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HIGH SCHOOL
RECORDS AND REPORTS

by

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The Function of Records and Reports

Introduction. The aim of any modern school administration is to produce the greatest possible efficiency in all lines of work within the school system. The primary object is to secure the largest returns for the money and energy expended. To do this in an intelligent manner it becomes necessary to check up in detail on all forms of expenditure and on the corresponding results obtained from each. We can estimate the success and failure, the excellences and the defects, of any school only by having some recorded facts and measurements which we can really use to better the system, the work and the results. This demands records and reports which are accurate accessible and usable.

More than that, these records and reports must be uniform in the units which are used to present the data and in the data themselves. This has been realized for a long time by various educational departments and associations, but the individual principal, the superintendent and his board of education have not appreciated this fact to the extent of taking action in any general manner. As a result, blank forms gathered from all
over the United States, or from over one state, such as Missouri, show a multiplicity of forms and as many ways and methods of keeping the data which are considered essential. For years the National Educational Association, the Bureau of Education and various state departments have worked on the question of uniformity in records and reports, and yet with surprisingly little effect as compared with the aim in view. This has been due almost entirely to the ignorance and indifference of school men in responsible positions. However, the Bureau of Education has formulated a fiscal report which has met with general approval and which will perhaps do more than any one thing to facilitate the comparison of schools in this respect. This Bureau has also recommended a record form for grade work. Yet, much more needs to be done.

**Purpose** School reports published annually are compiled from the records and reports made during the school year, and unless there is something of uniformity in the records and reports kept by the various schools, the reports published from them will not admit of comparison without much laborious reading, collecting of facts and reduction to the basis used in the school desiring to make the comparison. Naturally all this extra work should be eliminated if possible. Each school has to keep the facts required by the state department, the Bureau of Education, and certain recognized educational institutions, and many schools have to keep the same facts for purposes of administrative control. The question then arises, can-
not these schools keep uniform records for these purposes at least, using the same units of measurements and the same terminology in each case? One portion of this paper is an answer to this question, in that it presents and explains a uniform system of records and reports which will show the essential facts for the average school in this state and other states.

Still more vital than uniformity in records and reports perhaps is the "worth while" element. The gathering of educational statistics requires an expenditure in time, money and energy and from a business point of view alone the results to be obtained should be commensurate with the outlay. Two important factors should operate in the compilation of records and reports in every school system. The first is that the aim and purpose in keeping records and in preparing reports must justify the expenditure of the money and energy necessary to do the work in a satisfactory manner. If the service which the statistics are to render is not sufficient to make it worth while, they should not be gathered. This is demanded by the business world and is admitted by statisticians. The second is inherent in the fact that the conditions which determine the aim of certain records and reports, and which justify the necessary expense in one school do not exist in many other schools. For example, it may be of the greatest importance to show statistically that non-promotion or failure in one school is

due to irregular attendance more than to any other one thing, while in some other school such a report because of existing conditions, would have absolutely no justification.

Value of Records  It will be well, therefore, as a foundation for the discussion which follows, to justify the keeping of records and reports in our high schools in the light of these determining factors; that is, to show that there are general fundamental purposes for keeping statistical facts which would justify all forms of necessary expenditure. Since the value of reports only adds to the importance of records the purposes of records and of reports are inseparable. However, in view of the fact that many records are not included in reports, a brief outline of the value of the former will not be amiss. This can best be treated under three heads:

1. By showing that these blanks facilitate and systematize the routine work of dealing with pupils and teachers;

2. That they give a basis for improving the economic efficiency of the administration;

3. That they furnish information for reports and investigations considered of value to the school system or to education in general.

First. This value of records is concerned chiefly with the individual work of pupils and teachers. The facts of the present are not sufficient data for dealing intelligently with the problems that arise; past records are necessary. No teacher or principal can tell whether a pupil is neglecting his present work in a particular
subject simply because he makes a poor showing in the classroom. It may be due to one or more of the following facts: his former teacher's inefficient teaching; his own incapacity for the work; his lack of interest; too many school duties, or too much to do outside of school. For example, a pupil was reported to the writer a few weeks ago for failing in two or three subjects. The reason given by the teacher was lack of study and indifference. An investigation revealed the fact that the pupil had been hurried through his grade work and had been promoted to the high school without being able to pass in all of his subjects in the eighth grade. Another pupil was similarly reported for poor work in American Literature and Caesar, and the true cause was not that the pupil was not working in those subjects, but that he had taken the first year Latin and Rhetoric in a country school, where little oversight was given the work by the teacher in charge. And thus it is that past records will often reveal the true cause of the failure. Likewise such questions as: what subjects would be best for this boy or that girl? How shall this case of disobedience be treated? How shall this pupil be interested in his work? etc., can only be considered and answered wisely by reference to past records in regard to the pupil, his work and his teachers.

The final estimate of the value of a teacher to a school can be determined largely by past records. Other teachers are doing the same kind of work now or have done so in the past, and this makes it possible to compare the
work of a teacher in any system with what she might have done under the circumstances, or with what others have accomplished with the same opportunities. An explanation of why certain pupils are doing poor work in higher Algebra, Caesar, or second year German, or why they do so much memory work and so little thinking in certain subjects might be had by referring to the character of teaching done by the teacher under whom they did their preparatory work in those subjects or during the previous year.

This head must also include the facts connected with Vocational Guidance. More and more our high schools are beginning to realize they have not fulfilled their mission in the world until they have given the boys and girls who come under their direction the best possible preparation for real life. It has been noted that 70 per cent of all the pupils entering the high schools in this country make a choice of work and leave school to begin upon it before graduating. Furthermore it is a fact that these pupils have not sufficient information about the vocations open to them and the requirements for success in each to admit of a wise choice. The circumstances of the moment determine the majority of the decisions, and as a result we have many misfits in all callings of life. To prevent this waste of human talent and lives, information in regard to the world's work and the pupil is necessary. The facts about the vocations are being rapidly furnished by the business and professional

Those concerning the pupil must be gathered by means of a rather detailed record of each pupil, giving an insight into his aptitudes, ambitions and capacity. In short, the vocational guidance record is needed to give a basis for intelligently advising pupils, in the light of their vocational tendencies, concerning the best work for them in school and concerning the possible fields of endeavor for them in the world after they leave school.

Economic

Second Value

The value here is concerned chiefly with fiscal matters and contains the data which are of most interest to the tax-payers. The record of expenditures always serves the purpose of showing where and how the money has been spent, but it should do much more than that. These records should be kept uniform as to units and their arrangement for all schools of the system and for the same school over a number of years. (See page for items.) By so doing it will be possible through comparative study of such records to locate waste in various lines. This is especially true of fuel, equipment, etc.; or, in more general terms, in instruction per capita, in general control, in maintenance of plant and its operation. However, to save money would not justify the keeping of such records if that were the only aim in view. For one school to spend less money than another is not difficult; nor is it to the school's credit if that is all that can be said. The aim should be to produce the most efficient school for

3. Bloomfield, "Vocational Guidance of Youth", p.46-64
the money expended; efficiency should be the primary aim and should never be sacrificed for the sake of economy alone. For this to be done in a satisfactory manner, fiscal matters should be reduced to some common basis and expressed in large units common to all schools in order that the efficiency of the administration of one in all particulars can be measured by that of other systems. The value of these data will be more fully and clearly shown in a later discussion of the content and arrangement of fiscal records and reports.

For making reports

Third. The third value of records is by far the most important and is the vital purpose for collecting and keeping such facts from year to year. It is necessary to make reports concerning many matters each year for the good of the school and for educational purposes at large. Likewise it is necessary to have data for an intelligent investigation of important local problems which may arise at any time. This demands that a comprehensive, accurate, serviceable system of records be kept each year and filed for future reference. Records for this purpose cannot be dispensed with in any case.

Value of Reports

It is in our study of reports that we are confronted with the most important phase of educational statistics. Also it is the reports of schools that are most severely criticized because they often do not admit of comparison with reference to the items of importance. The failure here seems to be due to two things: (1) poor editing and
indexing, making it impossible to find any one thing easily, and (2) the lack of uniformity either in form, content or units, making comparison without considerable reduction and interpretation an impossibility. Hence it is evident that if reports are to made, they must fulfill their purpose sufficiently to justify their preparation.

The aim in making reports is three-fold.

(1) To furnish individuals, educational institutions, state and national departments and Bureaus with facts which will serve as a basis for determining the condition of the school, for ascertaining its rank with other schools of the country, and for comparing certain schools in matters of vital importance.

(2) To inform the members of the board of education, superintendents, principals and teachers concerning the exact condition of the school system, of the needs and defects, and of the character of work done in each line.

(3) To acquaint the intelligent public who support the school with the degree of efficiency of the entire system in its various parts and with the methods and plans for increasing such efficiency.

The first purpose is a very important one and does much to increase the efficiency of any system. Our schools are continually being compared by other institutions, universities and colleges, neighboring schools, and various educational departments by the way in which they group the facts obtained from the reports made to them by the school men. This report is often made in detail and necessitates a rather complete set of records to meet the demands made by it.

The second purpose has reference to the school authorities who are in direct touch with the facts presented.
Much of the practical value of reports to a school system is derived from short definite special reports concerning some particular matter of vital importance to the work in question. For this reason reports made from the records during the year while the matters discussed are subject to revision or improvement are by far the most important to those having the work in charge. The annual report is valuable to the higher officials who wish to make comparisons and determine the best policy for the coming year, but for working purposes the special report on defects and the possible solution in the light of statistical facts is invaluable and well worth the time, energy and money spent upon it.

And finally the report to educate the intelligent public is in no way inferior to the others. In fulfilling this purpose the report is something of a statement of the outlay and the results for the year's work. There is no group of people that has a better right than the taxpayers to know of the school and its work. The interested citizens should be informed of the school's condition now in comparison with former years, its condition now in comparison with other systems of similar size and opportunity, its defects and means of remedying them. Likewise, they should be told of the obligations of the community in relation to the various problems confronting the educational leaders at any time. The school reports in this capacity touch upon the vital matters which concern the community and should be made educative. The value of a report to
the public as such is two-fold: first, the school officials will do their duty better and more determinedly if they know the public is watching them and is going to demand a detailed statement of the accomplishments for the year. Especially is this true, if they know the work is to be measured by standards in other schools. Second, it will be a means of reform and progress in the community. Only as the community is kept educated to the proper standards of a school system will they realize the importance of change or of providing the means necessary to increase the efficiency of the system. Hence, the report made intelligible to the public for this purpose, cannot be dispensed with and deserves much more care in preparation to fulfill this specific requirement than is usually given it.

Briefly, to summarize, if records and reports are to justify their keeping, they must simplify and improve the routine work of the school, disclose the defects and weaknesses of the system and suggest a solution of the difficulties as they arise; they must aid the administrative officers in determining the general policy of the school and in giving the public the highest type of school for the money expended; and they must inform the interested public and institutions concerning the efficiency of the school in its various departments.
Chapter II

Recording and Reporting Facts

A. What Facts Should Be Recorded and Reported

The brief survey of the object in keeping records and reports shows the importance of compiling these facts for a definite purpose and with reference to the "worth while" element, and at the same time suggests two of the most important problems connected with educational statistics. The first problem is to determine what facts should be recorded and reported, and the second is to devise a satisfactory and efficient method of collecting and keeping them. It is a lamentable fact that many superintendents and principals do not attempt to solve these problems in any systematic manner, but follow the plan of their predecessors or their neighbors because of its simplicity or realness to them and without regard to its real efficiency. Too often school men adopt these plans from other schools without any attempt to find out whether they meet any suggested standards or whether they will furnish the information which will be required of the school during the year. And as a result of this unscientific method of keeping records and reports, many school men find themselves unable to fill out blanks sent them by educators and institutions and often times without the data necessary for rendering an efficient administration.
Our first problem, then, is to determine the exact items that should be kept by our schools, and to give a satisfactory reason for keeping them. It must be borne in mind, however, that the specific facts suggested now may not be sufficient or may not be unnecessary in the near future. The discussion which is to follow is intended primarily to point a method for determining the data that should be included in records and reports, and with the underlying principles in mind it should not be difficult for any superintendent or principal, in the future, to exclude or include various items to meet the demands of our educational system as its work becomes more and more efficient in all lines.

FACTS CONCERNING PUPILS

In considering the question, what facts should be recorded and reported? it will be well to investigate first those relating to the pupils, and second those relating to the high school in general. In seeking a method for determining the facts which should be kept in regard to the students in the high school, we have but to investigate the purposes which these facts are to serve, and choose the material which will best enable the officials to realize such aims or purposes. These are to supply facts for:

(1) National and state educational statistics;

(2) Use in the school system itself, for
   A. Administrative purposes,
   B. Vocational Guidance,
   C. Reports and general publicity,
   D. Research in education.
The requests for information in regard to individual schools, of the National Bureau of Education and of the state departments of education, will be treated separately for the sake of emphasis. The advisability of keeping the facts called for by these departments is apparent; the information thus gathered and reported is used specifically for the betterment of education in general and as such should be furnished in detail in every case. The National Bureau of Education at Washington calls for the following facts concerning pupils in the high schools on the blank forms which it sends out each year:

- Enrollment, boys and girls, total (net registration, excluding duplicates);
- Aggregate attendance (total number of days attended by all pupils);
- Days school was actually in session;
- Average daily attendance;
- Enrollment of students (boys and girls) by subjects.

The state statistical blanks call for information a little more in detail, and, in addition to the above the following matters should be available in the records of each system:

- Number graduating last year - boys, girls, total;
- Number graduating last year with 16 units or more - boys, girls, total;
- Number in each class of the high school - boys, girls, total;
- Average number of pupils per teacher;
- Average number belonging (bona fide students when report is made);
- Number of non-resident pupils - boys, girls, total;
- Number of short course pupils in state high school;
- Number of pupils in high school doing eighth grade work in any subject.

All of these items are not required in any one state, but 4. Blanks were examined from Illinois, Iowa, Michigan, Minnesota, Wisconsin, Ohio, Indiana, Missouri.
all can easily be shown by one form of records as will be explained later.

Admiral.

The facts needed for administrative purposes may be grouped under two general heads, (1) for routine work in the high school, and (2) for purposes of general control and management. The routine work calls for the following items in regard to each pupil:

- Name, birth and residence of pupil;
- Name, address and occupation of parent or guardian;
- Date of entrance;
- Date and cause of leaving school - stop, transfer, suspended, etc.;
- Date of graduating with units specified;
- Name of school entered from;
- Scholarship in each subject taken (periodic record of each year);
- Attendance and deportment;
- Physical and mental defects;
- Daily schedule of each pupil, showing each subject the pupil is taking, time and place of reciting each, and of spending his time free from class work during school hours.

This material is needed for getting in touch with pupils or parents at any time. The address of child and parent and the daily schedule will enable the principal or other official to locate any pupil in the building at any period of the day. This is often necessary in case of special conferences or special duties. Date of entrance, date and cause of leaving and the date of graduating and units received are matters of permanent record and should be kept in regard to every student for future reference or investigation. Name of school from which the student comes and the record of work, are necessary to judge of entrance credits and perhaps at times to explain the character of work done by student during first year or
two; the scholarship record is for reference at any time when advising and correcting a pupil. The other matters are self-explanatory.

Use of such facts are concerned more with reports made from the records than with any other thing. These reports may be briefly mentioned as special reports on attendance, discipline, punishments, truants, medical inspection, enrollment in various courses and in different subjects by departments, and failures. These matters are such as to suggest problems for the administrator in his study of various systems to determine the efficiency in each line of endeavor when compared with his own system.

Vocational Guidance The third group of facts is collected for purposes of vocational guidance. In this connection it would probably be well to mention the fact that vocational guidance is not a problem of the cities or the large towns alone. Every community, in which boys and girls are developing into men and women who must undertake the work of the world, has this responsibility resting upon it. Indeed the smaller towns need intelligent vocational guidance more if anything than does the city, because of the increased opportunity naturally available to the youth in a large city for learning of a large number of vocations and of his interest in any one of them. The boy or girl in a small town knows almost nothing of any vocation besides the ones that happen to be practiced by members of the community. This was amply illustrated by an inves-
tigation in a town of less than 1500 inhabitants. About 65 per cent of the pupils in the high school chose or stated preferences for one of two or three common lines of work such as teaching, farming, or business. Some few suggested law, medicine, engineering, clerking and office work. Only about 10 per cent gave a sensible reason for the stated preferences; all others seemed to have made guesses with no definite reasons therefor. A considerable number were at sea and desired aid and help in the matter. Many had made a choice and were totally ignorant of the demands to be made of them in preparation and experience to succeed. All of these facts only go to show the great need of rendering helpful assistance to pupils in their efforts to find their place in the world, and that such guidance is a problem for the small as well as the large towns and cities of our country.

