unduly large weight had to be given to

the recommendations set down in the latest published course of study

manual.

New courses of study were being planned for the elementary schools.

This in itself indicated that the manual could not longer be regarded

as an authoritative expression of the ideas of the administration. Yet

with the exception of a good arithmetic course and certain excellent

beginnings of a geography course, little indication could be found as

to what the details of the new courses were to be. The present report

has had to be written at a time when the administration by its acts

was rejecting the courses of study laid out in the old manual, and yet

before the new courses were formulated. Under the circumstances it

was not a safe time for setting forth the \_facts\_, since not even

the administration knew yet what the new courses were to be in their

details. It was not a safe time to be either praising or blaming

course of study requirements. The situation was too unformed for

either. In the matter of the curriculum, the city was confessedly

on the eve of a large constructive program. Its face was toward the

future, and not toward the past; not even toward the present.

It was felt that if the brief space at the disposal of this report

could also look chiefly toward the future, and present constructive

recommendations concerning things that observation indicated should be

kept in mind, it would accomplish its largest service. The time that

the author spent in Cleveland was mostly used in observations in

the schools, in consultation with teachers and supervisors, and

in otherwise ascertaining what appeared to be the main outlines of

practice in the various subjects. This was thought to be the point at

which further constructive labors would necessarily begin.

The recommendation of a thing in this report does not indicate that

it has hitherto been non-existent or unrecognized in the system.

The intention rather is an economical use of the brief space at our

disposal in calling attention to what appear to be certain fundamental

principles of curriculum-making that seem nowadays more and more to be

employed by judicious constructive workers.

The occasional pointing out of incomplete development of the work of

the system is not to be regarded as criticism. Both school people and

community should remember that since schools are to fit people

for social conditions, and since these conditions are continually

changing, the work of the schools must correspondingly change. Social

growth is never complete; it is especially rapid in our generation.

The work of education in preparing for these ever-new conditions can

likewise never be complete, crystallized, perfected. It must grow and

change as fast as social conditions make such changes necessary. To

point out such further growth-needs is not criticism. The intention

is to present the disinterested, detached view of the outsider who,

although he knows indefinitely less than those within the system about

the details of the work, can often get the perspective rather better

just because his mind is not filled with the details.

THE POINT OF VIEW

There is an endless, and perhaps worldwide, controversy as to what

constitutes the "essentials" of education; and as to the steps to

be taken in the teaching of these essentials. The safe plan for

constructive workers appears to be to avoid personal educational

philosophies and to read all the essentials of education within the

needs and processes of the community itself. Since we are using this

social point of view in making curriculum suggestions for Cleveland,

it seems desirable first to explain just what we mean. Some of the

matters set down may appear so obvious as not to require expression.

They need, however, to be presented again because of the frequency

with which they are lost sight of in actual school practice.

Children and youth are expected as they grow up to take on by easy

stages the characteristics of adulthood. At the end of the process it

is expected that they will be able to do the things that adults do; to

think as they think; to bear adult responsibilities; to be efficient

in work; to be thoughtful public-spirited citizens; and the like.

The individual who reaches this level of attainment is educated, even

though he may never have attended school. The one who falls below this

level is not truly educated, even though he may have had a surplus of

schooling.

To bring one's nature to full maturity, as represented by the best of

the adult community in which one grows up, is true education for life

in that community. Anything less than this falls short of its purpose.

Anything other than this is education misdirected.

In very early days, when community life was simple, practically all

of one's education was obtained through participating in community

activities, and without systematic teaching. From that day to this,

however, the social world has been growing more complex. Adults

have developed kinds of activities so complicated that youth cannot

adequately enter into them and learn them without systematic teaching.

At first these things were few; with the years they have grown very

numerous.

One of the earliest of these too-complicated activities was written

language--reading, writing, spelling. These matters became necessities

to the adult world; but youth under ordinary circumstances could not

participate in them as performed by adults sufficiently to master

them. They had to be taught; and the school thereby came into

existence. A second thing developed about the same time was the

complicated number system used by adults. It was too difficult for

youth to master through participation only. It too had to be taught,

and it offered a second task for the schools. In the early schools

this teaching of the so-called Three R's was all that was needed,

because these were the only adult activities that had become so

complicated as to require systematized teaching. Other things were

still simple enough, so that young people could enter into them

sufficiently for all necessary education.

As community vision widened and men's affairs came to extend far

beyond the horizon, a need arose for knowledge of the outlying world.

This knowledge could rarely be obtained sufficiently through travel

and observation. There arose the new need for the systematic teaching

of geography. What had hitherto not been a human necessity and

therefore not an educational essential became both because of changed

social conditions.

Looking at education from this social point of view it is easy to see

that there was a time when no particular need existed for history,

drawing, science, vocational studies, civics, etc., beyond what one

could acquire by mingling with one's associates in the community.

These were therefore not then essentials for education. It is just

as easy to see that changed social conditions of the present make

necessary for every one a fuller and more systematic range of ideas in

each of these fields than one can pick up incidentally. These things

have thereby become educational essentials. Whether a thing today is

an educational "essential" or not seems to depend upon two things:

whether it is a human necessity today; and whether it is so complex

or inaccessible as to require systematic teaching. The number of

"essentials" changes from generation to generation. Those today who

proclaim the Three R's as the sole "essentials" appear to be calling

from out the rather distant past. Many things have since become

essential; and other things are being added year by year. The normal

method of education in things not yet put into the schools, is

participation in those things. One gets his ideas from watching others

and then learns to do by doing. There is no reason to believe that as

the school lends its help to some of the more difficult things, this

normal plan of learning can be set aside and another substituted. Of

course the schools must take in hand the difficult portions of the

process. Where complicated knowledge is needed, the schools must teach

that knowledge. Where drill is required, they must give the drill. But

the knowledge and the drill should be given in their relation to the

human activities in which they are used. As the school helps young

people to take on the nature of adulthood, it will still do so by

helping them to enter adequately into the activities of adulthood.

Youth will learn to think, to judge, and to do, by thinking, judging,

and doing. They will acquire a sense of responsibility by bearing

responsibility. They will take on serious forms of thought by doing

the serious things which require serious thought.

It cannot be urged that young people have a life of their own which is

to be lived only for youth's sake and without reference to the adult

world about them. As a matter of fact children and youth are a part

of the total community of which the mature adults are the natural

and responsible leaders. At an early age they begin to perform

adult activities, to take on adult points of view, to bear adult

responsibilities. Naturally it is done in ways appropriate to

their natures. At first it is imitative play, constructive play,

etc.--nature's method of bringing children to observe the serious

world about them, and to gird themselves for entering into it.

The next stage, if normal opportunities are provided, is playful

participation in the activities of their elders. This changes

gradually into serious participation as they grow older, becoming at

the end of the process responsible adult action. It is not possible

to determine the educational materials and processes at any stage of

growth without looking at the same time to that entire world of which

youth forms a part, and in which the nature and abilities of their

elders point the goal of their training.

The social point of view herein expressed is sometimes characterized

as being utilitarian. It may be so; but not in any narrow or

undesirable sense. It demands that training be as wide as life itself.

It looks to human activities of every type: religious activities;

civic activities; the duties of one's calling; one's family duties;

one's recreations; one's reading and meditation; and the rest of the

things that are done by the complete man or woman.

READING AND LITERATURE

The amount of time given to reading in the elementary schools of

Cleveland, and the average time in 50 other cities[A] are shown in the

following table:

TABLE 1.--TIME GIVEN TO READING AND LITERATURE

========================================================

| Hours per year | Per cent of grade time

|-----------------------|------------------------

Grade | Cleveland | 50 cities | Cleveland | 50 cities

--------------------------------------------------------

1 | 317 | 266 | 43 | 31

2 | 317 | 235 | 36 | 26

3 | 279 | 188 | 32 | 21

4 | 196 | 153 | 22 | 16

5 | 161 | 126 | 18 | 13

6 | 136 | 117 | 15 | 12

7 | 152 | 98 | 17 | 10

8 | 152 | 97 | 17 | 10

========================================================

Total | 1710 | 1280 | 25 | 17

--------------------------------------------------------

During the course of his school life, each pupil who finishes the

elementary grades in Cleveland receives 1710 hours of recitation

and directed study in reading as against an average of 1280 hours in

progressive cities in general. This is an excess of 430 hours, or 34

per cent. The annual cost of teaching reading being about $600,000,

this represents an excess annual investment in this subject of

some $150,000. Whether or not this excess investment in reading is

justified depends, of course, upon the way the time is used. If the

city is aiming only at the usual mastery of the mechanics of reading

and the usual introductory acquaintance with simple works of literary

art, it appears that Cleveland is using more time and labor than other

cities consider needful. If, on the other hand, this city is using

the excess time for widely diversified reading chosen for its content

value in revealing the great fields of history, industry, applied

science, manners and customs in other lands, travel, exploration,

inventions, biography, etc., and in fixing life-long habits of

intelligent reading, then it is possible that it is just this

excess time that produces the largest educational returns upon the

investment.

[Footnote A: Henry W. Holmes, "Time Distribution by Subjects and

Grades in Representative Cities." In the Fourteenth Year Book of the

National Society for the Study of Education, Part I, 1915. University

of Chicago Press.]

It would seem, however, from a careful study of the actual work and

an examination of the printed documents, that the chief purpose of

teaching reading in this city is, to use the terminology of its latest

manual, "easy expressive oral reading in rich, well-modulated tone."

It is true that other aims are mentioned, such as enlargement of

vocabulary, word-study, understanding of expressions and allusions,

acquaintance with the leading authors, appreciation of "beautiful

expressions," etc. Properly emphasized, each of these purposes is

valid; but there are other equally valid ends to be achieved through

proper choice of the reading-content that are not mentioned. There is

here no criticism of the purposes long accepted, but of the apparent

failure to recognize other equally important ones. The character of

the reading-content is referred to only in the recommendation that

in certain grades it should relate to the seasons and to special

occasions. Even in reference to the supplementary reading, where

content should be the first concern, the only statement of purpose

is that "children should read for the joy of it." Unfortunately, this

mistaken emphasis is not at all uncommon among the schools of the

nation. How one reads has received an undue amount of attention; what

one reads in the school courses must and will receive an increasingly

large share of time and thought, in the new evaluation. The use of

interesting and valuable books for other educational purposes at the

same time that they are used for drill in the mechanics of reading

is coming more and more to be recognized as an improved mode of

procedure. The mechanical side of reading is not thereby neglected. It

is given its proper function and relation, and can therefore be better

taught.

So far as one can see, Cleveland is attempting in the reading work

little more than the traditional thing. The thirty-four per cent

excess time may be justified by the city on the theory that the

schools are commissioned to get the work done one-third better than in

the average city. The reading tests made by the Survey fail to reveal

any such superiority. The city appears to be getting no better than

average results.

