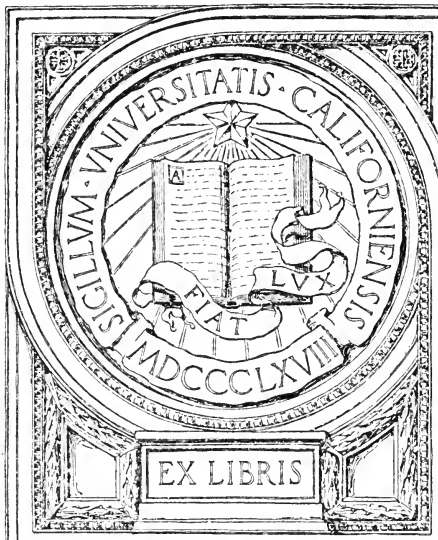


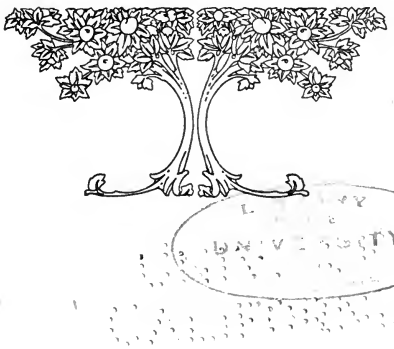
Vocational Education
and
Vocational Guidance

A Survey and Preliminary Report

By a Committee Appointed

by the

Iowa State Teachers' Association



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November, 1914

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Report of the Committee on Vocational Education and Vocational Guidance

ERRATA

P. 25, Columns 3 and 4 from the last, the words "under" and "over" should exchange places.
P. 26, Line 10 from the bottom, 81% should read 87%.
P. 32, Line 2 from the bottom "33" should read "32."
P. 33, Line 7, "32" should read "27."
P. 37, "Fig. 3" should be "Fig. 1," and should be used on page 57.
P. 38, Line 11 from the bottom. Insert the word "the" before the word "further."
P. 47, Heading last column. "Total by grades" should read "Total by ages."
P. 48, Heading last column, "minimum" should read "maximum."
P. 65, Line 10, "Insufficiency" should read "inefficiency."
P. 69, Line 5, "data" should read "item."
P. 71, Line 2, "works" should read "words."
P. 71. Line 21 "their" should read "its" own establishment.
P. 83, No. 78. Omission of "he" should read "he remains."
P. 94, Line 2 from bottom of the page, "one thousand" should read "nine thousand."
P. 96, Sec. 9, "report" should read "respond."

Honorary Member.

Report of the Committee on Vocational Education and Vocational Guidance

STATE OF IOWA
DEPARTMENT OF PUBLIC INSTRUCTION

BULLETIN NO. 13, 1914.

The report of the Committee on Vocational Guidance and Education appointed by the Iowa State Teachers' Association contains so much valuable material concerning this subject of vital interest to the state, that the Department of Public Instruction felt justified in publishing the result of the investigation and the findings of the committee in a special bulletin. The material will be available for the use of those interested and it will also be valuable as a foundation for any future or further survey of vocational conditions in the state.

Respectfully,

A. M. DEYOE,
Superintendent of Public Instruction.

Des Moines, Iowa, October 22, 1914.

COMMITTEE ON VOCATIONAL EDUCATION AND VOCATIONAL GUIDANCE OF THE IOWA STATE TEACHERS' ASSOCIATION.

Appointed by J. H. Beveridge, President.

Dr. W. A. Jessup, State University of Iowa.
Professor C. P. Colegrove, State Teachers' College.
Professor G. M. Wilson, State College of Agriculture and Mechanic Arts.
M. G. Clark, Chairman, Superintendent of Schools, Sioux City, Iowa.
Mrs. Anna L. Burdick, Secretary, Des Moines Public Schools.
The Honorable A. M. Deyoe, State Superintendent of Public Instruction, Honorary Member.

I.

FOREWORD.

Creation and Organization. At the meeting of the Iowa State Teachers' Association in November of 1913, a committee was created by authority of the Association, for the purpose of investigating and reporting upon legislation for Vocational Education and Vocational Guidance for the state of Iowa. The committee was later appointed by Superintendent J. H. Beveridge, President of the Association, including in its personnel, Professor W. A. Jessup, Iowa City, Iowa; Professor C. P. Colegrove, Cedar Falls, Iowa; Professor G. M. Wilson, Ames, Iowa; Mrs. Anna L. Burdick, Des Moines, Iowa; Superintendent M. G. Clark, Sioux City, Iowa; and the Honorable A. M. Deyoe, Des Moines, Iowa, Honorary Member.

At the first meeting of this committee a permanent organization was effected as follows: M. G. Clark was elected as chairman, and Mrs. Anna L. Burdick as secretary. The committee has held regular meetings and, up to the time of this writing, has met for investigation and discussion of the subject, six times, with the possibility of at least two more meetings before this report is finally rendered to the State Association.

The committee desires to express its appreciation of the services of the secretary, Mrs. Anna L. Burdick, and of her extensive and thorough contributions to this report.

Scope of the Work. At the first meeting of the committee held November 12th at the State House, the general discussion of the scope of the work of the committee was made and, at that time it was outlined and construed to include the following:

1. The gathering of data from:
   a. Industries.
   b. Commercial pursuits.
   c. Labor.
      (1) Skilled.
      (2) Unskilled.
      (3) Juvenile.

d. Education with special reference to waste under existing conditions, caused by
   (1) Elimination
   (2) Retardation
   (3) Juvenile delinquency
   (4) Inefficient schools.

2. The interpretation of the above data as a basis for the practical recommendations of the committee.

Since it seemed necessary in order to understand the work thoroughly, it was decided that a resume ought to be made of all that has been accomplished, particularly in the United States, along these lines of work. Consequently, it was assigned to Dr. W. A. Jessup to make an investigation and report concerning this phase of the needed investigation. The committee felt that it would be a very easy matter to make a superficial study of the legislation of Massachusetts, Indiana, Wisconsin, etc., and from such investigation to formulate legislation which it might recommend and possibly secure through the hasty action of the legislature. But it seemed to be the unanimous opinion of the committee that much of this legislation had not been successful, that all of the states in which work had been done were more or less open to criticism as to the real value of some phases of their legislation; and more than this, that Iowa presented definitely her own problem and that this problem must be known, not through hasty reports and immature conclusions, but by means of a thorough survey of all of those phases which enter into the industrial and vocational life of the state.

It was also thought that any legislation brought forward hastily before such a survey had been made and interpreted, must of necessity bring to Iowa far greater mistakes than those mentioned in any of the preceding states. Consequently, the committee has attempted to begin a big thing, a piece of work that could not be accomplished in the length of time given to the committee for its report.

At a later meeting of the committee, seven forms of questionaires were decided upon as the minimum amount of investigation that we could possibly attempt in the hopes of securing reliable data upon which to form any conclusions or recommendations. These schedules were as follows:

Schedule 1, which was placed in the hands of State Superintendent Deyoe, was made up of questions to be asked at the next

school enumeration concerning children's occupations and the age of leaving school.

Schedule 2, also placed in the hands of State Superintendent Deyoe, called for vocational information along two lines:

1. On vocational information to be answered by children.
2. Questions on vocational information to be answered by the parents of these same children.

Schedule Number 3 consisted of questions to the employers of labor concerning the problems of labor employment, and the education of their employes. The committee was fortunate to secure the co-operation of A. L. Urick, Commissioner of Labor, who sent this questionnaire out through his office, and from it much valuable information has been secured.

Schedule Number 4 was likewise sent out to the employers of commercial help. This schedule was assigned to Mrs. A. L. Burdick, to secure the information through the co-operation of the commercial clubs of ten chosen cities.

Schedule Number 5, sent out to organized labor, concerned itself with the problems of labor and the education and needs of the laborer and likewise was secured through the courteous co-operation of the Commissioner of Labor, A. L. Urick.

Schedule Number 6, on the permanency of agriculture as an occupation and also to secure data concerning the education of agriculturists, was assigned to Professor G. M. Wilson, of Ames.

Schedule Number 7, concerning itself with the problems of truancy delinquency, and of juvenile court records, was assigned to Superintendent M. G. Clark.

These schedules were all duly prepared and sent out and returns upon them appear in a later portion of this report.

Need of Compulsory School Statistics. One thing that nearly all these schedules have shown, at least all those having to do with the school life of a city, a county or a district, is the need of a system of records in each school concerning those vital statistics which must be available in order to survey the school field of Iowa, and know wherein are its real weaknesses or its strength. Practically no such records exist and it is at this point that the committee has often felt itself vitally handicapped in arriving at its recommendations or conclusions.

The Need of Vocational Education and Vocational Information. The committee wishes to place itself upon record as being heartily

convinced of the need of vocational legislation for Iowa. They, however, wish to place themselves just as distinctly on record that the investigations which they have made lead them to feel the inadequacy of the work which they have done and that as a committee, they are not yet ready to make final recommendations for a form of legislation which may tie Iowa up for years perhaps, to a serious legislative blunder.

Necessity of a Balanced Committee. Your committee feels that the issues in vocational education cannot be settled by the educator alone. Nor should the educator alone be asked to face and solve these issues unaided by the layman. Vocational education in the last analysis means preparation to meet the demands of callings. Only those who have had experience in these callings are able to furnish information and advice with regard to what should be taught in preparation for them and, to a considerable extent, as to how they should be gotten.

The educator is needed in order to take the contributions of the layman and organize them into courses of study. The co-operation of both is required to solve the problem. The school man knows the world of children and of books; the layman knows the world of affairs as they are carried on in his particular vocation. Both points of view are necessary; much of the work of vocational education must be carried on in the vocations themselves. This requires the interest and the help of the employer and employe.

We need to bring home upon both the employer and employe a renewal of an ancient sense of responsibility for the training of workers and the integrity of the craft. Industry cannot solve the problem unaided; neither can the schools. The need of co-operation, therefore, between the educator and the practical man and the development of devices and machinery whereby this co-operation may be most effectively secured is one of the problems yet to be solved.

Funds and Time. Furthermore, your committee also has been without adequate funds for any extensive investigation and the time at its disposal has been short and has been taken in the midst of other pressing duties in education. The committee has been more and more impressed with the large importance of the subject which presents itself, an importance which justifies the fullest consideration before final action is taken by the state legislature. To this extent the committee feels itself justified in asking for a larger appropriation of funds and an extension of time.

Finally. In attempting to handle the problem all such questions as these have caused your committee to offer at this time no final report or recommendation upon the subject. However, the investigations of our committee have laid open some by-problems that must be solved in order to give any investigating body the necessary data from communities and schools that it must have before it can speak with authority upon the subject for which the committee was created.

Some General Considerations

HISTORICAL.

Some provision has been made at every stage of civilization for the transmission of race experience to the oncoming generation. The problem of the selection of this experience, and the problem of the technique of transmission have always been present.

The particular ideals of the social group and the knowledge of the principles underlying the technique have varied at different stages of civilization, but on the whole history indicates that there has been a fairly constant *vocational* idea running through education from the beginning.

To go no farther back than our own American Education we find a *vocational* note running through it all. The academy proposed by Benjamin Franklin in 1743, was vocational in intent, as is indicated by the following quotation:

"As to their studies, it would be well if they could be taught everything that is useful, and everything that is ornamental. But art is long and their time is short. It is therefore proposed, that they learn those things that are likely to be most useful and most ornamental; regard being had to the several professions for which they are intended."

The early Boston High School, established in 1821, expressed the same idea, as is shown in the quotation from the report giving the reason for the establishment of this school:

"A parent who wishes to give his child an education that will fit him for active life, whether mercantile or mechanical, is under the necessity of giving him a different education from any which our public schools can now furnish. * * * We, therefore, recommend the founding of a seminary which shall be called the English Classical School." This school soon became the English High School.

The report on the establishment of the High School for Boys in New York, which was opened in 1825, reads: "It should never be forgotten that the grand object of this institution is to prepare boys for such advancement and such pursuits in life as they

are destined to after leaving it. All who enter the school do not intend to remain for the full period of time, and many who leave it expect to enter immediately upon the active business of life. It is very plain that these circumstances must require corresponding classification of scholars and studies."

HEAVIER DEMANDS ON THE SCHOOL.

With the growing vision of universal education and the attendant increase in the number of children in school, and the enormous increase in the cost of the school, have come about added complexities in adjustment. So long as the public school attracted relatively few people, the vocational needs of these people could be handled simply. The wider sampling of society attending schools has brought about a wider diversity in vocational interests of the constituency of the schools. The increase in support by taxation has brought about a more insistent demand for results of a tangible nature.

Thus the school finds itself face to face with the serious difficulty of providing a type of education which is of maximum significance for the people of the state. In the small schools of our state it is peculiarly difficult to provide a type of specific education which fits the different students for the different types of vocational activity. While it is true that differentiation of occupational activity has not gone on so rapidly in Iowa as it has in some of the Eastern states, yet this differentiation is going on with greater rapidity than many of us suspect as is indicated by the growth of cities, and in the development of commercial and manufacturing activties. According to the census of 1910, almost a half million of our people live in towns of 2,500 or more.

DIVERSITY IN OCCUPATIONS.

Professor Lewis, of the College of Education at the State University of Iowa, has recently made the following analysis of occupational conditions in Iowa:

"According to the last (1910) Census of Occupations (U. S.), there were in Iowa thirty-seven different occupations in which at least one man was engaged in every 1,000 of the population. The occupations and the average number of men engaged in each to every thousand of the population are given below.

Constant Occupation of Iowa Men.	Number of Workers per each 1,000 Population.
Laborers	100
Farmers	100
Gardners and Florists	2
Ditchers	2
Coal mine operators	6
Blacksmiths	2
Brick and Stone Masons	1
Builders and Building Contractors	3
Carpenters	8
Printers	1
Stationary Engineers	1
Machinists	3
Millers	1
Painters	3
Mill Operators	5
Draymen and Teamsters	3
Brakemen	1
Conductors (steam and electric)	1
Engineers (locomotive)	1
Firemen (locomotive)	1
Mail Carriers	1
Bankers	1
Clerks	5
Commercial Travelers	2
Deliverymen (stores)	1
Insurance (agents and officials)	1
Real Estate Agents	1
Retail Dealers	12
Salesmen (other than above)	5
Lawyers	1
Physicians	1
Teachers	1
Barbers	2
Janitors	1
Bookkeepers (cashiers, etc.)	2
Foremen	3
Clergymen	1

These figures furnish something of a basis for estimating the complexity of the problem of making adequate provision for vocational education in this state. It but emphasizes the necessity of promoting the fundamental phases of this type of work.

COMMUNITY VARIATIONS.

Another factor in a satisfactory adjustment of education to vocational needs is the diversity of vocational activity from city to city in the same state, and from decade to decade in the same city. Certain cities in Iowa, for example, are noted for their

mining industries, others for button manufacturing, metal work, printing, and so on. Changes are going on constantly in regard to these dominant industries in a given town so that vocational conditions are undergoing continual change. This change demands a high type of adaptability on the part of the man or woman who succeeds in participating in these changing activities. Great care is necessary in order that the school select permanent phases of vocational training.

SHIFTING POPULATION.

Not only are conditions changing, but the population is constantly shifting. Dr. Ayers found when he conducted a census of the thirteen-year-old children, that from twenty-one per cent to eighty-seven per cent of the thirteen-year-old children in a group of city schools throughout the country were not born in the town in which they were being schooled. Relatively few parents were born in the community in which they were living. The 1910 census shows that more than one-third of Iowa's population was born outside the state. This gives something of the measure of the migration of parents throughout the country, and gives an idea of the difficulty of providing a type of education which will be effective for the different communities. The migration of the citizenship of this country has been one of the striking characteristics of its development, and we see no indication of abatement. The answer to the question as to which vocations shall be taught is, as a consequence of this instability, not an easy one. Clearly we must seek the more wide-spread vocations, and the more fundamental aspects of these vocations.

INVENTIONS CHANGE CONDITIONS.

Another factor of complexity is the fact that the vocations themselves are constantly undergoing change through invention and discovery. The introduction of machinery into the various industrial activities has changed the whole industrial situation. The introduction of machinery into the steel industry, and into glass blowing are noteworthy examples. The introduction of farm machinery has done away with the necessity for a great many men on the farm. Two or three men can now do the work which required a dozen men a few years ago. The result of this is that the demand for all round skilled workmen is changing. Rather

the demand is for a few highly proficient men to work with a large group of men who do extremely simple tasks. Arthur D. Dean, Chief of the Division of Vocational Schools of the Department of Public Instruction of Albany, N. Y., says in this connection, "Even a superficial investigation will show that many occupations do not lead to an acceptable trade, and do not require an apprenticeship of two or three years. A worker may become skilled in a few months' time, and does not require a general apprenticeship."

MEN CHANGE OCCUPATIONS.

Another factor of complexity is the fact that the American citizen has not remained in one line of vocational activity permanently. How many men do you know who have followed only one vocation? Ask your friends this question, "Are you doing the thing now that you expect to do all your life, or is the work you are now doing merely temporary?" This restlessness of spirit, which is indicated by the constant migration of men from one place to another, and the more or less constant shifting from one occupation to another, is an expression of a striking American trait. While the schools may be able to ultimately modify this thing if it seems desirable, yet it must be borne in mind that for the present our attempts at improving education along a wider range of vocational activity must take this into consideration. Failure to recognize this desire to seek new vocations has handicapped the effectiveness of legislation in some of our neighboring states.

THEORETICAL CONSIDERATIONS.

It might be said that the vocational work in the school is conditioned by two factors; one, the conditions in the outside world; the other the nature of the individual to be educated. Social and economic progress means that conditions in the outside world are changing constantly. Individual progress in America is being constantly stimulated to attempt new heights of achievement, to venture into new fields, to travel new paths, to dream new dreams and to see new visions. Any system of education which we propose must take into account these two factors. It would be relatively easy for us to provide a successful type of vocational education in a static society, in a world with fixed occupations, peopled with men and women with fixed status, and with no ideal of

progress; but we like to think that American civilization has attained what it has through its willingness to modify its occupational activity constantly in the face of opportunities for improvement. We have boasted that our citizenship is what it is on account of the fact that we have kept alive and fanned the flames of individual imagination until we are proud of the fact that our people have a vision of better things, and are willing to pay the price of breaking up the old habits, the old associations, and go into the new fields and render new types of service. Witness the marvelous utilization and adaptation which has come with the use of steam, electricity and gasoline.

New systems of education which are proposed must take into account these factors of complexity and these theoretical considerations. They will ultimately succeed or fail in the degree that they are an expression of our social and individual ideals. The end of human social organization is not merely the creation of wealth, but the fostering of human welfare.

EXPERIMENTATION.

Our attention is drawn to the adjustments which are being made to this problem. Hundreds of communities have been experimenting with a view toward increasing the vocational effectiveness of their educational systems. Commercial courses have been expanded, agricultural training has been made more effective, courses in home economics have been modified, manual training courses have been developed, normal training courses have been introduced. Indeed, one city proudly boasts that it has sixty different courses leading toward as many different lines of activity.

LEGISLATION.

Within recent years considerable interest has been manifested throughout the country in regard to bringing about changes in the educational organization in a given system of city or state schools which would encourage experimentation on a large scale. Massachusetts, Wisconsin, Pennsylvania, Indiana, and other states have enacted specific legislation for the purpose of encouraging conservative communities to go forward with this or that particular type of vocational training.

Massachusetts has been a leader in this particular. In 1906 a commission was appointed by Governor Douglas for the purpose

of making a thoroughgoing analysis of social, economic and educational conditions within the state. This commission spent two years and considerable money on the survey. As a result of the findings of this commission provision was made within the state of Massachusetts for the establishment of certain specific types of vocational schools such as day vocational schools, part time vocational schools and evening vocational schools.

Wisconsin, on the recommendation of a commission appointed by the governor at the direction of the legislature, adopted a system of continuation or part time schools for the purpose of providing a better type of vocational training for the young people of the state.

In 1910 the legislature of the state of Indiana directed the governor to appoint a commission on vocational industrial education. This commission made an exhaustive study of the problem for a period of two years, culminating in the enactment of a vocational education law.

Indeed, it might be said that the characteristic method of bringing about vocational education legislation for the public schools has been that of the creation of a state-wide commission, working at the direction of the governor and the legislature. This fact is of especial significance at this time in Iowa, as it suggests the desirability of a legislative commission in our state.