The facts shown by records for this purpose would be determined largely by the one having the work in charge and by the method of guidance which is used. Any plan, however, requires facts in regard to two factors which are essential to satisfactory work. These factors are the pupil and the vocations. This information is to be used by the counsellor in aiding boys and girls in choosing suitable work while in school and in advising them concerning a suitable vocation after leaving school. The records of the counsellor should show the following data in regard to each pupil:

6. Ibid. p. 42, 46.; Parsons, "Choosing a Vocation", p.27-44.
Name, age, residence, nationality of pupil;  
Name, occupation, address of parent;  
Plans of pupil and of parent for the pupil’s future;  
Hereditary facts if any;  
Likes and dislikes in school work, why dislikes;  
Economic and environmental conditions of home life;  
Special training or experience of pupil in any lines of  
the world’s work;  
Personality and deportment of pupil in and out of school;  
Temperament, morality, character of pupil;  
Habits, health, strength, physique, etc.

If these matters were kept by a Vocational Bureau,  
it would be necessary for the school authorities to make  
special reports in regard to the pupil, such as scholar-  
ship in various departments; attitude toward work; toward  
student activities; toward fellow pupils and teachers,  
and other matters of similar nature. If the guidance  
were given by some teacher or principal, the official  
data of the school would supply a large part of these  
facts.

Specific use  
A word concerning the importance of some of these  
items seems advisable. The nationality of a man in a large  
measure determines his chances for success in some professions,  
and also in a way suggests possible fields of work for  
him. For example, certain nationalities are adept in  
certain vocations and have a natural fitness for the  
field of work – the Jew, for example, in the mercantile  
world. Plans of parent and of pupil are sometimes at  
variance, and working with a child when one had no insight  
into both of these factors would be in the most of such  
cases working with a one-sided and often misleading im-  
pression. It is not infrequent that a parent has am-  
bitions for the child beyond his possibilities or means,
or that the child has; while the other party in the case maintains a very sane estimate of the pupil's future. Hereditary facts refer to the profession or vocation that has been followed by a number of the family in the last few generations. These facts often give an insight into special talent or aptitudes; they also often throw some light on the child's or the parent's ambition for a certain vocation, and they not infrequently reveal some "pull" through relatives for rapid advancement or special preparation for the work. These matters will be advantageous in final analysis of vocational fitness and possibilities and may be determined by personal interviews with the pupil or parent. Likes and dislikes with reasons will often disclose special aptitudes and perhaps the real talent that should be developed. This applies more often to the mediocre student who shows a decided preference or advantage in certain lines. For example, a boy who disliked and could not handle mathematics should never attempt Engineering; or one poor in English and defective in his speech should avoid the law profession or the ministry, etc. Economic and environmental conditions would often determine the scope of the work that might be undertaken; the possibilities of the necessary preparation, money for school, opportunity for entering work with a chance to advance, etc. The other matters are ones that need no discussion to show their significance in judging of the fitness of a boy for various things in life. Each is of more or less importance in signifying special aptitudes, or defects which
would hinder or help in the work chosen.

In regard to the vocations a record should be kept of the opportunities; of the requirements in training and in talent for success in each vocation; of the salaries at various stages and of the manner of entering the field of work. This applies to all sized cities, as stated above. In connection with this work there should be an Employment Bureau, if possible. This Bureau should list vacancies and aid pupils in getting the work they seem best fitted for on leaving school. The individual record of each pupil should be extended as he progresses in life; at least for the first two or three years, for the purpose of testing the efficiency of the guidance given in those cases. It would enable the Counsellor to improve the methods of his Bureau in all matters of guidance.

Publicity. The fourth purpose for recording and reporting facts is for general publicity. Reports to the public should be prepared in order "that the layman of average intelligence, but of more than average interest, might have the information he seeks". These reports should be concerned chiefly with the statistics and their interpretation determining the present conditions, showing wherein the work falls short of the average or the standard, and explaining methods for improving the present system. This calls for no new facts, which should be kept in the records, but it does call for a varied interpretation and presentation of the facts already mentioned and those to be mentioned which should be included in the report to the public.

In the fifth and last group of facts which should be kept in regard to high school pupils we must speak of those relating to research in education. Most of the facts which are necessary for this work are not felt generally at the time such investigations are first made, and for that reason need not be seriously considered and cannot be anticipated by the average school. It is only when such problems are ones of state or national importance that the superintendent and principal would be justified in committing themselves to detailed book-keeping for the sake of research or special investigation, not affecting at the time their own school system. It is needless to do more than mention the fact that much of this work is concerned with certain data kept for other purposes over a number of years. It, in this case, is a matter of interpretation and application of these facts for the purpose of solving new problems or suggesting their solution.

For example, it need only be mentioned that a few weeks ago a Missouri superintendent received a request from an investigator apparently working on Vocational Guidance or vocational tendencies as shown by work in the grades. The blank form which was enclosed called for the following facts and wished them for the past twenty years, if possible:

Names of the best pupil and the poorest pupil in each year in the first grade that uniform grading was used. (This meant 40 pupils for the 20 years).
Names of the subjects in which each pupil excelled and failed in, with corresponding grade; (This was to be recorded for work in grades and in the high school, one grade being reported for all the grade work in the best and poorest subjects, and one for the high school work in the same fields).
Course in high school.
College the pupil entered, nature of work he undertook.
Work he finally entered.

All of the above is shown by a good system of records except the last two items and these should be recorded. The former should be recorded when the pupil's record is sent to the higher institution; and the second should be recorded in connection with vocational facts. And so it is with many research problems in education; the information needed is usually shown by records, and if not could not be anticipated in the connection in which it is to be used. Finally, it might be said in this connection that unless the purpose in view were of sufficient importance to the school system or educational work in general to justify the expenditure, no school should collect data for research in education as such.

FACTS CONCERNING HIGH SCHOOL IN GENERAL.

The facts which should be kept with reference to the high school in general aside from those mentioned in regard to the student alone, will be investigated in three particulars: first, with reference to national and state statistics; second with respect to school administration, and third with regard to publicity in general.

National statistical facts require that school records show data in regard to the following matters:

- National statistics

  - Number of administrative and supervisory officers.
  - Number of teachers (including regular, special and model teachers who devote more than half time to instruction.)
  - Number of different individuals employed as teachers (males and females).
  - Number of librarians and assistants, physicians, nurses.
Officials and Assistants (con.)
Annual salaries of teachers, (males and females)

Buildings.
Number of rooms and sittings in each building
Number of buildings, not used for school or special activities, such as office buildings, ware houses, etc.

Fiscal reports.
Financial report, prepared in accordance with the standard form sent out by the Bureau of Education at Washington. The general form of this report is suggested below.

I. EXPENSES
1. Expenses of general control,
2. " instruction,
3. " operation of school plant,
4. " maintenance of school plant,
5. " auxiliary agencies,
6. " miscellaneous nature.

II. OUTLAYS
1. Capital acquisition and construction.

III. OTHER PAYMENTS.

IV. RECEIPTS.
1. Revenue,
2. Non-revenue.

V. VALUE OF SCHOOL PROPERTIES.
1. Value of sites and buildings,
2. Value of equipment...... Total value......
3. Interest on value of school plant.

State Statistics
The additional facts for state statistics are:

Teachers and Courses.
Number of teachers in various departments.
Name of each teacher with subjects she teaches.
Certification, education and experience of each teacher.
Name and salary of superintendent and principal.
Total salary and number of assistants.
Number and name of subjects taught.
Needs of school and character of instruction.

Texts.
System of supplying texts.
List of texts used in each subject with supplements.

Equipment.
Number of volumes in library.
Value of library, and amount spent for library during current year.
Value of supplementary and reference books for teaching.
Value of equipment for different subjects and amount spent during current year.
Dis- trict
Assessed valuation of district.
Population of district.
Rate in mills of your school tax.
Bonded indebtedness of your district.
Miscellaneous:
Janitor's salary per month, months employed.
Kind of fuel and cost per year.
Method of heating each building.
Kind of ventilating in each building.
Number of class periods per day.
Length of class periods.
Length of school term.

It might be a hard matter to determine the value of some of this information if reported, but it is shown on the blank forms which were examined and the schools must somehow report the information if they are to serve the cause of education as interpreted by the state departments.

It is not the purpose here to justify the state departments in their requests but to suggest a system of records which facilitate the work of the officials and make the system more efficient, it used intelligently. Hence I shall simply enumerate the facts demanded on the assumption that the state and national departments must be given the information they call for.

Administrative Purposes
The information, in addition to the above, which is needed for administrative purposes, is very meager. It is concerned chiefly with reports of principals and supervisors with reference to the work of various teachers; an investigation of the results from the outlay in the various departments; the course of study, daily program; student activities in regard to their resulting benefits to pupils, and to their relation to the school and its work; and the conditions regarding the government and organ-
ization of the high school.

**Publicity.** No additional facts need be kept for the purpose of publicity other than a record of statistics in regard to other expenditures of the community and the returns realized from them, and in regard to other school systems - for the sake of comparison.

In addition to the above, which is considered suitable for an average modern school system, it should be remembered that many items may be necessary for a careful investigation of special problems of local importance. These are problems, however, which cannot be anticipated and which cannot be considered in a general treatment of records and reports under natural conditions. Each superintendent and principal confronted by these local problems might profitably proceed with them in accordance with the principle determining the method of procedure in this treatise; namely, unless the purpose in view seems to justify the necessary expenditure for statistical solution, the investigation should not be undertaken.

**B. HOW RECORD AND KEEP THESE FACTS.**

The arrangement and recording of the facts shown by records and reports both in their compilation and in their use should depend upon two factors; efficiency and economy. We are told that the fundamental aim of educational bookkeeping is "to accomplish far more than is now accomplished ....... and yet with less expenditure of time and money."\(^8\)

\(^8\) Snedden and Allen, "School Reports and School Efficiency", p. 9.
If this means anything it means that the thing of primary importance in educational statistics is more efficient records and reports, and that the secondary aim should be economy in time and money. First, we must evolve an efficient system and then while maintaining such efficiency we must reduce the necessary expenditure in time and money to a minimum. Further we learn that an efficient system must be comprehensive, accurate, definite and complete; it must show all the facts which will be needed and show them in the most convenient, durable and usable form. And as regards the other factor, economy, there is one thing which is of primary importance and that is uniformity throughout the entire system in the school, in the state and in the nation.

Briefly stated, then, the problem here is to suggest methods for arranging and recording the necessary facts that will produce a system which is uniform throughout, which presents all the facts required, and which will present them in a convenient, durable and usable form.

**Form of Records**

First, the most satisfactory form in which to keep these facts will be considered. Are they to be kept in bound volumes, in loose leaf form, in card catalogues, or in some combination of them? The chief merit of each seems to be as follows: Bound volumes are the most satisfactory to prevent loss of any particular record or any substitution for original records. The loose leaf form has not the advantages mentioned for the bound volume in that it is similar to the card catalogue in this respect,
and it has the disadvantages of the bound volume in handling at the time of entering or consulting any record. The card catalogue is the most satisfactory for handling, for expansion, and for keeping in order. For these reasons it is gradually taking the place of the books when such records can be kept on cards (this is true in all lines of business) provided it does not contain primary data in regard to fiscal matters. The book form always has the advantage in that the same number of records will occupy much less space, measured in thickness only, than in the card form, and in that they never require a special case for filing. On the other hand expansion is possible only by division of such records according to the limit of the book, and the records are not so accessible, durable and usable as in the card form. With reference to expense the card catalogue is the cheaper, even considering the necessary filing cases.  

Hence the only advantage of the bound volume which needs considering is that of preventing the destruction or substitution of records, because the other matters seem to be well balanced. The small space of bound volumes is easily offset by the increased efficiency of the cards in serving the purpose of the system. The filing case and the binding are equally balanced except that the former is suited to expansion while the latter is not readily so. With reference to the danger of loss of records, we need to note the fact that the only parties having access to these
permanent files are the principal, the clerks under his supervision and perhaps some teachers; (assuming records could be locked in case if necessary) all of whom would be interested in preserving not destroying such records. Hence it would seem that the danger of loss or alteration of the records is practically nil and as a result that the book form has no advantage in this respect over the card system which needs to be considered.

It is of course evident that personal preference might install the volume system rather than the card system, or that the present volumes would make a combination of cards and books advisable, but in view of the above discussion, this paper will deal with only the card system for keeping the records and reports needed.

Incidentally, it might be mentioned that the financial book-keeping should be done in bound volumes when dealing with original data; beyond that, it is unimportant even in fiscal matters, and the most convenient form should be adopted.

By way of summary, then we may say that the card system, for all practical purposes, is more efficient than any other for keeping the necessary data, and that it is also much more economical in time and money when we consider the increased efficiency and the fact that the school records are to be compiled and preserved as long as schools last. The superiority of the card system in all other respects than the three mentioned above is conceded by all familiar with the various forms and need not be dealt with
Factors in compiling facts. Any system of records kept either in card form or in book form can be very ineffective and impractical if prepared hastily and without proper consideration of a few essential factors. Hence, it will now be necessary to take up minor methods and devices which make for uniformity throughout the system and which at the same time greatly aid in saving time, energy and money. Incidentally it may be noted in the following that these factors if consistently observed in preparing the record forms will vastly increase the serviceableness and convenience of the different records.

1. Size and Form of Cards. All cards should have one of the following dimensions: 3" x 5"; 4" x 6"; and 5" x 8". These are the standard or regulation sizes for all ready made cards and card filing cases. This should be observed in every case possible, as odd sized cards demand made-to-order filing cases and cannot be found in stock at any place.

In case the information shown on the card is such as to demand a large card or is of a private nature, a folding card can be prepared which when folded will be suitable for filing in a standard case. (See exhibit , p. )

The school in a large measure determines the size of the card. If the school is small and promises little if any growth, there will be no need for much of the information shown on the following blanks; also there will
be little need of many of the record blanks shown in chapter III. It would be poor policy to install a system which could not be made to expand with the school; likewise it would be a waste of funds to put in a complete system where the school will never make valuable, if any, use of all such record forms. Thus as the size of the school determines in a measure the amount of data which must be recorded on some forms, it would to that extent determine the size of the card.

Data. Necessary data determine the minimum size of a card. Certain data must be recorded on certain cards and the cards must be of sufficient size to insure convenience in filling them out and in making further use of the information they show. Facts of the same nature should all appear on one side of the card in order that it would not be necessary to reverse the card to get all such facts. Whenever the facts are in two closely related groups they can be more conveniently placed on the two sides of the card than on a single larger card or on two cards. A good example of this is the scholastic and personal record of the pupil as recorded on the student record card. (See exhibit, p.)

Use. Other things being equal, the use to which a card is to be put will figure largely in determining its size. If it is to be handled much outside the office, carried around, or mailed, the card should be small, and suitable for mailing in an ordinary envelope, 3 5/8 x 6 1/2. This would suggest a 3" x 5" card or at least nothing larger
than a 4" x 6". If the data demand a larger card and still should meet these requirements, a folding card suitable for either of these filing cases should be used.

(See exhibits pp, )

In the case of privacy, such as the student's report to parents, the folded card is much more satisfactory than the larger one. It is more convenient for handling by pupils and teachers if 3" x 5", and if it is folded it can be filled out, and checked on its return, much more quickly than if it were a larger card enclosed in an envelope, for it can be opened and closed much quicker than it can be taken from the envelope and replaced every time the card has to be consulted.

II. Sex Distinction.

Sex should be distinguished by some mechanical means, in order to save time and to prevent error due to peculiar names, careless writing, or the omission of Miss or Mr. This is best done by the color of the card; white for girls and colored for boys. In the case of all individual cards for boys and girls, (male and female in general terms) the cards should be uniformly of two colors.

III. Title of Card.

The title of the card should never occupy the main top space of the card causing all other words to be placed too low for convenient filing by them. The title can best be placed in the upper right hand corner of the card; thus utilizing the space most often left blank, as the name of
the pupil, school, etc. seldom requires the entire top line. See Fig. A, below taken from a card of the Boston Elementary School Record System.) The bottom of the card, if reserved for special facts, should deal with explanations and signatures - its usual service.