Certainly people should read well and effectively in all ways in which

they will be called upon to read in their adult affairs. For the most

part this means reading for ideas, suggestions, and information in

connection with the things involved in their several callings; in

connection with their civic problems; for recreation; and for such

general social enlightenment as comes from newspapers, magazines, and

books. Most reading will be for the content. It is desirable that the

reading be easy and rapid, and that one gather in all the ideas as one

reads. Because of the fact that oral reading is slower, more laborious

for both reader and listener, and because of the present easy

accessibility of printed matter, oral reading is becoming of steadily

diminishing importance to adults. No longer should the central

educational purpose be the development of expressive oral reading.

It should be rapid and effective silent reading for the sake of the

thought read.

To train an adult generation to read for the thought, schools must

give children full practice in reading for the thought in the ways

in which later as adults they should read. After the primary teachers

have taught the elements, the work should be mainly voluminous reading

for the sake of entering into as much of the world's thought and

experience as possible. The work ought to be rather more extensive

than intensive. The chief end should be the development of that

wide social vision and understanding which is so much needed in this

complicated cosmopolitan age. While works of literary art should

constitute a considerable portion of the reading program, they should

not monopolize the program, nor indeed should they be regarded as

the most important part of it. It is history, travel, current news,

biography, advance in the world of industry and applied science,

discussions of social relations, political adjustments, etc., which

adults need mostly to read; and it is by the reading of these things

that children form desirable and valuable reading habits.

The reading curriculum needs to be looked after in two important ways.

First, social standards of judgment should determine the nature of the

reading. The texts beyond the primary grades are now for the most

part selections of literary art. Very little of it has any conscious

relation, immediate or remote, to present-day problems and conditions

or with their historical background. Probably children should read

many more selections of literary art than are found in the textbooks

and the supplementary sets now owned by the schools. But certainly

such cultural literary experience ought not to crowd out kinds of

reading that are of much greater practical value. Illumination of the

things of serious importance in the everyday world of human affairs

should have a large place in reading work of every school.

It is true that the supplementary sets of books have been chosen

chiefly for their content value. Many are historical, biographical,

geographical, scientific, civic, etc., in character. On the side of

content, they have advanced much farther than the textbooks toward

what should constitute a proper reading course. Unfortunately, the

schools are very incompletely supplied with these sets. If we consider

all the sets of supplementary readers found in 10 or more schools, we

find that few of those assigned for fourth-grade reading are found in

one-quarter of the buildings and none are in half of them. The same is

true of the books for use in the fifth and seventh grades. Some of the

books for the sixth and eighth grades are found in more than half

of the buildings, but there is none that is found in as many as

three-quarters of them.

The second thing greatly needed to improve the reading course is

more reading practice. One learns to do a thing easily, rapidly,

and effectively by practice. The course of study in reading should

therefore provide the opportunity for much practice. At present the

reading texts used aggregate for the eight grades some 2100 pages. A

third-grade child ought to read matter suitable for its intelligence

at 20 pages per hour, and a grammar-grade child at 30 to 40 pages

per hour. Since rapidity of reading is one of the desired ends, the

practice reading should be rapid. At the moderate rates mentioned, the

entire series of reading texts ought to be read in some 80 hours.

This is 10 hours' practice for each of the eight school years, an

altogether insufficient amount of rapid reading practice. Of course

the texts can be read twice, or let us say three times, aggregating

30 hours of practice per year. But even this is not more than

could easily be accomplished in two or three weeks of each of the

years--always presuming that the reading materials are rightly adapted

to the mental maturity of the pupils. This leaves 35 weeks of the year

unprovided for. To make good this deficit, the buildings are furnished

with supplementary books in sets sufficiently large to supply entire

classes. The average number of such sets per building is shown in the

following table:

TABLE 2.--SETS OF SUPPLEMENTARY READING BOOKS PER BUILDING

Grade Average number of sets

1 10.0

2 6.3

3 5.1

4 5.5

5 6.3

6 5.3

7 5.5

8 6.0

A fifth, sixth, seventh, or eighth-grade student ought to be able to

read all the materials supplied his grade, both reading texts and all

kinds of supplementary reading, in 40 or 50 hours. He ought to do it

easily in six weeks' work, without encroaching on recitation time.

He can read all of it twice in 10 weeks; and three times in 14 weeks.

After reading everything three times over, there still remain 24 weeks

of each year unprovided for.

The reply of teachers is that the work is so difficult that it has to

be slowed down enough to consume these 24 weeks. But is not this to

admit that the hill is too steep, that there is too much dead pull,

and that the materials are ill-chosen for practice in habits of rapid

intelligent reading? It is not by going slow that one learns to go

fast. Quite the reverse. Too often the school runs on low speed gear

when it ought to be running on high. The low may be necessary for the

starting, but not for the running. It may be necessary in the primary

grades, but not thereafter for those who have had a normal start.

Reading practice should certainly make for increased speed in

effective reading.

The actual work in the grades is very different from the plan

suggested. In taking up any selection for reading, the plan in most

schools is about as follows:

1. A list of the unusual words met with is written on the blackboard.

2. Teacher and pupils discuss the meaning of these words; but

unfortunately words out of the context often carry no meaning.

3. The words are marked diacritically, and pronounced.

4. Pupils "use the words in sentences." The pupil frequently has

nothing to say that involves the word. It is only given an imitation

of a real use by being put into an artificial sentence.

5. The oral reading is begun. One pupil reads a paragraph.

6. With the book removed, the meaning of the paragraph is then

reproduced either by the reader or some other pupil. This work is

necessarily perfunctory because the pupil knows he is not giving

information to anybody. Everybody within hearing already has the

meaning fresh in mind from the previous reading. The normal child

cannot work up enthusiasm for oral reproduction under such conditions.

7. The paragraph is analyzed into its various elements, and these in

turn are discussed in detail.

Such work is not reading. It is analysis. A selection is not read, it

is analyzed. The purpose of real reading is to enter into the thought

and emotional experience of the writer; not to study the methods by

which the author expressed himself. The net result when the work is

done as described is to develop a critical consciousness of methods,

without helping the children to enter normally and rightly into the

experience of the writer. The children of Cleveland need this genuine

training in reading.

Reading in the high schools needs very much the same sort of

modernization. There are more kinds of literature than classical

belles-lettres, and perhaps more important kinds. We would not

advocate a reduction of the amount of aesthetic literature. Indeed, the

young people of Cleveland need to enter into a far wider range of such

literature than is the case at present. But the reading courses in

high schools should be built out in ways already recommended for

elementary schools.

The training, however, should be mainly in reading and not in

analysis. The former is of surpassing importance to all people; the

latter is important only to certain specialists. And, what is

more, fullness of reading and right ways of reading will accomplish

incidentally most of the things aimed at in the analysis.

The following table of the reading outline of the High School of

Commerce is a fair sample of what the city is doing. Note how much

time is given to the reading and analysis of the few selections

covered in four years.

TABLE 3.--WEEKS GIVEN TO READING OF DIFFERENT BOOKS IN HIGH SCHOOL OF

COMMERCE

Weeks to read

First Year

Ashmun's Prose Selections 9

Cricket on the Hearth 5

Sohrab and Rustum 3

Midsummer Night's Dream 6

Ivanhoe 11

Second Year

Autobiography of Franklin 7

Idylls of the King 10

Treasure Island 7

Sketch Book 7

Vision of Sir Launfal 3

Third Year

Silas Marner 7

Iliad (Bryant's--4 books) 5

Washington's Farewell Address 5

First Bunker Hill Oration 6

Emerson's Compensation 5

Roosevelt Book 6

Fourth Year

Markham's The Man with the Hoe 2

Tale of Two Cities 10

Public Duty of the Educated Man 4

Macbeth 11

Self-Reliance 6

When a short play of a hundred pages like Macbeth requires nearly

three months for reading, when almost two months are given to Treasure

Island and nearly three months to Ivanhoe, clearly it is something

other than reading that is being attempted. It is perfectly obvious

that the high schools are attending principally to the mechanics of

expression and not to the content of the expression. The relative

emphasis should be reversed.

The amount of reading in the high schools should be greatly increased.

Those who object that rapid work is superficial believe that work must

be slow to be thorough. It should be remembered, however, that slow

work is often superficial and that rapid work is often excellent.

In fact the world's best workers are generally rapid, accurate, and

thorough. Ask any business man of wide experience. Now leaving aside

pupils who are slow by nature, it can be affirmed that pupils will

acquire slow, thorough habits or rapid, thorough habits according

to the way they are taught. If they are brought up by the slow

plan, naturally when speeded up suddenly, the quality of their work

declines. They can be rapid, accurate, and thorough only if such

strenuous work begins early and is continued consistently. Slow habits

are undesirable if better ones can just as well be implanted.

To avoid possible misunderstanding, it ought to be stated that the

plan recommended does not mean less drill upon the mechanical side

of reading. We are recommending a somewhat more modernized kind of

mechanics, and a much more strenuous kind of drill. The plan looks

both toward more reading and improved habits of reading.

One final suggestion finds here its logical place. Before the reading

work of elementary or high schools can be modernized, the city must

purchase the books used in the work. Leaving the supplying of books

to private purchase is the largest single obstacle in the way of

progress. Men in the business world will have no difficulty in seeing

the logic of this. When shoes, for example, were made by hand, each

workman could easily supply his own tools; but now that elaborate

machinery has been devised for their manufacture, it has become so

expensive that a machine factory must supply the tools. It is so in

almost every field of labor where efficiency has been introduced. Now

the books to be read are the tools in the teaching of reading. In a

former day when a mastery of the mechanics of reading was all that

seemed to be needed, the privately purchased textbook could suffice.

In our day when other ends are set up beyond and above those of former

days, a far more elaborate and expensive equipment is required. The

city must now supply the educational tools. It is well to face this

issue candidly and to state the facts plainly. Relative failure can be

the only possible lot of reluctant communities. They can count on

it with the same assurance as that of a manufacturer of shoes who

attempts to employ the methods of former days in competition with

modern methods.

In this city the expenditures for supplementary textbooks have

amounted to something more than $31,000 in the past 10 years.

Approximately one-third of this sum was spent in the first seven years

of the decade and more than $20,000 in the past three years. This

indicates the rapid advance in this direction made under the present

school administration but the supply of books still falls far short

of the needs of the schools. A fair start has been made but nothing

should be permitted to obstruct rapid progress in this direction.

SPELLING

Cleveland has set apart an average amount of program time for

spelling. Possibly the study might more accurately be called

word-study, since it aims also at training for pronunciation,

syllabification, vocabulary extension, and etymology. Since much of

the reading time is given to similar word-study, the figures presented

in Table 4 are really too small to represent actual practice in

Cleveland.