RESULTS.

With all these precautions in the matter of securing adequate information upon which to base legislative enactment, the complexities of the situation have been such that the results have been far from satisfactory. It has been difficult to frame a satisfactory law on the one hand, and on the other hand, it has been a difficult thing to get students to take advantage of the conditions provided. In this connection Professor Leavitt, of the University of Chicago, in discussing the interpretation of the law in Indiana says, "The Indiana law is interpreted by the State Board of Education, and the interpretation sometimes proves to be more restrictive than the law itself. For example, they have interpreted that "evening classes in the state aided vocational schools must be 'to fit the worker for a more profitable employment in the occupation in which he is actually engaged. An evening school which provides instruction for wage-earners designed to teach them another more remunera-

tive occupation or trade or one permitting a higher degree of skill is not eligible for state aid.' '' Thus the law serves so as to place a premium upon keeping the young man in the same line of activity in which he is already engaged, which in a way closes one door of opportunity; namely, that of shifting from one vocation to another vocation which is better rewarded. Professor Leavitt says that the law actually serves as a determent to natural growth of vocational education.

Concerning the second difficulty, namely, that of getting a satisfactory response on the part of the students, Mr. Hicks, State Director of Industrial Education in Wisconsin, says, ''It is not that such courses are not in themselves excellent courses, but rather that the employers and alleged apprentices do not recognize that such courses are available, and that such courses are worth while. Instead of co-operation in this matter, unfortunately we have the frequent paradox of both the apprentice and the employer being opposed to the written contract for the apprentice on the same theory, viz., that the law is unfair. In the mind of the employer it is unfair to grant the apprentice day instruction. In the mind of the apprentice it is unfair to expect him to remain three or four years in employment under a stipulated contract.''

Despite the fact that the public has been sympathetic with this type of education, as is indicated by its enactments for special bonuses, etc., actual progress has been slow. Special vocational agent, M. W. Murray, of the Massachusetts Board of Education, in his report in 1913, said, ''Four years of experience have shown that the all-day vocational school, taking pupils after the compulsory age, can at best reach only a small portion of the young people before they enter industry. The Douglas commission believed that if these schools were established, 80 per cent of the children leaving school and going to work would profit by their instruction. Four years of experience seem to show that they can add less than 10 per cent to the group which can be reached on an all-day basis. The all-day schools have been established in only 11 of the 354 cities and towns in the state, but they have demonstrated wherever they have been established that they can hold children who would otherwise leave school, that these children can be educated, that they are worth educating, though the other public schools have failed to reach them, and that they can give a training which enables their students to secure a more favorable entrance into trade and industry.''

The report of Commissioner Snedden, of Massachusetts, May, 1914, states that there were almost three thousand pupils enrolled in the day schools of every type, with about eight thousand enrolled in evening schools. Many of the schools which have received wide publicity actually enrolled few pupils. The Ashford Vocational Agricultural School registered 18 boys; the Brimfield Vocational Agricultural School registered 16 boys; the Bristol County Agricultural School registered 26 boys; the Essex County Agricultural School registered 97 boys; Smith's Agricultural School registered 122 boys; the Beverly Co-operative Day School registered 60 boys; the Quincy Industrial School registered 60 boys. The evening schools showed a very much larger enrollment. The Boston Evening Industrial School enrolled 639 pupils. The Lowell Independent Evening Vocational School enrolled 560.

Although Indiana has been operating under her present law for almost two years, very little has been done by way of the development of state aided schools.

CONTROVERSY OVER TERMS.

Among educational theorists there is a clear difference of opinion as to the meaning to be attached to many of the terms in this work. For example, two committees of the National Educational Association made reports at the St. Paul meeting which touched upon vocational education. The Committee on Vocational Education adopted for the most part the phraseology and definitions in use in Massachusetts. The Sub-Committee on Manual Arts of the Commission on Reorganization of Secondary Education stood for a different interpretation. The first committee proposed to limit vocational education as follows: "Vocational day schools, which may be of the following types: unified, combined, dual or co-operative; evening vocational schools, which may be of a trade extension or a trade preparatory type; vocational continuation schools which may be of a trade extension or a trade preparatory type." The committee further went on record as follows: "Vocational education is also to be distinguished from various forms of so-called 'Practical education,' which may resemble, in their processes, vocational education, but which do not always result in definite forms of vocational efficiency. The various forms of non-vocational education comprised under the term 'practical Arts' include manual training, household arts, simple gardening and agricultural education, many phases of commercial education, etc. The various

forms of practical arts education as now given in schools are *not* properly vocational although sometimes *mistaken* for vocational education, because they do not result, except by chance, in recognized forms of vocational efficiency, nor are they assumed to be given to persons who have defined vocational aims. * * * Various forms of practical arts education have an important and valuable place in general or liberal education, as a means of enlarging general intelligence, developing sound appreciation of economic products, and in part in laying the foundation for vocational choice."

Thus it is seen that the definition set up by this committee would clearly rule out as vocational a large part of the work as now given in agriculture, manual training, and home economics and commercial work in Iowa schools. Many of us would not agree with these definitions.

That there is a difference of opinion in regard to the validity of this classification is shown from the fact that the Sub-Committee on Re-organization of Secondary Studies reporting at the same meeting of the National Education Association said that "the major purpose in instruction in manual arts is to contribute directly to the vocational efficiency of the pupils" (in secondary schools). The committee affirmed that "when judged by actual practice, and not by definition, much of our manual arts instruction has contributed, and is still contributing, to the vocational efficiency of innumerable boys and girls."

NEED TO MOVE SLOWLY.

With this clear difference of opinion existing at the present time in the matter of educational leadership of this country, it would seem to be the part of wisdom for Iowa to move slowly, and only after a comprehensive report of an expert commission. Clearly we cannot afford to inaugurate a wholesale scheme until we know the situation thoroughly.

Concerning this necessity, Mr. C. A. Prosser, Secretary of the National Society for the Promotion of Industrial Education, said in Cincinnati three years ago, "The difficulties of the problem require that we should proceed on the basis of investigation and careful experimentation. We need perhaps most of all a frank recognition of the difficulties which have thus far been pointed out, and a diligent search for those as yet uncovered. Every-

where there should be careful, unbiased, scientific, thoroughgoing and more or less specialized study of social and industrial conditions, industries, occupations and workers. *The most important contribution that could be made by either public or private agencies would be successful experiments in new fields of industry that as yet remain practically untouched.*" (Italics ours.)

It should not be forgotten that much may be done without legislation. We are already doing much of significance in connection with the problem. This is recognized most clearly by the men who are in charge of vocational education on a large scale. Vocational Director Dean of the New York State Department, says, "I would re-create and re-vitalize my present machinery for developing a sane, comprehensive plan for furthering the educative process for youth before it went to work, and then as my means allowed and my keenness of judgment dictated, I would slowly, thoughtfully, and earnestly grapple with more complex educational and industrial problems which, while they are problems of importance to the welfare of the state, have after all relatively small import as compared with the problem of sound fundamental education."

Attention has already been called to the fact that the mobility of the population from one community to another, the shifting of type of occupation in a single city from decade to decade, and the changes as a result of invention, all contribute to the necessity of choosing the fundamental phases only of vocational education. Concerning this phase Director Dean of the Vocational Division of the Department of Education of New York state says, "It is the business of the state to train its youth toward the permanent requirements of industry. Such requirements are: good health, that the worker may withstand the nervous strain of modern production; personal and socialized character, to assist in the solution of tremendous economic problems which are coming up in the labor world; certain elements of citizenship training, in order that we may have industrial justice in our democracy; mental capacity, that the worker may think as well as operate; and, finally, fundamental skill, exchangeable in various branches of a trade or between various trades themselves."

Thus, if we were to accept the affirmation of the sub-committee of the committee on the Re-organization of Secondary Study, and the judgment of such men as Arthur W. Dean, Chief of the Division of Vocational Education of the state of New York, we might say that we are already doing much in vocational education in

Iowa. Iowa is subsidizing vocational education, as thus defined in the form of normal training, agriculture, manual training, home economics in connection with the normal training course. This type of work also receives encouragement in the consolidated schools. Commercial education, though not subsidized, is widely recognized.

It is important that the leadership in every community and every school be alert to the wonderful possibilities in connection with increasing the vocational effectiveness of the educational system in Iowa. To this end we ask that provision be made for a more thoroughgoing survey than has been possible thus far and that a legislative program be prepared by 1917.

THE ELIMINATION OF PUPILS FROM THE SCHOOLS IN IOWA.

Any study of the educational situation of the state would be incomplete without an attempt to ascertain the extent to which the children are being held in school in the upper grades. The statistics of elimination for the state as a whole not being available, the work of securing at least a tentative answer to this question was referred to the Department of Agricultural Education at the Iowa State College, which has been working with a number of superintendents throughout the state, organized as the Iowa School Survey Club. During the year 1913-14 the members of this club, together with the cities represented were as follows:

Clarson, J. W., Jr	Buffalo Center
Chehock, H. W	Clear Lake
Cherny, J. L	Independence
Delzell, E. B	College Springs
Dooley, L. W	New Hampton
Dow, H. E	Hamburg
Eells, H. L	Rolfe
Goetsch, F. W	Bedford
Griffin, R. A	Lake City
Humphrey, C. E	Denison
Ireland, J. M	Villisca
Johnson, S. A	Greenfield
Kies, H. D	Corydon
Linton, H. H	Newell
Long, R. E	Corning
Moore, A. W	West Union
Moore, J. E	Fayette
Neveln, S. T	Storm Lake
Overmyer, J. F	Algona
Owen, A. T. S	Farmington
Phillips, A. W	Tennant
Pye, Chas. F	Waukon
Reed, F. P	Osceola
Schmitt, C. J	Avoca
Smith, H. P	Newton
Smith, L. O	Keosauqua
Tye, Chas. H	Fonda
Street, J. P	Story City
Spaulding, Wayne	Oakland

The various members of the club co-operated by furnishing the data for making the age-grade table, boys and girls separately, for all of the cities. The study shows the comparative ranking of the cities, and therefore involves data which some superintendents might be inclined to consider as confidental. The spirit of the Survey Club, however, has been splendid in this respect. Each superintendent realizes that he has probably worked but a few

years in the place, and that whatever of progress or lack of progress is shown, is not due to his efforts entirely, but that the condition is an index of community spirit, the attitude of the school board, willingness to spend money, efficiency of teaching, and a large number of other factors none of which are fully under the control of the superintendent. Any one examining the final tables should also keep in mind the fact that only very general conclusions can be drawn from a final table and that even then the original data must either bear these out or furnish explanations.

Before undertaking to use the data with names of cities inserted, all of the members of the Survey Club were written with reference to the matter. Consent was immediately forthcoming, from the members. The spirit of the Club is indicated by such expressions as these:

"It is agreeable to use the name of our town so far as I am concerned. The way we get somewhere in working with school problems is by getting at things definitely."

"You may feel at perfect liberty to use any report of our school that I may send you. Although the report from the 8th grade is far below anything that it ever has been, there are particular reasons, and I am sure the situation will be corrected. If the Survey Club is to get anywhere we want to know in what way to go, and how to do it."

The instructions for collecting the data for the age-grade tables were in accordance with the report of the committee on Uniform Records and Reports adopted by the Department of Superintendence at the National Educational Association in February, 1912 (U. S. Bureau of Education Bulletin 3, 1912). Slightly more than half of the tables were made up in this office from original data furnished by the superintendents. The other tables were compiled by the superintendents according to instructions. The interest and fine co-operation of the Superintendents cannot be over-emphasized.

In order to illustrate the way in which the data was handled the tables for three cities, Fayette, Storm Lake and Hamburg, are given herewith. The data for boys and girls has been figured separately, and this is shown for Fayette, but is not here shown for the other cities. (See tables I, II, III, IV, V.) The variation between boys and girls in school progress is not dealt with in detail in this brief summary, although Table X shows a comparison of boys and girls in a few of the studies. In every case the girls make the better showing, a fact which carries large vocational significance.

TABLE I.—AGE-GRADE TABLE.

FAYETTE, IOWA, BOYS.

Grade	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	Normal	1 year over	2 years over	3 years over	4 years over	Total over	Total under	Total No.	% Largest Age-Group
																		Age Classification %----------								
1	2	7	1																						10	58
2		3	2	1																					6	35.3
3			4	6	1	1	1																		13	76.4
4			1	5	4	6																			16	94.1
5					1	4	3	3	2																13	76.4
6						1	4	3	2																10	58
7							2	6	4	2															14	82.3
8								3	3	3	1														10	58
I									6	6	5	4	2												23	129.4
II										4	3	2	1												10	58
III											3	3	3												9	57
IV													3	2	0	0	1								6	35.3
Total	2	10	8	12	6	12	10	15	17	15	12	9	9	2	0	0	1	(85) 60.7	(14) 10	(5) 3.5			(20) 14	(33) 25	140	

Definitions. Normal ages for first grade are 6 and 7, for second grade 7 and 8, for third grade 8 and 9, etc. (See U. S. Bul. 1911, No. 5, p. 12), Sept. 1 is the date for securing all ages, so report age of pupil on that date. (See U. S. Bul. 1912, No. 3, p. 34.). A pupil is 6 years old from the time he is 6 until he is 7

TABLE II.—AGE-GRADE TABLE.

FAYETTE, IOWA, GIRLS.

Grade	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	Normal	1 year over	2 years over	3 years over	4 years over	Total over	Total under	Total No.	% Largest Age-Group
1	7	6																							13	61.9
2	3	2																							5	24
3	2	2	5																						9	43
4				6	4	1	1																		12	71
5				2	3	6	3	0	1	1															16	94.1
6					1	4	6	1	0	0	1														13	62
7							1	3	3	1															8	47
8							1	0	6	3	3	2													15	88.2
I								1	2	11	5	9													28	164.7
II									1	1	6	2	2												12	70.5
III												4	4	1											9	43
IV											2	4	3	8											17	81
Total	7	11	4	13	8	11	12	5	13	17	17	21	9	9				(92) 58	(17) 11	(3) 2	(2) 1		(22) 14	(43) 27	157	

Age Classification %

TABLE III.—AGE-GRADE TABLE

FAYETTE, IOWA, BOYS AND GIRLS.

Grade	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	Age Classification % Normal	1 year over	2 years over	3 years over	4 years over	Total over	Total under	Total No.	% Largest Age-Group
1	9	13	1																						23	72
2		6	4	1																					11	34
3		2	6	11	1	1	1																		22	69
4			1	11	8	7	1																		28	87
5				2	4	10	6	3	3	1															29	91
6					1	5	10	4	2	0	1														23	72
7							3	9	7	3															22	69
8							1	3	9	6	4	2													25	78
I								1	8	17	10	13	2												51	159
II									1	5	9	4	3												22	69
III											3	7	7	1											18	56
IV											2	4	6	10	0	0	1								23	72
Total	9	21	12	25	14	23	22	20	30	32	29	30	18	11	0	0	1	(177) 59%	(31) 10	(8) 2	(2) .6	0	(42) 14	(78) 26	297	

TABLE IV.—AGE-GRADE TABLE.

STORM LAKE, IOWA, BOYS AND GIRLS.

Grade	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	Normal	1 year over	2 years over	3 years over	4 years over	Total over	Total under	Total No.	% Largest Age-Group
1	28	20	3	2																					53	104
2		18	16	9	2	3																			48	94
3			19	23	20	3	3	1	0	1															70	137
4				15	11	6	3	0	0	1															36	71
5					9	24	12	12	3	3															63	123
6						8	20	18	11	3															60	117
7							3	12	12	4	7														38	74
8								7	14	9	8	3	2	1											44	86
I								1	2	14	10	10	4												41	80
II									1	4	7	12	9	3											36	70
III											8	11	9	10	2										40	78
IV												6	9	14	5										34	66
Total	28	38	38	49	42	44	41	51	43	39	40	42	33	87	7			(315)	(79)	(31)	(6)	(2)	(119)	(129)		
																		55.9	14	5.5	1	.3	21.1	22.7	563	

TABLE V.—AGE-GRADE TABLE.

HAMBURG, IOWA, BOYS AND GIRLS.

Grade	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	Age Classification % Normal	1 year over	2 years over	3 years over	4 years over	Total under	Total over	Total No.	% Largest Age-Group
*	25	23	13	2	0	1																			64	128
1	3	25	22	19	6	1																			76	155
2			14	24	21	14	1	3																	77	157
3				1	15	12	8	8	2	0	1														47	95
4					5	9	10	5	11	3															43	87
5					1	8	8	12	7	0	1														37	75
6							3	9	12	3	1	0	0	1											29	59
7							2	3	10	8	5	0	1												29	59
8								2	3	12	3	4	2												26	53
I									5	13	11	12	4	1	1										47	95
II										2	5	6	3	1											17	34
III										1	0	5	2	1	0	1									10	20
IV											1	5	10	4	0	2									22	44
Total	28	48	49	46	48	45	32	42	50	42	28	32	22	8	1	3		(263) 50%	(115) 21	(59) 11	(27) 5	(11) 2	(214) 41	(47) 9	524	

*First Primary.

A glance at the tables themselves will show that the classification of the children in the Fayette schools is more consistent than that in the Hamburg schools. The normal age for children in the first grade is 6 and 7 and this advances one year with each grade. The normal for each grade is indicated by black faced type. The Fayette group is more consistent, has more underageness, and in general there is not so much spread in each grade. All of these points are brought out more fully by the comparisons in Table VI. Fayette shows 59% normal; Storm Lake 55%; Hamburg only 50%. Evidently what we want is many pupils of normal age so the higher this figure the better. The total overage in Fayette is 14%; in Storm Lake 21.1%; in Hamburg 41%. Manifestly what we want is as little overage as possible, so the smaller this figure the better. The total underage in Fayette is 26%; in Storm Lake 22.7%; in Hamburg 9%. If we are to have our choice, we certainly prefer underageness to overageness. Since one year is allowed in each grade we should expect a little underageness. Moreover, it is the custom in most of the schools of Iowa for children to start at the age of 5. This gives an additional year, and so we should not only expect considerable underageness, but should give a system credit in proportion to the underageness.

The matter of elimination is indicated in this table by the per cent that each grade is of the largest age-group. The largest age-group for boys and girls combined in the Fayette system is at age 14, in which there are 32 pupils. Figuring the per cent that the number of pupils in each grade is of the largest age-group, we find that in the first grade there are 23 pupils and that this is 72% of the number in the largest age-group (32). The per cents run:

1st grade	72%	7th grade	69%
2d grade	34%	8th grade	78%
3d grade	69%	9th grade	159%
4th grade	81%	10th grade	69%
5th grade	91%	11th grade	56%
6th grade	72%	12th grade	72%

as indicated in the column "Percent of the Largest Age-Group."

The Fayette schools show the unusual situation of as many pupils in the fourth year high school as there are in the first grade; while in the first year high school there is more than double the number of pupils in the first grade. The explanation, however, is not race suicide, but the fact that tuition pupils come into the upper grades and into the high schools in very large numbers.

The largest age-group in Storm Lake shows more of a falling off in the upper grades. In Hamburg again the numbers in the eighth grade and in each year of the high school are practically equal or a little above the first grade. This is shown graphically in figure 1.