<table>
<thead>
<tr>
<th>1. Last name</th>
<th>2. First name</th>
<th>ELEMENTARY SCHOOL RECORD SYSTEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Place of birth</td>
<td>4. Date of birth</td>
<td></td>
</tr>
</tbody>
</table>

(Fig. A)

IV. Headings. The headings for all blanks to be filled in by writing should be placed in small print near top of space so that all of space can be used for writing. (See Fig A, above)

In all tabulations and headings for columns and blank spaces for writing, the titles or headings should be printed horizontally if possible, other things being equal. This would prevent error in reading title and would never require turning card sidewise.

All headings of spaces, columns or lines should be numbered to facilitate use of headings in explanations, in transferring data, and in preventing errors. The number should be placed at the beginning of the heading or just above it. In case the numbers reached any considerable size, letters could be used for facts of a certain nature.

Indeed it is recommended for entirely different kinds of
data as it prevents the possibility of mixing any items of the two kinds. Such numbering greatly saves time in every way. (See Fig. A, p. 32)

V. Filing Data (word or date).

The word under which the card is to be filed should be placed in the left upper corner of the card, as near the top as practical for ready detection in a card file and not close enough to the top to be effaced by ordinary handling of cards while looking through the files.

If cards are to be filed by dates, the date should appear in this same corner, near the top and subject to the same limitations as the word. Date or word must be plainly, legibly and correctly written.

VI. Dates. All dates should be written -- 1912-2-15, the month being placed in the middle. The important fact in practically all dates is the year, and for that reason should appear first. This manner of writing dates should be uniformly observed by officials and clerks throughout the entire system -- Year - Month - Day.

VII. Pupil's Name. Names of persons should always be written with last name first; - "Smith, John R.", and never, "Nohn R. Smith". This rule should never be violated on the records where the name is of importance, for it is always the last name which is the determining factor. When a pupil is filling in his own name, this manner of writing the name is not expected and should not be required, for the ruling would not be consistently observed and thus would
lead to unnecessary error and confusion in the office.

VIII. Totals. All totals should be recorded in the space nearest the titles of the columns or lines. In all records, after they have been once determined, the totals are the important facts. Other data on the card take second place with reference to them for all practical purposes. Hence the totals should be expressed in the first space after the title on horizontal lines, and in the first space below the title in vertical columns. The old method of putting the totals as far away from the title as possible is a great waste of time in all future use and also a great source of error. (For examples, see exhibits pp )

IX. Printed matter. The actual handwriting should be reduced to a minimum by printing as many of the facts required as possible; only the absolutely necessary words and figures should be left for writing in by hand. For example, on the report cards the names of each study pursued by the child should be printed so that only the grade made by the pupil would have to be inserted. Likewise, the name of the pupil should never have to be written a second time for the same purpose during the year, as is sometimes the case in class books and registers. Another means of lessening the handwriting is in such matters as the following: instead of inserting the heading "resident pupil?" with a blank for "Yes" or "No" to be written in, the fact may be as satisfactorily determined by scratching out one of the two words, "resident non-resident" which should be printed in proper space.
X. Arrangement of Data.  Headings calling for primary data should be arranged according to their importance in the system.  For example, name of pupil, date of birth, and address are important facts about individual pupils and should come among the first of the primary data collected concerning the pupil.  This should apply to all forms for collecting primary data.

As a larger division of the primary data, related facts should come together on a particular part of the blank.  This is plain when we consider the following related facts; name, age, and address of pupil; name, occupation and address of parent; and such facts as date of entry, entered from, date and cause of leaving, etc.  Within each such group of related facts the items should be arranged in the order of their importance.  (See exhibit , p. )

Facts which appear on a number of cards or which are copied from those collecting the primary data to those of permanent record should be similarly situated on each card.  That is, when facts appear on more than one card, they should have the same location on each card with reference to other facts; at least, they should appear in the same order as on the original card.  (See exhibits , pp and note the arrangement of the data in each case.)

Especially is this arrangement of like data on all blanks using such data a very important factor in progressive forms of either records or reports.  By this is meant records or reports which show summaries of several
reports. *(See exhibit , p .)* For example, the order of the subjects on the year card, the report card and the record card of the pupil should all be the same to facilitate copying from one to the other. Another example is the order of the double-classification of items and their location on the monthly-yearly reports cited above.

**XI. Filling in Data.** The facts on all official records should be recorded in a plain, legible hand. Figures should be accurate. All names should be complete and correct.

Responsibility for the correct and satisfactory filling in of data must be definitely placed, and is most satisfactorily vested in one official, for then the party responsible for losses and errors can be definitely and immediately located.

Students are probably most satisfactory for clerical work; they should be reliable, accurate and neat. The greater the speed, in addition, the better.

All work should be checked over by the one responsible for the work, or by one whose judgment he is willing to accept.

**XII. Place for Data.** A place should be provided in the records for recording data when it is first compiled at any time during the year. It is no uncommon thing for school officials to spend hours or days collecting data for reports sent them by educators and institutions and to keep no record of such data on file. During the year in Missouri every superintendent or principal has to enumerate many
things such as the following; number of pupils in each
class in the high school; number in each subject taught;
number of volumes added to the library during current year;
value of equipment purchased for each subject; etc. All
these matters are determined at least once if the school
presents the state statistics required of it, yet no record
is kept of such matters from year to year in usable form,
and in many cases a second blank calling for the same in-
formation during the same year would necessitate another
complete compilation of the facts required.

There should be a place for all such data somewhere
in the records and the facts should be recorded as they are
compiled for the first time. There are two advantages
here: (1) The official will always know where these data
can be found at any time during the year; and (2) he can
easily determine whether it has been prepared during the
current year or not. It also makes comparison for a
number of years possible.

C. REPORTING FACTS

Some reports, such as the monthly report of the
teachers and principals and student reports to parents,
are really records of the school which are filed for fu-
ture reference in making official reports concerning the
condition of the school. Hence, all that has been said
concerning records must be considered as applying to this
form of "report".
In the matter of reports to the public, however, the principles which guide the school principal or superintendent are varied and numerous when the whole field is considered. There are some though which are fundamental in determining the scope and form of the report, and as such the following should be observed:

1. Only such data should be collected and such reports prepared as will tend to answer, either now or in the future, questions bearing on educational efficiency, and serve the purposes of school administration, either directly or through the indirect means of publicity, and
2. Only the forms should be used in making reports which will present most effectively the facts to be impressed upon the audience.

In the compiling of all reports, it should be remembered that school reports published at the present time independently throughout the country, because of the lack of uniformity, are "nearly useless for purposes of useful comparison".

In this connection also should be mentioned what has often been referred to as the "cycle plan" of reporting on schools and the work accomplished. There are many general matters which should be published in each annual report, but in addition to these there should appear, if there were sufficient justification, a rather thorough presentation of particular branches of the school work.

For example one year might be taken up with a very thorough investigation of the course of study, of the methods of

teaching certain branches, of the work done in certain trade or technical courses, or of vocational guidance and in such event a rather detailed report should be made on the work as revealed by the investigation. Such reports on these topics would not be of use or perhaps of any service to the school if they were published in full every year. In view of this fact, reports on these larger problems should not be made in detail except once in three or five years, when there would really be some valuable results to publish. Hence by the cycle plan the various problems could be treated in a full manner every four or five years and such reports would be much more valuable to the school issuing them and to other schools attempting similar work. All important problems cannot be intelligently dealt with during each year, and naturally concentration on a few with a view to solution in the most satisfactory manner possible would be productive of the best results.

Many school men fail to utilize one of the best and most satisfactory means of making reports in regard to their schools - the newspapers. In so doing they are neglecting one of the best means of educating their patrons up to the standards they wish supported. If the principal or superintendent would make it a point to keep the interested citizens informed, through the medium of specific, intelligent, comprehensible reports in the newspapers, concerning the proper standards for the school in its work and also the means of attaining these standards, he would
have much less difficulty securing the support he often needs at crucial periods of his school work.

**Important Factors**

There are a number of factors which will materially improve reports if seriously and consistently observed. Among them a few will be mentioned here.

**TIME OF PUBLICATION.**

When reports should be published is a matter which cannot be fixed. This is determined to a large extent by the use to be made of the information. If the facts are published to serve as records, one time is about as good as another, but if to shape the policies of the school, the report should be out before the beginning of the school year. If it is known at the beginning of the school year, just what problems are to be worked out during the year, the work can be made to serve such ends. But if the report comes out during the year, it will have little influence in shaping the work of the school and will have lost its chief value in this respect. If the work of the year is made to answer certain important questions, and the results are recorded each month during the year, it should not be a difficult matter to publish a report on such work at the close of the school year. Also, there is no time when the problems of the school are more real in the minds of the school officials than at the close of the school, and it is at such time that the author can best set forth the needs of the school, best raise new and important problems for the coming year's work, and best report on the work of the past year. The annual school report should, other things
being equal, be compiled and published immediately after the closing of school, at least by the middle of July. This has two distinct advantages: (1) the subject matter is then most interesting, and (2) the recommendations of the report and the problems it suggests can aid in shaping the policies of the school for the coming year.

In the case of special reports, it is apparent that they should be published when their information is most needed. There is no reason for holding back important facts until "the subject matter has lost its interest", in order that they may be incorporated in the annual report.

AUDIENCES.

There are two general audiences for which school reports might be prepared. One is composed of fellow superintendents and educational workers in other states and schools, and the other is composed of the taxpayers, parents and teachers of the local community. Just as business houses find it necessary to prepare different reports for foreign trade and home trade, so schools to realize the most from their reports, should prepare different kinds of reports for these two audiences.

Thus it devolves upon all schools to publish a special abridged report, more or less uniform with respect to reports of other schools, setting forth the facts in which fellow superintendents are most interested. This report should be a model of condensation and good form, and should be published at the least expense to meet the demands made

11. Bureau of Municipal Research, N.Y., "The Improving Reputation of School Reports".
of it. If this cannot be done the school should disregard the inquiries of the outside but interested parties, wherever it would mean a loss to the effectiveness of the report locally, and depend upon the state or nation to publish the comparative reports that might be needed by such outsiders.

Briefly we might say, "assuming proper comparative reports for the schools of each state by the state board of education - for large cities and comparable districts by the United States Bureau of Education, - there is every reason why local superintendents should concentrate upon the local adequateness of their own reports rather than upon uniformity with reports of other localities." And it should be suggested that "local adequateness" may require a number of special reports on the same matters to appeal to the several audiences in a single community, such as, administrative staff, members of the board and interested citizens, and laymen, - the reports varying from the purely technical to the non-technical means of presenting existing conditions, of urging new policies, and of making recommendations.

FORM OF REPORT.

The form in which a report is published determines in a very large degree its usefulness and efficiency in realizing the ends sought by the published and in meeting the demands made by its various readers. Many reports are still little used because of the bad form in which they

12. Bureau of Municipal Research, N.Y. "The Improving Reputation of School Reports"
present the essential facts. It is so difficult to get anything needed from them that the task is not undertaken and more useful reports are studied in their stead. A good example of this is the report of St. Joseph, Missouri. There are few tabulations and any matter sought can be found only by turning through the book and noting the headings, (report, 19).

Means of improving the form of reports will be discussed under "Methods and Devices" given below.

**Methods and Devices.**

*Alphabetical topical index.* In view of the fact that reports are never read as a whole by school men or others, and are consulted for certain specific information in regard to some particular problem or problems, the material wanted should be readily available. The report should have an alphabetical topical index referring to pages which would enable the reader to find any item or material without undue searching through the book. The St. Joseph report is one of the most useless of our larger school reports because of this one omission - the index. On the other hand the index of the Kansas City report enables one to find any matter at once.

*Uniformity.* The standard form set for the report should be maintained throughout the book. Reports from various quarters should be reduced to the same form in order that comparison might be easily made - to the same units. Likewise it is needless to say that all data con-
cerning a number of schools for the sake of comparison should be reduced to the same units, and as nearly as possible worked out on the same basis. An excellent example of this is found in the Missouri State Report in the tabulated information in regard to the high schools of the state. Comparison is simple and valuable.

Too often the high standard set by the first of the book is lost sight of as the report develops. In regard to the New York City School Report, Dr. Allen says, "The introductory pages that set forth the powers and organization of the Board of Education (pp. 9-14) promise logical treatment, use of indentation, numerals, and letters to facilitate classification. This promise, however, the body of the report fails to fulfill." 13

Illustrations and Diagrams. That free use should be made of illustrations and diagrams is amply demonstrated by newspapers, magazines, and reports of business houses which serve similar purposes in the world. This is only another way in which the schools can profit by example from the business side of life. Illustrations, besides giving an impression of the exact conditions of the school in certain respects, afford an excellent opportunity for comparison of school with school in various lines. They are sometimes the most effective means of supporting recommendations and bringing about changes. This is especially true in regard to the support needed for recommendations for new courses, more equipment.

better buildings and surroundings, and better sanitation. For example, a number of photographs of the work in Manual Training actually done by the pupils, or in Agriculture in connection with their class work, is far more conclusive argument in favor of the worthwhile element inherent in these courses than any number of pages of statistics and reading. Likewise, probably no one thing would have so great effect in leading to the installation of drinking fountains as an illustration of the old unsanitary drinking cup and the modern clean drinking fountain. And so it is with other matters which may be used in this manner to urge changes or to prove the wisdom of past action and show the good results obtained thereby.

The same is largely true of diagrams. They should condense a great deal of useful information into a very small space, and they should be self-explanatory. "Diagrams that must be explained are usually a hindrance rather than a help to understanding."¹⁴ The following is one of the most satisfactory diagrams, but many others such as the curve (graph), chart, outline tabulations, and drawings in scale, are valuable. Besides being very simple and clear, the following diagram can be easily prepared by the average printing office, or by newspapers for a brief report in regard to vital matters through the daily press. The rulings are made by cutting off bars

¹⁴. Bureau of Municipal Research, N.Y., "The Improving Reputation of School Reports."
of metal the proper length for each line, and in any case can be prepared much quicker than the more complicated diagrams requiring rulings and curves.

Wards

<p>| | |</p>
<table>
<thead>
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</thead>
<tbody>
<tr>
<td>4</td>
<td>319</td>
</tr>
<tr>
<td>7</td>
<td>314</td>
</tr>
<tr>
<td>1</td>
<td>322</td>
</tr>
<tr>
<td>3</td>
<td>332</td>
</tr>
<tr>
<td>2</td>
<td>346</td>
</tr>
</tbody>
</table>

Expense per capita of Man. Tr.

The lines in such a diagram should be 1/16 in. or 1/8 in. wide to secure best results. This diagram should show gradation rather than any other fact. That is, the shortest heavy line should come either at the top or at the bottom and the other lines should be inserted in their order of length. This should apply to all comparisons of schools, or cities, etc., where the order is not forced as would be the case in comparing by years or ages which should come in order.

*Tabulations.* Tabulations should be used largely for the same purpose as are diagrams, to show existing conditions in a very condensed and self-explanatory manner. One of the most useful devices for showing comparisons of schools, systems, cities, courses, and the like is by means of the double-distribution or double classification tables. Here the material is grouped under two heads; for example, ages by grades, etc. In this case the ages might be indicated along the top of
the table while the grades might be indicated in a vertical column at the side of the card or table. Thus by filling in the blank spaces properly one could see at a glance the pupils in each grade of a certain age. This would disclose the advanced and *retarded* pupils by age. Condensed tables of this form give more valuable information than many carefully written pages about the same matters.

Tabulations are also important as summaries. Summary tables should show wise omissions and inclusions. They should present the essential facts in the most compact and useful form.

**Interpretations.** Technical and non-technical word descriptions of illustrations, diagrams, and statistical tables are perhaps more important than any one thing to insure the proper effect of these methods of presenting facts and conditions. It is also a very conclusive method of impressing facts in their real light. A good example of this is to be seen in the advertisements of any newspaper, in the circulars and folders sent all over the country by railroads, insurance companies, and business houses of all kinds. They present the facts in a forceful light, and give new and conclusive views of the situation presented. For example, it will be far more conclusive to explain, in addition to a self-explanatory diagram showing that ________ high school is below the standard in instruction and equipment, if it is shown that
the necessary increase to bring the standing of the school above the average, would mean a very small sum per pupil per day. If the medium city paid $65 per capita for instruction, and the high school in this case paid only $50, it would seem far less significant to the tax payers, if it were shown that the necessary increase to bring the per capita instruction expense up to the $65 would mean the slight investment of 8 cents per pupil per day.

Or, in the case of each pupil taking the regular course, it would mean an investment of 2 cents for each recitation. Still more would it seem the only thing to do, were it pointed out that the average pupil spent more than that amount of money in pleasures which in no way prepared him for the problems of life to be encountered in the future. And were this reduced to the basis of per capita population the burden on each tax payer would be so insignificant that the citizens would not waste so much time before giving such a recommendation their hearty support.