TABLE 4.--TIME GIVEN TO SPELLING

========================================================

| Hours per year | Per cent of grade time

|-----------------------|------------------------

Grade | Cleveland | 50 cities | Cleveland | 50 cities

--------------------------------------------------------

1 | 47 | 54 | 6.5 | 6.3

2 | 63 | 66 | 7.2 | 7.3

3 | 79 | 73 | 9.0 | 8.0

4 | 63 | 67 | 7.1 | 6.9

5 | 51 | 61 | 5.7 | 6.3

6 | 47 | 58 | 5.4 | 5.9

7 | 47 | 52 | 5.4 | 5.3

8 | 47 | 51 | 5.4 | 5.1

========================================================

Total | 444 | 482 | 6.5 | 6.4

--------------------------------------------------------

The general plan of the course is indicated in the syllabus:

"Two words are made prominent in each lesson. Their pronunciation,

division into syllables, derivation, phonetic properties, oral and

written spelling and meaning, are all to be made clear to pupils.

"The teaching of a new word may be done by using it in a sentence;

by definition or description; by giving a synonym or the antonym; by

illustration with object, action or drawing; and by etymology.

"Each lesson should have also from eight to 20 subordinate words taken

from textbook or composition exercises.... Frequent supplementary

dictation, word-building and phonic exercises should be given.

Spell much orally.... Teach a little daily, test thoroughly, drill

intensively, and follow up words misspelled persistently."

In most respects the work agrees with the usual practice in

progressive cities: the teaching of a few words in each lesson; the

frequent and continuous review of words already taught; taking

the words to be taught from the language experience of the pupils;

following up words actually misspelled; studying the words from many

angles, etc.

In some respects the work needs further modernization. The words

chosen for the work are not always the ones most needed. Whether

children or adults, people need to spell only when they write. They

need to spell correctly the words of their writing vocabulary, and

they need to spell no others. More important still, they need to

acquire the habit of watching their spelling as they write; the habit

of spelling every word with certainty that it is correct, and the

habit of going to word-lists or dictionary when there is any doubt.

This development of the habit of watchfulness over their spelling as

they write is the principal thing. One who has it will always spell

well. In case he has much writing to do, it automatically leads to

a constant renewing of his memory for words used and prevents

forgetting. The one who has only memorized word-lists, even though

they have been rigorously drilled, inevitably forgets, whether

rapidly or slowly; and in proportion as he lacks this general habit of

watchfulness, degenerates in his spelling. The reason why schools

fail to overcome the frequent criticism that young people do not

spell well, is because of the fact that they have been trying to

teach specific words rather than to develop a general and constant

watchfulness.

The fundamental training in spelling is accomplished in connection

with composition, letter-writing, etc. Direct word-list study should

have only a secondary and supplemental place. It is needed, first, for

making people conscious of the letter elements of words which are seen

as wholes in their reading, and for bringing them to look closely

into the relations of these letter elements; second, for developing

a preliminary understanding of the spelling of words used; and third,

for drill upon words commonly misspelled. While a necessary portion of

the entire process, it probably should not require so much time as is

now given to it and the time saved should be devoted to the major task

of teaching spelling watchfulness in connection with writing letters

and compositions.

The great majority of the population of Cleveland will spell only as

they write letters, receipts, and simple memoranda. They do not need

to spell a wide vocabulary with complete accuracy. On the other hand,

there are classes of people to whom a high degree of spelling accuracy

covering a fairly wide vocabulary is an indispensable vocational

necessity: clerks, copyists, stenographers, correspondents,

compositors, proof-readers, etc. These people need an intensive

specialized training in spelling that is not needed by the mass of the

population. Such specialized vocational training should be taken care

of by the Cleveland schools, but it should not be forced upon all

simply because the few need it. The attempt to bring all to the high

level needed by the few, and the failure to reach this level, is

responsible for the justifiable criticism of the schools that those

few who need to spell unusually well are imperfectly trained.

The spelling practice should continue through the high school. It

is only necessary for teachers to refuse to accept written work that

contains any misspelled word to force upon students the habit of

watchfulness over every word written. The High School of Commerce

is to be commended for making spelling a required portion of the

training. The course needs to be more closely knit with composition

and business letter-writing.

HANDWRITING

Cleveland gives a considerably larger proportion of time to

handwriting than the average of the 50 cities.

TABLE 5.--TIME GIVEN TO HANDWRITING

========================================================

| Hours per year | Per cent of grade time

|-----------------------|------------------------

Grade | Cleveland | 50 cities | Cleveland | 50 cities

--------------------------------------------------------

1 | 47 | 50 | 6.5 | 6.7

2 | 63 | 60 | 7.2 | 6.7

3 | 63 | 52 | 7.2 | 5.7

4 | 63 | 53 | 7.2 | 5.5

5 | 67 | 50 | 6.4 | 5.1

6 | 47 | 47 | 5.4 | 4.8

7 | 47 | 39 | 5.4 | 3.9

8 | 32 | 37 | 3.6 | 3.7

========================================================

Total | 419 | 388 | 6.1 | 5.1

--------------------------------------------------------

The curriculum of handwriting resolves itself mainly into questions of

method, and of standards to be achieved in each of the grades. These

matters are treated intensively in the section of the survey report

entitled "Measuring the Work of the Public Schools."

LANGUAGE, COMPOSITION, GRAMMAR

The schools devote about the usual amount of time to training for the

correct use of the mother tongue. Most of the time in intermediate

and grammar grades is devoted to English grammar. Composition receives

only minor attention.

TABLE 6.--TIME GIVEN TO LANGUAGE, COMPOSITION, AND GRAMMAR

========================================================

| Hours per year | Per cent of grade time

|-----------------------|------------------------

Grade | Cleveland | 50 cities | Cleveland | 50 cities

--------------------------------------------------------

1 | 79 | 75 | 10.9 | 8.6

2 | 95 | 79 | 10.8 | 8.7

3 | 79 | 94 | 9.0 | 10.3

4 | 104 | 106 | 11.8 | 10.9

5 | 120 | 116 | 13.6 | 12.0

6 | 120 | 118 | 13.6 | 12.2

7 | 125 | 134 | 14.3 | 13.7

8 | 125 | 142 | 14.3 | 14.1

========================================================

Total | 847 | 864 | 12.3 | 11.4

--------------------------------------------------------

In the teaching of grammar too much stress is placed on forms and

relations. Of course it is expected that this knowledge will be of

service to the pupils in their everyday expression. But such practical

application of the knowledge is not the thing toward which the work

actually looks. The end really achieved is rather the ability to

recite well on textbook grammar, and to pass good examinations in the

subject. In classes visited the thing attempted was being done in a

relatively effective way. And when judged in the light of the kind

of education considered best 20 years ago, the work is of a superior

character.

As a matter of fact, facility in oral and written expression is, like

everything else, mainly developed through much practice. The form and

style of expression are perfected mainly through the conscious and

unconscious imitation of good models. Technical grammar plays, or

should play, the relatively minor role of assisting students to

eliminate and to avoid certain types of error. Since grammar has this

perfectly practical function to perform, probably only those things

needed should be taught; but more important still, everything taught

should be constantly put to use by the pupils in their oversight of

their own speech and writing. Only as knowledge is put to work, is it

really learned or assimilated. The schools should require much oral

and written expression of the pupils, and should enforce constant

watchfulness of their own speech on the part of the pupils. It is

possible to require pupils to go over all of their written work and to

examine it, before handing it in, in the light of all the grammatical

rules they have learned. It is also possible for pupils to guard

consciously against known types of error which they are accustomed to

make in their oral recitations. Every recitation in whatever subject

provides opportunity for such training in habits of watchfulness. Only

as the pupil is brought to do it himself, without prompting on the

part of the teacher, is his education accomplished.

A limited amount of systematic grammatical teaching is a necessary

preliminary step. The purpose is an introductory acquaintance with

certain basic forms, terminology, relationships, and grammatical

perspective. This should be accomplished rapidly. Like the preliminary

survey in any field, this stage of the work will be relatively

superficial. Fullness and depth of understanding will come with

application. This preliminary understanding can not be learned

"incidentally." Such a plan fails on the side of perspective and

relationship, which are precisely the things in which the preparatory

teaching of the subject should be strong.

This preliminary training in technical grammar need not be either

so extensive or so intensive as it is at present. An altogether

disproportionate amount of time is now given to it. The time saved

ought to go to oral and written expression,--composition, we might

call it, except that the word has been spoiled because of the

artificiality of the exercises.

The composition or expression most to be recommended consists of

reports on the supplementary reading in connection with history,

geography, industrial studies, civics, sanitation, etc.; and reports

of observations on related matters in the community. Topics of

interest and of value are practically numberless. Such reports will

usually be oral; but often they will be written. Expression occurs

naturally and normally only where there is something to be discussed.

The present manual suggests compositions based upon "changes in trees,

dissemination of seeds, migration of birds, snow, ice, clouds, trees,

leaves, and flowers." This type of composition program under present

conditions cannot be a vital one. Elementary science is not taught in

the schools of Cleveland; and so the subject matter of these topics is

not developed. Further, it is the world of human action, revealed

in history, geography, travels, accounts of industry, commerce,

manufacture, transportation, etc., that possesses the greater value

for the purposes of education, as well as far greater interest for the

student.

Probably little time should be set apart on the program for

composition. The expression side of all the school work, both in the

elementary school and in the high school, should be used to give the

necessary practice. The technical matters needed can be taught in

occasional periods set aside for that specific purpose.

The isolation of the composition work continues through the academic

high schools and in considerable degree through the technical high

schools also. In the high schools the expression work probably needs

to be developed chiefly in the classes in science, history, industrial

studies, commercial and industrial geography, physics, etc., where the

students have an abundance of things to discuss. Probably four-fifths

of all of the training in English expression in the high schools

should be accomplished in connection with the oral and written work of

the other subjects.

MATHEMATICS

To arithmetic, the Cleveland schools are devoting a somewhat larger

proportion of time than the average of cities.

TABLE 7.--TIME GIVEN TO ARITHMETIC

===========================================================

| Hours per year | Per cent of grade time|

Grade |-----------------------------------------------

| Cleveland | 50 cities| Cleveland | 50 cities |

-----------------------------------------------------------

1 | 38 | 60 | 5.2 | 6.9 |

2 | 136 | 96 | 15.5 | 10.7 |

3 | 142 | 131 | 16.3 | 14.4 |

4 | 152 | 149 | 17.2 | 15.4 |

5 | 142 | 144 | 17.1 | 14.9 |

6 | 155 | 146 | 17.5 | 15.0 |

7 | 142 | 140 | 16.1 | 14.4 |

8 | 158 | 142 | 17.9 | 14.1 |

===========================================================

Total | 1065 | 1008 | 15.5 | 13.3 |

-----------------------------------------------------------

That everybody should be well grounded in the fundamental operations

of arithmetic is so obvious as to require no discussion. Beyond this

point, however, difficult problems arise. The probabilities are that

the social and vocational conditions of the coming generation will

require that everybody be more mathematical-minded than at present.

