



# Vocational Education in Wisconsin

ARTICLES PREPARED FOR THE CHICAGO RECORD HERALD BY
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#### INTRODUCTION

At the present time there is a wealth of discussion on the question of vocational education, much of it necessarily based on theory. Wisconsin presents us the argument from experience. That state has an enviable reputation on account of her systematic, thorough and progressive way of dealing with her problems. Her legislation on the subject of vocational education is a case in point, which will interest all true friends of the youth who now leave our schools at fourteen to engage in the unequal struggle for subsistence.

The first article, written by Prof. Chas. C. McCarthy, Chief of the Legislative Library of the State of Wisconsin, deals with the report of the Commission appointed by the Legislature of Wisconsin to study the situation; the second is a description of the system of vocational education created by the Wisconsin law, written by Mr. Arthur M. Evans of the Record-Herald; the third is an explanatory interview with Prof. Lewis E. Reber, Dean of the Extension Department of the University of Wisconsin, member of the Wisconsin Commission on Vocational Schools, and now Secretary of the State Industrial Board; the fourth interview is with Prof. Chas. C. McCarthy, who wrote the first article; the fifth is an address by Dr. L. D. Harvey, President of Stout Institute, Menomonie, Wisconsin; the sixth one is an address by Supt. Burton E. Nelson of Racine, Wisconsin, who started the first school under the new law and who knows its workings from the standpoint of the administrator, and the last article is by Mr. H. E. Miles, president of State Board of Industrial Education.

I wish to thank the Record-Herald for the permission to reprint these interviews, all of which appeared in December and January issues of that paper.

EDWIN G. COOLEY.

sight and readiness, which can not be replaced by the tremendous care and ponderous exactness of certain German methods. We must not forget that peoples differ in temperament. The psychology and general make-up of the people and the physical characteristics of the country must be taken into account. We must build upon what we already have and add to it from the best of all other lands.

# Investment Is Heavy

In considering the specific causes of Germany's educational success in detail, the first point which astonishes us is the heavy investment made in industrial education. Nearly every small village has at least one industrial school and often in small cities several are found. In Hanau, a place not very much larger than Madison, Wis., there are five industrial or commercial schools, including an industrial art school and also what is practically a mechanical engineering school.

The equipment of some of these schools is complete and costly, but in most instances is very economical and surprisingly simple. The buildings are well adapted to the work in hand.

Some idea of the investment can be obtained from the fact that the little province of Wurttemberg, which has a population less than Wisconsin by at least one-fourth of a million persons, and which is on the whole a poor, hilly country, with few transportation facilities, has, besides its splendid system of elementary and secondary schools, about 250 industrial schools in its towns and villages, including one knitting school, three weaving schools, two industrial workshops for actual practice in weaving, two technical schools for textile and mechanical work, a large state university, a technical university, a royal building trades school, a great commercial college, several commercial improvement schools, a great agricultural school,

many farming schools similar to county agricultural schools here, an art trade school for industrial art, a pure art school, and many miscellaneous schools of all kinds for workmen of various grades, evening schools, continuation schools and schools in domestic economy for women. The tremendous investment made by this little province is far beyond anything of which we, in our prosperity, have thought.

### School Work Practical

Almost without exception, there is in Germany a correlation between the industrial conditions in the cities or towns in which these schools exist and the industrial schools. In fact, it is impossible to define exactly a German industrial school. Each city meets the problem differently. Each tries to adapt the teaching to its own needs, and sometimes the curriculum in a school in a certain village is entirely different from that in any other community. The schools are a striking reflex of the industrial conditions of the communities in which they are found.

Instead of starting with a few costly trade and technical schools, the Germans have encouraged a gradual growth in the entire field of industrial education, and they have put the emphasis upon the average man of an industry, and the teaching of the average workman at the bench or at the machine. They have realized that the success of an enterprise depends in the long run upon the men in the ranks. They are now putting as much strength into building up the average man—the average workman—as in building up the higher education, although the investment in higher institutions is as great in proportion as ours, if not greater.