Word descriptions - interpretations - are thus seen to be very important and one of the most effective means of making reports more effective.

**Reasoning from fact.** This is essential in connection with recommendations wherever possible. Illogical and haphazard reasoning are universally accompanied by inaction and little or no results. It is without consequence. Sufficient facts must be presented to make intelligent reasoning possible. For example, arguing
that a laboratory is well equipped just because a certain amount of money has been spent each year does not mean anything. Nor does the fact that $100 is spent for new supplies this year and $75 last year indicate that the laboratory is better equipped, unless it is explained that the amount for permanent supplies was more in the former than in the latter. The actual facts should be given, if correct reasoning is to follow. It is no evidence to note that a school spends $300 for school supplies this year and spent $100 and $200 for the last two years respectively, for it may mean that the supplies purchased with the $200 were principally used in the year when $100 was spent, and that the supply was practically exhausted when the $300 was spent. Thus it would appear the school is being no better furnished with supplies this year at $300 than in other years for less.

The same fact operates in the explaining of needs. It is no uncommon thing for reports to give page after page of printed matter dealing with the existing conditions which are not what they should be, and yet give no specific statement of the actual needs, the expense necessary to remedy them and also the means of doing so. Too often a general statement is all that is given to inspire interested parties to take action. For example, note the only statement in regard to vocational schools in New York City, although the report urges such schools: "The amount of money required to double the facilities of
vacation schools and playgrounds would be comparatively small, while the financial loss involved in keeping the majority of our school buildings closed and unused during the summer is enormous."15 Nothing definite is given in the above upon which individuals or societies interested in the work might form an estimate of the undertaking connected with such work. The actual facts involved in correct reasoning should be presented, especially when they would give a favorable view of the matter.

**Typographical technique.** Here reference is made to such matters as headings, indentations, figures, numerals, and different kinds of printer's type. All of these minor details facilitate classification and give emphasis to various matters. "Superintendents.... will find that a little expert editing will not only add to the clearness and interest of their story, but will save both space and money."16 The Kansas City report, 1910, is a good example of indentations and tabulations. The advantageous use of type and ink can best be had by reference to reports, circulars, etc., of large business houses and companies.

**Summary.** In conclusion it is necessary to note three significant facts developed in this chapter. (1) by examination and investigation of the sources of the demands made upon the schools for statistics we can determine just what facts should be kept in our records. (2) The card

15. Snedden & Allen, "School Reports and School Eff.", p. 164
catalogue seems to be the most satisfactory system for keeping these facts on file, and can be made very efficient by the observance of a number of mechanical devices to save time, energy and money. (3) Reports, in fulfilling their purpose of publicity, should receive careful preparation, especially with reference to a number of important factors which, if consistently kept in mind, will greatly increase the serviceableness and effectiveness of the report.
PART II

APPLICATION OF THEORY TO MISSOURI SITUATION

Chapter III

Records and Reports in Missouri High Schools.

The general theory given in Part I of this discussion now requires application to some specific situation in some state to demonstrate its practical value in actual school work. For the sake of definiteness Missouri will be taken as typical of the average state in representing school conditions. In view of the fact that the demands made by the state department of Missouri do not include all that is advisable for the various schools, no effort will be made to limit the facts shown by the system of records and reports which is to be suggested in this chapter to those called for by the state of Missouri, and national blanks. Anything that seems advantageous to school work in this state will be included and its specific purpose explained in connection with the record of form in which it appears.

The blanks presented below are applicable to schools of towns having a population of 10,000 and more. For smaller schools two things would be necessary to make the system more satisfactorily meet the existing conditions. First, the number of blanks and the de-
tailed data shown should be reduced until only necessary facts are included in the system. Second, the size of the cards should be cut down to only two sizes at most - 3 x 5 for cards as needed for purposes explained in connection with this card size, and 4 x 6 for all permanent record cards. This reduction is necessary in order that the expense of three sizes of filing cases may be eliminated and because the size 4 x 6 is large enough for all practical purposes in small schools which will never become large. On the other hand it may be necessary to enlarge the scope of these records and reports to meet the demands in schools where special factors are important, but the underlying principle should not be neglected in such enlargement. For all practical purposes the blanks given here will be sufficient for high schools in cities of 40,000 or 100,000 population.

This set of records and reports will deal only with the facts which concern the principal and his teachers in connection with the work of the school, and reports from these officials which will enable the higher officers best to shape the policy of the school. The discussion naturally divides itself into two general heads; first, the different record cards to be kept for showing the necessary data, and second, a detailed description of each record and its use.

In dealing with the first problem before us, it is only necessary at this point to make the statement that
all the information required can be easily shown on the following records. The justification of this assertion will appear in the detailed discussion of each card and its use, and will not be attempted here.

Official routine forms.

-2- - Student registration blank
-2- - Student schedule blank
2- - Attendance record - assembly
-2- - Student year card - register
-2- - Teacher's class cards - class book
-2- - Student reports
Medical Inspection blanks

Permanent school record forms.

2- - Course of Study
-2- - Daily program
2- - Teacher record
-2- - Student record
3- - Certificate of credits - transfer
-2- - Library record
2- - Equipment record
-2- - Monthly-Yearly report
Fiscal report (standard form)

Vocational guidance forms.

Student vocational record
Vocation record
Employment record

In this list of individual forms all those numbered (-1-) are at present found in every high school in the state which is deserving of the name "high school of Missouri". Likewise, all forms numbered (-2-) are found in schools of towns having a population of from 1500 or less up. Hence they are nothing new to the average high school. In addition, it should be noticed that the forms numbered (-3-) are used some time during the year in every high school. The uses are as follows:
all schools that have an assembly and that keep a record of absences and tardies for this meeting must have this record in some form—hence Attendance record—assembly. The course of study is essential in all schools and it is to be found in their catalogues instead of being on file where it can be referred to in later years; the value of this will be explained later. The Teacher's record must be given each time the high school visitor calls on the high school, and since it is required of all high schools the data should be kept in the files for reference. The certificate of credits has to be written for every pupil who goes to another school, either another high school or college, and for this reason a suitable form would mean a great saving of time. This is then no added item. The equipment record is furnished when the school officials have to estimate the number of volumes added to the library during the year, the money spent, etc.; the same for laboratory equipment, maps, and many other things, for state reports. All of this has to be produced by the school head at some time during the year, and often it is requested from various sources more than once during the term. This blank would only give such data, when once compiled, a definite place in the records where they would be available at any time.

This leaves in the above list three groups of items not already found in our schools generally: medical inspection, fiscal report for the high school, and vocational guidance. Medical inspection when once tried has been
found well worth the time and expense, as it locates many troubles affecting the school work of various pupils. Any teacher of many years experience will realize the need of such inspection. In the school where the writer has been working for over a year, two pupils failed completely during their first year in the high school, and upon repeating the work they met with no better success. Later an investigation revealed two bad cases of adenoids, and much of the mystery was solved at once. During the present year, although there is no medical inspection, a number of pupils doing poor work have been found to be troubled with catarrh, poor hearing, weak eyes, and other troubles. There is no doubt of the need of medical inspection. The demand is growing; it should be compulsory on boards of education in all schools, for then the schools would at least be doing their best to aid the pupils in every way. If the parents should not see fit to take action in regard to the matter, the schools would have fulfilled their mission - they will have done their duty.

The fiscal report is badly needed now for the sake of comparison between various high schools in regard to cost per capita of instruction, maintenance, supervision, etc., and hence needs little proof of its value. However, an excellent example of this value is apparent when an investigation is made of the state superintendent's report of Missouri high schools on the cost of equipment for various
subjects taught and the salaries paid instructors in all such schools. Here everything is reduced to the same unit and terminology, and comparison is readily made in all points covered by the report. In the report of schools this could be carried much farther and made as valuable in the additional respects.

Vocational Guidance has had but short existence in this country, but it is being indirectly solved in many ways, at least partially. Examples of such efforts will be noted in the following blanks as we study them individually—course of study, daily program, schedule card, and special reports. The elective system giving a wide choice of work during all of the high school work is valuable in this respect. The positive efforts at vocational guidance, however, are worthy the attention of any school man who wishes his high school best to serve the pupils in attendance. Vocational guidance of some sort is imperative, if the school is to do its best work; if the pupil is really to be prepared for something in life; if he is to work along the line of least resistance and where he can be most successful; if he is intelligently to face the problem of the future; if he is to comprehend in actual facts the work his choice may involve or demand to gain success; if he is to avoid the pitfalls that await the millions of misfits—unfortunate, misguided and careless boys and girls who have gone before him. Vocational guidance will not do all of these things, but it is a positive attempt to do them and will
result in a vast amount of helpful and vital work if systematically undertaken by the high school.

These three groups of items are thus shown to be of great value in any school where they can be efficiently handled. The detailed explanation which is to follow immediately will enable any school man to judge of the necessary expenditure of time and energy to operate the system and their relative value in his school. All other records are dealing with facts of recognized importance and should be kept in the files of all schools.

Adjustments for small schools

Many schools will not find these forms suitable in minor matters; either some important item for a particular school has been omitted, or items which are not essential to the local system have been included. In this event the items shown and the spaces should be changed to supply the facts most needed. The cards could then be printed with a slight increase of expense, according to quotations given on page. The process of adjustment is a minor matter, so long as the record forms are determined.

In addition to this many smaller schools, or any particular school might find it advisable to consider the following suggestions:

1. Keep in ordinary form as now used in most schools:
   daily register
teacher's class book

2. Leave out of the system such blanks as:
   attendance record
   medical inspection - if no work is attempted
certificate of credits

3. Keep on file, making out by hand, not printing in blank form:
   course of study
3 - (continued)
daily program
teacher record
equipment record

4. Cut down the items shown on:
registration blank, - 3,5,9,10,15,16,17,18
may be omitted.
course of study
medical inspection blanks - if slight work is attempted.
student record - to suit facts on registration blank if changed.

5. If vocational guidance were not attempted all such blanks and the back of the registration blank would not have to be printed.

This adjustment would not be difficult for any school, and yet the essential facts would be retained. The records that are to be made out by hand are not many and might be arranged as follows: The course of study and daily program have to be made out in good form for use in the school, and although they may be written on the board for purposes of entering pupils and for the first few days of school, the copy which was made out for the original copy should be filed for reference. Each teacher should be made to fill out her own "teacher record"; and the equipment record could be placed on blank cards with very little labor and would be more useful than any other form of record.

The simpler cards could be printed by the local offices, but the more complex cards that would cover a number of years could be prepared cheaper by some company especially prepared for such work, e.g. Library Bureau, Chicago. The library record might be put on blank cards by hand;
certain facts having definite places on the cards in each case. This could be done by students for a slight expense, perhaps in lieu of tuition, etc.

Discussion of blank forms

In order that the detailed description of these cards or blanks will be uniform the following arrangement of points will be observed. Reference to the point under discussion will be indicated by a heading similar to the underlined word in each point listed below. For example the paragraph dealing with the use of the form in the system will be headed by the word "use".

1. The blank itself - size, color, shape, etc.
2. The specific use of the card in the system as a whole.
3. The source of the data - where the facts come from.
5. The purpose of each item shown by the blank.

The following order and arrangement will be observed in the discussion of the blank forms. This will enable one to grasp immediately the records kept primarily concerning the pupil and primarily concerning the school. In order to indicate the importance of the records a further classification is made according to whether they are absolutely necessary in connection with the regular school work. The "additional" blanks are desirable but not required to furnish the necessary facts during the school year.

RECORDS REQUIRED

Concerning Pupil primarily.
Registration blank
Schedule card
Year card
Teacher's class card
Report card
Record card
RECORDS REQUIRED (Continued)
Concerning SCHOOL primarily:
Monthly-Yearly report
Equipment record
Teacher (employee) record
Library record
Course of study
Daily program
(Data for fiscal report to state or national department is found on "equipment" and "teacher" record forms)

ADDITIONAL RECORDS:
Concerning PUPIL primarily
Medical inspection
Vocational guidance
Special reports
Certificate of credits
Attendance record.

The first record required in the actual school work is the registration blank.

**EXHIBIT I**

This is the front side of the blank and deals with facts of registration primarily.
### EXHIBIT I

This is the back side of the Registration blank and deals primarily with facts of Vocational Guidance.

#### Blank:
- This form should be printed on paper which is rather heavy and stiff, suitable for temporary filing. It should be 3 x 5 in size.

#### Use:
- This blank shows the information needed both for the permanent scholastic record of the pupil and for vocational guidance record. It is to give all primary data in regard to pupil, and is to be used as a reference in regard to matters of address, name of parents, and other items as shown which are useful in dealing with individual cases. The record is used at the opening of school for judging of a pupil's choice of work; this use is made by the principal. The information on the back of the card is to locate the pupils to be interviewed by the vocational counsellor during the year. (See ex-
hibit. A

Source. All facts here are furnished by the student as primary data, except items 15,16,17,18. 17 is inserted as the blank is given out by a clerk who numbers each student enrolling; 16 indicates the person receiving the certificate of credits and entering the pupil, and is to be filled out only when 15 is entered on the blank. 15 is entered only in case the pupil is enrolling for the first time in the school, either from the grades or from some other high school; the necessary facts are to come from the certification of credits received from the other school, or presented by the pupil.

Recording Data. In case 15 and 16 are to be filled in, the principal or assistant receiving the blank from the pupil will immediately record the necessary facts by referring to the proper certificate of credits or promotion card which is either on file or being presented by the pupil. The credits are needed to advise about work and can now best be recorded as the fact is to be copied from here on the record card later. All other items are to be entered by the pupil from memory, immediately upon receiving the blank. The one receiving the card from the pupil should check all data on back and on front of card before filling in 15,16,18 in order to proceed to other card (schedule) in a natural order. He may now in case all is satisfactory proceed at once to fill in parts of exhibit II, by conferring with pupil and noting facts on the registration blank.

Purpose. Items are important for the following
reasons. All those on front part of the blank are to be copied on the permanent record of the pupil in connection with his complete record or history while in school. Those on the back of the form are for use in vocational guidance primarily, although they will aid in advising the pupil about his subjects. In the regular routine work the items have the following important uses and as such should be collected and filed, for each current year. 1 and 15 are for immediate use on the schedule blank and can best be obtained in this manner. 1,2,3,7,8 are for getting in touch with the pupil or parent at any time. This is necessary in connection with special reports to parents and notices to pupils to report at office. 18 has to deal with matters of tuition and state statistical facts. 4,5 6,9,10,11,12,14 are for use in permanent records and also for aiding the principal in intelligently dealing with pupils in regard to any special matter of discipline or school work. 12,13,14 might indicate late entrance and insufficient training, depending upon the character of work done by the former school. 6 is merely for saving time in subtracting 11 and 4. 15 might show loose examination, if entered by examination; or it might prove a discredit to former school if entered upon credits. 16 is to place definitely the responsibility in case of admission of students. 17 is to facilitate later enumeration of pupils enrolled.

On the back of the card, a, b, c, g, h, i, j, k, l, m are all to give insight into the wisdom of the pupil's choice of
work if he is not to be in school the following year; also in regard to his selection of studies for this year regardless of the future. His is to locate those requiring attention by the vocational counsellor. This is not a vital matter with girls as a general thing, although it will have a helpful influence on many and be a positive necessity in some cases. Such gathering of detailed facts is the only sure method of securing careful guidance in the choice of work for the year; too often the principal is broad and indefinite in his advice and aid, and as a result the pupil is given only a general education regardless of the best thing for the pupil. From the above blank he will have available all the necessary facts to give intelligent assistance to pupils in choosing subjects.

At the same time, during registration, the pupil should turn in a record of his daily schedule.

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<thead>
<tr>
<th>Last name first</th>
<th>SCHEDULE CARD</th>
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<tbody>
<tr>
<td>boy</td>
<td></td>
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<tr>
<td>girl</td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>Course</td>
</tr>
<tr>
<td>7th</td>
<td>Recitation</td>
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<tr>
<td>1st</td>
<td>subject</td>
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<td>3rd</td>
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</tbody>
</table>

EXHIBIT II.
Schedule Card — Front side.
EXHIBIT II
Schedule Card - Back side.

The Blank. All schedule blanks should be 3 x 5 in.
and should be printed on heavy rather stiff paper suitable
for filing temporarily.