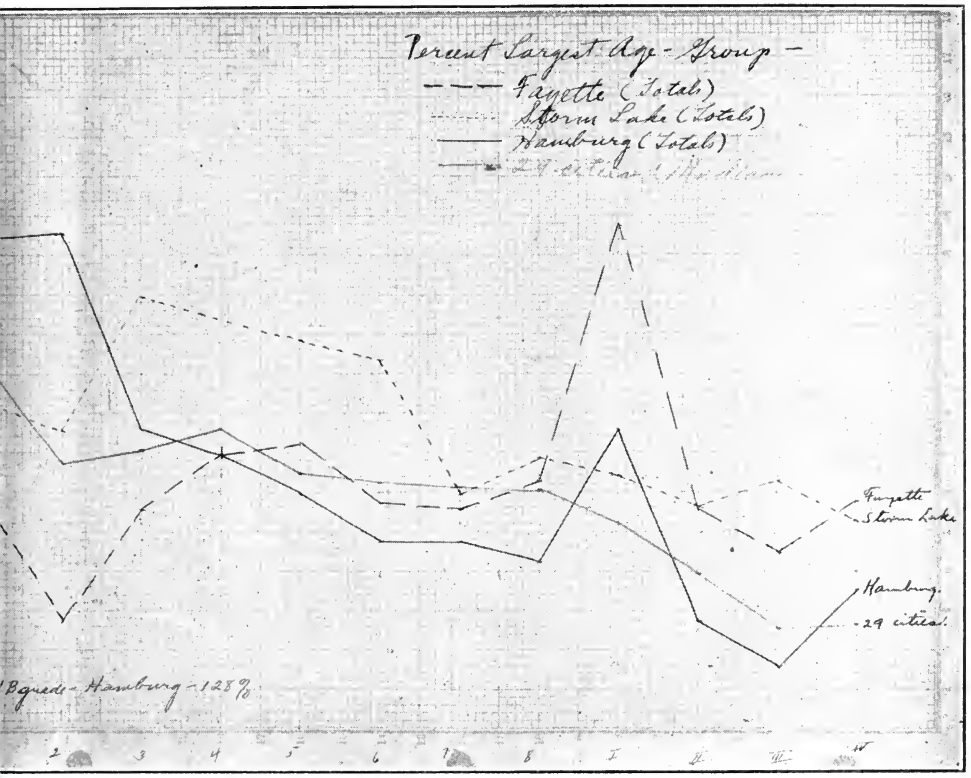

Fig. 1

Table VI is designed to allow ready comparison of the chief facts with reference to the 29 cities involved. The figures are based in every case upon totals (boys and girls combined). The first column gives the number of the cities in order and will be referred to again. The next thirteen columns indicate the grade population of the several cities as shown by the per cent of the largest age-group. It also indicates the elimination of pupils in the upper grades. This is best shown, however, by the summary at the bottom, the first line of which indicates the minimum, the second line, the first quartile; the third line, the median; the

TABLE VI.—29 IOWA

Per cent of Largest Age Group (Total)

															Variation of Grade Population		
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
	1B	1	2	3	4	Med.	5	6	7	8	I	II	III	IV	Grades	H. S.	Both
1	-----	72	34	69	87	72	91	72	69	78	159	69	56	72	172	—68	4
2	-----	148	105	75	97	80	81	78	70	89	56	64	19	19	15119	162	182
3	-----	129	100	103	121	100	62	79	88	118	59	76	47	71	13106	147	253
4	-----	62	47	45	62	55	53	43	57	60	60	49	69	28	439	14	53
5	-----	111	108	88	94	91	111	91	52	58	-----	-----	-----	-----	19135	------	135
6	-----	67	60	93	107	72	63	76	60	80	53	36	40	56	890	103	193
7	-----	145	89	78	87	100	100	78	102	114	110	111	47	44	11197	88	185
8	-----	75	78	87	84	84	81	84	87	91	87	66	69	69	211	45	56
9	-----	128	54	23	38	59	72	81	64	51	113	56	72	33	16159	—38	121
10	-----	79	103	79	105	84	79	84	97	66	97	108	55	45	560	31	91
11	-----	147	94	70	114	81	83	50	80	47	86	64	36	44	25191	94	285
12	-----	150	88	108	113	106	105	101	88	79	-----	-----	-----	-----	17122	------	122
13	-----	104	94	137	71	98	123	117	74	86	80	70	78	66	23156	98	254
14	-----	127	78.8	125	98	94	100	75	90.4	61	80.8	42.3	44.3	27	21145	182	327
15	-----	153	84	77	131	88	61	92	146	53	92	-----	-----	-----	18131	—4	127
16	-----	136	113	100	115	106	93	120	80	76	-----	-----	-----	-----	19135	------	135
17	22	67	70	70	82	70	72	71	39	70	65	56	32	49	7097	78	175
18	-----	108	78	104	95	83	79	83	83	51	-----	-----	-----	-----	1299	------	99
19	-----	112	107	109	122	100	76	109	100	100	-----	-----	-----	-----	783	------	83
20	-----	150	76	121	115	112	108	97	97	118	-----	-----	-----	-----	1299	------	99
21	-----	181	88	75	63	77	41	79	95	59	77	45	27	34	24169	125	294
22	-----	27	77	71	58	71	65	71	65	94	87	65	58	48	334	26	60
23	85	100	72	86	100	87	88	102	77	86	-----	-----	-----	-----	671	------	71
24	88	121	94	103	94	94	191	0	75	94	112	103	91	70	890	0	90
25	57	95	78	88	104	80	81	57	54	59	-----	-----	-----	-----	20143	------	143
26	80.8	104	79	83	100	81	100	70	62	30	-----	-----	-----	-----	22146	------	146
27	53.8	117	67	125	88	86	83	77	77	119	56	83	36	27	14111	142	253
28	-----	140	123	130	60	63	43	60	60	67	97	73	30	36	26229	76	245
29	128	155	157	95	87	81	75	59	59	53	95	34	20	44	27296	131	426
Min.	-----	62	34	23	38	------	41	0	39	30	0	0	0	0	11	—68	4
Q_1	-----	97	76	75	84	------	72	71	62	59	0	0	0	0	90	0	91
Med.	-----	117	84	88	95	------	81	78	77	76	65	49	32	33	111	16	135
Q_3	-----	145	100	104	107	------	100	91	88	91	92	69	55	48	145	98	253
Max.	-----	181	157	137	131	------	123	120	146	119	159	111	91	72	295	187	526

CITIES (1913).

Age Classification %							Years over-age per pupil	Av. age spread in grades	Combined ranking		
r	s	t	u	v	w	x	y	z			
Nor.	1-o	2-o	3-o	4-o	T-o	T-u					
59	10	2	.6	------	14	^{6}26	^{3}.178	^{45}.1	14	1	Fayette
59	8	2	.2	.5	11	^{3}29	^{1}.152	^{35}.0	22	3	Buffalo Center
59.2	10	2.8	.8	------	13.8	^{2}26.5	^{4}.195	^{35}.0	27	4	Story City
48	8	4	5	------	17	^{1}35	^{12}.331	^{24}.9	19	2	Rolfe
62	6	2	.8	.4	10	^{4}27	^{2}.155	^{75}.5	32	8	Waukon
70	8	3	.8	.4	13	^{15}16	^{5}.206	^{14}.6	30	7	Newell
52.3	11.8	3.4	1.3	------	16.7	^{2}30.8	^{6}.234	^{105}.8	29	6	Osceola
59.6	11.7	5.8	1.6	------	19.2	^{12}21.1	^{10}.283	^{45}.1	28	5	Oakland
61.1	8	.3	2	------	13.6	^{7}25	^{6}.208	^{55}.3	34	9	College Springs
63	8	3	1	.5	13	^{8}24	^{5}.206	^{186}.9	36	10	West Union
60	15.2	5	.6	------	21	^{14}18	^{9}.279	^{14}.6	49	12	Farmington
62	10	4	1	.8	17	^{13}21	^{8}.269	^{126}.1	50	13	Independence
55.9	14	5.5	1	.3	21.1	^{9}22.7	^{11}.305	^{85}.6	51	15	Storm Lake
55	14	6	2.4	.6	23	^{11}22	^{15}.358	^{105}.8	57	18	Clear Lake
53	12.9	10.3	.8	------	24	^{10}22.4	^{7}.262	^{14}.6	36	11	Tennant
53	14	5	2	7	21	^{7}25	^{13}.334	^{197}.1	58	19	Newton
65	15	5	2	.5	22	^{20}11	^{14}.339	^{146}.3	58	20	Algona
71	16	7	1	.4	25	^{2}44	^{18}.371	^{65}.4	60	23	Denison
55	13	6	4	1	24	^{13}21	^{21}.419	^{156}.4	56	16	Corning
48	12	6	3	1	23	^{4}27	^{24}.440	^{66}.5	56	17	Corydon
56	13	6	2	.7	22	^{13}27	^{16}.364	^{95}.7	62	24	Avoca
65	12	6	5	1	24	^{18}12	^{21}.419	^{176}.8	59	22	Fonda
59.2	16.2	6	1.4	.8	25	^{16}15.7	^{17}.358	^{115}.9	50	14	Bedfordd
60	18	9	1	.2	29	^{20}11	^{22}.421	^{85}.6	58	21	Greenfield
66.5	15	4	3	1	24.6	^{2}28.8	^{20}.401	^{85}.6	70	26	New Hampton
62.4	13.5	7.7	3	.6	24.3	^{17}13.2	^{23}.428	^{136}.2	75	27	Villisca
64.4	14.1	6.6	2.3	.5	24	^{19}11.8	^{19}.375	^{136}.2	65	25	Lake City
46	17.3	15.5	6.5	3	45	^{2}19.4	^{26}.891	^{126}.1	85	28	Keosauqua
50	21	11	5	2	40	^{2}38	^{95}.706	^{166}.5	91	29	Hamburg
46	6	.3	.2	0	10	4	.152	4.6	----	----	
55	10	3.4	1	0	16.7	12	.234	5.1	----	----	
59.2	13	5.5	1.6	.5	22	21	.334	5.7	----	----	
62.4	15	6	3	.8	24	25	.401	6.2	----	----	
71	21	15.5	6.5	7	45	35	.891	7.1	----	----	

fourth line, the third quartile; and the last line, the maximum. Applying this to the first grade we note that the lowest per cent of the largest age-group in any system is 62, the minimum; the highest, 181, the maximum. The middle figure, or the figure above and below which 50% of the cases fall, is 117. This is the median, shown in the third line. The first quartile is midway between the minimum and the median; while the third quartile is midway between the median and the maximum. These five lines, therefore, indicate at a glance the range in any one grade. The median for the different grades indicates the general trend of all of the cities with reference to grade elimination.

Referring again to Table VI the figures under Variation of Grade Population are based directly upon the data in the first fourteen columns (*a* to *n* inclusive, omitting column *f*). The discussion of this part of the table might be omitted, except that many superintendents will be interested and will desire to carry the work further. Briefly this may be explained as follows: Variation for the grades is figured on the basis of the total variation from the median of the first eight grades alone but in case the seventh and eighth grades rise above the median, credit is given for the amount of this rise. In like manner the high school is figured from the same median, but credit is given for a rise above the median. Column *f* indicates the medians.

The justification of this is that the population of the various grades should continue on a level, or with uniform numbers in each grade. The tendency is a regular decrease. Therefore for an increase in upper grades credit should be given, as it indicates strong holding power or attracting power, i. e., either holding their own pupils, or attracting pupils to upper grades from outside the corporation. The final ranking is based upon the eighth grade variation (inversely), the high school being considered only when it reduces the total variation. The variation of the grade population as a standard for measuring a school system has not been commonly used. It is, however, a standard worthy of consideration. If all of the above cities were of about uniform size, and all had high schools, it is believed that this standard could be applied with fair justice to all concerned, and properly figured as one of three or four standards, a combination of which should determine the ranking of the different systems with reference to the progress of children through the grades.

The numbers on the left indicate the ranking of the systems when ranked differently on the point of the variation in grade population. This first ranking took into consideration a number of small details which varied considerably with each system, but could not be made evident to others in a table giving summaries only. It was thought better, therefore, to rearrange them on this point according to the uniform standard indicated in the paragraph above. In some cases this changed the total ranking, so that the combined ranking indicated in the column to the right is not in the same order as the numbering on the left.

The next seven columns of Table VI (columns r to x inclusive) indicate the facts with reference to normal age, overageness and underageness. The column marked "Nor." indicates the per cent of children in the system that are normal according to the age-grade standard. The next column indicates the per cent one year overage; the next two years overage; the next three years overage; the next four years overage; and the next total overage. The seventh column under this heading indicates the per cent of total underage. The summary at the bottom again sets forth the significant figures, the median giving the most significant. These figures show a very surprising consistency about the various systems. The number of normal age as expressed by the median is 59.2%. The first quartile is about 4.2% below this, and the third quartile but 3.2% above. This means 50% of all of the cases fall within a range of 7.4%. The per cent of pupils one year overage is likewise quite consistent, the median being 13%; first quartile 10%, and the third quartile 15%. The per cent of total underage and of total overage runs practically the same, the medium being 22% for overage, and 21% for underage.

The next column in the table (column y), indicating the years of overageness per pupil is significant in that it furnishes a ready index with reference to the overageness in a particular system. This figure is found by taking the total years of overageness and dividing by the total number of pupils in the system. The range is surprising. The best system, Buffalo Center, on this point has only .152 years overageness for each pupil, while the poorest system has .891 years of overageness per pupil, almost a year of overageness for each pupil. In other words there is in this system nearly one year of retardation for every pupil in the system. This is according to the age-grade standard, but as a

matter of fact there may be even more retardation than that, because of the fact that the age-grade standard allows an extra year for normal age, and because of the further fact that pupils enter at age 5 quite generally in Iowa.

The next column of the table (column *z*) shows the average age-spread, grades only considered. The most consistent system shows an average age-spread of but 4.6 years, while the least consistent shows an age-spread almost twice as great, or 7.1. That means that taking this latter system as a whole there is an average difference in each grade in the system of 7.1 years between the youngest pupil in the grade and the oldest pupil. This brings out strongly the necessity of giving attention and special treatment to the overage pupils of the system.

The last column of the table gives the combined ranking. This ranking is based upon four items: the variation of grade population; the total underage; the years of overageness per pupil; and the average age-spread. The ranking of the separate systems in any one of these items is indicated by the small index figure in front of each item. The combined ranking of Fayette is secured by adding 1, 6, 3, 4 (=14), expressing the rank in the several items just referred to. Since in ranking the various items the best is marked 1, the lowest combined ranking indicates the best system, as shown by a combination of the four standards just referred to. A most significant thing in this study is the wide range among the various systems, suggesting as it does the possibility of improvement in the poorer systems, until they are brought at least to the standard of the median. It is quite likely that the study of any one system through a period of years would show equally significant variation in all of these items. In fact the study during the past Summer Session of one of these systems through a period of twenty years did show a variation and gradual improvement that was quite significant.

GRADE ELIMINATION.

The grade elimination in the twenty-nine cities under study as shown by the median of the per cent of the largest age-group is as follows:

1st grade	117	7th grade	77
2d grade	84	8th grade	76
3d grade	88	9th grade	65
4th grade	95	10th grade	49
5th grade	81	11th grade	33
6th grade	78	12th grade	33

Changing the basis so as to give 100 for the first grade our elimination figures become:

1st grade	100	7th grade	66
2d grade	71	8th grade	65
3d grade	75	9th grade	55
4th grade	81	10th grade	42
5th grade	69	11th grade	32
6th grade	67	12th grade	28

There are two questions with reference to this set of figures in which we are very greatly interested. In the first place, is it typical of Iowa as a whole? In the second place, how does it compare with the United States as a whole, or with different states in the Union? These two questions may best be answered by a brief review of the available relevant data with reference to grade elimination.

The first serious effort to determine the elimination of pupils from the upper grades was made by Dr. E. L. Thorndike (U. S. Bureau of Education Bulletin No. 4, 1907). His study was an estimate based upon the data from twenty-three cities of over 25,000 population. Dr. Thorndike estimated that the general tendency of American cities of 25,000 and over in 1900 was to keep in school out of a hundred entering pupils:

91 till grade 4	40 till the last grammar grade
81 till grade 5	27 till the first year high school
68 till grade 6	17 till the second year high school
52 till grade 7	12 till the third year high school
	8 till the fourth year high school

This study turned general attention to the fact that pupils did not remain in school to complete the work of the upper grades, and since that time we have had a general movement throughout the country, especially in city systems, looking toward a more definite study of this question through the making of annual age-grade tables. But as yet the data is very insufficient for total areas, and in many states there is no data giving a distribution by grades or by ages. Thornkike estimated that his figures for the country as a whole were much too high. Dr. Woodward attempted an estimate in 1901 (Report of the Commissioner of Education, 1901, page 1367), and gave the following as indicating the gradual elimination of pupils from the first grade to the fourth year in high school:

1st grade	100	7th grade	16
2d grade	86	8th grade	12
3d grade	77	9th grade	5
4th grade	70	10th grade	2
5th grade	43	11th grade	1.9
6th grade	23	12th grade	1.6

This set of figures is transformed from the original estimate by Dr. Woodward in order to put it in form for comparison with the other data. The important thing to be noted about this study is that it is an estimate, a guess, and nothing more. The data was not then available, and is not now available, to permit accurate figures for the entire country.

Dr. Leonard P. Ayres turned his attention to the question of grade elimination, and in his "Laggards in the Schools" gave us a large amount of valuable data, together with further estimates and tables of elimination.

In 1911 Dr. G. D. Strayer undertook to extend the age-grade study to include a great many smaller cities. His complete study involved 318 cities; 186 of them less than 25,000 population; 132 of them over 25,000 population. This study gave a grade-population elimination curve for grades 1 to 12 as follows:

1st grade	100	7th grade	50
2d grade	81	8th grade	39
3d grade	78	9th grade	30
4th grade	75	10th grade	19
5th grade	68	11th grade	13
6th grade	59	12th grade	10

These set of figures is deduced from the median grade population, and is made uniform with the figures indicated above.

The thirteen cities in Iowa taken from Dr. Strayer's 1911 Report gave the following as a set of figures, as representing the grade population from grades 1 to 12:

1st grade	100	7th grade	52
2d grade	78	8th grade	45
3d grade	81	9th grade	30
4th grade	77	10th grade	22
5th grade	72	11th grade	16
6th grade	69	12th grade	12

This set of figures is deduced from the median grade popula- the elimination curve for the 318 cities as shown by Dr. Strayer's study. The thirteen cities involved in this study are: Burlington, Clinton, Creston, Council Bluffs, Des Moines, Dubuque, Iowa City, Keokuk, Marshalltown, Mason City, Muscatine, Oskaloosa, Ottumwa.

Coming to the twenty-nine cities in the study by the Iowa Survey Club, taking the median of the grade population as a basis, and reducing to similar form for comparison, we have (as indi-

cated above) the following as showing the grade elimination in the twenty-nine Iowa cities:

1st grade	100	7th grade	66
2d grade	71	8th grade	65
3d grade	75	9th grade	55
4th grade	81	10th grade	42
5th grade	69	11th grade	27
6th grade	67	12th grade	28

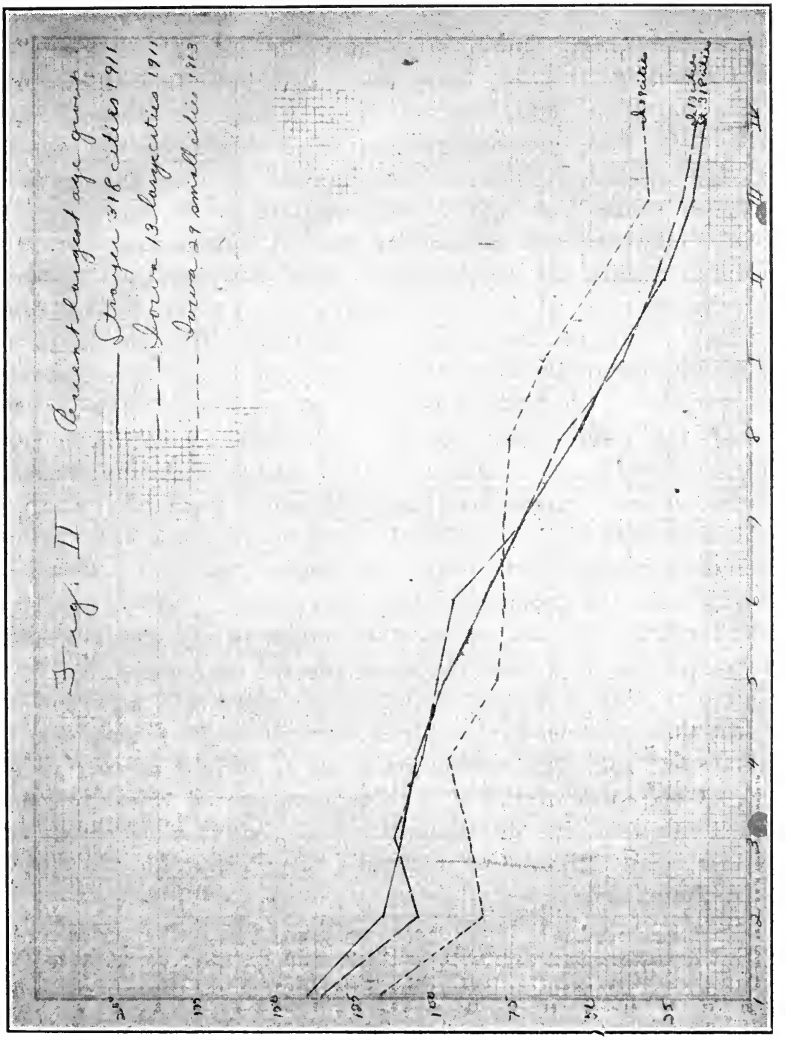

Fig. 2

These figures are for smaller cities of Iowa, and they show a considerably larger number in the upper grades, just as the thirteen relatively smaller Iowa cities show slightly better than Dr. Strayer's 318 cities. The contrast may be brought out by arranging the three groups of figures together:

Dr. Strayer's 318 cities, 1911—
Grades 1 to 12—100, 81, 78, 75, 68, 59, 50, 39, 30, 19, 13, 10.
Dr. Strayer's 13 Iowa cities, 1911—
Grades 1 to 12—100, 78, 81, 77, 72, 69, 52, 45, 30, 22, 16, 12.
29 Iowa cities, 1913—
Grades 1 to 12—100, 71, 75, 81, 69, 67, 66, 65, 55, 42, 27, 28.