The content of mathematics courses is to be determined by human needs.

One of the fundamental needs of the age upon which we are now entering

is accurate quantitative thinking in the fields of one's vocation, in

the supervision of our many co-operative governmental labors, in our

economic thinking with reference to taxation, expenditures, insurance,

public utilities, civic improvements, pensions, corporations, and the

multitude of other civic and vocational matters.

Just as the thought involved in physics, astronomy, or engineering

needs to be put in mathematical terms in order that it may be used

effectively, so must it be with effective vocational, civic, and

economic thinking in general. Our chief need is not so much the

ability to do calculations as it is the ability to think in

figures and the habit of thinking in figures. Calculations, while

indispensable, are incidental to more important matters.

Naturally before one is prepared to use mathematical forms of thought

in considering the many social and vocational problems, he must have

mastered the fundamentals. The elementary school, at as early an

age as practicable, should certainly give the necessary preliminary

knowledge of and practice in the fundamental operations of arithmetic.

This should be done with a high degree of thoroughness, but it should

always be kept in mind that this is only a preliminary mastery of the

alphabet of mathematical thinking. The other part of our problem is a

development of the quantitative aspects of the vocational, economic,

and civic subjects. One finds clear recognition of this in Cleveland

in the new arithmetic manual. The following quotations are typical:

"The important problem of the seventh and eighth grades is to

enable the pupils to understand and deal intelligently with the most

important social institutions with which arithmetical processes are

associated."

In discussing the teaching of the mathematical aspect of insurance, we

find this statement: "Owing to the important place this subject holds

in life, we should emphasize its informational value rather than its

mathematical content."

Under taxation and revenue: "If the general features of this subject

are presented from the standpoint of civics, the pupils should have no

difficulty in solving the problems as no new principle is introduced."

Under stocks and bonds: "Pupils should be taught to know what a

corporation is, its chief officers, how it is organized, what stocks

and bonds are, and how dividends are declared and paid, in so far as

such knowledge is needed by the general public."

These statements indicate a recognition of the most important

principle that should control in the development of all of the

mathematics, elementary and secondary, beyond the preliminary training

needed for accuracy and rapidity in the fundamental operations.

When this principle is carried through to its logical conclusion, it

will be observed that most of these developments will not take place

within the arithmetic class, but in the various other subjects.

Arithmetic teaching, like the teaching of penmanship, etc., is for

the purpose of giving tools that are to be used in matters that lie

beyond. The full development will take place within these various

other fields. For the present, it probably will be well for the

schools to develop the matters both within the arithmetic classes and

in the other classes. Neither being complete at present, each will

tend to complete the other.

On the side of the preliminary training in the fundamental operations,

the present arithmetic course of study is on the whole of a superior

character. It provides for much drill, and for a great variety of

drill. It emphasizes rapidity, accuracy, and the confidence that

comes to pupils from checking up their results. It holds fast to

fundamentals, dispensing with most of the things of little practical

use. It provides easy advances from the simple to the complicated. The

field of number is explored in a great variety of directions so that

pupils are made to feel at home in the subject. One large defect is

the lack of printed exercise materials, the use of which would result

in greatly increased effectiveness. Such printed materials ought to be

furnished in great abundance.

ALGEBRA

In the report of the Educational Commission of Cleveland, 1906, we

find the following very significant sentences relative to the course

of study for the proposed high school of commerce:

"An entirely new course of study should be made out for this school.

Subjects which have been considered necessary in a high school,

because they tend to develop the mind, should not for this reason only

be placed in a commercial course. Subjects should not be given because

they strengthen the mind, but the subjects which are necessary in this

course should be given in such a way as to strengthen the mind. The

mathematics in this school should consist of business arithmetic and

mensuration. We can see no reason for giving these students either

algebra or geometry. But they should be taught short and practical

methods of working business problems."

We find here a recommendation since carried out that indicates a clear

recognition of the principle of adaptation of the course of study to

actual needs. Carried out to its logical conclusion, and applied to

the entire city system, it raises questions as to the advisability of

requiring algebra of girls in any of the high school courses; or of

requiring it of that large number of boys looking forward to vocations

that do not involve the generalized mathematics of algebra. Now either

the commercial students do need algebra or a large proportion of these

others do not need it. It seems advisable here to do nothing more than

to present the question as one which the city needs to investigate.

The present practice, in Cleveland as elsewhere, reveals

inconsistency. In one or the other of the schools a wrong course is

probably being followed. The current tendency in public education

is toward agreement with the principle enunciated by the Cleveland

Educational Commission, and toward a growing and consistent

application of it.

Differentiation in the mathematics of different classes of pupils is

necessary. The public schools ought to give the same mathematics to

all up to that level where the need is common to all. Beyond that

point, mathematics needs to be adapted to the probable future

activities of the individual. There are those who will need to reach

the higher levels of mathematical ability. Others will have no such

need.

There is a growing belief that even for those who are in need of

algebra the subject is not at present organized in desirable ways. It

is thought that, on the one hand, it should be knit up in far larger

measure with practical matters, and on the other, it should be

developed in connection with geometry and trigonometry. The technical

high schools of Cleveland have adopted this form of organization.

Their mathematics is probably greatly in advance of that of the

academic schools.

GEOMETRY

Form study should begin in the kindergarten, and it should develop

through the grades and high school in ways similar to the arithmetic,

and in conjunction with the arithmetic, drawing, and construction

work. Since geometrical forms involve numerical relations, they supply

good materials to use in making number relations concrete and clear.

This is now done in developing ideas of fractions, multiplication,

division, ratio, per cent, etc. It should be done much more fully and

variously than at present and for the double purpose of practising

the form-ideas as well as the number-ideas. Arithmetic study and

form-study can well grow up together, gradually merging into the

combined algebra and geometry so far as students need to reach the

higher levels of mathematical generalization.

At the same time that this is being developed in the mathematics

classes, development should also be going on in the classes of

drawing, design, and construction. The alphabet of form-study will

thus be taught in several of the studies. The application will be

made in practical design, in mechanical and free-hand drawing,

in constructive labor, in the graphical representation of social,

economic, and other facts of life. The application comes not so much

in the development of practical problems in the mathematics classes as

in the development of the form aspect of those other activities that

involve form.

We have here pointed to what appears to be in progressive schools

a growing program of work. Everywhere it is yet somewhat vague

and inchoate. In connection with the arithmetic, the drawing, the

construction and art work, and the mathematics of the technical high

schools, it appears to be developing in Cleveland in a vigorous and

healthy manner.

HISTORY

The curriculum makers for elementary education do not seem to have

placed a high valuation upon history. Apparently it has not been

considered an essential study of high worth, like reading, writing,

spelling, grammar, and arithmetic. To history are allotted but

290 hours in Cleveland, as against 496 hours in the average of 50

progressive American cities. This discrepancy should give the city

pause and concern. If a mistake is being made, it is more likely to

be on the part of an individual city than upon that of 50 cities.

The probability is that Cleveland is giving too little time to this

subject.

TABLE 8.--TIME GIVEN TO HISTORY

===========================================================

| Hours per year | Per cent of grade time|

Grade |-----------------------------------------------

| Cleveland | 50 cities| Cleveland | 50 cities |

-----------------------------------------------------------

1 | 0 | 27 | 0.0 | 3.1 |

2 | 0 | 31 | 0.0 | 3.4 |

3 | 19 | 35 | 2.1 | 3.8 |

4 | 25 | 57 | 2.9 | 5.8 |

5 | 25 | 67 | 2.9 | 6.9 |

6 | 51 | 71 | 5.7 | 7.3 |

7 | 85 | 91 | 9.7 | 9.2 |

8 | 85 | 117 | 9.7 | 11.6 |

===========================================================

Total | 290 | 496 | 4.2 | 6.5 |

-----------------------------------------------------------

The treatment in the course of study manual indicates that it is a

neglected subject. Of the 108 pages, it receives an aggregate of less

than two. The perfunctory assignment of work for the seventh grade is

typical:

"UNITED STATES HISTORY

"B Assignment.

Mace's History, pp. 1-124 inclusive.

Questions and suggested collateral reading

found in Appendix may be used as teacher directs.

"A Assignment.

Mace's History, pp. 125-197.

Make use of questions and suggested collateral

reading at your own option."

For fifth and sixth grades there is assigned a small history text

of 200 pages for one or two lessons per week. The two years of the

seventh and eighth grades are devoted to the mastery of about 500

pages of text. While there is incidental reference to collateral

reading, as a matter of fact the schools are not supplied with the

necessary materials for this collateral reading in the grammar

grades. The true character of the work is really indicated by the last

sentence of the eighth-grade history assignment: "The text of our book

should be thoroughly mastered."

In discussing the situation, the first thing to which we must call

attention is the great value of history for an understanding of the

multitude of complicated social problems met with by all people in a

democracy. In a country where all people are the rulers, all need a

good understanding of the social, political, economic, industrial, and

other problems with which we are continually confronted. It is true

the thing needed is an understanding of present conditions, but there

is no better key to a right understanding of our present conditions

than history furnishes. One comes to understand a present situation by

observing how it has come to be. History is one of the most important

methods of social analysis.

The history should be so taught that it will have a demonstrably

practical purpose. In drawing up courses of study in the subject for

the grammar grades and the high school, the first task should be an

analysis of present-day social conditions, the proper understanding of

which requires historical background. Once having discovered the list

of social topics, it is possible to find historical readings which

will show how present conditions have grown up out of earlier ones.

Looked at from a practical point of view, the history should be

developed on the basis of topics, a great abundance of reading being

provided for each of the topics. We have in mind such topics as the

following:

Sociological Aspects of War

Territorial Expansion

Race Problems

Tariff and Free Trade

Transportation

Money Systems

Our Insular Possessions

Growth of Population

Trusts

Banks and Banking

Immigration

Capital and Labor

Education

Inventions

Suffrage

Centralization of Government

Strikes and Lockouts

Panics and Business Depressions

Commerce

Taxation

Manufacturing

Labor Unions

Foreign Commerce

Agriculture

Postal Service

Army

Government Control of Corporations

Municipal Government

Navy

Factory Labor

Wages

Courts of Law

Charities

Crime

Fire Protection

Roads and Road Transportation

Newspapers and Magazines

National Defense

Conservation of Natural Resources

Liquor Problems

Parks and Playgrounds

Housing Conditions

Mining

Health, Sanitation, etc.