Its Use. First, this card shows the pupil his re-
quired and elective subjects, thus aiding him in arranging
his course on a definite basis. Its use in the system after
filing is, first, to serve as a course of primary data in regard
to the pupil's course, and second, for the purpose of locating
the pupil, while he is in school, at any period during the
day. In case of any change in courses, this card will
present the exact facts bearing on the question involved;
the required subjects and the elective subjects which the pupil
must observe in making a change in his course for the year,
provided he remains in a certain course. The principal,
teacher, or other person might wish to get into immediate
communication with the pupil at any time during the day; by

<table>
<thead>
<tr>
<th>Subjects to be taken</th>
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<tbody>
<tr>
<td>Required this year</td>
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<tr>
<td>---------------------</td>
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</table>

To be filled in by Em.

DIRECTIONS:
1. Students must take subjects in "required" space
2. From "electives" and "advised" as given above the student may select rest of his course.
3. Student, having selected studies, must enter them in proper spaces on opposite of this card. Be sure to state room and date.
4. When completed file this card with principal at once.
the use of this schedule card, if all blanks are filled in, 
the pupil can be located at once. This card furnishes all 
the data shown by the year card and the student reports (see 
Exhibits V) which are filled out directly from these 
schedule blanks.

Source of Data. The data here are to come from the 
following sources; registration blank, record card, course of 
study, and the program. 1,13 come from the registration 
blank; 19,20 are gotten from the record card; "study room" 
should come from the charts showing the distribution of pupils 
of various classes; blanks on back of card should be filled in 
from facts gained by consulting with pupil and examining the 
record card and the registration blank.

Recording Data. The specific manner in which these 
data are to be filled in without loss of time, is as follows:
The principal upon receiving and checking the registration 
blank will fill out the last two lines and then prepare a 
schedule blank for the pupil, writing in the pupil's name, 
and filling in all other items on front of card with the ex-
ception of the "daily schedule". He will then enter the 
proper subjects on the back of the card, explain to the pupil 
any necessary matters relative to the completing the blank, 
and require him to fill in the remainder of the card and file 
it in the office within a definite period of time. The 
pupil should then consult his teachers or those interested in 
his choice of subjects and by use of the daily program fill 
in the blanks for the various subjects he takes.
The card is to have only the periods filled out that contain a recitation. At all other periods the pupil will be supposed to be in the study room as indicated by the top of the card. In case the pupil is excused (where pupils remain in building for study) from study room for any period the proper entry should be made on this card. Thus this card would show all the facts necessary to locate definitely and quickly any pupil at any time.

Purpose of items. With reference to the value of the items it will be noticed that 1 is absolutely necessary; 12, 19, 20 are essential for the principal to advise about work properly and to fill out the required and advised subjects on the back of the card; "subjects to be taken" are for aiding the pupil in meeting requirements and taking the best work, all things considered; 19, 20 are for rapid classification of pupils and goes on record for use on the report card; "year" prevents mixing of cards of different years, where the cards may not be destroyed at end of eh year but retained for a month or so during the following year. This is advisable in regard to the registration blanks given above for purposes of comparison of data given for years on back of the blank.

Immediately after the enrolling of pupils two things are necessary - a daily register and a class book or their equivalent in some form. In this system the card form for these two records seems best because of the varied use to which they can be put in this particular form as well as because of the expense. Were a principal wishing to keep a
record of tardiness and absences alone, the old book form is more satisfactory, but where a number of factors must be considered the card catalogue is more serviceable and usable.

<table>
<thead>
<tr>
<th>Last name first</th>
<th>Course Units Class Year</th>
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ATTENDANCE AND DEMERITS

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<tr>
<th>Day</th>
<th>A.M. tardy</th>
<th>A.M. absence</th>
<th>P.M. tardy</th>
<th>P.M. absence</th>
<th>Day absence</th>
<th>Demerits</th>
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Student Year Card - (Daily register)

EXHIBIT III

DELINQUENCY

<table>
<thead>
<tr>
<th>Teacher:</th>
<th>Nature of report</th>
<th>Action taken</th>
<th>Date</th>
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Remarks:

Back of Year Card, Exhibit III.
The Blank. The size should be 4 x 6 in. Sexes should be distinguished by colors; white for girls and colored for boys. In schools where department is determined by demerits this card should meet with favor.

The advantages of this form over the book form adopted in Missouri are:

1. The cards being well indexed alphabetically are easier to secure for entering absences or tardies than they would be in a book register where the names are scattered over six pages.
2. The new pupils can be arranged as easily after the first week as before it closes in the card system, while in the book often it is necessary to break the alphabetical order in recording the names of later pupils.
3. The space in which the tardy or absence is to be recorded can be located quicker and with less trouble on the card because of its close proximity with the day and month; especially is this true where the space is located far from the name of the pupil and from the day of the week, or when opposite sides of an indented page must be used.
4. The chances for errors in recording absences or tardies for different pupils are almost lacking with the cards, while they are numerous with the large pages of the book; many a pupil being recorded for another's absence or tardiness because of difficulty in locating the proper square in page.
5. Totals can be much more easily located on the cards as the space is small and care does not have to be taken to get the proper line for any pupil.
6. In view of the fact that only a few pupils are tardy or absent for any day, these can be recorded more readily because of the ease of locating the proper card or name.
7. The card affords a place for recording reports on delinquents whose work is falling below passing; the book does not.
8. The card shows record of all grades reported on all reports of delinquencies and the action taken, and of special reports to parents - the book does not.
9. The card affords a convenient space for recording grades of each pupil for the quarter as they are sent in irregularly by the teachers, making it convenient to fill out the student report card as soon as all such grades are received; the book does not.

Its Use. This card is to serve all the purposes of the daily register, and in addition it is to show a record of all official reports and the action taken in regard to each pupil; this latter information is on the back of the card. The card
is suited to monthly, quarterly (for nine-month terms) and two-monthly (ten-month terms) reports. In case of the monthly report totals in regard to attendance, determine and reported grades would be shown for each month; in case of the two-monthly reports, they should be shown every two months, the even numbered months indicating the lines for totals, and in case of quarterly reports they should appear on the line which contains the heavy bar, indicating the end of the quarter - the odd numbered months, 3, 5, 7, 9 indicating the line for totals. In case of six-weekly reports similar bars might be inserted for convenience in determining totals. Thus the form of card shown here might be suitable for any kind of report. However, the quarterly report is advised in all cases of nine-month terms, as it affords the best means of dividing the school year into semesters and gives ample notification to parents if the special notices (exhibits Xa and Xb) are sent out promptly. Besides it is an added incentive to the pupil to do good work; he does not wish to be singled out as one of the failures to-date.

This card also serves as a record of all special reports on grades or other matters, and in case of the grades reported at the end of the month a record is made in the proper space, under the blank spaces at left of card. If a special form of report is sent to the parent, a ring is placed about the reported grade to indicate that the notice has been sent. Such a record is valuable when complaint is made by parent. The records show the proper report was sent out whether the parent ever saw it or not. This would have a tendency to prevent the pupil
from returning the report without allowing his parents to see it.

In addition to this use of the spaces for grades, it affords a convenient place for recording all quarterly grades as they are received irregularly from the teachers.

**Sources of data**

Data are to come from the schedule blank, the teacher's class cards, and the attendance record—assembly, (exhibits II, IV, ).

**Recording Data.** The name of the pupil should be entered during the first week of school, in order that records of attendance may be kept from the first days of school. These cards can be arranged alphabetically regardless of the manner of enrollment and thus can be most conveniently filled out to this extent as the pupils enroll. A very satisfactory way would be to have a clerk enter items 1, 13, 17, 20 and "year" as the schedule cards are turned in during registration. Subjects for reported grades should not be entered until about the end of the third week; only abbreviations for subjects can be entered here. This would be ample time for all necessary changes to be made in the schedule cards. The subjects taken by each pupil should be copied in the year card directly from the schedule card as it appeared after the changes in subjects had been made.

**Purpose of items.** The reason for entering subjects taken under "reported grades", or spaces for same, is for keeping a record of special reports on work in various classes, also it serves as a record of the special notices to parents at this time.

1, 13, 17, 20 are for purposes of reference in case of consultation with pupil in regard to work or in connection with delinquences, etc. For example, 13 might locate the most im-
important subject the pupil was studying; 20 and 17 should suggest the advisability of dropping one subject in any case. Other things being equal, a pupil having seven units and carrying five subjects would be dealt with differently from a pupil with nine units and carrying five subjects, or even with eight units and carrying five subjects.

This is to be the general reference card for all current data bearing on the case of any pupil when reported for any delinquencies, and as such should show character of attendance, deportment, all reported grades, and all reports of delinquencies to date. Likewise it would be the source of information should any parent wish to know about the record of his child at any time. All things being considered, it cannot be dispensed with where efficiency is the watchword of the principal. The ordinary daily register is absolutely unable to cope with the situation here presented.

**Time.** By some it will be argued that the time spent in keeping this year card in form will be excessive. This statement is unfounded. The time spent in doing this is very little more than that ordinarily spent on recording such facts, and the very nature of the entries makes it a time saver. The reported grades and delinquencies must be kept on file somewhere and in such form as will be useful; no more serviceable place could be devised than in the daily register, and the time required is the minimum. In the complete group of reports sent in during the year, the name of the pupil does not have to be written even once for such a purpose and the subjects but once during the year. The space for delinquencies and action taken reduces the handwriting to a minimum and yet suggests the facts involved. The
interview with any pupil is carried on by reference to this blank and the result of the interview is dated and recorded on the back of the card; the card is then filed and a complete record of the facts involved is in the files in a highly satisfactory form. The time involved is insignificant, as the entry might easily be made while giving the final statements to the pupil. The interview is necessary if justice is sought. Hence it seems the time spent in keeping this card up-to-date is insignificant and the great waste of time urged is without foundation.

Closely related to the year card is the Teacher's Class Card, which takes the place of the class book now commonly used by the teacher. Its advantage over the old class book is recognized by the majority of teachers who are familiar with its use. The card in this system is put to one additional use, which makes it still more serviceable, and that is a means of reporting all matters concerning pupils.

EXHIBIT IV - Teacher's Class Card.

(Front of card is shown here)
The Blank. These cards should be small, suitable for carrying about and for enclosure in an envelope if necessary. A suitable size is 3 x 5 in., and the color should be uniformly white for girls and colored for boys. One card index showing title of subject for each class should be kept with each group of cards, so that the teacher may select from her tray with the least difficulty the cards for any particular class. Each teacher should be supplied with a tray which would hold enough 3 x 5 cards for all her recitations.

Its Use. This card is the teacher’s class book. In addition it is a means of reporting all delinquences, requires no writing of the pupil's name and does not necessitate notifying the pupil.

The manner in which the card serves these varied purposes depends upon four rules or regulations of the school: (1) A pupil has no right in a class and is not a member of the class
except when the teacher has his class card; (2) All reports and notifications of absences are made by the teacher by handing in the class card for the pupil in each case; (3) The pupil's card will be returned to the teacher only after the pupil goes to the principal and explains about the report, and (4) If a pupil is absent from a recitation or is reported for any delinquency, he knows he must report immediately to the principal if he is to continue with the work. These four regulations or customs of the school and the pupils are held rigidly to them in a systematic, fair and firm manner. This works no hardship on anyone and the co-operation of principal, teachers, and pupils is insured in every case. In operation, then it works thus: In case a pupil is absent or has been reported, he knows at once what is expected of him and reports promptly to the principal at the earliest possible moment without waiting to be summoned. When he appears at the office the principal has the report at hand and inquires into the case. If it is a mere matter of necessary absence and is excused, the principal simply puts his check (x) within the circle indicating the absence given by the teacher on the card; gives the pupil a class permit which enrolls him until the teacher hears further from the principal, and the class card is returned to the teacher.

If the matter is of a grave nature a record is made on the year card as indicated by the blanks on back of Exhibit III; and the principal's check (x) is placed on the line between the date and the offense of the class card. If the principal is not satisfied with the interview with the pupil he gives him a class permit for one day, which the pupil presents to the teacher. This one day permit means that the pupil must report again the
next day for final action; and to the teacher it means that
the principal wishes a conference with reference to the matter
under discussion. During the day the teacher sees the
principal and when the pupil reports the following day, he
is informed of the final action taken; his card was given the
teacher at the close of the interview and no class permit is
needed.

In case of poor grades reported at the end of the month,
the class card bearing the monthly standing is handed in as
before. The teacher notifies the pupils to be reported
at the last meeting of the class before the card is handed in,
fastens to the card a short note giving the cause of the failure
as he understands the case and drops it in the principal's box.
The pupil understands that he is to report to the principal
before the next recitation if his grade is not discounted,
and thus the principal gets his interview with each pupil at the
earliest possible moment and before the special report is sent
to the parent if it is sent at all. Very likely the
number reported, at the end of the month, will be so many as to
make it impossible for the principal to see them personally
the first day after the reports. In that case he should see
as many as possible giving those whom he could not see a class
permit indicating the time he would confer with them. This
permit would admit them to the class until such conference were
held when the teacher would be notified in regard to the final
action. As these reports are sent in they should be copied
on the year cards (the evening or afternoon after the reports
were handed in), and the class cards checked (✓) after each
grade reported should be returned immediately to the teacher. These year cards should be kept separate from the general files and replaced only as the cases were disposed of satisfactorily.

There seems to be considerable red tape here, but by studying the situation a moment it will be seen that the time actually spent in obtaining this interview and starting the pupils in their work for the rest of the quarter is reduced to a minimum and that the plan requires a minimum of time and work on the part of each concerned. A word needs to be said in regard to the note fastened to the card bearing the poor grade — the cause of failure. This note should be attached to the year card when the grade is recorded and kept for reference until after the interview with the pupil. Action taken will be recorded on the back of the year card if no report is sent home; if one is sent home, the cause of failure will appear in this report and will be filed upon its return. This again requires a minimum of necessary work. These reports have to be sent out, and the time occupied in sending them is very much less than that required to issue monthly reports in all cases, and by showing the causes in each instance they are much more effective.

**Source of Data.** The source of data is of course the recitation and work connected with it.

**Recording Data.** The manner of sending in reports for delinquencies is by writing the offense and dating it as shown on the back of the card. Where more than one line is needed for the offense two might be used. If more than this, the bare facts should be suggested in these lines, and a detailed
written out and fastened to the card when it is sent to the principal. This gives the teacher a record of the report on his card and places in the principal's hands all the facts involved, in a comprehensible form.

Demerits should be recorded in the squares given for each daily recitation; the lower part of each space for daily class grades, and the upper part for demerits only. The negative system of grading should be used. The scale should be by the month, as these monthly reports must be made; this would make each recitation count five, or a failure in every sense of the word would mean that five be taken from the monthly grade because of that particular recitation. Markings here, however, as in all cases of grading, must be made advisedly.

Purpose of Items. The value of a few items is still to be explained. The "name" and "subject" are for the convenience of the teacher should she get the cards mixed in different classes. The "year" is for her use in case she keeps these cards year after year as she often does her class book now. The "name of teacher" is for the convenience of the principal in returning cards and for reference to teacher in each report of pupils. In case the card is lost in any way a duplicate of the card in all essential respects except the scholarship since last report may be made from the year card of the pupil.

For the convenience of teachers while the card is with the principal it would be found serviceable to insert in the class group a "dummy" card bearing the pupil's name written lightly in lead pencil. When the card is returned the "dummy" is removed.

Routine matters with reference to pupils are not broken
again now until the end of the quarter, when the reports are sent to the parents. For discussion of special reports which should be sent out during the quarter, the reader is referred to pages of this paper. Here the quarterly report will be the only one presented.

<table>
<thead>
<tr>
<th>Name in full</th>
<th>Course</th>
<th>Units</th>
<th>Class</th>
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<tbody>
<tr>
<td>Date Ending:</td>
<td>1st quar.:2nd quar.</td>
<td>Date Ending:</td>
<td>3rd quar.:4th quar.</td>
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<tr>
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<td>2nd</td>
<td>3rd</td>
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<tr>
<td>Al.</td>
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<tr>
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<tr>
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<tr>
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<td></td>
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<tr>
<td>E--Excellent</td>
<td></td>
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<tr>
<td>S--Superior</td>
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<tr>
<td>M--Medium</td>
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<td></td>
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<tr>
<td>F--Failure</td>
<td></td>
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</tbody>
</table>

Quarterly Report - EXHIBIT V.
(This is inside of card when folded)
EXHIBIT V - (Outside of card when folded)

1. Last name first

To Parents or Guardians:
A unit is a year's work in any subject. 16 units are required for graduation.
Please examine this report carefully and cooperate with teachers to keep up a high grade of work.
Promptness and regularity in attendance, and home study are necessary for good school work.
Please sign in the proper space below and return this report promptly.