Apparently Iowa shows better than the country as a whole, and the smaller cities very much better than the larger cities. An examination of the data, however, offers an easy explanation. The small cities with comparatively small numbers in the upper grades, are greatly influenced by even small numbers coming into the upper grades and high school as tuition pupils, and this apparently offers all the explanation needed. Advancing through the upper grades the school draws from a constantly widening area. Pupils come in from the country round about for the first year high school, for the second, for the third. But for the third and fourth year of the high school, they come in also from smaller high schools which have maintained a one, two or three-year course. The result is that many of the schools involved in this study, practically all of them accredited schools, show the unusual situation of more in the first year high school than in any other grade in the school. The general curve shows also a sudden upturn again in the fourth year (see figures 1 and 2). This apparently is all the explanation that is necessary. As one superintendent wrote, "Of the twenty-nine pupils in my eighth grade, twenty-eight of them came from outside the corporation."

This data with reference to the cities simply calls attention to the fact that we must have returns from all of the schools over a total area of sufficient size to enable us to form a correct judgment. The report of the U. S. Commissioner of Education for 1911, attempts to give an elimination table, but it is clearly stated that this is an estimate. The figures there given for the entire United States are:

1st grade	100	7th grade	26
2d grade	60	8th grade	19
3d grade	58	9th grade	11
4th grade	56	10th grade	7
5th grade	48	11th grade	5
6th grade	33	12th grade	3

This may or may not be a good estimate. It cannot be considered accurate or conclusive.

Last year the Iowa Survey Club collected statistics from 291 country schools in twenty-five counties of Iowa. These, however, furnished data only for the first eight grades. The returns indicate the following elimination:

1st grade	100	5th grade	53
2d grade	52	6th grade	46
3d grade	52	7th grade	55
4th grade	53	8th grade	53

Although over four thousand children were involved in this study, it is manifestly too small to justify any conclusions.

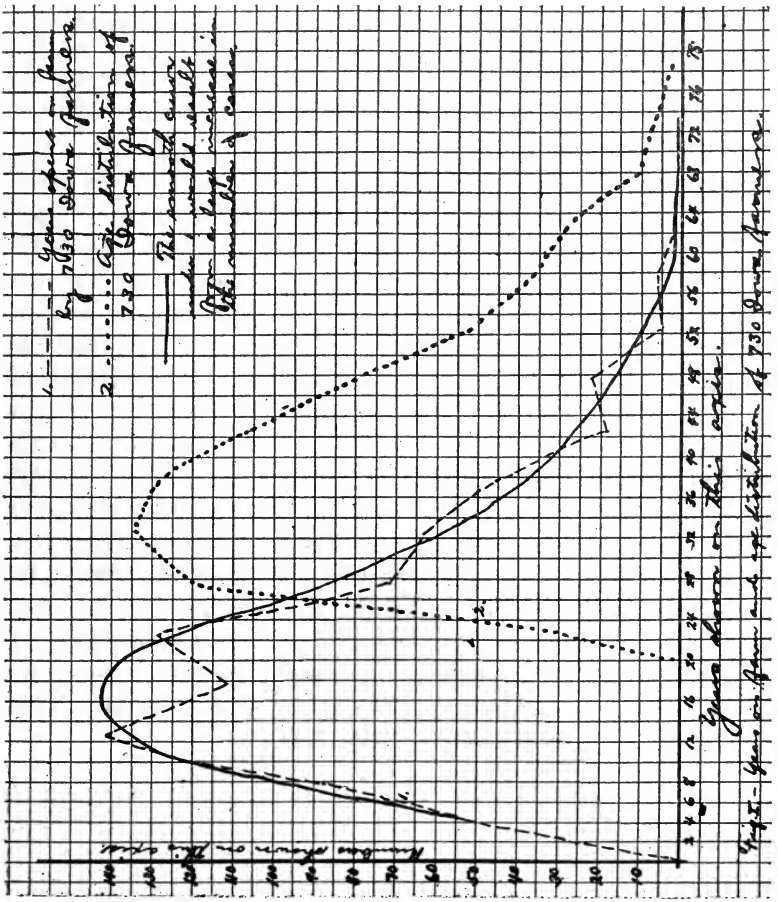

Fig. 3

The 1911 report for Illinois furnishes an elimination table, but the discussion does not indicate how authoritative this is to be considered. The returns are as follows:

1st grade	100	7th grade	40
2d grade	70	8th grade	46
3d grade	67	9th grade	16
4th grade	68	10th grade	11
5th grade	54	11th grade	7
6th grade	56	12th grade	6

Through the courtesy and co-operation of the County Superintendent, D. C. McIntosh, the complete returns for all children, city, town and country, were secured from a single county in Indiana (Greene Co.) with the following results:

1st grade	100	7th grade	40
2d grade	63	8th grade	39
3d grade	67	9th grade	17
4th grade	65	10th grade	13
5th grade	59	11th grade	9
6th grade	47	12th grade	8

Through the courtesy and energetic co-operation of Superintendent M. L. Howell, the age-grade tables for all of the schools of Wright County have been secured. This means not only the eight city systems but the 120 one-room schools and the two parochial schools. Every child in Wright county who was in school on September first is included in this study. The fact that one county superintendent was able to secure this data taken with further fact that an interested superintendent in Indiana co-operated in the study by furnishing the same data, indicates the possibility of applying methods of supervision to the country schools which are more or less common at the present time in city systems. The State Department has secured data from four additional counties but it came too late for use in this study; because of the additional data called for the returns from the four counties are not quite so complete as from the two counties included in this study. Because of the significance of an age-grade table covering an entire county the one for Wright county is included herewith as indicated in Table VII.

TABLE VII.—AGE-GRADE TABLE.

WRIGHT CO., IOWA, 1914, BOYS AND GIRLS.

Grade	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	Normal	1 year over	2 years over	3 years over	4 years over	Total over	Total under	Total No.	% Largest Age-Group
																			Age Classification %----------								
Pr.		3	171	92	25	5	1		1				1													299	213
1		2	107	239	154	50	10	8	4			1														575	
2			49	145	134	49	11	4	4	2	1															399	97
3			5	54	146	120	81	18	11	1																436	106
4				4	64	156	134	65	32	7	4															466	111
5					7	48	126	115	92	29	7	1														425	103
6					1	8	39	119	102	63	21	7														360	88
7							11	60	95	115	49	18	7	2	1											358	87
8							1	6	61	108	82	40	10	4	1											313	76
I									1	42	69	70	36	10	1											229	56
II										1	36	54	47	16	2	2										158	38
III											8	15	66	54	25											168	41
IV												3	15	39	47	11	5									120	29
Total	5	278	385	382	407	392	411	392	398	368	278	209	181	125	77	13	5		61.6	13.5	3.9	1.3	.4	19.3	19.1	4306	

All of the above figures make us the more desirous of having definite data for our entire state.

TABLE VIII.—GRADE POPULATION.

(Grades)

		1	2	3	4	5	6	7	8	9	10	11	12
1	Thorndike 1900, estimate, 23 cities	-----	114	113	106	94	80	63	45	-----	-----	-----	-----
2	Woodward 1901, estimate, entire U. S.	130	112	101	91	57	30	21	15	7	3.5	2.5	2
3	Illinois 1911, all school, estimate doubtless	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
4	Entire U. S. 1911, estimate	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
5	Strayer 1911, 318 cities	140	113	110	106	96	83	70	55	42	27	19	14
6	Iowa 1911, 13 cities from Strayer	135	105	111	105	98	93	70	60	41	30	22	16
7	Iowa 1913, 29 average cities, Iowa School Survey Club	117	84	88	95	81	78	77	76	65	49	32	33
8	Iowa 1913, 291 county schools in 25 counties, Iowa School Survey Club	152	79	79	81	81	70	84	81	-----	-----	-----	-----
9	Indiana 1912, Greene county complete	173	108	115	112	102	80	69	67	29	20	17	15
10	Iowa 1914, Wright county complete	213	97	106	111	103	88	87	76	56	38	41	29

TABLE IX.—GRADE POPULATION (DERIVED TABLE).

(Grades)

		1	2	3	4	5	6	7	8	9	10	11	12
1	Thorndike 1900, (entering group instead of grade population	100	-----	-----	91	81	68	52	40	27	17	12	8
2	Woodward 1901	100	86	77	70	43	23	16	12	5	2	1.9	1.6
3	Illinois 1911	100	70	67	63	54	56	40	46	16	11	7	6
4	Entire U. S. 1911	100	60	58	56	48	33	26	19	11	7	5	3
6	Iowa 1911, 13 cities	100	78	81	77	72	69	52	45	30	22	16	12
5	Strayer 1911, 318 cities	100	81	78	75	68	59	50	39	30	19	13	10
7	Iowa 1913, 29 cities	100	71	75	81	69	67	66	65	55	42	27	28
8	Iowa 1913, 291 country schools	100	52	52	53	53	46	55	53	-----	-----	-----	-----
9	Indiana 1912, Greene county	100	63	67	65	59	47	40	39	17	13	9	8
10	Iowa 1914, Wright county	100	46	50	52	48	41	41	36	26	18	19	14

TABLE X.—GRADE POPULATION.

COMPARING BOYS AND GIRLS.

(Grades)

		1	2	3	4	5	6	7	8	9	10	11	12
5	Strayer 1911, 318 cities	Boys	145	117	112	107	97	82	67	50	37	22	16	11
		Girls	135	110	107	105	95	85	72	60	47	32	22	18
6	Iowa 1911, 13 cities	Boys	134	110	111	105	104	92	66	60	38	25	16	13
		Girls	137	100	111	104	93	95	74	61	45	35	28	20
7	Iowa cities missing	Boys	175	107	116	118	105	94	85	83	53	45	27	26
		Girls	145	91	128	96	89	85	78	92	68	55	40	36
9	Indiana 1912, Greene county	Boys	172	105	116	111	92	71	60	57	29	19	12	12
		Girls	162	119	107	108	107	88	77	77	28	23	18	17
10	Iowa 1914, Wright county	Boys	211	97	105	109	104	85	81	56	42	34	32	21
		Girls	206	94	103	113	99	86	90	94	68	42	49	37

Table VIII brings together the several attempts to determine the extent of elimination. These are made uniform by being reduced to a common base, giving 100 for the grade having the largest group. In each case this is the first grade. In using this table, particular attention is called to the fact that many of the attempts are estimates, and that others are modified by particular conditions.

Aside from the material contained in Dr. Strayer's study, that collected by the Iowa Survey Club and the data from Wright County, it seemed that there is no way to determine how much elimination there is in the Iowa schools. The only other attack upon this problem seems to be through the per cent that the high school enrollment is of the total enrollment. Using the 1913 Iowa Directory as a basis, we find that there are 41,973 pupils in the high school, which is 8.2% of the total enrollment, the total enrollment being 507,845.

In Illinois the high school enrollment is 7.5% of the total enrollment (1911-12), while the commissioner's estimate for the United States as a whole is that the high school enrollment is 6.3% of the total. In Massachusetts the high school enrollment is 12.7% of the total enrollment (1911-12). This shows Iowa slightly better than Illinois and the United States as a whole, but not so good as Massachusetts.

Turning to another table furnished by the 1912 Report of the U. S. Commission, p. 8, Vol. II, we find that Iowa had in school in 1910-11, 83.93% of the population between the ages of 5 and 18. There were but four other states, Maine, Nebraska, Kansas and Colorado, that are reported as making a better showing. Illinois was reported as having only 70.8% of her children between the ages of 5 and 18 in school. Taking this same table and referring to the per cent of the total population enrolled in the school, we find that Iowa is reported as having 22.6% of the total population enrolled, and that there are eleven other states ranking above Iowa, the ranking states being: North Dakota, Nebraska, Kansas, North Carolina, South Carolina, Tennessee, Mississippi, Arkansas, Oklahoma, Utah and Idaho. The returns seem to indicate that compared with other states children go to school well in Iowa and stay in school well but the figures do not seem to indicate that this difference is very great. Possibly the figures indicating seven-tenths of 1% more in the high schools of Iowa than Illinois are about correct. Figures are available making possible comparison of the

number of the total high school pupils remaining to the fourth year high school for three states: For Louisiana 12% of the high school pupils in 1910-11 were seniors; in Illinois 14.7% were seniors; in Iowa 1913-14, 16.7% were in the twelfth year. This again indicates that in Iowa the pupils are held to the last year of high school, a little better than in Louisiana or Illinois. The corrected high school statistics for Iowa for the year 1913-14 as furnished by Mr. Fuller of the State Department of Public Instruction and Mr. Foster, inspector for the State Board of Education, are as follows:

	Accredited	Non-Accredited	Total	
9th year...	12,570	4,402	16,972	36.6%
10th year...	9,246	3,106	12,352	26.5%
11th year...	7,516	1,905	9,421	20.2%
12th year...	6,689	1,112	7,801	16.7%
Totals ...	36,021	10,525	46,546	100

Taking these figures instead of the figures of the Iowa Educational Directory, as a basis, we get 9.1 (instead of 8.2) as the per cent of the total enrollment found in the high schools of the state. If to the number of high school pupils here given we add 4,000 more for the unclassified, post graduates and others as suggested by the office of high school inspection, we get 9.9% as the figure showing per cent of total enrollment in the high school. This figure gives the high school situation the benefit of all doubt, but even then is not unusually high.

It is significant that according to the 1913 directory, 11,717 high school pupils are tuition pupils. This means that they come in from rural districts and smaller towns. The tuition pupils are 28% of the total high school enrollment in Iowa. In Illinois, the tuition pupils in the high schools are 10.2% of the total enrollment.

It would not be safe to conclude that a final table for the entire state would show a condition in Iowa with reference to elimination that is far superior to that of any other state. All of the figures available indicate that the conditions prevailing in Iowa are very similar to those prevailing in other good states, and that there is an enormous amount of elimination. Possibly of each 100 pupils entering school, 60 to 70 remain to the eighth grade and 25 or 30 to complete the fourth year high school. No one knows, however, just what the figures are. What we need is complete returns from every school corporation in the form of age-grade tables. This is a possibility, and could be secured by the expenditure of a small amount of energy in educating the reporting officers. We should

really have separate showing for rural schools, for villages and small towns, and for cities. It would then be well if each county were shown by a separate table, making possible a comparison of one part of the state with another, and each of these with the state as a whole, as shown by a final table. Comparison between boys and girls should also be made possible. It is useless to attempt to determine our present status until we have definite data. Any particular system of schools should go a step further, and should have the individual record card for each pupil showing among other things why the pupil leaves school when he does leave. The individual record card is recommended by the Department of Superintendents of the National Education Association. Until we have such definite data it will be best to act upon the evidence which we have, and use every means to make school work better in subject-matter, and in method; and make every effort, likewise, to train our teachers to a high point of efficiency in order that we may hold our pupils for as much education as possible.

TABLE I.—SUMMARY OF PUPILS' PERSONAL REPORTS.

MONEY EARNED WHILE IN SCHOOL—CHOICE OF VOCATION, GRADES 12, 11, 10, 9, 8, AND 7.

MATERIAL COLLECTED FROM DES MOINES COUNTY.

I. NUMBER OF PUPILS REPORTING.

Grade	Boys	Girls	Total
Twelfth	46	66	112
Eleventh	57	66	123
Tenth	68	109	177
Ninth	104	113	217
Eighth	166	191	357
Seventh	72	103	175
Totals	513	648	1,161

II. AGES OF PUPILS REPORTING.

Grade	Age	Average Age
Twelfth	From 16 to 20	17 yrs. 10 mos.
Eleventh	From 15 to 20	17 yrs. 8 mos.
Tenth	From 13 to 19	15 yrs. 6 mos.
Ninth	From 12 to 19	15 yrs. 1 mo.
Eighth	From 12 to 20	13 yrs. 10 mos.
Seventh	From 12 to 17	13 yrs. 5 mos.

III. EARNING MONEY WHILE IN SCHOOL.

Grade	Boys	Girls	Total
Twelfth	32	7	39
Eleventh	35	5	40
Tenth	50	49	99
Ninth	40	5	45
Eighth	69	27	96
Seventh	25	8	33

IV. ESTIMATED AMOUNT EARNED THIS SCHOOL YEAR.

Grade	Boys	Girls	Total
Twelfth	$ 3,188	$ 80	$ 3,268
Eleventh	2,128	26	2,154
Tenth	2,288	254	2,542
Ninth	2,077	69	2,146
Eighth	2,067	336	2,403
Seventh	465	112	577
Totals	$ 12,213	$ 877	$ 13,090

When earned: Before school, 102; after school, 192; Saturdays, 262; vacations, 517.

V. EARNINGS LAST SUMMER VACATION.

No. of days pupils worked for pay, 23,060.

Amount earned by Twelfth Grade pupils	$ 4,460
Amount earned by Eleventh Grade pupils	3,690
Amount earned by Tenth Grade pupils	2,755
Amount earned by Ninth Grade pupils	2,704
Amount earned by Eighth Grade pupils	3,320
Amount earned by Seventh Grade pupils	559
Total	$ 17,448

VI. HIGH SCHOOL COURSE AND COLLEGE ATTENDANCE.

Number Expecting to Take a High School Course for the Given Number of Years.

Grade	1 Year	2 Years	3 Years	4 Years	5 Years
Twelfth				88	15
Eleventh				107	23
Tenth		6	5	155	8
Ninth	8	15	1	174	13
Eighth	12	21	4	208	5
Seventh	3	12	7	51	10
Totals	23	54	17	983	74

Number Intending to Go to College.

From the Twelfth Grade	72
From the Eleventh Grade	69
From the Tenth Grade	98
From the Ninth Grade	68
From the Eighth Grade	144
From the Seventh Grade	52
Total	503

VII. VOCATIONS ALREADY CHOSEN.

Number from the Twelfth Grade	58
Number from the Eleventh Grade	69
Number from the Tenth grade	93
Number from the Ninth Grade	105
Number from the Eighth Grade	175
Number from the Seventh Grade	78
Total	578

Number Taking a Course in School to Prepare for the Vocation Chosen.

From the Twelfth Grade	58
From the Eleventh Grade	61
From the Tenth Grade	69
From the Ninth Grade	68
From the Eighth Grade	57
From the Seventh Grade	17
Total	330

BY WHOM INFLUENCED TO MAKE CHOICE OF VOCATION.

Grade	Teachers	Parents	Relatives	Friends	Class-mates	Ministers	Others
Twelfth	13	48	15	23	6	3	13
Eleventh	14	52	14	12	3	2	8
Tenth	10	78	22	19	2	0	3
Ninth	5	93	17	14	2	3	8
Eighth	19	130	26	26	3	0	4
Seventh	13	71	7	6	2	0	1
Totals	74	472	101	100	18	8	37

Total number who wish advice as to choice of vocation, 535.