The technical schools of collegiate grade are splendid, yet it is to the miscellaneous continu-

ation schools that Germany owes a great measure of her success.

Your committee believes that it is the German industrial continuation school which especially deserves study. The German continuation school is made possible by the fact that practically everyone is compelled to go to school until he is 14 years years of age. From 14 to 18 he is compelled to go to school a certain portion of his time; perhaps a day in a week. He may go to school in some places from 4 to 6 in the afternoon; in other places and other trades, two mornings a week, and in still other places (and this is the popular way) for one day in a week, but he must go to school.

The reason for this is the sensible way in which the Germans have studied out a plan for replacing the apprenticeship system. Taking the remnants of that system, which of course still exists here and there, they have

added to it the continuation school.

# Supplement Apprentice System

The apprentice in the jewelry firm begins work at 14 years of age. On Friday or Saturday he has to go to school. In that school he may have one hour of German, one hour of freehand drawing, one hour of plastic design, one hour of commercial geography, and in general everything which will give him a broad view of the other departments of the work in which he is engaged.

If he is a merchant's clerk he may be given a course in a mercantile continuation school, which would teach him how to buy and sell, do accounting and to understand the general features of a thorough commercial education. Everything is applied directly to the business in which he finds himself, and which perhaps in his own town or village is a specialty.

Continuous classes are held in most cases so

that in the industrial school where boys between 14 and 20 years of age, and even men up to 25 and 30, go to school from two to four years to learn trades, there are also many boys coming in every day of the week from different manufacturing establishments.

Evening classes are also held, but if a boy goes to an evening class the manufacturer is compelled to allow him a certain number of hours each day away from his work, so that the total number of hours for the evening school and day work is not greater than one day's work. This is also the law in Scotland.

# Work by "Task" System

The classes are small in these schools, and the "task" system is so used that a class may include one boy who is doing elementary work and another who is finishing the highest task

given by the teacher.

In the beginning only a few of these classes were organized as the need became evident. There always remained boys in unskilled or miscellaneous work. General continuation classes were founded for them and, as courses could be provided for special trades or pursuits, separate courses were instituted. Those who remained in the general courses were given general manual training, literature, arithmetic, citizenship, etc.

Schools of like nature exist for girls and special classes have been rapidly organized in the different work in which the girls are em-

ployed.

Above the continuation course are a great variety of schools—lower industrial schools, middle industrial schools, higher industrial schools and special schools of all ranks and descriptions, making a whole, great, irregular democratic educational system, fitted to the needs of the different localities in a wonderful manner, and meeting the conditions much bet-

ter than if they were regularly classified and standardized.

After a very severe trial, reaching over a period of years, it was found that the inevitable tendency of all industrial schools was to become theoretical, and to turn out theoretical students rather than practical men, who would be of use in building up the industrial resources and commercial prosperity of the country. The Germans have established, almost universally, local committees of business men, manufacturers and workmen, who control these schools wherever they are. The result is that the manufacturers and the working people take the utmost pride and interest in these schools, and watch closely their development.

# Shun Theoretical Standpoint

In talking with the heads of the industrial schools in Germany one is impressed by the fact that these men always say that if the employers would only allow them to have the boys for full time, or for longer periods, and would not interfere so much with the management of the school, they could do splendid work. But the general history of industrial education in this country, as well as German experience, shows us that if these schools are all put on a fulltime basis, the boy who works in the factory and earns his living after he is 14 years of age is gradually crowded out, and schools are formed which turn out engineers, professional or cultured men, but which do not meet the needs of the great mass of the people.

It is far better to have the management of the schools in the hands of the employers and employes than to be hampered by the theoretical standpoint which inevitably would result if the teachers or school men had it all in their

own hands.

Another great element in the success of this

work is the kind of teachers employed. Every means has been used to get the right kind of teachers.