Pensions

Unemployment

Child Labor

Women in Industry

Cost of Living

Pure Food Control

Savings Banks

Water Supply of Cities

Prisons

Recreations and Amusements

Co-operative Buying and Selling

Insurance

Hospitals

After drawing up such lists of topics for study, they should be

assigned to grammar grades and high school according to the degree

of maturity necessary for their comprehension. Naturally as much as

possible should be covered in the grammar grades. Such as cannot be

covered there should be covered as early as practicable in the high

school, since so large a number of students drop out, and all need

the work. Of course, this would involve a radical revision of the high

school courses in history. It is not here recommended that any such

changes be attempted abruptly. There are too many other conditions

that require readjustment at the same time. It must all be a gradual

growth.

Naturally, students must have some familiarity with the general

time relations of history and the general chronological movements

of affairs before they can understand the more or less specialized

treatment of individual topics. Preliminary studies are therefore both

necessary and desirable in the intermediate and grammar grades for the

purpose of giving the general background. During these grades a great

wealth of historical materials should be stored up. Pupils should

acquire much familiarity with the history of the ancient oriental

nations, Judea, Greece, Rome, the states of modern Europe and America.

The purpose should be to give a general, and in the beginning a

relatively superficial, overview of the world's history for the

sake of perspective. The reading should be biographical, anecdotal,

thrilling dramas of human achievement, rich with human interest.

It should be at every stage of the work on the level with the

understanding and degree of maturity of the pupils, so that much

reading can be covered rapidly. Given the proper conditions--chiefly

an abundance of the proper books supplied in sets large enough for

classes--pupils can cover a large amount of ground, obtain a wealth

of historical experience, and acquire a great quantity of useful

information, the main outlines of which are remembered without much

difficulty. They can in this manner lay a broad historical foundation

for the study of the social topics that should begin by the seventh

grade and continue throughout the high school.

The textbooks of the present type can be employed as a part of this

preliminary training. Read in their entirety and read rapidly, they

give one that perspective which comes from a comprehensive view of the

entire field. But they are too brief, abstract, and barren to afford

valuable concrete historical experience. They are excellent reference

books for gaining and keeping historical perspective.

Reading of the character that we have here called preliminary should

not cease as the other historical studies are taken up. The general

studies should certainly continue for some portion of the time through

the grammar grades and high school, but it probably should be mainly

supervised reading of interesting materials rather than recitation and

examination work.

We would recommend that the high schools give careful attention to the

recommendation of the National Education Association Committee on the

Reorganization of the Secondary Course of Study in History.

CIVICS

Civic training scarcely finds a place upon the elementary school

program. The manual suggests that one-quarter of the history time--10

to 20 minutes per week--in the fifth and sixth grades should be given

to a discussion of such civic topics as the department of public

service, street cleaning, garbage disposal, health and sanitation, the

city water supply, the mayor and the council, the treasurer, and the

auditor. The topics are important, but the time allowed is inadequate

and the pupils of these grades are so immature that no final treatment

of such complicated matters is possible. For seventh and eighth

grades, the manual makes no reference to civics. This is the more

surprising because Cleveland is a city in which there has been no

end of civic discussion and progressive human-welfare effort. The

extraordinary value of civic education in the elementary school, as a

means of furthering civic welfare, should have received more decided

recognition.

The elementary teachers and principals of Cleveland might profitably

make such a civic survey as that made in Cincinnati as the method of

discovering the topics that should enter into a grammar grade course.

The heavy emphasis upon this subject should be reserved for the later

grades of the elementary school.

In the high schools, a little is being accomplished. In the academic

high schools, those who take the classical course receive no civics

whatever. It is not even elective for them. Those who take the

scientific or English courses may take civics as a half-year elective.

In the technical high schools it is required of all for a half-year.

The course is offered only in the senior year, except in the High

School of Commerce, where it is offered in the third. As a result of

these various circumstances, the majority of students who enter and

complete the course in the high schools of Cleveland receive no civic

training whatever--not even the inadequate half-year of work that is

available for a few.

Whether the deficiencies here pointed out are serious or not depends

in large measure upon the character of the other social subjects, such

as history and geography. If these are developed in full and concrete

ways, they illumine large numbers of our difficult social problems.

It is probable that the larger part of the informational portions of

civic training should be imparted through these other social subjects.

Whether very much of this is actually done at present is doubtful;

for the history teaching, as has already been noted, is much

underdeveloped, and while somewhat further advanced, geography work is

still far from adequate at the time this report is written.

GEOGRAPHY

Geography in Cleveland is given the customary amount of time, though

it is distributed over the grades in a somewhat unusual way. It is

exceptionally heavy in the intermediate grades and correspondingly

light in the grammar grades. As geography, like all other subjects,

is more and more humanized and socialized in its reference, much more

time will be called for in the last two grammar grades.

TABLE 9.---TIME GIVEN TO GEOGRAPHY

===========================================================

| Hours per year | Per cent of grade time|

Grade |-----------------------------------------------

| Cleveland | 50 cities| Cleveland | 50 cities |

-----------------------------------------------------------

1 | 0 | 16 | 0.0 | 1.8 |

2 | 0 | 7 | 0.0 | 0.8 |

3 | 28 | 50 | 3.2 | 5.4 |

4 | 101 | 83 | 11.4 | 8.5 |

5 | 125 | 102 | 14.3 | 11.2 |

6 | 125 | 107 | 14.3 | 11.0 |

7 | 57 | 98 | 6.4 | 9.9 |

8 | 57 | 76 | 6.4 | 7.6 |

===========================================================

Total | 493 | 539 | 7.2 | 7.1 |

-----------------------------------------------------------

As laid out in the manual now superseded, and as observed in the

regular classrooms, the work has been forbiddingly formal. In the

main it has consisted of the teacher assigning to the pupils a certain

number of paragraphs or pages in the textbook as the next lesson, and

then questioning them next day to ascertain how much of this printed

material they have remembered and how well. It has not consisted

of stimulating and guiding the children toward intelligent

inquisitiveness and inquiring interest as to the world, and the skies

above, and waters round about, and the conditions of nature that limit

and shape the development of mankind.

That the latter is the proper end of geographical teaching is being

recognized in developing the new course of study in this subject.

Industries, commerce, agriculture, and modes of living are becoming

the centers about which geographic thought and experience are

gathered. The best work now being done here is thoroughly modern.

Unfortunately it is not yet great in amount in even the best of the

schools, still less in the majority. But the direction of progress is

unmistakable and unquestionably correct.

As in the reading, so in geography, right development of the course of

study must depend in large measure upon the material equipment that is

at the same time provided. It sounds like a legitimate evasion to

say that education is a spiritual process, and that good teachers

and willing, obedient, and industrious pupils are about all that is

required. As a matter of fact, just as modern business has found it

necessary to install one-hundred-dollar typewriters to take the place

of the penny quill pens, so must education, to be efficient, develop

and employ the elaborate tools needed by new and complex modern

conditions, and set aside the tools that were adequate in a simpler

age. The proper teaching of geography requires an abundance of reading

materials of the type that will permit pupils to enter vividly into

the varied experience of all classes of people in all parts of the

world. In the supplementary books now furnished the schools, only

a beginning has been made. The schools need 10 times as much

geographical reading as that now found in the best equipped school.

It would be well to drop the term "supplementary." This reading should

be the basic geographic experience, the fundamental instrument of

the teaching. All else is supplementary. The textbook then becomes

a reference book of maps, charts, summaries, and a treatment for

the sake of perspective. Maps, globes, pictures, stereoscopes,

stereopticon, moving-picture machine, models, diagrams, and museum

materials, are all for the purpose of developing ideas and imagery of

details. The reading should become and remain fundamental and central.

The quantity required is so great as to make it necessary for the city

to furnish the books. While the various other things enumerated are

necessary for complete effectiveness, many of them could well wait

until the reading materials are sufficiently supplied.

In the high schools the clear tendency is to introduce more of the

industrial and commercial geography and to diminish the time given to

the less valuable physiography. The development is not yet vigorous.

The high school geography departments, so far as observed, have not

yet altogether attained the social point of view. But they are moving

in that direction. On the one hand, they now need stimulation; and

on the other, to be supplied with the more advanced kinds of such

material equipment as already suggested for the elementary schools.

DRAWING AND APPLIED ART

The elementary schools are giving the usual proportion of time to

drawing and applied art. The time is distributed, however, in a

somewhat unusual, but probably justifiable, manner. Whereas the

subject usually receives more time in the primary grades than in the

grammar grades, in Cleveland, in quite the reverse way, the subject

receives its greatest emphasis in the higher grades.

TABLE 10.--TIME GIVEN TO DRAWING

===========================================================

| Hours per year | Per cent of grade time|

Grade |-----------------------------------------------

| Cleveland | 50 cities| Cleveland | 50 cities |

-----------------------------------------------------------

1 | 47 | 98 | 6.5 | 11.3 |

2 | 47 | 54 | 5.3 | 6.0 |

3 | 47 | 56 | 5.3 | 6.2 |

4 | 47 | 53 | 5.3 | 5.5 |

5 | 57 | 50 | 6.4 | 5.2 |

6 | 57 | 50 | 6.4 | 5.1 |

7 | 57 | 50 | 6.4 | 5.0 |

8 | 57 | 49 | 6.4 | 4.9 |

===========================================================

Total | 416 | 460 | 6.1 | 6.1 |

-----------------------------------------------------------

Drawing has been taught in Cleveland as a regular portion of the

curriculum since 1849. It has therefore had time for substantial

growth; and it appears to have been successful. Recent developments

in the main have been wholesome and in line with best modern progress.

The course throughout attempts to develop an understanding and

appreciation of the principles of graphic art plus ability to use

these principles through practical application in constructive

activities of an endlessly varied sort.

Occasionally the work appears falsetto and even sentimental. It

is often applied in artificial schoolroom ways to things without

significance. General grade teachers cannot be specialists in

the multiplicity of things demanded of them; it is not therefore

surprising that they sometimes lack skill, insight, ingenuity, and

resourcefulness. Too often the teachers do not realize that the study

of drawing and design is for the serious purpose of giving to pupils a

language and form of thought of the greatest practical significance

in our present age. The result is a not infrequent use of schoolroom

exercises that do not greatly aid the pupils as they enter the busy

world of practical affairs.

These shortcomings indicate incompleteness in the development. Where

the teaching is at its best in both the elementary and high schools

of Cleveland, the work exhibits balanced understanding and complete

modernness. The thing needed is further expansion of the best, and the

extension of this type of work through specially trained departmental

teachers to all parts of the city.

There should be a larger amount of active co-operation between the

teachers of art and design and the teachers of manual training; also

between both sets of teachers and the general community.

MANUAL TRAINING AND HOUSEHOLD ARTS

In the grammar grades manual and household training receives an

average proportion of the time. In the grades before the seventh, the

subject receives considerably less than the usual amount of time.