VIII. LIST OF VOCATIONS CHOSEN.

Teaching	190	Architect	3
Farming	77	Music teaching	2
Stenography	63	Mining engineering	2
Bookkeeping	27	Civil engineering	2
Business	26	Church work	2
Domestic science teaching	25	Forestry	2
Electrical engineering	23	Physical culture training	1
Dress maker	19	Y. M. C. A. work	1
Machinist	13	Insurance	1
Lawyer	13	Aviator	1
Physician	12	Mechanics	1
Nurse	12	Draughtsman	1
House keeper	11	Barber	1
R. R. work	10	Carpenter	1
Civil service	8	U. S. Navy	1
Librarian	7	Author	1
Dentistry	7	Science	1
Kindergarten teaching	7	Missionary	1
R. R. engineering	6	Serving	1
Milliner	6	Photographer	1
Clerk	5	Plumber	1
Druggist	4	Hunter	1
Chemical engineering	4	Illustrator	1
Dramatics	3		

NUMBER CHOOSING FATHER'S VOCATION.

Farmer	43	Engineer	2
Physician	2	Mechanic	3
Druggist	4	R. R. clerk	1
Lawyer	1	Blacksmith	1
Business	2	Musician	1
Moulder	1	Clerk	1

TABLE II.—SUMMARY OF REPORTS SHOWING GRADES OF PUPILS IN SCHOOL.

GRADES IN SCHOOL.

Age	Males Females	1	2	3	4	5	6	7	8	9	10	11	12	Total	Total by Grades
5	Males	112												112	
	Females	95		1										96	208
6	Males	81	20	5		1								107	
	Females	95	24	4	2									125	232
7	Males	46	60	22	1									129	
	Females	34	73	36	2	1								146	275
8	Males	18	44	43	20	4								129	
	Females	4	38	42	25	5	1							115	244
9	Males	4	25	27	35	11	2	2						106	
	Females	1	18	37	40	18	4	2						120	226
10	Males	1	14	25	34	28	6	4						112	
	Females	3	2	28	37	45	12	5						132	244
11	Males	1	2	12	26	26	21	11	3	1				103	
	Females		4	12	18	25	24	13	3					99	202
12	Males	1	1	7	20	21	30	20	22	5				127	
	Females			4	23	24	29	20	20	5				125	252
13	Males		1	2	8	7	12	13	30	11	2			86	
	Females			3	3	10	9	23	40	15	2			105	191
14	Males				1	12	13	17	17	7	9	2	1	79	
	Females				1	8	10	23	28	13	9	4		96	175
15	Males					2	6	13	23	18	14	5		81	
	Females					3	4	10	24	31	5	9		86	167
16	Males					2	5	12	24	16	6	11	4	80	
	Females					1	2	8	16	8	11	7	10	63	143
17	Males									3	8	7	8	26	
	Females					1	2	2	12	7	8	7	16	55	81
18	Males					1	1	2	8	1	3	2	9	27	
	Females					1	1	3	5	4		4	12	32	59
19	Males							3	4	1		2	1	11	
	Females				1			1	3		4	1	11	21	32
20	Males								3		1		2	6	
	Females						1	1	4	3	2		5	16	22
	Totals by grades	496	326	311	296	257	195	207	289	149	84	61	79		2,753

TABLE III.—ELIMINATION—AGE AND GRADE OF LEAVING—OCCUPATION ENTERED (MONROE COUNTY).

Occupation	Number reported	Age											Male	Female	Married	Single	Age at Time of Leaving School											Grade Last In												Years at Work						Minimum salary per week	Average salary per week	Minimum salary per week
		10	11	12	13	14	15	16	17	18	19	20					10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6			
Teaching	16									5	4	7	2	14		16							1	3	4	1								2	2	3	2	5	3	2							$ 9.30	$10.97	$15.00
College	21							1	4	4	5	7	10	11		21						1	1	2	1	1								1			1	16	6	1									
Farming	60	3	2	2	1	4	2	7	5	5	15	15	65			65	1	1		1	1	4	8	8		2						7	1	4	7	14	2	1		1	4	2	4	2	2		5.00	6.56	10.00
General labor	25							2	3	3	11	6	25		3	22			1		1	2	5	1	2								2	2	4	8	2			1	5	2	1		1		9.00	12.00	27.50
Clerking	55						3	5	7	10	18	10	50	5	2	53					7	6	18	5								1	1	6	8	16	13	7		2	12	7	7	3			3.50	8.98	25.00
Mining	209				2	9	27	27	40	37	37	30	209		1	208		1	1	13	96	48	17	6	2				1	2	8	22	48	55	38	9	3	1		37	37	26	27	14	5	2.50	8.77	25.00
Office work	34							4	5	9	5	10	10	24	1	33					1	5	8	5	6								3	3	4	11	4	4	5	8	8	1				3.50	8.21	21.00
Housekeeping	155	2	6	1	3	5	8	20	32	26	28	25		155	36	115	1	1	2	6	24	27	13	4	1							6	3	13	26	30	25	10	1		4	5	5	2	4	2	2.50	3.59	9.00
Ill health	24	3	4	1			3	3	3	3	2	2	7	17		20				1	1		4	1				1	2	1	5	5	4	1	2		1	1									
Grade school grad.	34									8	10	12	5	10	24		34									1	1			1		1		1			1		1									
Feeble mind & ref.	10			1		2	1	2	1		2		9	1		10																																
Refused to attend	10						1	2	1	3	1	2		10		10			1		1	5		3								1	1	1	4	1	1										

The Committee desires to express its appreciation to County Superintendents Theresa Tiedemann and Myrta Harlow for their assistance in collecting the data for the foregoing tables.

TRUANCY, DELINQUENCY, AND JUVENILE COURT REPORT.

QUESTIONAIRE NUMBER 7.

In compiling the statistics on the truancy, delinquency, and juvenile court schedule, the most striking fact that seems to develop is the meagerness of real statistics. It would seem that very few schools are able to make a survey of their own field and know exactly the vital conditions which affect their school life from available recorded statistics.

This questionnaire has had to do with those things which reveal the weaknesses of the public school system, and yet but few schools seem to have any definite records of the amount of truancy, delinquency and the various causes and remedies which are in operation within their own system.

Some 650 questionnaires were sent out, and of these 44 have been returned, distributed as follows: 21 from rural schools; 14 from towns under 3,000; 6 from cities of from 3,000 to 10,000; 3 from cities of 10,000 to 40,000, and only one from cities of 40,000 or over.

There seems to be no general misunderstanding with reference to what constitutes truancy or delinquency. The definitions given on most blanks were quite in accordance with the general idea, with the exception, perhaps, that truancy was most often confined to absence without knowledge of parent, rather than to an absence without a legal excuse.

RURAL SCHOOLS.

Of the 21 rural schools reporting, only 3 gave their total attendance; consequently, it was impossible to figure truant percentages in the general rural report. In the 3 rural schools reporting the total attendance, however, the percentage of truancy varied from 50 to 75 per cent of the attendance.

One hundred fifteen cases of truancy were reported in the 21 schools, distributed as follows:

Grade:	1	2	3	4	5	6	7	8
Boys:	10	6	11	9	12	7	12	10
Girls:	6	5	7	6	7	2	1	4

These cases of truancy were distributed through the following ages:

Age:	7	8	9	10	11	12	13	14	15	16
Boys:	14	6	8	5	5	11	9	7	8	4
Girls:	7	3	2	8	9	2	2	0	4	1

It will therefore be seen that in the rural schools there seems to be no special point at which we find the maximum of truancy either in respect to grade or age. It would seem evident, however, that grades 6, 7 and 8 contain a large number of over age pupils.

The causes assigned for truancy were as follows: Kept out for work, 53; sickness, 41; dislike of school, 11; over and under age, 10; desire for work, 7; lack of parental control, 6; physical defects, 4; bad company, 4; trouble with teacher, 3; dislike for one study, 2.

There were no juvenile court cases reported. The effective remedies mentioned were as follows:

1. School attendance officer, although no intimation was given as to how he operated in the country.

2. Special classes, although none of these reports intimated in what way this remedy was used.

Most rural schools reported seemed to indicate that manual training and domestic science would prove helpful, as also would something in the line of pre-vocational classes. The following remarks were taken from some of these papers, and are interesting:

No. 17 reports: "I taught domestic science and served warm lunches during the winter term, which greatly increased our attendance. I have taught agriculture and tried to interest the boys in that, but could not obtain manual training equipment."

No. 21: "I think that more and better apparatus in school for performing experiments and for illustration would serve as a good remedy for truancy and delinquency."

No. 15: "I suggest that work be made of more practical value to pupils and unnecessary work and study eliminated."

No. 14: "I really have no suggestions as I have had no experience with truancy or delinquency, but last year in my small country school we had a warm dinner served. We cooked just one thing each time on our heating stove. This spring we had an egg-shell garden and tested seed corn in rag-baby testers. Then we used the credit system for home work as suggested in the Iowa Teachers' handbook. These things all created deep interest in the school work on the part of parents, as well as pupils."

TOWNS AND CITIES UNDER 3,000.

In towns and cities under 3,000 inhabitants 13 reported. Four of the 13 reported no cases of truancy or delinquency. The remaining cases were distributed as follows:

Grade:	1	2	3	4	5	6	7	8
Boys:	4	7	6	8	2	11	2	4
Girls:	0	0	3	0	0	0	1	0

Age:	7	8	9	10	11	12	13	14	15	16
Boys:	2	8	6	4	11	5	0	5	2	1
Girls:	0	1	0	0	0	0	2	1	0	0

Here the marked points of maximum truancy and delinquency would seem to be at grade 6 and age 11 for the boys. Of the 3 truant girls reported in grade 3, two were found to be 13 years of age. The peculiarity of this report is that the age of maximum truancy and the grade of maximum truancy are not coincident.

The assigned causes rank as follows: Illness, 12; lack of parental control, 13; bad company, 8; incorrigibility, 5; over and under age, 3; kept out for work, 3; poverty, 3; trouble with the teachers, 1.

Contributing causes were assigned mostly to the matter of poor environment. Only 1 school reported juvenile court cases. Of these cases, 2 were at age 12, 1 at 10 and the other at 13. All 4 cases were committed to the industrial school.

The most effective remedy reported was the truant officer and of nearly equal importance was placed aid to poor by means of books, clothing, etc. Only 2 were positive that manual training and domestic science was a definite aid; 1 was positive that pre-vocational classes would be of special help. Several others expressed the opinion that they might be helpful and 3 were of the opinion that neither manual training nor pre-vocational work would prove an effective remedy. The remainder either made no reply to the questions or answered that they had no data on the subject.

No. 26 thought that the most effective remedy was to find out what each individual was interested in, and through this interest, arouse interest in other branches.

No. 29 found free textbooks one of the most efficient remedies.

No. 30 found that smoking causes boys to be listless and creates a lack of desire for study.

No. 31 reports no cases of truancy, but reports that 1 eighth grade boy quit school because he disliked the work demanded. He had been three years in the eighth grade.

CITIES OF FROM THREE TO TEN THOUSAND.

From cities of 3,000 to 10,000, 6 replies were received. Of these 2 reported no record of truancy or delinquency. Neither was sufficient data concerning enrollment given whereby percentages could be completed to be of much value. In these 6 cities, truancies were classified as follows:

Grade:	1	2	3	4	5	6	7	8		
Boys:	4	2	8	5	10	6	8	10		
Girls:	1	1	0	1	0	1	1	0		
Age:	7	8	9	10	11	12	13	14	15	16
Boys:	3	4	6	9	1	7	7	12	4	1
Girls:	0	2	1	0	0	0	1	1	0	0

In this report the maximum of truancy seems to have been in grades 5 and 8. The maximum by age was in years 10 and 14. The causes assigned were dislike of school, 43; incorrigibility, 22; over and under age, 30; bad company, 14; desire for work, 5; sickness, 5; kept out for work, 4; poverty, 3; lack of parental control, 3; trouble with teacher, 3.

Contributing causes were mostly assigned to environment. The second contributing cause was the separation of parents. Two schools reported juvenile court cases, 4 in one case and 3 in the other. Two of these 7 cases were committed to parents and relatives, 2 dismissed from court and 1 continued, and 2 placed on probation.

The most effective remedy was stated to be the truant officer. The second most effective remedy was the matter of aid to poor by means of books, clothing, etc., and other remedies mentioned were work with backward pupils, medical attention, etc.

Two of these schools were sure that manual training, domestic science and pre-vocational classes are of great assistance. No. 40 asserted that he had found in three separate years' comparisons that ten per cent were decidedly influenced to stay in school because of domestic science and manual training. Two were definitely sure that these items could not be counted upon as definite remedies. Two others regarded them as helpful.

No. 36 asserted that as there are a variety of causes for truancy and delinquency, a variety of remedies is necessary. Sometimes the fault is with the teachers, sometimes the pupil, sometimes the home and environment.

No. 37 suggests as follows: "Shut up a lot of the cheap shows, create a taste for wholesome literature, keep off streets at night, provide proper playground supervision, stamp out cigarette smoking."

CITIES OF FROM TEN TO FORTY THOUSAND.

Three reports were received from cities of 10,000 to 40,000. One of these cities reported that they had no definite records on either truancy or delinquency; the other two cities report delinquency and truancy as follows:

Grade:	1	2	3	4	5	6	7	8
Boys:	2	4	4	10	4	6	8	6
Girls:	0	0	1	1	0	1	0	1

Age:	7	8	9	10	11	12	13	14	15	16
Boys:	1	2	2	5	5	6	11	5	4	3
Girls:	0	0	0	2	0	0	0	1	0	0

It will be noted in this report that the maximum of truancy by grades occurred in the fourth grade, the maximum of truancy by age is in the 13th year. The causes assigned were not reported upon by two of these cities. The third city reported them as follows:

Dislike of school, 8; lack of parental control, 4; bad company, 3; sickness, 2; incorrigibility, 1; poverty, 1; trouble with teacher, 1.

Contributing causes mostly assigned to poor environment and separation of parents. One city reported 24 juvenile court cases, distributed as follows: Committed to industrial school, 6; committed to other public institutions, 3; committed to private institutions, 2; committed to parents and friends, 11; placed on probation, 2. Of these pupils, 4 were 7 years of age, 2 were 8 years of age, 2 were 9, 1 was 10, 2 were 11, 3 were 12, 4 were 13, 2 were 14, 3 were 15, and 1 was 16 years of age.

These towns did not seem to have a definite opinion with reference to the effectiveness of manual training, domestic science or pre-vocational work. One reported the elementary pupils were too young for pre-vocational classes and said what we need "is a compulsory education law that will keep boys and girls in school until they are 16 years of age. Our law is not stringent enough."

Another said that if pre-vocational, manual training, or domestic science work is given, it should be thoroughly practical work. "I mean the boys and girls should feel they are accomplishing something, instead of merely doing exercises. To this end, practical shop men should do the instructing and continuation and part-time schools are necessary. Most of our so-called manual training is too academic."

CITIES OF FORTY THOUSAND, OR OVER.

One city of forty thousand or over reported as follows:

Grade:	1	2	3	4	5	6	7	8		
Boys:	3	26	24	32	29	19	14	2		
Girls:	6	16	13	20	15	2	5	0		
Age:	7	8	9	10	11	12	13	14	15	16
Boys:	2	4	9	16	22	28	37	20	11	0
Girls:	6	2	10	3	12	13	22	6	20	0

It will be noted that the maximum of truancy by grades is in grades 3, 4 and 5; the maximum of truancy of the girls beginning a little earlier than that of the boys, or in grade 2. The real maximum, both of the girls and boys, however, occurs in grade 4.

The maximum of truancy by age was in ages 11, 12, 13, 14, the maximum occurring at age 13. It will be noted in this report where probably a definite record is kept of every truancy case, that a much larger percentage of the truancy is recorded of girls than in any of the preceding reports.

The causes assigned were as follows: Sickness and connivance (untrue statements) of parents, 83; incorrigibility, 41; kept out for work, 32; poverty, 31; dislike of school, 12; trouble with teacher, 12; lack of parental control, 8; physical defects, 9; over and under age, 7; bad company, 4; desire for work, 1.

The contributing causes were mostly assigned to poor environment and, as in other towns, the second cause given was "parents divorced."

A comparison of the maximum grade truancy with the maximum age truancy, however, would lead one to believe that over and under age has more to do with truancy than the causes assigned above would indicate. Sixty-four juvenile court cases are reported as follows:

Age:	7	8	9	10	11	12	13	14	15	16
Boys:	0	1	0	1	4	14	13	4	6	0
Girls:	1	1	2	1	1	0	7	3	4	1

The disposition of these cases is given as follows: 21, continued generally; 14, under probation; 10, committed to industrial schools; 8, committed to private institutions; 6, committed to parents; 5, dismissed.

The effective remedies were given as the truant officers, special work for backward children, voluntary medical inspection, and aid to poor, with books, clothing, etc. It was reported that domestic science and pre-vocational classes are a distinct value.

The other suggestions were school nurses, truant detention schools, and an amendment to the attendance enforcement law by adding the words "or imprisonment" in the penalty for parents.

PERMANENCY OF AGRICULTURE AS A VOCATION.

The data forming the basis of this research was collected along with other data, by the Department of Farm Management of the Iowa State College. The data were tabulated by advanced students under the direction of the Department of Agricultural Education of the Iowa State College.

A typical Iowa farming district was chosen with the object of securing data from every farmer in the district. The district chosen was that section of the state at the corner of Grundy, Black Hawk and Tama counties. This is a typical agricultural community, corn and small grains, hogs and big cattle being the chief products. The data was collected by field enumerators. For this study 730 reports were available, and the returns were summarized upon the four points:

1. Age of the farmers.
2. Years spent on the farm (as laborer, tenant and owner.)
3. Education.
4. Years in other occupations.

The *age,* as the following distribution indicates, shows that the group chosen was a normal group. The curve corresponds quite closely to the actuary's table of any normal occupation. The youngest farmer was 20; the oldest were 80; the medium age was 38; the upper quartile 31; and the lower quartile 47, as marked in the table. The table follows:

TABLE I. SHOWING AGE OF 730 IOWA FARMERS IN A TYPICAL FARMING DISTRICT.

Age	No. (at the given age)		Age	No. (at the given age)	
20	1		30	30	
21	5		Q. 31	33	
22	4	27	32	25	134
23	7		33	23	
24	10		34	23	
25	14		35	32	
26	21		36	18	
27	24	117	37	26	128
28	30		M. 38	24	
29	28		39	28	

TABLE I.—Concluded.

Age	No. (at the given age)		Age	No. (at the given age)	
40	22		60	8	
41	18		61	3	
42	28	106	62	7	28
43	12		63	8	
44	26		64	2	
45	18		65	4	
46	13		66	2	
Q. 47	18	80	67	0	11
48	21		68	3	
49	10		69	2	
50	13		70	4	
51	12		71	1	
52	10	52	72	1	7
53	11		73	0	
54	6		74	1	1
55	11		79	1	
56	6		80	2	2
57	7	37			
58	6			730	
59	7				

Distributed into five year groups the numbers are as follows:

TABLE II. SHOWING TABLE I DISTRIBUTED INTO FIVE YEAR GROUPS.

Age.	Nos.	Age.	Nos.
20—24	27	50—54	52
25—29	117	55—59	37
30—34	134	60—64	28
35—39	128	65—69	11
40—44	106	70—74	7
45—49	80	75—80	3

The curve marked Age Distribution in Figure 1, brings out graphically the numbers according to the five year distribution. The heavy line shows the smoothed curve which would result from a large increase in the number of cases.

The years spent on the farm by these farmers include the experience as laborer, tenant and owner. Details as to how the work is divided up along these three lines are not given herewith but in a surprisingly large number of cases there has been regular progress from laborer to tenant, and finally to owner. The years spent on the farm, as indicated by the distribution below show a very normal situation. The time ranges from one year to 70 years; the median being *19;* first quartile *12;* third quartile *28.* In general the curve for years on the farm, as indicated in figure I, is almost identical in form with the curve showing the age. That the two curves appear at different values on the x-axis was to be expected, time

spent on the farm begins at 1, while the age of the youngest farmer is 20. The table showing distribution of years spent on the farm follows:

TABLE III. SHOWING DISTRIBUTION OF THE 730 IOWA FARMERS AS TO YEARS SPENT ON THE FARM, AS LABORER, TENANT, AND OWNER.