Very wisely, indeed, the Germans have paid the teachers in this work higher wages than for similar grades in the other schools; they have laid stress and emphasis upon this work. In almost every place one sees men teaching in these schools who are really artists in their work. The committees of manufacturers and employers see to it that this is the case. Special inducements have been held out for good workmen. Private rooms have been furnished in the schools where they can carry on their work. Recently special schools for teachers in industrial teaching have been founded, where men and women are specially trained.

# How "Task" System Works

There is another element—the "task" system which is in vogue there.

Small classes of from sixteen to twenty are usual, and the "tasks" are assigned for each member in the class. All who are prepared alike begin at the same "task." If a boy has but one day in the week in which to do his work, he can come in and work at his task. When he has finished that he will go on to the next task. Beside him in the room are men who are learning a trade in the trade school. It is a question of individual ability and the task completed rather than a question of a certain amount of time put in to advance a grade. The whole thing adds to the simplicity and economy of management.

# WISCONSIN VOCATIONAL SCHOOL SYSTEM LEADS THE NATION'S PROGRESS

Continuation, Occupational, Trade and Evening Institutions of Learning Under Mandatory Statutes Give State Control of Child Till 16 Years Old and Force Employers to Provide Apprentices With Education. Plan Developed by State's University.

Wisconsin is living up to its reputation as the most progressive state in the union by marching at the head of the procession in the latest educational movement—vocational schools.

Four years ago the Legislature appointed a commission of experts to study the question of industrial education at home and abroad. Two years ago, acting on a report from this commission, the Legislature enacted a series of laws providing for the establishment of continuation, vocational, trade and evening schools. first laying a foundation by rewriting the child labor and truancy acts. The work of organizing these schools is now in progress and Wisconsin is engaged in an effort to give its industrial and commercial population advantages similar to those it has been giving for years to its agriculturists.

Although the laws have been effective only a few months, thirty cities already have opened industrial and continuation schools, more than 10,000 pupils have been enrolled, the classes constantly are increasing and new courses are being added. All over the United States those interested in the new educational movement are watching with interest the development of the Wisconsin plan.

# No Opposition to Plan

One unusual feature attendant upon the passage of vocational school laws was that they went through without opposition. This fact never has failed to stir the wonderment of persons who have had experience in promoting reform measures before state assemblies, and it is attributable to the influence of the University of Wisconsin, which is the real foundation head of progressivism in the Badger State.

Activities of the university extension department, which largely has been responsible for the exalted position the university occupies as the most advanced "public service" institution of its kind in the country, had demonstrated the efficacy of occupational training in the apprenticeship schools, and opposition to the bills

was nipped before it sprouted.

Separate management and state aid are features of the Wisconsin plan. Under the new laws a state controlling board of industrial education was created consisting of three employers, three skilled employes, these six to be appointed by the Governor, and three practical educators, being the state superintendent of education, the dean of the extension department and the dean of the college of engineering of the University of Wisconsin.

General supervision over the public industrial evening, continuation and commercial schools is in the hands of an official appointed by the state superintendent of education, designated as "the assistant for industrial education." He is known as an assistant in the department of public instruction and in the performance of his duties is under the direction of the state

superintendent.

Local management of the vocational schools is in the hands of local boards of industrial education, each consisting of the city superintendent of schools or the principal of the high school and four other members—two employ-

ers and two employes, who are appointed by the local board of education.

#### Those Interested in Control

Thus, while two-thirds of the state board and two-thirds of the local boards consist of employers and employes, giving a predominant power in the development of the system to the interests most to be bettered, the new schools are linked up with the existing educational system. Control is separate but co-operative.

Upon cities of 5,000 or more inhabitants the act is mandatory. They must have local boards. With communities of smaller size it is optional as to whether they will establish local boards.