1st

2nd

3rd

At close of school this card will be sent to parent.

(back of folded card)
The Blank. This form should be suitable for mailing if necessary, and should be private; thus the folded form, as it can be more easily and quickly prepared.

Its Use. The use of reports is too well known to need mention here.

Source of Data. The data are to come from the year card and the schedule card.

Recording of Data. The data are to come from the year card and the schedule card. This report card is to be filled out partially - all except the grades and dates - some during the first quarter. The items 1, 13, 19, 20 are taken directly from the schedule card of each pupil, and entered either at the time as that on the year card, or at a more convenient time during the quarter. When all grades have been reported, usually spanning over two or three days (giving ample time for recording them on the year cards) and collected on the year cards for each student, the quarterly report is filled out. This filling out amounts to copying the grades on the report from the year card, and supplying the date for the end of the quarter; all other items have been filled out during the semester before this time. Here again the work is reduced to a minimum and a great saving of time is apparent.

Purpose of Items. The value of the items 17, 19, 20 are apparent. These are facts which are not usually shown on report cards and yet they are the very things which should appear in order that parents may know just where their children are with respect to class standing and with reference to graduation. This would eliminate many of the misunderstandings
that arise when certain pupils are not graduated or when they are not passed on to the higher classes at the end of the year. These items should always be given. The directions are to make the card self-explanatory. Accordingly it will be noted that the quarterly report is not given to the pupil the last quarter, but retained until the final record card is completed. The quarterly report is then mailed to the parent with all blanks filled in complete.

The final record with reference to all pupils is found in the Student Record Card.

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<table>
<thead>
<tr>
<th>Subject</th>
<th>Tr</th>
<th>Av</th>
<th>Gr</th>
<th>Yr</th>
<th>Av</th>
<th>Gr</th>
<th>QUARTER</th>
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</tbody>
</table>

STUDENT RECORD CARD - EXHIBIT VI.
(Front of card)
The Blank. This card should be in two colors, white for girls and colored for boys; the size should be 5 x 8 in.

Both sides are used: One, the front of the card, for scholastic facts and credits with allied facts of importance; the back for failures and other personal data which are valuable in explaining deficiencies and the character of work done in many cases.

Its Use. The card is for permanent files to show the record of a pupil in all his high school career. This material may be used in any way necessary, either for special investigation, or for source of facts required by the certificate of credits.
Sources of Data. The data here come from the registration blank, the student's year card and the report card. The year card could only furnish such matters as special information on outside activities, delinquencies, etc. The student report gives the scholastic record.

Recording of Data. The data above the table of subjects should be filled in during the year at some convenient time. The items are in the same order as on the registration blank and could be accurately written in by any boy or girl of the school who wrote a legible hand.

All other matters should be entered at the end of the year, just before the report card is mailed to the parents. The facts here copied down are simply the grades with the date. Note ALL FAILURES are placed on back of card, so they will never be considered in making out credits. This necessitates that no grade be put on this permanent record until the end of the year; no grade will thus appear on front side unless a pass has been made. Thus it will be impossible to make an error in credits by counting subjects in which the student failed, but such failures may always be noted when necessary. This is a valuable point and should not be violated in the preparation of the card, nor in copying in the grades.

Purpose of Items. Everything here is a matter of the scholastic history of the pupil. The items shown here were gathered for certain purposes while the student was in school, but are now recorded for future reference in making out reports and for investigations along special lines. For example, just at present Vocational Guidance involves many problems.
whose solution could be facilitated by investigating past records of pupils. Items 25, 26 are new items and are given to show specifically the facts that are essential in either graduation or withdrawal. The units should be enumerated in small legible figures just before the "year" column; then they could be quickly determined for use on the schedule card at the beginning of each year, and at graduation.

A record of failures is absolutely necessary for future advice concerning work, and the cause is still more important.

The personal record is to give an estimate of the pupil's seriousness in his school work. In many respects this record will show or suggest the breadth of the pupil's interests. Under honors and remarks should come a summary of his participation in school activities. Attitude toward work and estimates of the pupil in many respects are possible here. This space can be made as valuable as the principal should desire, either in connection with the pupil's additional work in the school, or with respect to the aid it might give others in judging the pupil.

This completes the required records concerning the pupils primarily.

School Records. With reference to the records dealing chiefly with the school, the monthly-yearly report is of first importance. This report has to be made monthly, and since it shows important facts it should be permanently filed at the close of the year in order that the efficiency and growth of the school might be investigated.
### EXHIBIT IX. (Principal's Monthly Report) 5 x 8 in.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>2. No. pupils attending - days</th>
<th>MONTH</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>5th</th>
<th>6th</th>
<th>7th</th>
<th>8th</th>
<th>9th</th>
<th>10th</th>
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<tbody>
<tr>
<td>19</td>
<td>200</td>
<td>18-24</td>
<td>16-18</td>
<td>14-16</td>
<td>10-12</td>
<td>8-10</td>
<td>6-8</td>
<td>4-6</td>
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<td>Y</td>
<td>X</td>
<td>W</td>
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<td>19</td>
<td>180</td>
<td>160-180</td>
<td>140-160</td>
<td>120-140</td>
<td>100-120</td>
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<td>40-60</td>
<td>20-40</td>
<td>1-20</td>
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</table>

#### No. Students by Courses

<table>
<thead>
<tr>
<th>PUPILS</th>
<th>Total</th>
<th>Latin</th>
<th>Science</th>
<th>Mod. Lang.</th>
<th>Normal</th>
<th>Comm'l</th>
<th>Spec'l</th>
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<tr>
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<tr>
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<tr>
<td>Sophomores</td>
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<tr>
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<td></td>
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<tr>
<td>Taking Work</td>
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</tbody>
</table>

Date school opened: Date closed:
The Blank. This card should be white and 5 x 8 in.
in size, suitable for permanent filing at close of the year.

Its Use. Its use is that of the ordinary monthly report -
to acquaint higher officials with facts in regard to all items
enumerated thereon. This card is the permanent record of
attendance for the year and each month for the entire school and
should be filed for the future. It also is the record from
which data are gathered for national statistics on seating,
teachers and attendance in many respects.

Source of Data. The data come from the records in regard
to: the capacity of the building, determined once by count or
reference to chart of rooms; teacher records; year cards and
enrollment blanks. In most cases the principal would never
have to consult any record for the figures to go with items
concerning the number of seats and the number of teachers.
Hence the year cards would show all the facts necessary for filling
out the report.

Recording Data. The manner in which the data are to be
compiled here will depend upon a number of things among them
the following are important.

When a pupil is suspended, his year card should be taken
from the general file, marked with an "S" in the date of his
suspension, and placed in the back of the year card filing
case under an index "suspended". In case he is re-admitted
his card should not be placed in the general files but kept in
the back of the case under an index of "transferred" - until
the close of the month. At the beginning of each month all
cards remaining in these special files should have a rubber
band placed around them in order that they may not get mixed with
with the suspended, transferred and re-admitted pupils for
the month. As a pupil is transferred, his card is treated
in the same manner as those suspended - put in back of files.

At close of the month then to get the data for the items
in Exhibit VII, the following procedure is advised, as it will
prove satisfactory and accurate.

1. Count all cards in each of the special files, and
record - 1.2.3.
2. Put all suspended and re-admitted cards in with the
general file of year cards and assort them according to "tardy"
and "not tardy". Count cards in "NT" group and record - u.
Enumerate the cases of tardiness by adding the total tardies
shown by the cards in the "T" (tardy) group and record - t.
3. Collect cards and throw out all cards showing no
absences. Count these and record - v.
4. The figure for w is determined by counting the days
absent while the cards showing absences are together for de-
determining - v, subtracting this from the product of the x
and number of days school was in session for the period covered
by the report, and adding in the days attended by the pupils
transferred during the same period. This will give - w.
5. Collect cards again and throw out all colored cards.
Count those left and record girls of - y. Count the colored
and record boys of - y. This will give the total number en-
rolled at any time during period covered by report.
6. Add to this figure for y in each case, the number
transferred during the month and record boys and girls of - p.
7. Collect all cards except the transferred ones and
assort into piles corresponding to the columns of z. Count
cards in each pile and record according to z.
8. The figure for - x - is obtained by dividing the total
number of days attended - w - by the number of days the school
was in session for the period considered. This will give
the average number of pupils attending every day, and is the
figure required by national statistics for the year. The
sum of days attended is also required for apportionment of
school funds - this can be secured from the items in w, or
from the year cards independently of the monthly report.

For the year, the same procedure would be followed
except in the case of q,r,s,u. These are obtained by adding
the figures shown for each month.

No transferred pupils are to be considered in computing
any of the items except s and w; the latter is the figure used
in state apportionment of funds and is called for by the national
blanks. It should include days attended by all pupils for any
period.
9. Rearrange all year cards alphabetically, laying out
the suspended cases, and place in files for following month's work.
This work might be done by a pupil.
After once determining the number of boys and girls in the school and keeping the record straight in regard to transfers, re-admitted pupils and suspensions, the counting of girls and boys might be omitted. Hence after the first month the only estimate of importance would be with regard to tardiness and absences, and the character of attendance as shown in - y.

Time. Here again the time element seems excessive. But if considered from the point of view of the high school in a town of 10,000 inhabitants, where the high school has about 300 pupils a fair comparison of time taken in estimating these items from the book register, and the year cards as given here, is suggested below.

The 350 pupils would require a little over the 6 pages of Welch's register, the ordinary book sold for $1.50

Difficulties of using book:

1. The transferred, re-admitted and suspended pupils would be hard to locate and would take twice the time that it does to count the cards here.
2. The counting of the boys and girls could not be done as quickly or as accurately as by the colored cards.
3. Estimates for --m-- could not be so readily obtained as the process would be laborious after the first month, and in any case it would mean turning through the 6 pages at least 11 times.
4. Estimates of the number not absent and not tardy would be more difficult in that the figures are soon far from the names and blank and full lines (spaces left between letters of alphabet, etc.) would be a constant source of error.

In addition it might be noted that the quickest method for counting cards is to uncover the edges by repeated bending and then count by fives or tens. In this manner the cards can be enumerated in any case in very few moments.

Purpose of items. Reporting attendance in this manner gives a real estimate of the character of attendance. A
glance at the report will show whether the attendance is due to general irregularity or from individual cases in school only a short time. Good attendance would show very few pupils in the columns below 16-16. All other matters are readily evaluated, as they are common in the better reports over the country.

It is coming more and more to be required that all these facts be kept with respect to sex for purposes of comparison and various investigations relating to the differences in the sexes. In connection with this suggestion it is well to note that by inserting just after the number of the month the letters B and G and dividing the present space into two smaller spaces by running a line between the B and G through the space for each month, all of the items on the report could be shown by sexes. For example each line would appear and in that event the attendance and enrollment spaces should be condensed giving more space for other items. Such a report would be greatly facilitated by the colored cards.

The superintendent's monthly report should be similar to this in all respects except "schools" should appear where "months" is shown, and "month" where "year" is here given. The superintendent returns this card to the principal after each report, and for final filing at the close of the year.

The back of the card is for recording the data as shown when they are collected. This is for purposes of comparison, in various subjects for state statistics and other purposes, and yet they encounter the same problem each year - no record is on file which would make this readily obtainable. The following will fill a long felt want on the part of principals and superintendents.
So often during the school year it is important to know the equipment which has been added in each department and the cost in each case. In many of our schools this is not available.

<table>
<thead>
<tr>
<th>Subject or Department</th>
<th>EQUIPMENT RECORD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Supplies</td>
</tr>
<tr>
<td>Date of Bill</td>
<td>Nature of Bill</td>
</tr>
<tr>
<td>Company</td>
<td>Word bill</td>
</tr>
<tr>
<td></td>
<td>is filed under</td>
</tr>
</tbody>
</table>

**EQUIPMENT RECORD — EXHIBIT VIII.**

**The Blank.** The card should be 4 x 6 in.

**Its Use.** Its use is for reference only. It is to supply facts for state reports concerning value of the equipment added each year and for giving the number of volumes added to the library.

**Sources of Data.** The data are to be supplied from the bills as the goods are received and checked over.

**Recording Data.** This form is to be filled out just after the articles have been checked on the bill and before the bill is sent for payment and final filing.

**Purpose of Item.** The value of this record is important. It will show the proportion of money spent in various subjects; where and when purchases are made, the nature of the order, and the reference to the letter files which will show the bill in
detail. Hence when the state reports are received all the necessary facts will be found on these cards. In the "nature" of equipment should be mentioned the number of volumes in case of books, and such matters as chemicals, glassware, etc. in regard to other supplies. This card will be sufficient for a number of years and by the addition of other cards in each subject as needed the system can be made to extend over an indefinite number of years; this card should be placed just behind the one full of data, in the same file.

Another matter of more or less annoyance is the record of the members of the faculty. When the high school visitor or inspector visits the school this record has to be gathered from one or all teachers in the school. The facts required should be kept on file, not only for this purpose, but for additional uses as given below.

<table>
<thead>
<tr>
<th>Last name first</th>
<th>Position</th>
<th>SCHOLARSHIP: High School</th>
<th>Years</th>
<th>Grad.</th>
<th>Years</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Normal School</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>College or Univ.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Degrees with date</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Special subjects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Can teach</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Experience in other schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Kind of Certificate**

**EXPERIENCE IN THIS SCHOOL**

<table>
<thead>
<tr>
<th>Year</th>
<th>Salary</th>
<th>No. Periods</th>
<th>Subjects Taught</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cause of Leaving:

(Remarks Over)
These cards should be 4 x 6 in.

Use. The card is for reference in case of high school inspection, and for state report blanks. Also it is for reference in recommending teachers who have taught in the school.

Source of Data. The data are to be supplied by the teachers themselves sometime during the year, and are to be kept up-to-date by the teacher while she remains in the system.

Recording of Data. Given above - entered by teacher.

Purpose of Items. These data are valuable for making the card serve its purpose as outlined under "use". All facts mentioned except the experience in detail are given for necessary reports to be made out during the year. The special subjects and "can teach" are for collecting facts which will enable a principal to assign classes or work in emergency cases at any time during the year, or in apportioning out the teaching in case some sections are more than estimated when the teachers were employed.

Every school has a number of records besides those dealing with the pupils alone. One of these is the library record. Each library should have a permanent record of its volumes so that they could be located with reference to subject, title, or author. This would demand the writing of three cards at least for each book. In case a shelf list were kept in card form also, an additional card would be necessary for each book. This shelf list should be filed in a single alphabetical list. All the other cards should be filed in one continuous card file arranged alphabetically. The subject card, the author card and the title card should all be placed together in the same alphabetical file. For example,
to find "Principles of Argumentation" by Baker and Huntington, one could look under "Di" and find it by title, and under "Ba" and find it by author, or "Debating" and find it by subject, yet all such cards would be in one file, the debating coming under "D" of the general alphabet. The books under the subdivisions of subjects, such as "debating", "Phonograph", "Light", etc., should each be arranged alphabetically by author and fitted with simple guides different in color from the general guides.

The following forms will be found suitable to those needing a simple system. Schools should write to Library Bureau, Chicago, for special cards if interested, or to some University conducting courses in Library Science, where the most improved system might be installed under expert direction. For cataloging a library, the services of an expert is advisable. When the system is once installed in a scientific manner and put on the proper basis its future expansion is not hard to control.

<table>
<thead>
<tr>
<th>53.017</th>
<th>Principles of Argumentation</th>
<th>C 1905</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baker and Huntington</td>
<td></td>
</tr>
</tbody>
</table>

(Title Card) EXHIBIT Xa

---

<table>
<thead>
<tr>
<th>53.017</th>
<th>Baker and Huntington</th>
<th>C 1905</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Principles of Argumentation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General purpose of book can be given here if desired --</td>
<td></td>
</tr>
</tbody>
</table>

( Author card) EXHIBIT Xb.
<table>
<thead>
<tr>
<th>53.017</th>
<th>Debating</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ba.15</td>
<td>Baker and Huntington C 1905</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Principles of Argumentation</td>
<td></td>
</tr>
</tbody>
</table>

(Subject card) EXHIBIT X c.

In these cards the number refers to the book according to divisions and subdivisions, and enables a librarian to locate any book immediately. In the card system the card is to be filed according to the word in the top line; the first word in such line.

The Dewey system of numbering and classifying should be followed. The system is then suitable for unlimited expansion.