Yrs. on Farm.	No. of Farmers.		Yrs. on Farm.	No. of Farmers.	
1	1		30	16	
2	1		31	15	
3	9	30	32	15	63
4	19		33	12	
			34	5	
5	14		35	13	
6	14		36	12	
7	15	87	37	7	45
8	22		38	7	
9	22		39	6	
10	39		40	4	
11	16		41	7	
Q. 12	35	141	42	3	18
13	28		43	1	
14	23		44	3	
15	24		45	5	
16	24		46	8	
17	26	112	47	5	22
18	17		48	1	
M. 19	21		49	3	
20	32		51	4	5
21	21		54	1	
22	25	127	55	1	
23	26		56	2	
24	23		57	1	6
25	13		58	2	
26	11		60	1	
27	14	71	62	1	2
Q. 28	21		70	1	1
29	12			730	

The curve in figure I is based upon the five year distribution, the details of which follow:

TABLE IV. SHOWING TABLE III, REDISTRIBUTED WITH A FIVE YEAR PERIOD AS THE UNIT.

Years.	Nos.	Years.	Nos.
1— 4	30	40—44	18
5— 9	87	45—49	22
10—14	141	50—54	5
15—19	112	55—59	6
20—24	127	60—64	2
25—29	71	65—69	0
30—34	63	70—74	1
35—39	45		

The facts with reference to the *education* of these farmers are not quite as definite as a school investigator would desire, and yet the data seemed valuable because taken as a whole it shows quite well the situation with reference to schooling. These facts are distributed so as to show the schools attended and the number of years in each. As shown by the totals in common school, high school and college, the facts are not far different from what they are in the total population. It is to be noticed that a large number of the farmers do not indicate the number of years in school. This should have been secured. But of those who do report this fact, over half of them quit before the eighth grade. It is quite likely that a number of those reporting ten or twelve years in the common schools should really be classed as having taken some work in the high school. Others, of course, simply went to the common schools, according to the old practice of continuing in grade work until twenty-one years old. The number who had high school work, 94, is 12.8% of the total; and this is larger than the per cent of total pupils who reach the high school. According to the latest returns the high school enrollment for the state is 9.1% of the total school enrollment. The number who have had some college work, 76, is 10.4% of the total, and this is higher than the per cent in college work that would be indicated by the total distribution of school population. It is to be noticed, however, that only a few are college graduates, and only two have indicated the master's degree. In general it seems that the schooling of these men is just about normal or possibly a little above the average for the total population. This means that the incompetent who have practically no schooling do not become farmers, but enter lines of work requiring less ability. Table V gives detailed distribution for education or schooling.

TABLE V. SHOWING EDUCATION OF 730 IOWA FARMERS.

School	Years in this School	No.
Common school	Years not indicated	149
	1 year	2
	2 years	1
	3 years	1
	4 years	7
	5 years	4
	6 years	35

TABLE V.—Concluded.

School	Years in this School	No.
Common school	7 years	29
	7½ years	1
	8 years	93
	9 years	47
	10 years	83
	11 years	30
	12 years	36
	13 years	11
	14 years	12
	15 years	6
	16 years	5
High school or academy	Years not indicated	7
	Less than 1 year	5
	1 year	19
	1½ years	1
	2 years	28
	3 years	15
	4 years	13
	5 years	6
College	Years not indicated	3
	Less than 1 year	6
	½ year	2
	1 year	12
	1½ years	3
	2 years	18
	3 years	0
	4 years	3
	5 years	2
Business College	Years not indicated	1
	Less than 1 year	7
	1 year	8
	1½ years	1
	2 years	6
	3 years	3
	4 years	1
	Years not indicated	1
	Less than 1 year	2
	1 year	3
	2 years	2
Agricultural College (All I. S. C.)		730

The details with reference to age, length of time on the farm, and education are used here chiefly to show that we have a distribution of people which shows a normal situation. Everyone of these three factors indicates that this is a random selection and that it covers the total area. It is therefore, doubtless as nearly authoritative

as could be secured from an equal number of farmers selected anywhere. There is every indication that a listing of the total farmers of the entire state would show similar distribution.

The particular purpose of this inquiry, however, is to ascertain the facts relative to the *permanency of farming as an occupation,* and the facts shown by this study are significant just to the degree that we have a normal and representative distribution of farmers. The facts with reference to the permanency of farming as an occupation exceed all forecasts. Of the 730 reporting on this point, 573 or 78.4% had spent no time in any other occupation; the remaining 157, or 21.6%, show that far the largest part of the remaining have spent 1, 2, 3, and 4 years in other occupations; with a few scattered along even up to 30 years in other occupations. This means that when it comes to farming, men grow up on the farm or go at once to the farm—become laborers, tenants, and owners in succession, in the large majority of cases. In the cases where other occupations have been entered first, men work a few years at something else, apparently in order to get money on hand to enable them to go to the farm. Very few, however, work more than five, and exceedingly few more than ten years before making the transfer to the farm. The few scattering ones who waited more than ten years to go to the farm evidently got well started in other lines, found them remunerative and kept the farm in mind as a dream to be realized, when opportunity offered. With two of the group this happened after thirty years. Table VI shows the 730 Iowa farmers distributed as to time spent in other occupations.

TABLE VI.

No. Years	No. Persons	No. Years	No. Persons
0	573	17	1
1	18	18	3
2	21	19	1
3	19	20	2
4	16	21	0
5	8	22	0
6	9	23	0
7	5	24	3
8	6	25	1
9	9	26	0
10	9	27	0
11	3	28	1
12	2	29	0
13	3	30	2
14	2		
15	4		730
16	2		

Further discussion is unnecessary. The facts speak for themselves. Farming is a permanent occupation. Not only is farming permanent, but it affects large numbers of the total population. In the U. S. in 1910, 57,819,000 people or 63% of the total population were in the country and smaller towns. The population of Iowa, according to the 1910 census, was distributed as follows:

467,098 or 22%, in the 17 cities over 10,000.
54,194 or 2.5%, in the 8 cities from 5,000 to 10,000.
158,762 or 7.1%, in the 43 cities from 2,500 to 5,000.
172,370 or 7.7%, in the 144 cities with population of 1,000 to 2,500.

This leaves 1,372,344 out of a total population of 2,224,771, or 61.7% in the country and in villages of less than 1,000. This means that our population is dominantly rural, and that rural interests, therefore, must figure largely in any adequate scheme of education for the state.

The rural character of the population is shown equally forcefully by the statistics with reference to agriculture in the United States and in Iowa.

The 1910 census indicates that there were in the United States 12,659,203 people of both sexes engaged in agriculture. This is 33.2% of all of those engaged in productive industry. For males alone this figure is 36.1%; for females 22.4%. This per cent for males is larger than for any other line of industry, and for females it is exceeded but slightly by two other lines, these being (1) domestic and personal service and (2) manufacturing and mechanical industries. In Iowa the situation for agriculture is even stronger. Of the 694,799 males over ten years of age engaged in productive industry in 1910, 339,413, or 44.8% were engaged in agricultural pursuits. The two large lines for women in Iowa are domestic and personal service, first; teaching school, second; manufacturing, third; while agriculture ranks fourth, with a total of over 8,000 women engaged in agriculture.

Interpreting the above facts on the basis of the Ayers occupational study, we may say that for the entire United States there are 138 farmers for each 1,000 population and for Iowa there are 156 farmers for each 1,000 population. This means that for the state as a whole, farmers are more numerous in Iowa than are merchants or clerks in cities of 50,000 and over. If we consider that almost every farmer has with him on the farm a family of three (wife and two children), then we have for the state 624 out of each 1,000 population who are directly interested and de-

pendent upon the farm. And this does not count retired farmers and farm owners living in the cities. We are fairly sure that 80% of these children of the farm will continue their farm interest into maturity and throughout life, and that the present farmers will not change their present interests.

The comparatively small numbers in manufacturing as compared with agriculture is indicated by the fact that the 133 industries reported for Iowa in 1910 contain a total of but 78,360 employed. Most of these are in the seventeen large cities of over 10,000. This means that for the state as a whole, agriculture is the one large and dominant industry.

We may expect that manufacturing and urban population in this state will continue to increase, as it has in Illinois and Indiana. But the constructive imagination can scarcely conceive of the time when agriculture will not be the dominant interest of the state. The fact that fully half the population of the entire state are engaged in farming, and that it is an occupation of unusual permanency, means that any scheme of education must consider these facts and make provision accordingly. It is apparent that the present generation and the coming generation of farmers taken together have in their hands the destiny of the state with reference to its largest single asset; that is, the fertility of the soil. If this is to be conserved, it means that our farming class must become scientifically educated for their work. The education of the on-coming generation of farmers to the necessity of maintaining our priceless heritage of soil fertility through a knowledge of scientific agriculture, becomes one of the large and definite problems in any complete scheme for vocational and industrial education. Attention to this matter now will doubtless be better policy than to defer action until an exhausted soil forces upon us an economic condition akin to that in older countries and commits us to an uphill pull of several years to restore what our negligence has lost.

THE ATTITUDE OF EMPLOYERS OF COMMERCIAL HELP TOWARD VOCATIONAL EDUCATION.

Letters were written to the Chambers of Commerce, Commercial Clubs and Industrial Associations of the seventeen largest cities in the state of Iowa to secure the co-operation of these organizations in the investigation of the attitude of employers of commercial help toward vocational education. A questionnaire which had been prepared under the advice and direction of competent business men was sent out to ten representative cities, the co-operating organizations distributing them and returning the same for tabulation by one authority.

The cities are typical Iowa communities, and the 67 firms replying are representative of the dominant industries of the state. Some of the organizations co-operating had educational committees which were interested in the results of the investigation, others, which had none, were anxious that their organizations, as well as their schools, should profit by the results of this investigation.

On the question of difficulty in obtaining efficient office help, the firms reported as follows:

Yes	28
At times	20
No	10
Not replying	9
Total	67

The chief difficulties were due largely to an insufficient number of applicants with suitable recommendations, and an absence of proof for the employers that the applicant was mentally, morally and physically equipped for the work which was sought. The applicant had little idea of measuring up his natural ability and training to the demands of the work, about which, in many cases, he seemed to be uninformed. This suggests the advisability of a personal record card which should give an authentic and continuous account of the pupil throughout his school course—information equally necessary whether the student goes to work or to further training. It also points to a need of general information concerning the present-day demands of business, and specific, definite and accurate information concerning the vocation for which the youth is being trained.

On the question, "By what method do you seek employees?" the replies tabulated as follows:

Advertising	29
Put out sign	4
Employment agency	34
Application	38
Ask Business Colleges	38
Ask employees	3

The test of efficiency of any vocational course is the immediate placement of people in that occupation or employment for which it prepares. Since the public school maintains commercial courses, it should also conduct a Placement Bureau in connection with the same. This would eliminate the necessity of advertising, putting out signs, and employment agencies with their attendant fees. Application would be made through the Placement Bureau. Such functions have long been carried on under educational supervision in Germany, England and Scotland, and are multiplying in the United States. In Boston, New York, Philadelphia, Cincinnati, Cleveland, etc., these have passed the experimental stage, and Chambers of Commerce and educational institutions unite in their efforts to safeguard the transition from school to work as part of the scheme of vocational guidance.

On the question, "Do you employ boys and girls between the ages of 14 and 18?" the replies were as follows:

Boys—		Girls—	
Yes	55	Yes	21
No	29	No	37
Number	208	Number	305

Many firms reported that they did not employ help under 18, but that which they did employ proved best adapted to their needs coming from the institutions in the order indicated below:

From General High School	24
From Business Colleges	22
From Commercial High School Course	19
From Office training without complete High School course	19
From Grammar Schools	9

Owing to the immaturity of high school graduates, the employers signified their custom of selecting office help from business colleges, and the shop and factory help from high school graduates.

The defects commonly apparent to the employer were tabulated in the order of their dominance as indicated by the following number of firms:

1. Inaccuracy	30	6. No concentration	24
2. Irresponsibility	33	7. No application	20
3. Indifference	31	8. Instability	18
4. No ambition	25	9. Dishonesty	3
5. Inattention	24		

Note—The three firms reporting dishonesty employ younger girls in stores where goods are profusely displayed on the counters, and there is no check on the clerks other than the cash register.

10. Insufficiency in the following branches:

Spelling	42	Writing	39
Arithmetic	27	Reading	8

Note—There was little direct test in business of the ability to read. These answers came from the offices of abstracters and recorders, where proof-reading is part of the business.

Lack of speed, accuracy, and inability to use the English language effectively in business, were noted as additional defects.

In reply to the question, "What has a business man a right to expect from high school graduates?" the returns would suggest that the school look not only as to what it is teaching, but as to what it is teaching for. Information is not so much desired as good mental habits, which can result only from training. As a result of general training the employer has a right to expect adaptability, application, accuracy, ambition, civility, concentration, self-reliance, initiative, responsibility, neatness and dispatch, obedience and courtesy, loyalty to employer's interests, ability to take directions, good mental habits which enable one to plan effectively and to execute systematically and with thoroughness. To meet the demands of today co-operation is necessary; planning, organizing and systematizing is a necessary sequence in effective execution of any enterprise.

In special training, short cuts and quick methods in arithmetic are necessary to meet the demands for speed; mastery of the English language is a necessary tool and an invaluable asset in business. A number of firms expressed the desirability of vocational business courses which would give technical knowledge of materials, tools and processes of industry, as the only kind of business training that had a future beyond the mere clerical job.

Some provision should be made for teaching the relation of the employer and the employee and the worker's attitude toward his work, the value of money, and honesty in the disposition of time.

On the question of the advisability of a short business course in the high school the returns stood:

Favorable	52
Unfavorable	9

As to the age at which this should be given opinions differed; the lowest was 13, the highest 20; the greatest number advised 16 to 18.

There was a definite agreement in the comments that the 14 to 16-year-old youth is not welcome in the office end of industry in positions of responsibility. Any commercial course at that age is necessarily pre-vocational. A general course followed by a business course was suggested as most desirable.

On the question of whether the high school should train for clerical work or for business management, or both, the reports were:

For clerical work	11
For business management	5
A combination possible	31

The consensus of opinion indicated that the youth was unable to comprehend the problems of business management because of immaturity and irresponsibility. This training is possible only on a basis of experience in business, and must be an outgrowth of it. Clerical jobs are easily handled. There is not much future in them. The youth must have ambition beyond them, in order to be of much value to the establishment or make progression himself. Clerical work is preparatory and supplementary to management. The youth must try himself out before he can be advanced to management, and some firms doubt the ability of the schools to do anything more than give a general business training.

The kinds of commercial training that would meet the needs of each business were wide in range and indicate the degree of specialization in business methods of today. The include the following:

Invoicing
Railroad billing
Billing machine operators
Adding machine operators
Stenographers
Claims
Dictaphone
Collection work
Auditing
Mailing
Shipping
Credit work
Bookkeeping
Telegraph operating
Salesmanship
Stationery and office supplies
Stock-keeping
Filing
Purchasing
Cashier
Banking

Shorthand, typewriting and bookkeeping no longer furnish a complete course in business training.

Among the suggestions of the various employers which were emphasized are the following:

(1.) Power to observe, analyze and judge people.

(2.) Practical training in English, consisting of logical thinking and power of exact expression, discrimination in the choice and meaning of words, ability to write simple, direct and effective letters.

(3.) Vocational guidance in assisting the youth to discover his aptitudes and abilities in different kinds of work, and directing his thought along serious consideration of his future occupation and preparation for it.

(4.) An Advisory Board of Trustees made up of business men who would adapt the commercial course in the public schools to the actual demands of modern business.

ATTITUDE OF EMPLOYERS OF LABOR TOWARD VOCATIONAL EDUCATION.

The complete tabulation of data analyzed here will be found in the Sixteenth Biennial Report of the Bureau of Labor Statistics.

Analysis. A questionnaire was sent out to 1,800 employers of labor to obtain their attitude toward vocational education and to secure other data which might have immediate bearing on the subject, such as the securing, training and promoting of help; labor difficulties, etc. The replies were voluntary and the immediate interest in the question was shown by the return of 210 replies in less than one week from the date of sending. Four hundred twenty-two replies were received in time for tabulation.

The replies cover a range of 65 representative industries of Iowa, as follows:

1. Agricultural Implements.
2. Automobiles.
3. Baskets.
4. Boots and Shoes.
5. Brass.
6. Bakery.
7. Brick and Tile.
8. Bridge and Iron Works.
9. Brooms.
10. Butter, etc.
11. Buttons.
12. Canning.
13. Carriages and Wagons.
14. Cars, Railway.
15. Cement.
16. Clothing.
17. Clothing, Women's.
18. Coffee, Spices, etc.
19. Coffins.
20. Confectionery.
21. Contractors.
22. Cooperage.
23. Copper and Sheet Metal.
24. Dairymen.
25. Electric Light, Heat and Power.
26. Electric Street Railway.
27. Flags.
28. Flour Mill Products.
29. Food Preparations.
30. Foundry, Machine Shops.
31. Furniture.
32. Gas Tanks.
33. Gates.
34. Hosiery.
36. Ice and Cold Storage.
35. Hotels.
37. Incubators.
38. Laundries.
39. Leather Goods.
40. Liquors, Malt.
41. Lumber.
42. Marble.
43. Painters.
44. Oils.
45. Paper and Wood Pulp.
46. Patent Medicine.
47. Plumbing.
48. Printing and Publishing.
49. Pumps.
50. Quarrying.
51. Sanatorium.
52. Seeds.
53. Slaughtering.
54. Soap.
55. Stores.
56. Sporting Goods.
57. Stoves.
58. Telephone.
59. Tobacco.
60. Vinegar.
61. Washing Machines.
62. Water Works.
63. Wholesale Groceries.
64. Wire Works.
65. Miscellaneous.

The total number of employees in the 422 establishments was 40,134, including 33,460 males, and 6,674 females. Of these numbers 249 males and 76 females were under 16 years of age. This, however, is not complete, as many firms did not report on this data. In the industries reporting, it would indicate that employees under 16 are not an industrial asset. The total number reported in training was 915 or 2.12 per cent of the total number employed.

The wages present great irregularity. In the main this matter seems to depend on locality, degree of skill required, and the specialization of the process. In some cases the superintendent received less than the high grade skill, particularly in such industries as would indicate his work to be of a clerical nature. In the distribution of women workers, the greater numbers are found in the lesser skilled employments and comparatively few in the directive positions. Where the percentage of women employed is high, in positions where the same grade of skill is required, the wages vary from one-third to three-fourths that of the man. In only one instance was it equal.

The chances for advancement, or the future in a given occupation, may be estimated by a comparison of the wage table of lesser skill, higher skilled labor, and the salaries of superintendent and foremen. Promotion of the efficient is later shown to be a large means of recruiting the higher grades of labor.

The employers' statements in regard to the difficulty in obtaining help tabulated as follows:

Difficulty in obtaining skilled help:

Yes	165
Yes qualified	20
No	176
No qualified	1
Not reporting	60

Difficulty in obtaining foremen and superintendents:

Yes	155
Yes qualified	10
No	171
Doubtful	1
Not reporting	85

This table reflects trade conditions. When the labor supply is such that the employer may pick men for the jobs, there is little difficulty. When conditions are such that a man may pick his work, there is little difficulty. The difficulties, in the main, are in the least desirable industries and arise out of the fact that the

unskilled workers, having few resources within themselves, want amusement and entertainment which the city alone affords, and the discontent of the workers manifests itself in difficulty in securing help.

The supply varies according to the nature of the employment and location. It also varies in the same industry, in the same locality, showing that the individual differences in the superintendent, foremen, and employee alike, enter into the question of securing help. Those industries which are training their workers have the least difficulty with labor problems.

The sources of obtaining help for higher grade skill tabulated as follows:

Trained in own establishment	116
From all other sources	220
From schools	18
From Trade Unions	5
From Trade Schools	1
Trained in part in own establishment	29
	389
Not reporting	83

The sources of obtaining help in medium grade skill tabulated as follows:

Trained in own establishment	108
From all other sources	214
From schools	8
From stock-holder's family	1
From Trade Union	2
From Trade School	1
Trained in part in own establishment	25
	359
Not reporting	113

"Other sources" include advertising and personal application, imported from industrial centers, taken from other establishments, etc. The great number of pick-ups and casual workers indicated in the "source of obtaining help" as "anywhere," "all over," "local," etc., show how largely the selection of help is a process of elimination of the unfit. The establishments which train their own men and promote them within the ranks as they show ability, do it to secure a stable corps of workers in the plant. In some establishments it is necessary to bear the cost of training for several months before the worker can do any profitable productive work. The instability of the younger worker becomes a problem of expense. In industries where women and girls work the force is largely recruited through personal acquaintance. This table

shows how small a factor the schools are in supplying help, or in other works, fitting for industrial pursuits.