Four types of school are enumerated, the law specifying that the duty of the local board is "to foster, establish and maintain industrial, commercial, continuation and evening schools." The authorities are interpreting the law as meaning that the four distinct types must be established before the state aid can be given up to the limit. Communities that have started only two types of school will get only one-half the state aid provided for in the bill; those that have one type will get one-fourth, and so on

The new schools are to be supported and maintained by a separate tax, and the funds given by the state are to amount to one-half the sum expended in any school up to \$3,000 and not exceeding \$10,000 for any one community. The state gives aid to the first thirty cities starting the vocational schools.

With the co-operation of the state board of industrial education, the local boards have general supervision of instruction in the local vocational schools.

The act provides that whenever twenty-five persons qualified to attend an industrial, commercial, continuation or evening school shall file petition with the local board, the board shall provide the courses.

# Purpose of Schools

The vocational schools are open to all residents of the community in which they are located, of 14 years or more, who are not by law required to attend other schools. The purpose of the new schools is set forth in the portion of the law pertaining to the Stout Institute at Menomonie:

"To instruct young persons in industrial arts and occupations \* \* \* and to give such instruction as will lead to a fair knowledge of the liberal arts, a just and seemly appreciation of the nobility and dignity of labor, and in general to promote diligence, economy, efficiency, honor and good citizenship."

Stress is laid on the last clause, the basic idea of the Wisconsin plan being the building of character and the training in better citizenship, the betterment of society by driving out

illiteracy and its attendant poverty.

In addition to the industrial, continuation, commercial and evening schools, the laws provide for trade schools. Promoters of the vocational training movement, however, do not lay emphasis on this type of school. Any city or school district is empowered to establish and conduct a school to give instruction in the useful trades to persons more than 14 years of age. These schools are not to be under the boards of industrial education, but are to be controlled and managed by the local school boards, and it is optional as to whether the school board shall appoint five citizens experienced in the trades to serve in an advisory capacity.

As a substructure for the vocational school act, the Legislature revised the child labor and truancy laws, and likewise the apprenticeship act, which had been written in 1849 and had grown obsolete. So far as education is concerned, Wisconsin now has charge of the child

from the seventh to the sixteenth year.

Education in the vocational schools for boys

and girls between 14 and 16 who are given permits to work, is mandatory. Each "permit" child must go to school for five hours a week, and the employer is to pay the child's wages for the time spent in school.

Moreover, it is intended school work is to be done in the day time if possible, and not when

the child is tired after a day's work.

In Ohio and Michigan school attendance for the "permit" child is optional, but in Wisconsin it is arbitrary, and the state thus has compulsory education up to 16 years; in the common school up to 14, and either in the common school or the continuation school from 14 to 16. The only exception is in the case of children engaged in agriculture.

Under the new apprenticeship law every indenture must contain an agreement stating the number of hours to be allowed for instruction and the number of hours to be spent in work, the total of such hours not to exceed fifty-five in any one week. Other agreements required in the indenture are:

The whole trade as carried on by the employer shall be taught.

The time to be spent at each process or

machine shall be specified.

Not less than five hours a week shall be devoted to instruction of the apprentice, this to include two hours a week in English, in citizenship, business practice, physiology, hygiene and the use of safety devices, the remaining three hours to be devoted to such other branches as may be approved by the state board of industrial education.

# Law Is Mandatory

The instruction may be given in a public school or in such other manner as the local or the state board of industrial education may approve; attendance at school shall be certified to by the teacher and failure to attend shall subject the apprentice to a penalty of the loss of compensation for three hours for every hour he shall be absent from the school without cause. The law does not require the attendance of the apprentice at school during such parts of the year as the public school is not in session. Violation of the apprenticeship act is made a punishable offense.

Even before the law was passed continuation schools for apprentices had been established in several shops by the university extension department; since it was passed several of the largest manufacturers in Wisconsin have arranged either to have apprenticeship schools in their own plants or to send their apprentices to the public industrial schools in their communities. If they see fit the local school boards may engage with the university extension department to furnish the instruction.