It might be added that all books in our high schools should be arranged according to authors and titles if arranged on either basis, and that the subject card be installed if possible at the same time. If this proves to be impractical at the time, its absence will not be serious loss until the library becomes very well developed.

COURSE OF STUDY and DAILY PROGRAM

A copy of the course of study and of the daily program should be placed in the files each year for future reference and for comparison with reference to development and tendencies, etc.

This necessarily introduces the question of filing. It will be found very convenient to print the course of study, if printed, on paper 5 x 8, or on paper of such size that it can be folded to 5 x 8 in. This will produce a uniform file of
these records.

The course of study should be self-explanatory with reference to the various courses and the subjects. That is, it should explain the kind of training or development or preparation a student would receive by taking either of the courses outlined. Reference to the Los Angeles course of study as given in the Appendix of Brown's "The American High School", p. 436, will explain what is meant here. A more concise treatment of the subject is given in the course of study for the Hastings, Nebraska, High School.

If these various courses, as offered in most schools, are explained definitely in the course of study as suggested by these two courses of study (Los Angeles, and Hastings), the pupil and parent will be able to understand the difference between the courses and to make a wise choice of school work.

The high school program can be made to show very valuable information in addition to its ordinary items.

A very suitable form is that given below:

**DAILY HIGH SCHOOL PROGRAM**

<table>
<thead>
<tr>
<th>Time</th>
<th>Mr. Coleman</th>
<th>Mr. Harran</th>
<th>Miss Holyand</th>
<th>Mr. Barten</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00</td>
<td>III Germ. 12 (14)</td>
<td>IV Germ. 21 (7)</td>
<td>II Eng. 14 (24)</td>
<td>I Algebra 26 (26)</td>
</tr>
<tr>
<td>9:45</td>
<td>IV Hist. 13 (12)</td>
<td>I Lat. 19 (18)</td>
<td>III Eng. 21 (17)</td>
<td>IIGeom. 29 (24)</td>
</tr>
</tbody>
</table>

Daily Program -- EXHIBIT XI (Front of card)

1. Roman numerals indicate year of course.
2. Figures represent the room in which the class recites.
3. Figures in parentheses indicate the number of pupils in each class, to be filled in later in school year.
This card should be 5 x 8 in. or a size which could be folded to this size.

On the back of this card should appear the items which are required by "certificates of admission" or "certificates of credits" which are sent to other institutions showing the pupil's work in the school prior to his leaving. Also it shows the texts used during the period, number of pupils in each division of the various departments such as English, Mathematics, etc.

<table>
<thead>
<tr>
<th>Year</th>
<th>Texts, Work, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1911-12</td>
<td></td>
</tr>
<tr>
<td>Subject</td>
<td>No. Pupils</td>
</tr>
<tr>
<td>English I</td>
<td>54</td>
</tr>
<tr>
<td>English II</td>
<td>47</td>
</tr>
</tbody>
</table>

Back of Daily Program - EXHIBIT XI.

Columns 1 and 3 should be printed in full when the program is printed, and the other columns, 2, 4, 5, should be left blank to be filled later during the year.

At close of the year's work this should be filed in a convenient place, 5 x 8 in. card case.

Any of this information could be filled in at free moments by any member of the faculty or some pupil during an idle study period.
ADDITIONAL BLANKS.

Aside from the blanks mentioned, which should be required in every school, there are a number of blanks which are essential to a school attempting certain work. One of these is Medical Inspection. Medical Examination should be given about the second week or later in the school year, as convenient, and should be repeated at the beginning of the third quarter.

The following blank seems (largely like blank used in New York, as shown on page 64 of Gulick and Ayres, "Medical Inspection of Schools") very satisfactory and requires a minimum of writing to present the necessary facts.

<table>
<thead>
<tr>
<th>Student name</th>
<th>First</th>
<th>Girl: Medical Inspection</th>
<th>Boy: Inspection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hist. of Illness:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School year</td>
<td>1st</td>
<td>2nd</td>
<td>3rd</td>
</tr>
<tr>
<td>1. Date of Phys. Ex.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Anemia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Enlarged Lymphs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Nervous Diseases</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Cardiac</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Pulmonary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Skin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Defect of Orthopaedic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. &quot; Vision</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. &quot; Hearing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. &quot; Nasal ETHG.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. &quot; Palate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. &quot; Teeth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Hypertrophy tonsils</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Adenoids</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Revaccination</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Treatment advised.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Medical Inspection blank - EXHIBIT XII.
(Front of card)

TREATMENT

<table>
<thead>
<tr>
<th>Date</th>
<th>For What</th>
<th>Result</th>
<th>Physician</th>
</tr>
</thead>
</table>

Back of EXHIBIT XII.
The blanks are 4 x 6 and are arranged for a complete four year medical record of any pupil in the high school. These cards are kept in a card file and at each examination are added to in all essential respects.

These blanks should be consulted in the cases of all failures in school work in order that no injustice to any pupil by virtue of any physical defect might arise.

At the time of the examination, besides making the proper entry on the Inspection Blank, the physician should send a notice to the parents in regard to the condition of the child in case treatment is necessary. The following forms are suitable and practical.

**MEDICAL INSPECTION NOTICE**

"This notice does not exclude pupil from school"

The parent or guardian of ________________________________ of attending ________________________________ of attending

A. S. is hereby informed that a physical examination of this child seems to show an abnormal condition of the ________________________________

This child should be taken to your family physician for treatment and advice. Take this card with you and give to the physician.

Medical Inspector.

Front of card, EXHIBIT XIIIa.

Present this card to your physician:

The physician in charge is requested to fill out and forward this card after he has examined the child.

I have this day examined ________________________________ of A. S. and find

the following condition:

I advised as follows:

__________________________________________________________

Physician.

Date

Office address.

Back of EXHIBIT XIIIa.
This card is to be mailed to parent at the close of the physical examination by the Medical Inspector, or sent by the child, preferably the former. When this card is returned to the Inspector it should be filed in a 3 x 5 in. case along with others of similar nature.

If the parent fails to take action, the school will have done its duty, although every means should be used to compel the parent to secure medical attention for the child.

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Vocational Guidance

Another work which our high schools should seriously undertake is Vocational Guidance. The following few records in regard to this work will be found valuable at the present time, although with the rapid strides that vocational guidance is taking in this country any blanks suggested in this report could be made more efficient in some respects for any particular school if the counsellor kept informed of the progress of this work in other schools.

---

<table>
<thead>
<tr>
<th>Vocational RECORD</th>
<th>Date</th>
<th>Vocational RECORD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Last name first.</td>
<td></td>
<td>2. Address</td>
</tr>
<tr>
<td>Speech</td>
<td>5. Countenance</td>
<td></td>
</tr>
<tr>
<td>Personality</td>
<td>Appearance in clothes - manners</td>
<td></td>
</tr>
<tr>
<td>i. Vocation preferred</td>
<td>j. Why</td>
<td>Parent's desire</td>
</tr>
<tr>
<td>k. Experience</td>
<td>m. Subjects liked</td>
<td>n. Subjects disliked</td>
</tr>
<tr>
<td>Excelled in what subjects</td>
<td>Ave. Grade</td>
<td></td>
</tr>
<tr>
<td>Money available - could get</td>
<td>Family vocation - history</td>
<td></td>
</tr>
<tr>
<td>Special talent</td>
<td>Interested most in</td>
<td></td>
</tr>
<tr>
<td>Possible fields</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adviser: Parent (Ext)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What pupil did after leaving school: why, if not as advised

<table>
<thead>
<tr>
<th>Date</th>
<th>Doing What</th>
<th>Remarks</th>
</tr>
</thead>
</table>

**The Blank.** All Vocational Record cards should be of the same size, and by reason of the amount of data they must show, 4 x 6 in. is a minimum. These should be of a color different from all other forms.

**Its Use.** This card is used in connection with the Employment Bureau, and is for reference by the counsellor when considering the pupil for any particular vocation. It is apparent that the counsellor could not settle many cases by a single interview and at each study of the case or at each conference this record should serve to bring the case up-to-date at any time.

Also this card is for improving the efficiency of the guidance department. By keeping track of the pupils who are guided into the proper fields of work and noting the success with which the advice is meeting, better work can be done.

**Source of Data.** The information here is to come from the registration blank, student record and interviews with pupil.
Recording Data. All items to be filled in by the counsellor are to come from the interviews - others might be inserted by a clerk or assistant from the registration blank and the record card, although the copying of such facts would do more than most anything to familiarize a principal with individual cases.

A student appointed as recorder or clerk might keep these cards up-to-date with respect to the "later" record by attempting to keep in touch with the pupils for a few years after they leave school. This could be handled by a pupil only in small schools; the work would require too much time in a large system.

Purpose of Items. The justification of these items for vocational guidance will be indefinite because of the importance of the various items to the counsellor. A counsellor who depends upon his judgment of pupils from interviews largely, would not need many of the items mentioned, but one who was very systematic and considered details with regard to their bearing on the various cases, would find the items of importance much as follows: 1,3,4 are for getting in communication with the proper party at any time; 6,8,9,10,a,b,c,d, are concrete facts which have a bearing in determining the ability and natural talent for various kinds of work. i,j,k,l,m,n are simply indicators for judging of the pupil's on estimate, his fixed ideas and the reasons for the same. These give the counsellor a start in the matter and can easily lead him into the vital matters at once. The last two items before the red line are for final disposition of various things. For example if a pupil would not get the money needed and wished to be an artist
or a field architect or landscape gardener where considerable money has to be spent in study under masters or in travelling, the case is hopeless and his project should be discouraged. The same is true in regard to college work. Many a pupil is wearing out his life in a field in which he cannot make good, simply because he is "out of place". Frequently the family talent will re-appear in members of the family and they will naturally succeed better in somethings than others, although this is rather an insignificant factor in American families. Also this family history might reveal a rich relative who would or could start the boy in his vocation and advance him rapidly if he deserved such. This would be worth while and is a determining factor; all such must be considered. Other items are self-explanatory.

The vocation finally advise should be recorded for a later testing of the judgment of the counsellor. The final action of the pupil should be kept on file for a similar reason, and for determining the wisdom of the pupil's choice. The "later" record is to test the judgment and wisdom of the advice given and to disclose the counsellor's insight into character, ability and human nature. Needless to say this work will be a complete failure unless the counsellor has the vocations and their demands thoroughly in mind and the best interests of the pupils at heart.

In determining the requirements and demands made by the various vocations through study and reading as well as through experience and personal investigation, the counsellor would find it advisable to condense his findings on a card suitable
for filing. This should be convenient and should show the essential facts to recall to the counsellor the details of the vocations which would be needed in informing a pupil or parent in regard to the nature of the vocation under question, in referring them to books and articles treating the vocation in full. By altering the following material and its arrangement according to the conditions emphasized by the counsellor a serviceable record of vocations could be kept on file.

<table>
<thead>
<tr>
<th>Vocation</th>
<th>Vocational Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation, Nature of</td>
<td></td>
</tr>
<tr>
<td>Time for preparation</td>
<td>Cost of preparation</td>
</tr>
<tr>
<td>Special requirements as to boy</td>
<td></td>
</tr>
<tr>
<td>Health conditions</td>
<td></td>
</tr>
<tr>
<td>PAY</td>
<td>POSITION</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**EXHIBIT XIV - Vocation Record (Front)**

The Blank. This card should be 4 x 6 in. and used fully if at all.

Its Use. The vocation record is used only for quick reference to the actual facts, and is not useful except for reference by the counsellor. He may not keep in his mind the facts regarding each vocation as he would need; this card
is simply a condensed reminder of necessary details. For more detailed information reference should be made to books, and pamphlets.

Source and Recording of Data. The data here are to come from books and experience with reference to this particular vocation. Part of it may come from circular letters or specially prepared bulletins such as those published by the Boston Vocational Bureau, and from investigations and visits to plants and individuals carrying on the work in question.

Purpose of Items. The items are of value when we consider that every pupil must be interested in the nature of his position, the time and money needed to prepare definitely for something, the position, salary and opportunities at the start and the future in each. The references given in the back of the card are
are for personal reading and study by the pupil if he is interested in some line or vocation. For example, many pupils who have talent in drawing or art never learn that good designers receive as high as $20 to $100 a week by a few years of consistent and well directed effort. These books are eye-openers to many.

The Employment Bureau which should be conducted in connection with the guidance department if it is to realize its full purpose in the school. This Bureau, however, should serve only those who for some reason cannot go further in school at the time; otherwise it might induce pupils to leave school before they should.

<table>
<thead>
<tr>
<th>Position</th>
<th>Pay</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Blank</td>
</tr>
<tr>
<td>Address</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Requirements of position.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification of candidate desired</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunity in future</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remarks:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Employment Blank - Exhibit XV. (Front of card)
The Blank. This card should be 4 x 6 in. and of the same general color as the other vocational record forms.

Its Use. Its use is for keeping a record of vacancies and the disposition made of each. This may run for years in a single vacancy. For example, some firm might depend upon the school to replace pupils as fast as the ones employed advance to something better, or as they fail to make good. This would require a rather extended record; hence the tabulations on the back of the card.

Source and Recording of Data. The data are to come from information sent in by firms having the vacancies and from action of the employment secretary or chairman in disposing of vacancies. All matters should be recorded as soon as received.

Purpose of Items. The facts kept here are for aiding the secretary in making suitable recommendations and for following up his recommendations with a view to determining the success of those employed and the reason why others failed to secure the position after being recommended.
Other blanks which are useful at times are the following.

Certificate of Credits, attendance record, and special report blanks for students. In many respects these are not important to smaller schools, except the special report to parents. The certification is often needed in large schools where the student body change more or less each year. The following blank, very similar to the one used in Seattle, Washington, has two chief advantages. It presents all the essential facts in mailing form, and requires the least amount of writing on the part of the official making out the blank.

<table>
<thead>
<tr>
<th>Name in full</th>
<th>School Location</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Term</th>
<th>Los.</th>
<th>Date issued</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Practicals:**

1. Leave "credit" column blank.
2. "I" in "no. times per week" means number of lab. periods.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Text</th>
<th>Qu. of text</th>
<th>No. of weeks</th>
<th>Time</th>
<th>Gr.</th>
<th>Subject</th>
<th>Text</th>
<th>Qu. of text</th>
<th>No. of weeks</th>
<th>Time</th>
<th>Gr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Economics</td>
<td></td>
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<tr>
<td>German</td>
<td></td>
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<td></td>
<td></td>
<td>Pedagogy</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>French</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>Domes. Sci.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>History</td>
<td></td>
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<tr>
<td>Algebra</td>
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<tr>
<td>Geometry</td>
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<tr>
<td>Trigonometry</td>
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<tr>
<td>Agriculture</td>
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<tr>
<td>Physics</td>
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<tr>
<td>Chemistry</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-Excellent</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>S-Superior</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-Inferior</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

*CERTIFICATE OF CREDITS - EXHIBIT XVI*
CERTIFICATE OF CREDITS

In

HIGH SCHOOL

(See back of card)

Outside of EXHIBIT XVI when folded.

This card is 5 3/4 in. x 7 in. and folds to a 3 1/2 in. x 5 3/4 in., making it suitable for mailing in an ordinary envelope and for filing in a 4 x 6 filing case.

This blank shows the same items called for by the certificate of admission to the University of Missouri and should be sufficient for the average school to estimate accurately the standing of the pupil concerned.

In copying the facts from the record card, only the grades on the front of the card are desired. The information about texts comes from the back of the daily program.
In all schools where the students assemble for morning or afternoon exercises tardies and absences must be recorded if such assemblies are to be worth while to all. Exhibit XVII is a suitable form for taking such a record.

![Attendance Record - Exhibit XVII.](image)

This card should be 3 x 5 in. printed on paper in pads. This blank is a mechanical chart of the assembly seats, locating the seats by rows and numbers, reduced to a convenient size for handling. The letters refer to the rows of seats, and the numbers to the seats in the rows.

The use is apparent. The official or student who keeps this record of attendance notes three things at each assembly: the day (date), the time (A. M. or P. M.) and the attendance (tardies or absences). These are indicated and the blank is stuck on a desk file until the record can be transferred to the year cards. The names of the pupils occupying any seat is obtained by referring to a chart containing names in seats.

The method of indicating the time is by striking out either A. M. or P. M.; the date should be at least the month and day; tardies are indicated by a check (√) in the proper space,
and absences ( 0 ) for pupils not present. These are natural easy marks to make and are thoroughly satisfactory, and are suggested merely because of the ease with which they can be entered.

The special reports which should be sent out to parents in the midst of a quarter's work are as follows:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Cause of poor work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A decided improvement in this work must be made to insure a passing grade for this quarter.