The sources of obtaining office help tabulate as follows:

Trained in own establishment	101
From all other sources	142
From schools	75
Stock holders	4
From Trade Union	0
Trained in part in establishment	15
Not reporting	85

The sources of obtaining superintendents, foremen, etc., tabulate as follows:

Trained in establishment	182
From all other sources	95
From schools	11
Stock holders	12
Trade Unions	2
Trained in part in own establishment	9
Not reporting	111

The higher the skill which is demanded, the greater the dependence on the industry for training in their own establishment. These three tables show that the greatest per cent of workers furnished by the schools goes to the office end of industry, the business and directive side. This is the result of the development of vocational education in business college and engineering schools.

The Trade Unions and Trade Schools are a negligible factor in the supply of trained workers.

The attitude of employers of labor toward the various types of vocational schools tabulated as follows:

On the question, "Would the efficiency and opportunity of employees be increased by public preparatory schools for pupils between the ages of 14 and 16?" the vote stood:

Yes	302
Yes qualified	4
No	61
No qualified	1
In doubt	11
Not reporting	43

On the question, "Would practical day trade schools giving one year or more to specialized training to pupils after 16 years of age, meet the problem of unskilled employes?" the vote stood:

Yes	267
Yes qualified	9
No	77
No qualified	0
In doubt	14
Not reporting	55

On the question, "Would part time or evening schools help unskilled workers to advance to high grade positions?" the vote stood:

Yes	263
Yes qualified	13
No	69
No qualified	0
In doubt	11
Not reporting	66

These tables show a decided demand for vocational schools of a preparatory grade for the 14 to 16 year old youth.

The employers of labor have suffered from inefficient help to such an extent that they are in favor of any form of training which will raise the standard of efficiency, although the previous table shows that their knowledge of trade schools, as far as actual experience goes, is limited.

It is evident from the employers' own statements that so far as they have analyzed their problem, aid from the public schools as they now exist is only a remote possibility.

Who voted "Yes"?

1. The broad minded employer of unskilled help who wants to see the general standard of education raised, though he would not profit directly by vocational education.
2. The man who looks upon vocational education as a means of minimizing the social problems that grow out of unskilled employment.
3. The man who regards it both as a means of increasing the self-dependence and self-respect of the individual and a means of developing character and moral responsibility which will assist in the solution of labor problems.
4. The man who sees how much his employees might have done had they received training suited to their ability, though, by this fact, he would have been deprived of their services.
5. The man who believes in vocational education as a means of establishing the dignity of labor by overcoming the prejudices which now prevail in favor of a poorly paid collar and cuff aristocracy.
6. The man who feels that a gap exists between the school and the actual demands for discipline, concentration, speed and accuracy necessary in business today.
7. The employer of skilled labor who would profit directly by the increased efficiency and greater skill of his workers.

8. The business manager who sees in the casually employed and poorly paid common laborer an economic waste which might have been prevented if he had had training suited to his capacity.

Who voted "No"?

1. The reactionary who thinks the public schools are trying to do too much already and favors a return to the "Three R's."
2. The employer of skilled labor who finds that public school training does not go far enough to be of real benefit to boys who wish to engage in his line of work.

Note: (This applies particularly to wood work.)

Who is in doubt?

1. The employer who fears the impossibility of giving practical instruction under the present school system.
2. The employer who doubts whether the boys and girls of this generation would take advantage of the opportunities offered unless they were made compulsory.

TYPICAL REMARKS OF VOCATIONAL TRAINING BY EMPLOYERS OF LABOR.

No. 73. There is no doubt that general industrial and mechanical efficiency can be raised to a much higher standard, not only by proper education of those who find themselves naturally adapted in any one direction, but as well by the elimination of the many occupational misfits. In a matter so essential to public welfare it is well that there should be a more systematic endeavor to solve the problem, and enforce, if need be, principles that may be found capable of producing salutory results. Too many men adopt a trade or vocation before they have had an opportunity to learn whether or not that trade or vocation will be congenial or in concord with their natural ability; and too many who decide on a course of occupation, even though peculiarly fitted for that special work, labor on to become proficient in the art without a due regard for even the rudimentary principles of the science.

I am of a firm opinion that the introduction of a department of commercial and mechanical science in our public schools would evolve a wide spread benefit. The great majority of young men and women leaving public schools face the necessity of earning a livelihood by some trade or commercial vocation. While their edu-

cation so far as culture is concerned has been quite thorough, they are unprepared to grasp the significance of material responsibility, and are largely incapable of deciding on a pursuit best adapted to their natural ability; nor can it be expected of their parents or others to decide for them judiciously without having had a fair opportunity to learn by practical test what is and what is not in a young man or young woman.

In the mechanical field there is unlimited room for accomplishment for the right kind of a young man, and yet this great section of our industrial area is filled with wasted opportunities, and burdened with individual failures. More practical education in our public schools could largely overcome this. By actual experience boys and young men should learn their advantages before setting out in a definite course, rather than awaken at some later time to find themselves on the wrong road, when it is probably too late to turn back and start in the right direction. Furthermore, the majority of those adapted to mechanical skill and employed in that kind of work do not derive the fullest benefit from their advantages. The apprentice follows in the footsteps of the journeyman; he learns to perform without studying the technology of the art. While, of course, a public school training could not be expected to complete a technical education, it would, nevertheless, plan the germ, which would develop in the atmosphere of practical endeavor; and by self-education the employee would grow in value not only to himself, but also to his employer and the public in general.

No. 257. Since our work is seasonable, we necessarily expect and have to accept unskilled labor, and depend on a few efficient helpers whom we have trained to direct the work. Our opinion on vocational education is that it should follow a thorough elementary school training to be successful. The alert, active brain will be most efficient because it will naturally discipline itself. Teach children to think—and what to think about. Skill in figures, in the use of language, is a useful acquirement, but integrity of character, honesty, prudence and frugal living seem to be no part of the child's education. Neatness, orderliness and attention to detail are sadly lacking in the average worker.

No. 264. We are in favor of vocational and trade schools, or even public schools with no vocational trade courses if they will only teach boys discipline and industry, and a fair degree of accuracy. This our present school system does not do. To over-

come this weakness, we plan to establish a school to teach boys the elements of our business, and to teach them spelling, arithmetic, and grammar, as the public schools are not doing even this.

No. 107. We employ on an average 70 people at processes that would not be practical to teach in the public school. However, we see that industry would be improved by the systematic training of the youth.

What is needed most is character training, the fundamental principles of responsibility and honesty in the use of time. If the youth could be taught that he is appreciated and rewarded to the extent of the ambition and willingness he shows in the interest of his employers, the technical problems would be of less moment in our business. The youth's choice of an occupation resolves itself into "how little can I do, and how much can I get?" This spells the labor problem.

No. 131. The trade schools would be of great advantage to workmen and employers alike. With proper opportunity the boy would have formed a definite idea as to which trade he would like to follow, and specialize in it, thus not wasting valuable time and delaying his chances for advancement. An important element in such training would be a fairly definite idea of the compensation which might be expected by becoming proficient in that particular trade. Another feature which should be brought to his attention is the relative healthfulness of the various trades; also the average hours which he might expect to work during the year; or yearly compensation. At as early an age as practicable, the student should be allowed to select his own course, but before doing so he should be fully advised as to the relative advantages and disadvantages of his prospective vocations, as regards salary, hours, etc., so that he will not make the mistake of spending the best years of his life in becoming proficient in a branch which he may like as a study or as laboratory work—only to find out later that the compensation or the hours or something else is not to his liking.

No. 236. I believe that it is one of the best things that has been done along educational lines in a good many years. Take myself, as a subject. When I went to school we had nothing like that, and I was more or less interested in manual training work or in fact anything that had to do with tools. Instead of having that to spend my time on I had to study algebra, etc., and had nothing to apply it on, and consequently I didn't know what it was about.

When I got out of school I didn't know what I could do or where to look for a position, and for about eight years I drifted from one job to another until I finally fell into the laundry business. I was just like thousands of other boys were and are today. They don't know what they are fit for and the man to whom they apply for a position is too busy to take chances on them, and they do not get a job, or rather none to their liking. I don't believe that it would help my employees (or at least some of them) very much to attend these schools; and I do not believe it would help me directly, but indirectly it would help everybody a great deal.

No. 311. There is no doubt in my mind that if competent instruction in training the boys in our public schools to work at trades is given it will enable them to secure better wages and more self respecting employment earlier than if they are compelled to secure this same knowledge after leaving school.

Care should be taken in arranging the classes of instruction to see that the course of instruction is the best that can be adapted to each individual boy. Boys are frequently discouraged in their efforts to help themselves to better positions by finding themselves unfitted for the work in which they are employed and not understanding how to make a change to a more suitable occupation.

Every boy should be taught a trade but every boy should not be required to learn the same trade. Technical and industrial courses should be open to boys who show sufficient proficiency and intelligence in their trade classes but should not be compulsory. Every boys should learn first to use his hands to best advantage to earn his living, and when he has learned this thoroughly he may be taught the more advanced problems in his trade.

No. 410. The need is certainly an urgent one of having schools where young men may be taught the different lines of trade. The business colleges throughout the country are doing a great thing for increasing the efficiency of office help, but schools which would train a young man in the proper lines for efficiency in factory work are just as essential.

It would appear to me that the establishment of trade or industrial schools to take hold of the boy at the time he graduates from the grade schools would be about the right place. Of course, the average boy at that age doesn't know what he wants to do, but by making the course about *two years long,* would enable him to decide in a better way. Or, if he had two years of high school and then went to a trade school, it would work out nicely.

The specialist is the man who is wanted nowadays, and the one who commands the wages. And the boy who enters factory work by first working here and then changing time and time again generally doesn't buy bank bonds. One thing that should be taught in these schools is the relation of employer to employee, or the relation of capital to labor, and made to see how one can't exist without the support of the other. The boy thus trained would be in demand by every manufacturer and his influence with fellow workers would be of immense value.

No. 2. A little would do no good and possibly harm—especially if it were crowded in as a part of the present system. A thorough training by competent instructors covering several years of school work following a thorough foundation in the common branches would be a blessing to the students and the community at large.

No. 50. Don't take any stock in it. A thorough drill confined to the three R's is my idea of a public school education. The public schools are attempting too much now and are doing nothing thoroughly.

No. 205. We believe that the education derived from public school work is but little advantage in our line of work, as it does not take them sufficiently far into the work. They simply get a slight idea of how to handle tools and machines, and some theory. Do not go into it far enough, do not get down to the actual practice, so that they can go into a factory and accomplish results.

No. 17. Vocational work must be taught by thorough mechanics who have had thorough training. Usually, workers taught by old fogy methods are worse than those who have never had training, and to be of any value in a modern shop must forget what he was wrongly taught, and on which he has wasted his time and money.

No. 1. As a general proposition we may state that we are not entirely stisfied that our present public school system is so designed as to best serve its purpose for the people as a whole. We believe, for example, that our high schools are so organized and the course of study is so outlined that it is more suitable in preparing students for higher studies, such as the University, than it is in preparing them for a beginning in any of the various walks of life that they will follow. When it is taken into consideration that a very small proportion of all of the scholars get to the University, the condition is brought more forcibly to mind.

The same thing is true in relation to grade schools below the high school, as many scholars do not have an opportunity to go to high school. We believe, therefore, that both the grade schools and the high schools should be so arranged as to best fit the largest number of pupils to take an active part in the life of the community and become in the shortest possible time useful, productive, upright, honest citizens, who will contribute the most to the improvement of their respective communities and the welfare of the State as a whole in the largest degree.

No. 202. A good high school education to develop minds and special training, if done by a *practical skilled tradesman,* would help every young man in "making good" in his chosen vocation, there is no doubt. But if he is instructed by a *teacher of theory* only, he is worth less in a factory than one without such instruction, because at the age of 16 to 20 boys are very wise anyway. If they think they are "First Class" educated machinists, for instance, they usually know more than the superintendent who got his trade as an apprentice in actual practice. Education is essential to high class skilled labor, especially in mechanical lines, but only as a foundation. Actual practice is necessary to reach the efficiency required in manufacturing and any instructions should be given as laying the foundation and not as making machinists or mechanics who can go into a shop or factory and demand first class wages. They should rank about third class.

No. 272. Have no opinion in this matter, but have not found high school students very good help, as in most cases they won't go down and do the dirty work that is necessary to be learned before they are capable of handling better grades of work. Have also found they watch for whistle time too carefully, have too many schemes for rapid advancement to be willing to learn thoroughly at wages in keeping with their ability. Have found the young married man the best worker, but in this class have had trouble in finding men even after several years' experience capable of directing shop work. Our plant being small, one man now acts as manager of the whole works, not from choice but on account of not being able to find the right man to take complete charge of our shop, with never more than six machine men and from one to six painters and laborers. During the slack season we run a much smaller force.

The young fellow with some training in school, willing to get several years' experience at from $2 to $3 a day should find many

good jobs waiting for him in small establishments like ours with good chance of advancement as the business grows.

No. 306. We think it is a good thing, yet we don't know that it would be of particular benefit to our particular business. All our office girls need is a high school education in addition tc stenography. Our factory girls only need brains enough to paste labels on neatly, etc., and make speed. The average girl we get is a pretty poor stick, for some reason. They either have not been endowed with enough brains to progress, or else they don't want to; we don't know which. At any rate we find very few who have any ambition. They want plenty of money, but they don't seem to want to develop brains to get it, or to realize that in order to earn a good salary they must be able to render efficient service in return. We don't pay very high wages, but the ones we hire are not worth more. We would much prefer to have a higher class of workers who would produce higher volume and grade of work and get more money. In order to have them learn more, they would have to be forced to go to school longer, and be *made* to become more efficient workers and better citizens.

ATTITUDE OF ORGANIZED LABOR TOWARD VOCATIONAL TRAINING.

The data analyzed below appears in the Sixteenth Biennial Report of the Bureau of Labor Statistics:

Analysis. Questionnaires sent out to the different Labor Organizations brought 96 replies stating their attitude toward vocational training. These represent people engaged in the various processes requiring the different degrees of skill necessary in twenty-nine different types of occupations as follows:

1. Barbers.
2. Bartenders.
3. Blacksmiths.
4. Brewers.
5. Bricklayers.
6. Cigar Makers.
7. Car men.
8. Carpenters.
9. Clerks, Postoffice.
10. Conductors.
11. Electrical Workers.
12. Engineers, Locomotive.
13. Engineers, Stationary.
14. Engravers.
15. Machinists.
16. Miners.
17. Moulders.
18. Painters.
19. Plumbers.
20. Pressmen.
21. Sheet Metal Workers.
22. Stage Employes.
23. Street Railway.
24. Switchmen.
25. Teamsters and Chauffers.
26. Trades Assembly.
27. Trainmen.
28. Typographical.
29. Miscellaneous.

1. On the question of pre-vocational courses in the grades, aimed at a round of experiences, rather than skill as a means of discovering aptitudes, abilities and interests in such types of work as lend themselves readily to projects, the returns tabulated:

Yes, 79; No, 14; No answer, 3.

2. On the question of public industrial or preparatory schools, for children between the ages of 14 and 16, which are of a general nature, aimed at industrial intelligence rather than skill, the returns tabulated:

Yes, 82; No, 11; No answer, 3.

3. On the question of trade schools, where intensive work is given during a short time under trade conditions in trade hours, which prepare directly for the occupation and shorten the period of apprenticeship, the returns tabulated:

Yes, 77; No, 18; No answer, 1.

4. On the question of technical courses in the high school which do not train the worker for a specific occupation, but rather

aim to give a knowledge of materials, tools and processes to the youth who is to enter in the business and directive side of industry, the returns tabulated:

In regular high school: Yes, 46; No, 28; No answer, 22.

In separate institutions: Yes, 40; No, 22; No answer, 34.

5. On the question of continuation schools in which children between the ages of 14 and 18 who have left school for work, return one-half day per week for instruction aimed to promote general intelligence and good citizenship; or are trained out of the job in which they are, to an occupation in line with their ability, the returns tabulated:

Yes, 60; No, 30; No answer, 6.

6. On the question of part-time schools in which an alternation of work in school is made with the work in the shop, where the pupil engages in productive employment, the worker receiving a wage during his learning period, and the product being consumed in the general market, the returns tabulated:

Yes, 55; No, 34; No answer, 7.

7. On the question of evening schools of elementary grade which train for citizenship, the returns tabulated:

Yes, 65; No, 23; No answer, 5.

8. On the question of public evening courses adapted to people with a common background and a common need, to learn new processes, the use of new tools, or who wish to fit themselves for better positions, the returns tabulated:

Yes, 78; No, 9; No answer, 6.

9. On the question whether labor organizations should co-operate in the establishment of such schools, the returns tabulated:

Yes, 65; No, 3; No answer, 25; Qualified, 3.

The remarks which follow indicate a general sentiment favorable to these schools, which are, in the main, considered desirable:

1. As a means of interesting the pupils who now drop out of school in large numbers.
2. As a means of discovering the ability, inclination and capacity of the individual, thus helping in an intelligent choice of a life work.
3. As a means of supplementing, not supplanting, the educational opportunities now offered at public expense.

4. As a source of supply of apprentices in skilled trades and industries, who have tried themselves out on the fundamental processes. This training done under proper conditions, would shorten the period of apprenticeship required for entrance to a trade.
5. As a means of establishing a sense of responsibility of the worker for his work, the dignity of labor, the integrity of the craft, and a knowledge of the mutual dependence and responsibilities of the employer and the employee.
6. As a means of securing larger returns from the wage earning careers, in enjoyment and progress in one's chosen work, and a fuller participation in the benefits of public education for the masses whose years of schooling are limited.

The following replies are typical:

No. 29. Labor organizations should encourage the establishment of industrial courses and apprentices should be recruited from the same. They should encourage their own men, particularly those who have had a successful experience as actual workers, in teaching industrial courses as it is only in proportion as shop conditions as they actually exist and are reproduced in material, processes, product and teaching conditions, that this work will be successful. The pupil will learn that he can profit only to the extent of his industry; this will be an incentive even to the drone.

The cultural side of education should not be neglected; by proper balance alone can the worker profit to the full extent of his power and reach his maximum of working and social efficiency. Many men fail in life because of "lop-sided education"—all skill and no culture or mental training, or all culture and mental training and no knowledge and skill.

Vocational training will fail as long as it is taught by college trained men and women who have neither time nor inclination to rub elbows with conditions as they actually exist and their judgments are formed from people who have written about rather than lived in the industries.

If vocational training ever plays an important part in the lives of any generation, it will do so as the hand-maiden of industrial education—to be taught by experienced artisans engaged in teaching trades in the schools of the future.

No. 67. The most competent mechanics in labor organizations favor anything which would educate their members or prospective members wherever possible. It is necessary to investigate the pupil's fitness for an occupation before his decision is made. Manual training as it is taught gives the pupil only a slight and limited acquaintance with tools and materials, and discovers, in some few instances, a skill or interest which has some bearing in the selection of an occupation. It is not vocational education. A man's skill is usually on a par with his culture and general education. His efficiency and his standards of living are interrelated. The part time system is the most feasible plan.

No. 78. The child's haphazard choice of jobs results in shifting from place to place, wasting from two to four years, trying to find work for which he may have some liking; or never finding it, remains an unskilled laborer, casually employed. The state could better afford to bear the cost of such training for its citizens, as it would make them less liable to need support or punishment from the state.

The only organization which opposed the propositions, assigned the reasons for its attitude, as follows:

1. It would raise the taxes enormously.
2. It would lessen the number of apprentices to choose from.
3. Apprenticeship is the best school.
4. It is best to leave vocational education to private schools.

THE EMPLOYMENT CERTIFICATE PROVISION OF LAWS OF DIFFERENT STATES.