TABLE 11.--TIME GIVEN TO MANUAL TRAINING

======+=======================+========================

| Hours per year | Per cent of grade time

Grade +-----------+-----------+-----------+------------

| Cleveland | 50 cities | Cleveland | 50 cities

------+-----------+-----------+-----------+------------

1 | 32 | 42 | 4.3 | 4.8

2 | 32 | 47 | 3.5 | 5.1

3 | 32 | 40 | 3.5 | 4.5

4 | 32 | 45 | 3.5 | 4.6

5 | 38 | 50 | 4.3 | 5.2

6 | 38 | 57 | 4.3 | 5.8

7 | 63 | 72 | 7.1 | 7.1

8 | 63 | 74 | 7.1 | 7.4

------+-----------+-----------+-----------+------------

Total | 330 | 427 | 4.8 | 5.6

------+-----------+-----------+-----------+------------

It is easy to see the social and educational justification of courses

in sewing, cooking, household sanitation, household decoration, etc.,

for the girls. They assist in the training for complicated vocational

activities performed in some degree at least by most women. Where

women are so situated that they do not actually perform them, they

need, for properly supervising others and for making intelligible and

appreciative use of the labors of others, a considerable understanding

of these various matters.

Where this work for girls is at its best in Cleveland, it appears to

be of a superior character. Those who are in charge of the best are in

a position to advise as to further extensions and developments. It

is not difficult to discern certain of these. It would appear, for

example, that sewing should find some place at least in the work of

seventh and eighth grades. The girl who does not go on to high school

is greatly in need of more advanced training in sewing than can be

given in the sixth grade. Each building having a household arts

room should possess a sewing machine or two, at the very least. The

academic high schools are now planning to offer courses in domestic

science. As in the technical high schools, all of this work should

involve as large a degree of normal responsibility as possible.

We omit discussion here of the specialized vocational training of

women, since this is handled in other reports of the Survey.

When we turn to the manual training of the boys, we are confronted

with problems of much greater difficulty. Women's household

occupations, so far as retained in the home, are unspecialized. Each

well-trained household worker does or supervises much the same range

of things as every other. To give the entire range of household

occupations to all girls is a simple and logical arrangement.

But man's labor is greatly specialized throughout. There is no large

remnant of unspecialized labor common to all, as in the case of women.

To all girls we give simply this unspecialized remnant, since it is

large and important. But in the case of men the unspecialized field

has disappeared. There is nothing of labor to give to boys except that

which has become specialized.

A fundamental problem arises. Shall we give boys access to a variety

of specialized occupations so that they may become acquainted, through

responsible performance, with the wide and diversified field of man's

labor? Or shall we give them some less specialized sample out of

that diversified field so that they may obtain, through contact and

experience, some knowledge of the things that make up the world of

productive labor?

Cleveland's reply, to judge from actual practices, is that a single

sample will be sufficient for all except those who attend technical

and special schools. The city has therefore chosen joinery and

cabinet-making as this sample. In the fifth and sixth grades work

begins in simple knife-work for an hour a week under the direction of

women teachers. In the seventh and eighth grades it becomes benchwork

for an hour and a half per week, and is taught by a special manual

training teacher, always a man. In the academic high schools the

courses in joinery and cabinet-making bring the pupils to greater

proficiency, but do not greatly extend the course in width.

Much of this work is of a rather formal character, apparently looking

toward that manual discipline formerly called "training of eye and

hand," instead of consciously answering to the demands of social

purposes. The regular teachers look upon the fifth and sixth grade

sloyd[\*sic] which they teach with no great enthusiasm. Seventh and

eighth grade teachers do not greatly value the work.

The household arts courses for the girls have social purposes in view.

As a result they are kept vitalized, and are growing increasingly

vital in the work of the city. Is it not possible also to vitalize the

manual training of the boys--unspecialized pre-vocational training, we

ought to call it--by giving it social purpose?

The principal of one of the academic high schools emphasized in

conversation the value of manual training for vocational guidance--a

social purpose. It permitted boys, he said, to try themselves out

and to find their vocational tastes and aptitudes. The purpose is

undoubtedly a valid one. The limitation of the method is that joinery

and cabinet-making cannot help a boy to try himself out for metal

work, printing, gardening, tailoring, or commercial work.

If vocational guidance is to be a controlling social purpose, the

manual training work will have to be made more diversified so that

one can try out his tastes and abilities in a number of lines. And,

moreover, each kind of work must be kept as much like responsible work

out in the world as possible. In keeping work normal, the main thing

is that the pupils bear actual responsibility for the doing of actual

work. This is rather difficult to arrange; but it is necessary before

the activities can be lifted above the level of the usual manual

training shop. The earliest stages of the training will naturally be

upon what is little more than a play level. It is well for schools to

give free rein to the constructive instinct and to provide the fullest

and widest possible opportunities for its exercise. But if boys are

to try out their aptitudes for work and their ability to bear

responsibility in work, then they must try themselves out on the

work level. Let the manual training actually look toward vocational

guidance; the social purpose involved will vitalize the work.

There is a still more comprehensive social purpose which the city

should consider. Owing to the interdependence of human affairs, men

need to be broadly informed as to the great world of productive

labor. Most of our civic and social problems are at bottom industrial

problems. Just as we use industrial history and industrial geography

as means of giving youth a wide vision of the fields of man's work,

so must we also use actual practical activities as means of making

him familiar in a concrete way with materials and processes in

their details, with the nature of work, and with the nature of

responsibility. On the play level, therefore, constructive activities

should be richly diversified. This diversity of opportunity should

continue to the work level. One cannot really know the nature of work

or of work responsibility except as it is learned through experience.

Let the manual training adopt the social purpose here mentioned,

provide the opportunities, means, and processes that it demands, and

the work will be wondrously vitalized.

It is well to mention that the program suggested is a complicated

one on the side of its theory and a difficult one on the side of its

practice. In the planning it is well to look to the whole program. In

the work itself it is well to remember that one step at a time, and

that secure, is a good way to avoid stumbling.

Printing and gardening are two things that might well be added to

the manual training program. Both are already in the schools in some

degree. They might well be considered as desirable portions of

the manual training of all. They lend themselves rather easily to

responsible performance on the work level. There are innumerable

things that a school can print for use in its work. In so doing,

pupils can be given something other than play. Also in the home

gardening, supervised for educational purposes, it is possible to

introduce normal work-motives. By the time the city has developed

these two things it will have at the same time developed the insight

necessary for attacking more difficult problems.

ELEMENTARY SCIENCE

This subject finds no place upon the program. No elaborate argument

should be required to convince the authorities in charge of the school

system of a modern city like Cleveland that in this ultra-scientific

age the children who do not go beyond the elementary school--and they

constitute a majority--need to possess a working knowledge of the

rudiments of science if they are to make their lives effective.

The future citizens of Cleveland need to know something about

electricity, heat, expansion and contraction of gases and solids, the

mechanics of machines, distillation, common chemical reactions and a

host of other things about science that are bound to come up in the

day's work in their various activities.

Considered from the practical standpoint of actual human needs, the

present almost complete neglect of elementary science is indefensible.

The minute amount of such teaching now introduced in the language

lessons for composition purposes is so small as to be almost

negligible. The topics are not chosen for their bearing upon human

needs. There is no laboratory work.

Naturally much of the elementary science to be taught should be

introduced in connection with practical situations in kitchen, school

garden, shop, sanitation, etc. Certainly the applied science should

be as full as possible. But preliminary to this there ought to be

systematic presentation of the elements of various sciences in rapid

ways for overview and perspective.

To try to teach the elements only "incidentally" as they are applied

is to fail to see them in their relations, and therefore to fail in

understanding them. Intensive studies by way of filling in the

details may well be in part incidental. But systematic superficial

introductory work is needed by way of giving pupils their bearings

in the various fields of science. The term "superficial" is used

advisedly. There is an introductory stage in the teaching of every

such subject when the work should be superficial and extensive. This

stage paves the way for depth and intensity, which must be reached

before education is accomplished.

HIGH SCHOOL SCIENCE

Having no elementary science in the grades, one naturally expects to

find in the high school a good introductory course in general science,

similar in organization to that suggested for the elementary stage.

But nowhere is there anything that even remotely suggests such a

course. Students who take the classical course get their first glimpse

of modern science in the third or fourth high school year, when they

have an opportunity to elect a course in physics or chemistry of the

usual traditional stamp. No opportunity is given them for so much as

a glimpse of the world's biological background. Those who take the

scientific or English course have access to physical geography and to

an anemic biological course entitled, "Physiology and Botany," which

few take. Students of the High School of Commerce have their first

contacts with modern science in a required course in chemistry in the

third year, and elective physics in the fourth year. In the technical

high schools the first science for the boys is systematic chemistry in

the second year and physics in the third. They have no opportunity

of contact with any biological science. The girls have "botany and

physiology" in their first year.

The city needs to organize preliminary work in general science for the

purpose of paving the way to the more intensive science work of the

later years. A portion of this should be found in the elementary

school and taught by departmental science teachers; and a portion

in the first year of the high school. As junior high schools are

developed, most of this work should be included in their courses.

As to the later organization of the work, the two technical high

schools clearly indicate the modern trend of relating the science

teaching to practical labors. What is needed is a wider expansion of

this phase of the work without losing sight of the need at the same

time for a systematic and general teaching of the sciences. It is a

difficult task to make the science teaching vital and modern for

the academic high schools, since they have so few contacts with the

practical labors of the world. Cleveland needs to see its schools

more as a part of the world of affairs, and not so much as a hothouse

nursery isolated from the world and its vital interests.

PHYSIOLOGY AND HYGIENE

Teaching in matters pertaining to health is given but a meagre amount

of time in the elementary schools. While the school program shows one

15-minute period each week in the first four grades, and one 30-minute

period each week in the four upper grades, it appears that in actual

practice the subject receives even less time than this. In the attempt

to observe the class work in physiology and hygiene, a member of the

Survey staff went on one day to four different classrooms at the hour

scheduled on the program. In two cases the time was given over to

grammar, in one to arithmetic, and in one to music. This represents

practice that is not unusual. The subject gets pushed off the program

by one of the so-called "essentials." It is difficult to see why

health-training is not an essential. In a letter to the School Board,

February 8, 1915, Superintendent Frederick wrote:

"The teaching of physiology and hygiene should become a matter

of serious moment in our course of study. At present it is not

systematically presented in the elementary schools: and in the high

schools it is an elective study only in the senior year. My judgment

is that it should become a definite part of the program, as a required

study in the seventh and eighth grades."

The small nominal amount of time as compared with the time usually

expended is partially shown in Table 12. Professor Holmes' figures for

the 50 cities include elementary science along with the physiology and

hygiene.