We trust you will give this the attention it merits and assist us so far as you can to better matters.

You are cordially invited to visit the school and to consult with the teachers at any time.

Principal.

Poor work in high school is usually due to one or both of two things: (1) Lack of sufficient home study; (2) inability to carry as many studies as the pupil is trying to carry. For successful work in four subjects from two to three hours of regular, systematic earnest home study are necessary.

Pupils should consult with teacher if they do not know the trouble with their work.

I have carefully noted the contents of this report.

Parent or Guardian.

Special notice in regard to school work of pupil. EXHIBIT Va

This special report is to be sent out at the end of the first month of each quarter if the work seems to justify it. Nine weeks is too long a time for a pupil to neglect his work without the parents knowing of such neglect; hence
In case a student continues to do poor work in a subject it is sometimes advisable to transfer him to a lower class but he should be given every opportunity to make good before he is put back. It is suggested therefore that the following notice be sent to his parents in order that every means for improving his work may be brought to bear on the case.

TO PARENT.
Notice of Failure in Class work.

Kr. ______________ 19

The last _______ weeks has failed to attain and maintain the required standing in the class in ________

Unless satisfactory improvement be made during the ensuing _______ weeks, it will be necessary to transfer _______ to a lower class.

Very respectfully,

Principal.

The effect of this notice will be destroyed if the above statements are not carried out in practice if the pupil fails to improve in his work. A few such cases fairly and firmly enforced will have a wholesome effect on the entire work of the school.

This card is 3 x 5 and should be on very light cardboard or on heavy paper. This notice should not be sent out unless the authorities intend to enforce its regulations.
In conclusion it is only necessary to call attention to the above enumerated points in regard to each blank to demonstrate the fact that "there's a reason" for each record form, and for each fact collected and recorded. In making use of such records, only those forms should be installed which it is felt would be "worth while" in the particular system; and in addition only such items should be shown on the forms used as would prove serviceable if included.

For all general purposes of records in Missouri High Schools, the above system will adequately meet the demands. The expense given in the following chapter will in addition demonstrate the fact that this system is easily possible for any school wishing to keep an efficient system of records in all the essentials mentioned above.
Chapter IV.

INSTALLATION AND OPERATION OF PROPOSED SYSTEM.

A. Installation.

The card system is not only more convenient and better adapted to the conditions in various schools, than is the bound volume or the loose leaf form of records, but it is also cheaper. The records where the comparison in price can be estimated with considerable accuracy are "student permanent record", "daily register", and "teacher's class book", and what is true here is true in all other forms of records. Therefore, just below the estimated cost of the card system, comparison will be made between the above records and the same forms in books (bound and loose).

The prices in each case are from publishing houses dealing in regards of the form mentioned, and may be considered as typical in all respects.

The prices for furnishing the following cards, as per tabulations A are taken from quotations made by the Library Bureau, Chicago, and any of the card forms can be furnished by the company on the same scale as quoted here.

The additional blanks will have prices as estimated by a local printer and are subject to change with locality. Comparison with the prices of the Library Bureau and those made on the same blanks by the local printer, it seems that the local prices are somewhat higher than they would be if prepared by the Library Bureau.

-115-
**TABULATIONS A - All prices are net f.o.b. Chicago.**

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>Paper size</th>
<th>color</th>
<th>Price per 500</th>
<th>1000</th>
<th>2500</th>
<th>5000</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Ledger</td>
<td>5x5</td>
<td>white (front side)</td>
<td>$2.75</td>
<td>$3.75</td>
<td>$7.00</td>
</tr>
<tr>
<td></td>
<td>&quot;</td>
<td>&quot;</td>
<td>(both sides)</td>
<td>4.30</td>
<td>5.70</td>
<td>10.50</td>
</tr>
<tr>
<td>II</td>
<td>&quot;</td>
<td>&quot;</td>
<td>(both sides)</td>
<td>4.30</td>
<td>5.70</td>
<td>10.50</td>
</tr>
<tr>
<td>III</td>
<td>&quot; 110 stock 4x6</td>
<td>&quot; or colors</td>
<td>5.65</td>
<td>7.75</td>
<td>16.25</td>
<td>23.25</td>
</tr>
<tr>
<td>IV</td>
<td>&quot; 3x5</td>
<td>&quot; or colors</td>
<td>4.55</td>
<td>6.10</td>
<td>11.90</td>
<td>17.70</td>
</tr>
<tr>
<td>V</td>
<td>&quot; 6x6</td>
<td>&quot; or colors</td>
<td>7.60</td>
<td>9.85</td>
<td>18.75</td>
<td>26.75</td>
</tr>
<tr>
<td>VI</td>
<td>&quot; 5x8</td>
<td>&quot; or colors</td>
<td>7.80</td>
<td>10.60</td>
<td>21.00</td>
<td>31.00</td>
</tr>
<tr>
<td>VII</td>
<td>&quot; 5x8</td>
<td>&quot; or colors</td>
<td>7.55</td>
<td>10.15</td>
<td>20.75</td>
<td>30.75</td>
</tr>
<tr>
<td>VIII</td>
<td>&quot; 4x6</td>
<td>Per 100 - $6.25</td>
<td>5.65</td>
<td>7.75</td>
<td>16.25</td>
<td>23.25</td>
</tr>
<tr>
<td>IX</td>
<td>&quot; 4x6</td>
<td>or colors</td>
<td>5.40</td>
<td>7.50</td>
<td>15.90</td>
<td>23.00</td>
</tr>
<tr>
<td>XV</td>
<td>&quot; 4x6</td>
<td>or colors</td>
<td>5.40</td>
<td>7.50</td>
<td>15.90</td>
<td>23.00</td>
</tr>
<tr>
<td>XVII</td>
<td>Ledger</td>
<td>3x5</td>
<td>or colors</td>
<td>2.75</td>
<td>3.75</td>
<td>7.00</td>
</tr>
</tbody>
</table>

On a heavier hard than the 110 stock, the above may be printed on 120 stock as follows: On 3x5 cards, it would be $.25 more per thousand, on the 4x6 $.50 more per thousand, and on the 5x8 $.35 per thousand.

**Estimated cost of other blanks:**

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>Paper size</th>
<th>color</th>
<th>Price per 500</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIII</td>
<td>110 stock 4x6</td>
<td>White or colors</td>
<td>$4.00</td>
<td>$6.00</td>
</tr>
<tr>
<td>IX</td>
<td>4x6</td>
<td>&quot;</td>
<td>5.00</td>
<td>7.00</td>
</tr>
<tr>
<td>X</td>
<td>3x5</td>
<td>plain</td>
<td>1.35</td>
<td></td>
</tr>
<tr>
<td>XII</td>
<td>4x6</td>
<td>or colors</td>
<td>5.65</td>
<td>7.75</td>
</tr>
<tr>
<td>XVI</td>
<td>5 3/4 x 7&quot;</td>
<td>&quot;</td>
<td>.50</td>
<td>10.50</td>
</tr>
</tbody>
</table>

All other forms are to be printed by local printer as needed and for this reason no quotations will be given.

**Key to above quotations:**

<table>
<thead>
<tr>
<th>I</th>
<th>Registration</th>
<th>VI Record card</th>
<th>XII Medical Inspector</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td>Schedule card</td>
<td>VII Monthly-Yearly Rpt</td>
<td>XIII Vocational Student</td>
</tr>
<tr>
<td>III</td>
<td>Year Card</td>
<td>VIII Equipment Rpt</td>
<td>XIV Vocation Record</td>
</tr>
<tr>
<td>IV</td>
<td>Teacher's Class</td>
<td>IX Teacher's record</td>
<td>XV Employment Record</td>
</tr>
<tr>
<td>V</td>
<td>Report cards</td>
<td>X Library cards</td>
<td>XVI Certificate of Credits</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>XVII Attendance Record</td>
</tr>
</tbody>
</table>
In addition to the printing there is the extra expense of filing cases for a system in card catalogue form. The following quotations on standard size, quarter sawed golden oak, Card Index Cabinets are from three companies as listed below.


<table>
<thead>
<tr>
<th>No. Drawers</th>
<th>1 dr.</th>
<th>2 dr.</th>
<th>3 dr.</th>
<th>4 dr.</th>
<th>6 dr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 x 5 cards, no rod</td>
<td>$2.50</td>
<td>$3.00</td>
<td>$3.50</td>
<td>$4.50</td>
<td>$5.50</td>
</tr>
<tr>
<td>4 x 6</td>
<td>3.00</td>
<td>6.00</td>
<td>9.00</td>
<td>11.00</td>
<td></td>
</tr>
<tr>
<td>5 x 8</td>
<td>3.50</td>
<td>7.00</td>
<td>11.00</td>
<td>17.00</td>
<td></td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>No. Drawers</th>
<th>1</th>
<th>2</th>
<th>4</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 x 5 cards, no rod</td>
<td>$3.25</td>
<td>$5.50</td>
<td>$9.00</td>
<td>$12.50</td>
</tr>
<tr>
<td>4 x 6</td>
<td>3.75</td>
<td>6.50</td>
<td>10.00</td>
<td>14.50</td>
</tr>
<tr>
<td>5 x 8</td>
<td>4.50</td>
<td>7.25</td>
<td>12.75</td>
<td>16.50</td>
</tr>
</tbody>
</table>

From **Chicago House Wrecking Co.**, Chicago, Ill., Catalogue 164.

(This is a mail order house and does not deal exclusively in these goods as do the above firms.)

<table>
<thead>
<tr>
<th>No. Drawers</th>
<th>1</th>
<th>2</th>
<th>4</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 x 5 cards, with rods</td>
<td>$1.40</td>
<td>$2.15</td>
<td>$4.10</td>
<td>$6.75</td>
</tr>
<tr>
<td>4 x 6</td>
<td>1.85</td>
<td>2.50</td>
<td>4.60</td>
<td>7.00</td>
</tr>
<tr>
<td>5 x 8</td>
<td>2.40</td>
<td>3.30</td>
<td>6.00</td>
<td></td>
</tr>
</tbody>
</table>

It is advisable when installing blanks for school records to have them made on a large scale if they are of a satisfactory system. Hence in the following comparison of expense in installing certain forms in card, loose leaf or bound volume, the period considered will be ten years. The school will be the average in a town of 10,000 inhabitants, having an enrollment of about 300 pupils, about 90 new pupils entering each year.
CARD SYSTEM (Student permanent record) Exhibit VI

1000 cards, 5 x 8, printed for use .......... $10.60
1 50-division alphabetical guide ......... .50
1 25-division " ................. .15
1 Oak filing case, 2 dra., 5x8 .......... 7.00 or $3.20

Total ................................ $18.25 or $14.55

COST PER YEAR ................................ $1.83 or $1.46

LOOSE LEAF SYSTEM.

A reliable company quotes:
1 Book bound in cloth, leather back and
 corners, automatic post fastener with
 index and one transfer binder with in-
 dex - all with 240 sheets making 240
 individual records ...................... $7.50

1000 records, or enough for 10 years would re-
 quire 4 such books .................... $30.00

COST PER YEAR ............................ $3.00

BOUND VOLUME SYSTEM.

Same company quotes:
1 bound volume, 240 pages containing
 printed forms, from $10 to $15 ac-
 cording to binding.
1000 records would require 10 such books,
 making the cost for 10 years ............ $40.00

COST PER YEAR ............................ $4.00

It is apparent, therefore, that the card system is
almost twice as cheap as either of the other forms, and
its superiority as a system makes it much more desirable.

CARD SYSTEM (Teacher's Class Cards) Exhibit IV.

The teacher's class book makes possible another comparison.
In the above school with 12 teachers or less and each teacher
teaching 6 classes with 25 pupils per class, would require 150
cards a year.

1500 cards, 3 x 5, ready for use ................ $4.30
COST PER YEAR ............................ $3.43
TEACHER'S CLASS BOOK ................. $30.25
The above estimate for the Student Record was made with reference to the single form. In case the whole or a similar card system were to be installed it would be cheaper and more convenient to purchase a sectional filing case, ordering only the sections needed. This could be added to as the records increased with the years, and thus be made a continuous system.

The manner in which the above quotations are given will make it possible for any high school to compute the expense necessary to install any particular card and make its use as convenient as the system will permit.

B. OPERATION OF THE SYSTEM.

The effectiveness of the operation of the system will depend upon two things: (1) definitely placing of responsibility with reference to the various records, and (2) requiring by law or through rules or regulations of the Board of Education, that these records be filled out and filed by the proper official at the close of each year.

The responsible party for the various records will be found in the discussion of each record in chapter III and need not be repeated here. The principal of the high school, in general, should be held responsible for all records, and he in turn should hold certain teachers or assistants responsible for the different records if the matter is divided among many officials. This gives the Board an opportunity to enforce its regulations with reference to the school records.
Just because some teacher or principal cares so little about
the school as to leave his work with the records incomplete
in any manner is no excuse for the lack of such records
when the new principal enters upon his work. Of course,
it should be a fact that no official would thus neglect
his obligations to the school, students and the board, but
the examples that can be cited so readily in almost any
part of the country are ample proof of the need of this safe-
guard which will protect the school from the indifference and
carelessness of such officials. And if the records are
not left in suitable shape, the board is at fault as well
as the indolent principal or teacher.

Besides the school laws of Missouri which give ample
opportunity to the board to punish severely one failing
to do his duty in this respect, the board has power to
pass any needed regulations and to make any special require-
ments of its teachers or principal with a view to making them
fully do their duty. In Missouri's school laws, 1911,
Section 10602 one opportunity is given the board for punishing
in this respect.

"Any district or county clerk, county superintendent,
county treasurer, school director or other officer, who
shall wilfully neglect or refuse to perform any duty or
duties pertaining to his office under this chapter shall be
regarded as guilty of a misdemeanor and subject to a fine of
not more than one hundred dollars, to be recovered in any
court in this state having competent jurisdiction."

This section applies to all classes of schools.

The following law with reference to teachers in common
schools should be enforced with reference to the proper of-

ficials in the high schools.
"Section 10861......It shall be the duty of every teacher to make out and file with district clerk, at the expiration of each month, a report of the number of pupils in attendance during the month, distinguish between male and female, the average attendance, and such other statistics as the board of directors, by order, may require, and no warrant shall be ordered by the board of directors drawn by the clerk for such month's salary until such monthly report has been made and filed with the district clerk; and at the close of the term, a report embracing a summary of the above, together with the length of term taught, wages paid, teachers employed, and such other information as the board, by its official acts, may require;...... and no warrant shall be issued by said clerk in favor of such teacher for the last month's salary of such term until he shall have filed with said clerk and county superintendent such term report."

This gives the board of education an opportunity to say what shall be reported as completed in the official records or school statistics before the last month's salary is paid. Although these laws are worded with respect to the district board of directors, the board of education in any city or town is subject to the same ruling as is shown by the following extract of the law with reference to the duties of the members of the city board of education.

"Section 10871......The board of education of any town, city or consolidated school district, shall, except as herein provided, perform the same duties and be subject to the same restrictions and liabilities as the boards of other school districts acting under the general school laws of the state....."

Likewise with respect to the official on the board who is affected by the above law, the following extract applies:

"Section 10868......The president and secretary, except as herein specified, shall perform the same duties and be subject to the same liabilities as the presidents and clerks of the school boards of other districts."

It should be noted in this connection that the secretary of the board of education who issues a warrant to a principal or teacher who fails to make a monthly or term report or such other information as the board, by its official acts,
may require" as per section 10861, is guilty of a misdemeanor and subject to a fine of not more than one hundred dollars, as per extract of section 10802 given above.

Thus it seems that the laws of Missouri in regard to schools are sufficient for every board of education to insure a satisfactory system or records. The board and clerk or secretary are protected absolutely from any indifference or carelessness on the part of the high school principal or teacher, and above that the members of the board are protected from any oversight or carelessness on the part of the clerk or secretary of the board. Provision is also made for the board to require the keeping of any record which seems advisable. The board, therefore, has all power to enforce the proper keeping of all records and reports.

In conclusion, it is only necessary to say that the above suggestions in regard to requiring of school superintendents, principals, and teachers, certain definite statistical information and general reports, applies to all schools, large and small, and the enforcement of the state laws in regard to this one point will do much toward the solution of the problems dealing with school statistics. And the Board should take this matter in charge to this extent because of the shifting and changing in the officials they elect.

Above all things, it should be the aim of each educator, each superintendent, principal or teacher to have records and reports which show all the required facts, in a stable form, and which are efficient in meeting the ends such records and reports are meant to serve.

THE END.
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