The "employment certificate," or "age and schooling certificate," as it is called in some states, is essential for the enforcement of the compulsory school attendance and child labor law. It may be described as the document by which the child establishes his legal right to enter employment, and by which the employer secures himself against unknowing violation of the law. It not only is the means of checking-up the age of the child, but it is the means of imposing certain other requirements upon those children who seek to leave school and enter employment. It ought in all cases to be the means by which the local school authorities keep account of those children who go to work.

The purpose of child labor legislation is to give the child an opportunity for education and normal development, to prevent exploitation at the period of youth at which training of the child is necessary. The regulation of child labor is as much an educational problem as it is a labor problem. In the enforcement of child labor legislation the school authorities in each community are as much needed as the state labor inspectors. The employment certificate issued by the local school authority and checked up by the state labor inspectors, in the places of employment, brings both agencies into co-operation with the greatest advantage to each.

Wherever the compulsory education law requires that children attend school up to 16 years, unless over 14 years of age and regularly employed (or unless the child has completed the eighth grade), as in Iowa, there can be little satisfactory enforcement of the law without the educational authorities having a record of every child under the age of 16 that leaves school and enters employment, and some means of knowing when the employment terminates.

The important provisions of what might be called a model law in regard to employment certificates are as follows (practically the provisions of the Ohio law):

No child under 16 to be employed unless the child presents to the employer an "age and schooling," or employment certificate, issued in ac-

cordance with the provisions of the law, which certificate must be kept on file by the employer during the child's employment.

These employment certificates to be issued only by the superintendent of schools in the city or county in which the child resides, or by someone designated by him in writing.

On termination of the employment the certificate must be returned by the employer to the issuing office.

The issuing authority may not issue a certificate until the following documents have been received and placed on file:

(1) The pledge of the employer that he expects to employ the child, and will return the certificate to the issuing office as soon as the child leaves his employ.

(2) The School Record of the child, as provided in the law, stating the age, ability to read and write, and school grade.

(3) Evidence of Age, in the following order: (a) Birth certificate. (b) Baptismal record or passport, (c) school record or other documentary evidence, (d) In lieu of anything else, affidavit of the parent with one, or two, disinterested citizens.

The child must personally appear before the issuing officer and be examined, and such officer must satisfy himself that the child is 14 years of age, is able to read and write English, and has had a course of instruction equivalent to seven yearly grades in the public schools.

(4) A certificate from the school physician, or if there should be none, of the board of health, or if there be no board of health in the school district in question, from a licensed physician appointed by the board of education, showing that the child is physically able to do the work for which it is to be employed.

The employment certificate is to be transmitted by the issuing officer to the employer, and does not at any time become the property of the child, to be used as a license for idleness.

The School Record must be signed by the principal of the school that the child last attended, and must state the child's age, its ability to read and write, and the grade in school which it has attained.

The blanks for the certificates are to be furnished by the Commissioner of Labor of the state, and on the 1st and 10th days of each month the Superintendent of Schools or other person authorized to issue employment certificate shall transmit to the office of the Commissioner of Labor, upon blanks to be furnished by him, a list of names of children to whom certificates have been issued, returned or refused. Such lists shall give the names and address of the prospective employer, and the nature of the occupation in which the child intends to engage.

Labor Inspectors and Truant Officers may demand that certificates be obtained to prove the age of children apparently under 16, but who claim to be over that age.

The qualifications included in the provisions for employment certificates in the laws of different states come under three headings: (1) Proof of Age, (2) Educational Qualifications, (3) Physical Qualifications.

Proof of Age. The only certain proof of age is the birth certificate. Unfortunately birth registration has not been complete in Iowa, nor in

many other states, at least not for 14 years. The order in which different proofs are required under the present Iowa law is satisfactory.

Educational Qualifications. The educational requirements of children applying for employment certificates vary a great deal in the laws of different states.

Twenty-six states require that children be able to read and write English. Illinois requires literacy but not necessarily ability to read and write *English.*

Quite a number of states require the attainment of certain grades in the public schools, or equivalent instruction:

4th Grade	5th Grade	6th Grade	8th Grade
Michigan	Maryland	Arkansas	Colorado
West Virginia	New Jersey	Kentucky	Nebraska
	Wisconsin	New York	New Hampshire
		Ohio, boys (girls 7th)	Vermont
		Oregon	California (unless 15 yrs old)

A greater number of states require attendance at school for a minimum number of days either during the year previous to the birthday at which the child becomes old enough to go to work, or during the year previous to the time the certificate was issued:

Entire School Year	160 Days	150 days	¾ School Year
Maryland	Oregon	New Hampshire	Nebraska
Massachusetts			
Ohio			
Oklahoma			

130 Days	120 Days	100 Days	12 Weeks or Less
Delaware	North Dakota	Michigan	Florida
Dist. Columbia		Utah	Georgia
New Jersey			South Dakota
New York			

Instruction in certain specified subjects, usually reading, writing, spelling, geography and arithmetic through common fractions, is required in the following states: Kentucky, Florida, Maine, North Dakota, Oregon.

Physical Qualifications. Nine states require that a medical examination be made of the child and a signed statement from the examining physician be filed with the issuing officer before a certificate can be granted. This statement certifies that the child is physically able to do the work for which it is to be employed. New York state has developed the medical examination of the children to the highest degree of any state.

In seven states the issuing authority is not permitted to grant a certificate to the child unless such child seems to him to be physically fit to perform the work that he is going to do. These states are: Connecticut, District of Columbia, Idaho, Michigan, Nebraska, Utah, and West Virginia.

In Indiana, Louisiana, Missouri, North Dakota and Oklahoma, certificates from a physician may be required by the issuing officer whenever he has any doubt about the applicant for an employment certificate being able to do the work for which it is to be employed.

The states that have a medical examination as a part of the requirement for an employment certificate are as follows:

New York.
Massachusetts.
Ohio.
New Jersey.
Maryland.
Kentucky.
New Hampshire.
Rhode Island.
Minnesota.

Changes have already been planned for the coming session of the Legislature in the Child Labor Law of Illinois, that will include a complete medical examination of applicants for employment certificates on the same plan as that of New York.

In thirty-seven states employment certificates are issued by the superintendent of schools or local school authorities. In eight states only, no employment certificates are required, the affidavit of the parent being accepted as proof of age. In Oregon the certificate is issued by the Board of Inspection of Child Labor. In Porto Rico they are issued by the municipal secretary. In Virginia they are issued by notary publics and amount to little more than parents' affidavits.

The following states in which certificates are issued by the school authorities have these requirements, omitting the proofs of age:

Arkansas .....Ability to read and write English.
Completion of Sixth Grade.

California .....Read and write English.
Written request from prospective employer.

Colorado .....Literacy—English.
Eighth Grade (School Superintendent or Juvenile Court Judge may exempt).

Connecticut .....Literacy—English.
Knowledge of fractions.
Physical fitness.

Delaware .....Literacy—English.
130 days' attendance in school, preceding year.

District of Columbia ..Physical fitness.
Literacy—English.
130 days' school attendance previous year.
Knowledge of certain fundamental subjects.

Florida .....Literacy—English.
60 days' school attendance previous year.
Instruction in certain fundamental subjects.

Georgia .....12 weeks' school attendance previous year.

Idaho .....Literacy—English.
Knowledge of certain fundamental subjects,
Physical fitness.

Illinois .....If illiterate, can be employed only when evening schools are in session.

Indiana .....Certificate of physical fitness may be determined by the factory inspector.

Where vocational school with part time classes, Board of Education may require attendance five hours weekly between 8 a. m. and 5 p. m. of youths 14 to 16.

Kansas .....Compulsory school attendance to 15, except those who can read and write English, and are necessarily employed. These need attend only eight weeks.

Kentucky .....Literacy—English.

Sixth Grade or equivalent.

Instruction in certain fundamental subjects.

Employer's pledge to employ child.

Medical examination to determine fitness for work.

Louisiana .....(Certificates required for girls to 18 years.)

Factory inspector may demand certificate of physical fitness.

Maine .....Literacy—English.

A test in certain fundamental subjects, or certificate of regular attendance at night school.

School authority may require certificate of fitness.

Maryland .....Literacy—English.

Fifth Grade.

School attendance entire year previous.

Certificate of physician appointed by issuing officer showing that child has attained normal development, is in sound health, and physically able to do the work applied for.

Certificate must contain name and address of the employer, and is good only for that employment.

Special vacation certificate granted.

Massachusetts .....School attendance full two years previous.

Physical examination.

Michigan .....Literacy—English.

Fourth Grade test.

100 days' school attendance year previous to 14th birthday.

Minnesota .....Literacy—English.

Certificate from physician designated by School Board attesting fitness for intended occupation.

Missouri .....Literacy—English.

Appearance in person of child and examination by issuing officer of physical condition and literacy.

Certificate of physical fitness from Board of Health if officer requests.

Montana .....Literacy—English.
Nebraska .....Literacy—English.
Attendance three-fourths year previous to becoming 14 years of age.
Completion of Eighth Grade or attendance at night school.
Signed statement as to literacy, age and physical condition.
New Hampshire .....Literacy—English.
300 half days' school attendance the preceding year.
Certificate of physical fitness from Board of Health.
(School attendance compulsory up to 16 unless have completed the Grammar school.)
New Jersey .....Literacy—English.
Fifth Grade tests.
130 days' school attendance previous year.
Medical examination.
New York .....(Issued by Boards of Health.)
Literacy—English.
Sixth Grade.
130 days' school attendance previous year.
Medical examination by Board of Health.
North Carolina .....Certificate as to school attendance, and statement of parent required under 13 and over 12 years.
North Dakota .....Literacy—English.
A knowledge of certain fundamental subjects.
120 days' school attendance previous year.
Personal appearance of child before issuing officer.
Physical fitness in doubtful cases to be determined by the health officer.
Ohio .....(Certificates required of boys 15 to 16 years; girls 16 to 18 years.)
Sixth Grade tests for boys.
Seventh Grade tests for girls.
School attendance full previous year.
Written pledge of employer to employ a child and return certificate to issuing officer.
Oklahoma .....Literacy—English.
School attendance full previous year.
Issuing officer must be satisfied that child is physically able to perform work.
If doubtful, physical fitness determined by health officer.
Pennsylvania .....Literacy—English.
Rhode Island .....Literacy—English.
Physical examination.

South Dakota .....(Certificates required under 14 years for employment during school term.)
12 weeks' school attendance, during the year.
Utah .....Literacy—English.
100 days' school attendance year previous to 14th birthday.
Appearance in person of child.
Vermont .....Certificates required of child under 16 unless has completed 9 years' school course.
Washington .....Certificates required only under 15 years for employment in school term.
West Virginia .....Literacy—English.
Fourth Grade test.
Normal physical development and fitness for work.
(Examination by Board of Health Officers in case of doubt.)
Wisconsin .....Literacy—English,
Passed the Fifth Grade, or attended school at least 7 years.
Statement by employer of intention to employ child.

The present child labor law in Iowa provides no such check upon either the compulsory school attendance or upon the employment of children. The local school authorities have no record of the children who enter employment except as they show up as absentees from school. If the city is small enough and the truant officer has sufficient time, he may investigate all absentees and find those that are employed by visits to the home, then to the places of employment. The truant officer, or the school superintendent, has no means of knowing when the child ceases its employment and should, under the compulsory education law, be returned to school.

In few Iowa cities can records be had of the children between the ages of 14 to 16, employed in different industries.

Through enforcement of the compulsory education law and relief work, sometimes necessary to keep pupils in school, Muscatine, with the co-operation of an aroused public interest, has been able to furnish complete records of all children between the ages of fourteen and sixteen years, on the basis of the school census.

A signed statement from the child's parents as to his age and regular employment is necessary before the child leaves school. This is verified from school records. If he has completed the 8th grade, the school has no further jurisdiction; if not, the school keeps track of him until 16 years of age.

Co-operation with the employers has been developed so that they report whenever a child leaves their employ, thus enabling him to return to school at once.

Children may work ten hours a day in Iowa. There is no regulation of street trades in cities. Employment under sixteen is prohibited after 9 P. M. in certain employments, not including work in hotels or messenger service.

Though this paper deals with the age and schooling certificate, the hours of labor, regulated and prohibited employments and their exemptions have a significant bearing on school work.

VOCATIONAL GUIDANCE.

A realization of the educational, economic and social waste which takes place in the transition from school to work has started an interest in the Vocational Guidance movement. That this waste occurs whenever the transition occurs, from the grade school drop-out to the university graduate, indicates that there has been an omission on the part of the home, the school and the public in safeguarding the youth against the haphazard choice, either of work or further training. From workshops, from factories, and from the ranks of professional men comes the same statement of drift, or chance, or mere whim, as decisive factors in the choice of an occupation. Many employers of labor testified, out of their own experiences, that few people have any information concerning the various fields of endeavor open to them, and know nothing of congenial or uncrowded occupations.

The American youth has heretofore exercised his democratic privilege of rising as he pleased or falling when he chose, in most cases unguided, unadvised, and uninformed in regard to the conditions in business and industry today. Because of these conditions has come the demand that more guide-posts be set up at youth's cross-roads.

Educational guidance is the first step in vocational guidance. For the youth who improvises a landing-place on the educational ladder at his fourteenth birthday, it is necessary that he knows that industry does not welcome him as an irresponsible, juvenile worker. Eighty-five per cent of the boys and girls of that age who are employed in the United States are in "blind-alley" or futureless jobs. Two million children is our annual sacrifice to the Minotaur of the "blind-alley" job. That these same people make our criminal, social and labor problems proves that it would be cheaper for the state to enforce its school attendance laws and provide training adapted to the needs and capacity of the youth, than to bear the higher cost of correction and punishment later.

Returns from the investigation of why children leave school have upset all our preconceived theories in regard to economic need as a cause for leaving school. The figures vary from nine to twenty-six per cent, due to this cause. Those who dropped out for this

reason sought to mend the tragedy of their separation by attendance at night schools and boys' clubs.

It is useless to wait until a complete and effective scheme of vocational guidance has been worked out. We can solve the problem only by working on it.

For the child who goes to the high school an important decision awaits him in the choice of a course of study. This pupil needs information, assistance, and counsel likewise, in arriving at a wise decision. This choice is often influenced by the merest whim, by parents' and teachers' hobbies, by companions, or by hearsay evidence that certain subjects are hard or easy. In an elective system, the requests for changes sometimes show the pupils who have no aim.

A vocational counselor should have a very practical knowledge of the laws and phenomena of psychology, and an understanding of human nature as revealed in motives, interests, aims, desires and personal differences which go to make up what we call character. The counselor must be tactful, sympathetic, sincere, resourceful, able to command respect and trust, and to invite confidence and candor in dealing with the young.

Two problems, then, confront the grade school vocational counselor whose service is to co-operate with the parent and child: (1) in discovering, educating and utilizing that ability of every boy and girl that will give him the greatest economic and social returns; (2) in knowing what the various occupations offer, their advantages, disadvantages, conditions for efficiency and success, etc.

A careful analysis of the courses which are given in the high school, their aims and the careers to which they lead, should be information which the teacher could supply to pupil and to parent, upon whom the ultimate responsibility for choice should rest.

Pre-vocational courses aimed to give an occupation round of experiences, rather than skill as a means of self-discovery, are a most valuable factor in vocational guidance.

In the high school, Vocational Guidance, through vocational counselors and courses in vocational information, should have the following aims: (1) To aid the youth in self-analysis and self-discovery; (2) to survey the various fields of endeavor, at close range, the requirements and training for various occupations, the qualities necessary for success, the demand and supply of work-

ers, positions, pay and future in them; (3) to lead the youth who is going to higher institutions to consider his choice in the light of his needs, the scholarships offered by the state clubs, societies and colleges to first-year students.

Many studies have been made of vocational aims and factors which determine the choice of occupation. Noteworthy are the studies of Dean Keppel of Columbia on "The Occupations of College Graduates," and Dean Herman Schneider of Cincinnati on "Selecting Young Men for Particular Jobs;" Miss Bessie Davis' study of 2,000 high school students in Somerville, Mass.; Jesse Davis' investigation at Grand Rapids. Dr. Irving King's investigations in certain Iowa high schools led him to the conclusion that experience in earning money for one's self is a preparation for future work that is decidedly worth while. It is of especial value when related to future plans. The school and the community should provide more opportunity for the pupils which will minister to their vocational interests. The school should undertake to enlighten pupils systematically on vocational opportunities, provide more vocational studies. and give more attention to practical relationships involved in ordinary studies, that the pupil may be provided with a better basis on which to go out into the community and choose his work. The community should take a more direct interest in the future of its children, beside providing them with school opportunities. Pupils engaged in different kinds of work should feel a responsibility in providing ways for boys and girls to get some slight contact with different vocations, so that they might have the experience of earning money and a practical appreciation of the requirements of a vocation.

Vocational guidance is not new. Consciously or unconsciously it is going on all the time. For the most part much of it, which is not based on accurate and authentic information, must be colored by personal prejudice, and hence is misguidance. The struggle for human efficiency is the key-note of the age. Two great factors in personal efficiency are (1), that the person shall be adapted to his work; (2) that he shall be prepared for it.

The problem of selecting and training people for work heretofore has fallen more heavily upon business than upon the schools. The employers of labor say this is a big and difficult problem, because in the United States we have over fifty million working people and over one thousand occupations, including industrial, commercial, agricultural, household arts and professional. These

are varied and differ from each other in character, opportunity, wage, requirements in workers, the skill and aptitude necessary for success. The problem is difficult, not only because of the variety of employments, but because individuals differ more widely than vocations in interests, aptitudes, abilities, physical strength, moral fitness and personal characteristics.

The problem of helping an individual to find his work in life involves an analysis or understanding of vocations, on the one hand, such as only can be gathered by long-continued expert study, and investigation of the interests and possibilities of individuals, on the other hand, involving as they do the unfolding of characteristics sometimes latent, sometimes concealed, sometimes misunderstood.

The movement is in its infancy—a period of agitation and promotion. Here and there excellent contributions have been made and practical experiments have been carried on to enable people to find and follow their bent. Vocational Bureaus, modeled after the one at Boston, have been established by Chambers of Commerce in many cities for the investigation and publication of vocational information. Courses in vocational information, through the avenues of English, civics and economics, particularly that of Grand Rapids, have passed the experimental stage. Thirty cities have established Placement Bureaus, in order to keep education supervision of employment of the youth of school age. Chambers of Commerce and industrial associations have organized Junior Leagues after the Winston-Salem plan, described in Senate Document No. 108, 63rd Congress. Many cities have advisory committees which serve in the preparation and adjustment of courses of study in trade and commercial schools, and in providing speakers representing the various kinds of business and industries of the community. Winnipeg, Manitoba, has distributed these addresses as vocational guidance literature. The Teachers' Club of Minneapolis made a vocational survey and published their findings. The Chicago Women's Clubs employed a woman to make a study of the occupations which children left school to enter. This resulted in the school taking on the issuance of employment certificates and employment supervision of children of school age. Cincinnati has been following up 1,000 children placed in progressive employment for a period of three years to estimate the relative values of work and schooling. These are but a few concrete examples of the various kinds of work which are being done.

Vocational guidance, though a matter of state-wide interest, should be left in the hands of local communities for investigation and experiment. The work of local communities in this field will produce such results and benefits as the following:

1. Children, and parents of children, will be brought to think carefully of the relationship of the schooling of the child to the work which he is to do in life.

2. There will be an increasing tendency to differentiate courses of study in the fields of elementary and secondary education, to provide training which will lead to the different vocations.

3. It will lead to better enforcement of the compulsory attendance laws of the states, and to such revision of attendance and employment laws of the state as will meet the situation.

4. There will come such information in regard to kinds and conditions of employment open to children as cannot help but lead to improvement in them.

5. Children will, in an increasing degree, be steered away from dead-end and blind-alley jobs into more progressive occupations.

6. As guidance becomes more effective, and the opportunities for vocational training more varied, children will be induced to stay longer in school in order to get better preparation for life work.

7. Then will come a growing recognition that the most effective guidance is that which leads to careers through further training in all-day, part-time and evening schools.

8. The home, the school and the public will become more alive to the necessity for co-operation in assuming the responsibility for those who leave school for work, and will be led to provide opportunities for part-time and continuation school work.

9. Industries will profit by the larger efficiency which will come from more careful selection of employees, coupled with better ability and preparation, and will report accordingly.

10. Schools will profit by this contact with the vocations, since they will measure up the efficiency of schemes of training in terms of their effects.