TABLE 12.--TIME GIVEN TO SCIENCE, PHYSIOLOGY, HYGIENE

======+=======================+========================

| Hours per year | Per cent of grade time

Grade +-----------+-----------+-----------+------------

| Cleveland | 50 cities | Cleveland | 50 cities

------+-----------+-----------+-----------+------------

1 | 10 | 37 | 1.3 | 4.3

2 | 10 | 41 | 1.1 | 4.5

3 | 10 | 40 | 1.1 | 4.4

4 | 10 | 37 | 1.1 | 3.8

5 | 19 | 34 | 2.1 | 3.5

6 | 19 | 40 | 2.1 | 4.2

7 | 19 | 45 | 2.1 | 4.5

8 | 19 | 57 | 2.1 | 5.7

------+-----------+-----------+-----------+------------

Total | 116 | 331 | 1.7 | 4.4

------+-----------+-----------+-----------+------------

In addition to the work of the regular teachers in this subject, a

certain amount of instruction is given by the school physicians and

nurses. In his report to the Board, 1913, Dr. Peterson writes:

"Health instruction is given by doctors and nurses in personal talks

to pupils, talks to whole schools, tooth-brush drills conducted in

many schools, and in visits into the homes by the nurses. Conscious

effort is continually made by all doctors and nurses to inspire to

right living all of the children with whom they come in contact."

Looking somewhat to the future, it can be affirmed that the school

physicians and nurses are the ones who ought to give the teaching in

this subject. After giving the preliminary ideas in the classrooms,

they alone are in position to follow up the various matters and see

that the ideas are assimilated through being put into practice both at

school and at home. At present, however, 16 physicians and 27 nurses

have 75,000 children to inspect, of whom more than half have defects

that require following up. It is a physical impossibility for them

to do much teaching until the force of school nurses is greatly

increased.

For the present certain things may well be done:

1. A course in hygiene and sanitation, based upon an abundance of

reading, should be drawn up and taught by the regular teachers in the

grammar school grades. This course should be looked upon as merely

preliminary to the more substantial portions of education in this

field. The physicians and nurses should select the readings

and supervise the course to see that the materials are covered

conscientiously and not slighted.

2. The schools should arrange for practical applications of the

preparatory knowledge in as many ways as possible. Children in relays

can look after the ventilation, temperature, humidity, dust, light,

and other sanitary conditions of school-rooms and grounds. They can

make sanitary surveys of their home district; engage in anti-fly,

anti-mosquito, anti-dirt, and other campaigns; and report--for credit

possibly--practical sanitary and hygienic activities carried on

outside of school. Only as knowledge is put to work is it assimilated

and the prime purpose of education accomplished.

3. The corps of school nurses should be gradually enlarged, and after

a time they can be given any needed training for teaching that will

enable them, as the work is departmentalized in the grammar grades,

to become departmental teachers in this subject for a portion of

their time. Their "follow-up" work will always give them their chief

educational opportunity; but to prepare for this the classwork must

give some systematized preparatory ideas.

In the high schools, training of boys in hygiene and sanitation is

little developed. The only thing offered them is an elective half-year

course in physiology in the senior year of the scientific and English

courses in the academic high schools. In the classical course, and

in the technical and commercial schools, they have not even this.

Physiology is required of girls in the technical schools, and is

elective in all but the classical course in the others. While in one

or two of the high schools there is training in actual hygiene

and sanitation, in most cases it is physiology and anatomy of a

superficial preliminary type which is not put to use and which

therefore mostly fails of normal assimilation.

The things recommended for the elementary schools need to be carried

out in the high schools also.

PHYSICAL TRAINING

The city gives slightly more than the usual amount of time to physical

training in the elementary schools. Except for first and second

grades, where a slightly larger amount is set aside for the purpose,

pupils are expected to receive one hour per week.

TABLE 13.--TIME GIVEN TO PHYSICAL TRAINING

======+=======================+========================

| Hours per year | Per cent of grade time

Grade +-----------+-----------+-----------+------------

| Cleveland | 50 cities | Cleveland | 50 cities

------+-----------+-----------+-----------+------------

1 | 63 | 46 | 8.7 | 5.4

2 | 54 | 41 | 6.2 | 4.5

3 | 38 | 40 | 4.4 | 4.5

4 | 38 | 40 | 4.3 | 4.2

5 | 38 | 38 | 4.3 | 4.0

6 | 38 | 40 | 4.3 | 4.2

7 | 38 | 38 | 4.3 | 3.7

8 | 38 | 39 | 4.3 | 4.0

------+-----------+-----------+-----------+------------

Total | 345 | 322 | 5.0 | 4.2

------+-----------+-----------+-----------+------------

Even though it is a little above the average amount of time, it is

nevertheless too little. A week consists of 168 hours. After deducting

12 hours a day for sleep, meals, etc., there remain 84 hours per week

to be used. In a state of nature this was largely used for physical

play. Under the artificial conditions of modern city life, the nature

of children is not changed. They still need huge amounts of active

physical play for wholesome development. Most of this they will get

away from the school, but as urban conditions take away proper

play opportunities, the loss in large degree has to be made good

by systematic community effort in establishing and maintaining

playgrounds and playrooms for 12 months in the year. The school and

its immediate environment is the logical place for this development.

The course of study lays out a series of obsolescent Swedish

gymnastics for each of the years. The work observed was mechanical,

perfunctory, and lacking in vitality. Sandwiched in between exhausting

intellectual drill, it has the value of giving a little relief and

rest. This is good, but it is not sufficiently positive to be called

physical training.

Very desirable improvements in the course are being advocated by the

directors and supervisors of the work. They are recommending, and

introducing where conditions will permit, the use of games, athletics,

folk dances, etc. The movements should be promoted by the city in

every possible way. At present the regular teachers as a rule have not

the necessary point of view and do not sufficiently value the work.

Special teachers and play leaders need to be employed. Material

facilities should be extended and improved. Some of the school grounds

are too small; the surfacing is not always well adapted to play;

often apparatus is not supplied; indoor playrooms are insufficient

in number, etc. These various things need to be supplied before the

physical training curriculum can be modernized.

In the high schools two periods of physical training per week in

academic and commercial schools, and three or four periods per week in

the technical schools, are prescribed for the first two years of the

course. In the last two years it is omitted from the program in all

but the High School of Commerce, where it is optional. With one or two

exceptions, the little given is mainly indoor gymnastics of a formal

sort owing to the general lack of sufficiently large athletic fields,

tennis courts, baseball diamonds, and other necessary facilities.

Special commendation must be accorded the home-room basis of

organizing the athletics of the technical high schools. Probably no

plan anywhere employed comes nearer to reaching the entire student

body in a vital way.

With the exceptions referred to, it seems that the city has not

sufficiently considered the indispensable need of huge amounts of

physical play on the part of adolescents as the basis of full and

life-long physical vitality. High school students represent the best

youth of the community. Their efficiency is certainly the greatest

single asset of the new generation. There are scores of other

expensive things that the city can better afford to neglect. The one

thing it can least afford to sacrifice on the altar of economy is the

vitality of its citizens of tomorrow.

MUSIC

In the elementary schools Cleveland is giving considerably more than

the average amount of time to music. In the high schools, except for

a one-hour optional course in the High School of Commerce, the subject

is developed only incidentally and given no credit. It is entirely

pertinent to inquire why music should be so important for the grammar

school age and then lose all of this importance as soon as the high

school is reached.

TABLE 14.--TIME GIVEN TO MUSIC

======+=======================+========================

| Hours per year | Per cent of grade time

Grade +-----------+-----------+-----------+------------

| Cleveland | 50 cities | Cleveland | 50 cities

------+-----------+-----------+-----------+------------

1 | 47 | 45 | 6.5 | 5.2

2 | 54 | 48 | 6.1 | 5.3

3 | 54 | 47 | 6.1 | 5.1

4 | 54 | 48 | 6.1 | 4.9

5 | 51 | 45 | 5.7 | 4.7

6 | 51 | 45 | 5.7 | 4.6

7 | 51 | 45 | 5.7 | 4.4

8 | 51 | 44 | 5.7 | 4.4

------+-----------+-----------+-----------+------------

Total | 413 | 367 | 6.0 | 4.8

------+-----------+-----------+-----------+------------

The probability is either that it is over-valued for the elementary

school and should receive diminished time; or it is under-valued for

the high school and should be given the dignity and the consideration

of a credit course, as it is in many progressive high schools.

It cannot be urged that the subject is finished in the elementary

schools. Pupils in fact receive only an introductory training in vocal

music. The whole field of instrumental music remains untouched. It

seems the city ought to consider the question of whether the course

ought not to be much expanded and continued throughout the high school

period as an elective subject. However, in considering the question

it should be kept in mind that there are very many things of more

importance and of far more pressing immediate necessity.

FOREIGN LANGUAGES

German has long been taught in the elementary schools. Until less than

10 years ago it was taught in all grades beginning with the first.

More recently it has been confined to the four upper grades. Beginning

with the present year, it is taught only in the seventh and eighth

grades. The situation is so well presented in the report of the

Educational Commission of 1906 that further discussion here is

unnecessary. They summarize their discussion of the teaching of German

in the elementary schools as follows:

"Such teaching originated in a nationalistic feeling and demand on the

part of German immigrants, and not in any educational or pedagogical

necessity.

"It aimed to induce the children of Germans to attend the public

schools, where they would learn English and be sooner Americanized.

"For 15 years [now 25 years] past, German immigration has almost

ceased, and other European nationalities, as the Bohemians, Poles, and

Italians, have taken their place numerically.

"The children of the earlier German immigrants are already

Americanized and use the English language freely, and those later

born, of the second and third generations, no longer need to be taught

German in the schools beginning at six years of age.

"It is demonstrated by experience and by abundant testimony that

children neither from German nor from English-speaking families really

learn much German in the primary and grammar grades, that is, from six

to 13 years of age.

"Hence the Commission recommends that the teaching of German in these

grades be discontinued and that the German language be taught only in

the high schools.

"It is admitted that those who begin German in the high school, after

the second year, can keep up with and do as good work in the same

classes as those who have had eight years of German in the primary and

grammar grades and two years in the high schools."

The form of argument that once was valid for including German in the

elementary course of study may now be valid for Polish, Hungarian,

Bohemian and Italian, for the children of the first generation of

these nationalities. Properly done, it is a means of preventing

the children's drifting from the parental moorings. After the first

generation, it would not be needed.

It is impossible, in the limited space at our disposal, to discuss

comprehensively so complicated a topic as foreign languages in the

high school. One group of educators sturdily defends the traditional

classical course, with its great emphasis on Greek and Latin, while

another group as urgently insists that if any foreign languages

are taught, they must be the modern ones. These opposing schools of

thought are profoundly sincere in their conflicting beliefs. Each

side is absolutely certain that it is right and is unalterably of the

opinion that there is no other side of the question to be even so

much as considered. Anything that agrees with its own side is based

on reason; anything opposed is but ignorant prejudice. Under the

circumstances the disinterested outsider may well suspect that where

there is so much sincerity and conviction, there must be much truth on

both sides. And undoubtedly this is the case.

Latin is a living language in our country in that it provides half of

our vocabulary. Pupils who would know English well should have a good

knowledge of this living Latin. If the Latinists would shift their

ground to this living Latin and provide means of teaching it fully

and effectively for modern purposes, it is possible that the opposing

schools of thought might here find common ground upon which all could

stand with some degree of comfort and toleration. When Latin study of

the character here suggested is devised, it ought to be opened up to

the students of all courses as an elective, so that it could be

taken by all who wish a full appreciation and understanding of their

semi-Latin mother tongue. Such a study ought to be required of the

clerical students of the High School of Commerce. In the meantime,

however, all will have to wait until the Latinists have provided the

plans and the materials.

In the new so-called English course in the academic high schools

required foreign languages are omitted entirely. In the third and

fourth years German or Spanish is made elective. This gives rise

to several questions. If the foreign language is studied simply as

preparation for the leisure occupation of reading its literature--the

only value of the course in the case of most who take it--why should

not French be elective also? By far the largest of the world's

literatures, outside of the English, is the French. The Spanish has

but a small literature; and while Germany has excelled in many things,

belles-lettres is not one of them. Another question relates to the

placing of these electives. If one is to study a foreign language at

all, it is usually thought best to begin earlier than the third year

of the high school, so as to finish these simple matters that can

be done by children and gain time in the later years for the more

complicated matters that require mature judgment.

DIFFERENTIATION OF COURSES

Courses of training based upon human needs should be diversified where

conditions are diversified. Uniform courses of study for all schools

within a city were justifiable in a former simpler age, when the

schools were caring only for needs that were common to all classes.

But as needs have differentiated in our large industrial cities,

courses of training must also become differentiated. In Cleveland this

principle has been recognized in organizing the work of the special

schools and classes. For all the regular elementary schools,

however, a uniform course of study has been used. Under the present

administration, principals and teachers are nominally permitted wide

latitude in its administration.

A large part of this freedom is taken away by two things. One is the

use by the city of the plan of leaving textbooks to private purchase.

For perfectly obvious reasons, so long as textbooks are privately

purchased, a uniform series of textbooks must be definitely prescribed

for the entire city. Uniform textbooks do not necessarily enforce a

uniform curriculum. In usual practice, however, they do enforce it

as completely as a prescribed uniform course of study manual. As the

schools of different sections of the city are allowed to experiment

and to develop variations from the course of study, they should be

allowed greater freedom in choosing the textbooks that will best serve

in teaching their courses.

The second condition enforcing a uniform course of study in certain

subjects is the use of uniform examinations in those subjects. We

would merely suggest here that it is possible to use supervisory

examinations without making them uniform for all schools. Different

types of school may well have different types of examination.

Different social classes often exist within the same school.

Administrative limitations probably must prevent the use of more than

one course of study in a single elementary school. But as the work of

the grammar grades is departmentalized, and as junior high schools

are developed, it will become possible to offer alternative courses

in these grades. Those practically certain of going on to higher

educational work requiring foreign languages and higher mathematics

should probably be permitted to begin these studies by the sixth or

seventh grade. On the other hand, those who are practically certain

to drop out of school at the end of the grammar grades or junior high

school should have full opportunities for applied science, applied

design, practical mathematics, civics, hygiene, vocational studies,

etc. When the necessary studies are once organized and departmental

work introduced, it is not difficult to arrange for the necessary

differentiation of courses in the same school.

Finally, courses of study should provide for children of differing

natural ability. Extra materials and opportunities should be provided

for children of large capacity; and abbreviated courses for those

of less than normal ability. In departmentalized grammar grades

and junior high schools this can be taken care of rather easily by

permitting the brighter pupils to carry more studies than normal,

and the backward ones a smaller number than normal. Under the present

elementary school organization with classes so large and with so many

things for the teachers to do, it is practically impossible to effect

such desirable differentiations.

SUMMARY

1. The fundamental social point of view of this discussion of the

courses of study of the Cleveland schools is that effective teaching

is preparation for adult life through participation in the activities

of life.

2. The schools of Cleveland devote far more time to reading than do

those of the average city. In too large measure this time is employed

in mastering the mechanics of reading and in the analytical study

of the manner in which the words are combined in sentences and the

sentences in paragraphs. The main object of the reading should be

the mastery of the thought rather than the study of the construction.

Through it the children should gain life-long habits of exploring,

through reading, the great fields of history, industry, applied

science, life in other lands, travel, invention, biography, and

wholesome fiction. To this end the work should be made more extensive

and less intensive. As an indispensable means toward this end the

books should be supplied by the schools instead of being purchased by

the parents.

3. The teaching of spelling should aim to give the pupils complete

mastery over those words which they need to use in writing and it

should instil in them the permanent habit of watching their spelling

as they write. Drill on lists of isolated words should give way to

practice in spelling correctly every word in everything written. The

dictionary habit should be cultivated, and every written lesson should

be a spelling lesson.

4. The time devoted to language, composition, and grammar is about the

same as in the average city. The chief result of the work as done in

Cleveland is to enable the pupil to recite well on textbook grammar

and to pass examinations in the subject. The work in technical grammar

should be continued for the purpose of giving the pupils a

foundation acquaintance with forms, terms, relations, and grammatical

perspective, but this training need not be so extensive and intensive

as at present. The time saved should be given to oral and written

expression in connection with the reading of history, geography,

industrial studies, civics, sanitation, and the like. Facility and

accuracy in oral and written expression are developed through practice

rather than through precept. They are perfected through the conscious

and unconscious imitation of good models rather than through the

advanced study of technical grammar. Only as knowledge is put to work

is it really learned or assimilated.

5. Cleveland gives more time to mathematics than does the average

city. The content of courses in mathematics is to be determined by

human needs. A fundamental need of our scientific age is more accurate

quantitative thinking about our vocations, civic problems, taxation,

income, insurance, expenditures, public improvements, and the

multitude of other public and private problems involving quantities.

We need to think accurately and easily in quantities, proportions,

forms, and relationships. Arithmetic teaching, like the teaching

of penmanship, is for the purpose of providing tools to be used in

matters that lie beyond. The present course of study is of superior

character, providing for efficient elementary training and dispensing

with most of the things of little practical use. The greatest

improvement in the work is to be found in its further carrying over

into the other fields of school work and in applying it in other

classes as well as in the arithmetic class. In the advanced classes

mathematics should be differentiated according to the needs of

different pupils. Algebra should be more closely related to practical

matters and developed in connection with geometry and trigonometry.

6. History receives much less attention in this city than in the

average city. The character of the work is really indicated by the

last sentence of the eighth-grade history assignment: "The text of our

book should be thoroughly mastered." The work is too brief, abstract,

and barren to help the pupils toward an understanding of the social,

political, economic, and industrial problems with which we are

confronted. It should be amply supplemented by a wide range of

reading on social welfare topics. This reading should be biographical,

anecdotal, thrilling dramas of human achievement, rich with

human interest. It should be at every stage on the level with the

understanding and degree of maturity of the pupils so that much

reading can be covered rapidly.

7. In Cleveland, where there has been an almost unequalled amount of

civic discussion and progressive human-welfare effort, the teaching

of civics in the public schools receives too little attention. It is

recommended that the principals and teachers make such a civic survey

as that made in Cincinnati as the method of discovering the topics

that should enter into a grammar-grade course. Not much civics

teaching should be attempted in the intermediate grades, but it should

be given in the higher grades.

8. A new course of study in geography is now being put into use. The

work as laid out in the old manual and as seen in the classrooms

has been forbiddingly formal. It has mainly consisted of the teacher

assigning to the pupils a certain number of paragraphs or pages in

the textbook as the next lesson, and then questioning them next day to

ascertain how much of this printed material they have remembered and

how well. The new course of study recognizes, on the contrary, that

the proper end of geographical teaching is rather to stimulate and

guide the children toward an inquiring interest as to how the world

is made, and the skies above, and the waters round about, and the

conditions of nature that limit and determine in a measure the

development of mankind. To attain this ideal will require in every

school 10 times as adequate provision of geographical reading and

geographical material as is now found in the best equipped school.

9. Drawing and applied art have been taught in Cleveland since

1849. The object of the teaching is to develop an understanding and

appreciation of the principles of graphic art and ability to use these

principles in practical applications. Where this work is done best, it

shows, in both the elementary and high schools, balanced understanding

and complete modernness. What is needed is extension of this best

type of work to all parts of the city through specially trained

departmental teachers.

10. Where teaching of household arts is at its best in Cleveland,

it is of a superior character and should be extended along lines

now being followed. Manual training for boys should be extended and

broadened with a view to giving the pupils real contact with more

types of industry than those represented by the present woodwork.

11. Elementary science finds no place in the course of study of

Cleveland. The future citizens of Cleveland will need an understanding

of electricity, heat, expansion and contraction of gases and solids,

the mechanics of machines, distillations, common chemical reactions,

and the multitude of other matters of science met with daily in their

activities. The schools should help supply this need.

12. Teaching in matters pertaining to health is assigned little time

in the elementary schools, and the time that is assigned to it is

frequently given to something else. The subject gets pushed off the

program by one of the so-called "essentials." A course in hygiene

should be drawn up, and practical applications of the work should be

arranged through having pupils look after the sanitary conditions of

rooms and grounds. The school doctors and nurses should help in this

teaching and practice.

13. Physical training is given about as much time as in the average

city, but without adequate facilities for outdoor and indoor plays

and games. At present the work is too largely of the formal gymnastic

type. Desirable improvements in the course are being advocated by

the directors and supervisors of the work. They are recommending

and introducing, where conditions will permit, the use of games,

athletics, folk dances, and the like. The movement should be promoted

in every possible way.

14. In the elementary schools Cleveland gives more than the average

amount of time to music, but in the high schools the subject is

developed only incidentally and is given no credit. It is a question

whether this arrangement is the right one, and in considering possible

extensions it should be remembered that there are other subjects of

far more pressing immediate necessity.

15. It is impossible in this brief report to discuss adequately so

complicated a matter as that of the teaching of foreign languages in

the high schools, but some of the most important of the questions

at issue have been indicated as matters which the school authorities

should continue to study until satisfactory solutions are reached.

16. Where school work in Cleveland is backward, it is because it has

not yet taken on the social point of view. Where it is progressive, it

is being developed on the basis of human needs. There is much of both

kinds of work in Cleveland.

17. In a city with a population so diversified as is that of

Cleveland, progress should be made steadily and consciously away from

city-wide uniformity in courses of study and methods of teaching.

There should be progressive differentiation of courses to meet the

widely varying needs of the different sorts of children in different

sections of the city.

CLEVELAND EDUCATION SURVEY REPORTS

These reports can be secured from the Survey Committee of the

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25 cents per volume with the exception of "Measuring the Work of the

Public Schools" by Judd, "The Cleveland School Survey" by Ayres, and

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Boys and Girls in Commercial Work--Stevens.

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