In Milwaukee the vocational school board has contracted with the extension department to give instruction to apprentices, continuing the work that the university has been carrying on for the last two years, and in West Allis, Racine and Kenosha the local school boards have contracted with the extension department for teachers and texts to instruct in nine different subjects, the schools thus gaining the benefit of the most expert services at minimum cost.

# Four Types of School

To summarize: Four distinct types of vocational school are being organized under the law:

1. A night school-for persons over 16 years who are regularly employed during the day.

- 2. A permit school, either day or night, for children between 14 and 16, who have permits to work.
- 3. The apprentice school, a part-time day school.
  - 4. An all-day continuation school for "per-

mit" children who have left the school for work, lost their jobs and are without employment. They must, under the law, either go back into the public schools or into the all-day continuation school.

As an illustration of the eagerness with which the opportunities afforded by the new laws are being grasped, the vocational schools of Madison are worthy of mention. Madison, of course, is the intellectual center of the state. It boasted that illiteracy was almost unknown. When it came to establishing the required vocational schools it engaged A. W. Siemers, who had had training in college and in shop, as superintendent of the continuation schools. Last year the city had maintained the old-stye evening school with a total enrollment of twenty-five.

Siemers was engaged on the understanding that if he could round up thirty-six pupils for the new vocational schools in Madison the authorities would be more than satisfied, for factories are few in the capital. The new school has been in operation for three months. Instead of thirty-six pupils the classes have an enrollment of 450 in the evening school, while sixty-five "permit" children of 14 to 16 years are in the continuation school. Courses are being given in mechanical drawing, English of the shop, in gas engines, in automobile construction, salesmanship, electrical wiring, sanitation, citizenship and a few other similar branches.

### Teachers Are Practical

"The popularity of the new schools," said Mr. Siemers, "is due to the fact the instruction is given by teachers who are familiar with actual working conditions in the vocations. Twenty-five attended evening school last year; this year 450 are taking the same courses Why? Something is being offered that they

actually want, not something that some one fancies they ought to want. Work of this character required instructors right out of the shop, not teachers whose minds have never

wandered outside the academic pales.

"The ordinary teacher works by rote. doesn't know the conditions in which his pupils live and work. As an illustration, we had three instructors in mechanical drawing from the university. Two had three or four years in the shop, the third was without shop practice, a fine instructor "on the bill," but not acquainted with the peculiar little problems that mean so much to the vocational pupils. How did it work out? In a month the classes of the two college-shop men increased 30 per cent. The third man's class dwindled until it finally contained only one pupil and we had to discontinue it. It simply goes to demonstrate that the vocational schools would not accomplish their purpose if they had been made part of the common school system."—Arthur M. Evans in Record-Herald.

# WISCONSIN IS MAKING GOOD PROGRESS WITH VOCATIONAL TRAINING

Dr. Louis Reber, Secretary of State Board of Industrial Education, Holds Pronounced Views on Necessity of Separate Control of School Systems and Declares That Expert Teachers Are Essential to Success of Courses to Fit Young Persons for Trades.

#### BY ARTHUR M. EVANS

Madison, Wis., Dec. 23.—Wisconsin is a laboratory in which is being conducted an experiment the results of which will have nation-wide importance. The establishment of the vocational schools is an effort to solve the problem of giving opportunities to boys and girls who face in the twentieth century problems of living and of occupation unknown a decade or two ago. It is an attempt at economic readjustment.

The conditions that led Wisconsin to start its new industrial school system are by no means unique. They are akin to the changes that everywhere are heralding the dawn of a new economic era in America; the changes that have followed the growth of the cities, the introduction of new manufacturing processes, the adoption of new commercial methods, the settlement of the land, the depletion of natural resources and the evolution of a "raw material" country into a "finished products" country.

# State's Industries Change

Not so long ago Wisconsin was almost exclusively an agricultural state. In the last ten or fifteen years it has changed rapidly, until it now is a great manufacturing state, producing each year at least \$450,000,000 of manufactured products and \$280,000,000 of agricultural

products.

"Our future," reported the commission of experts who investigated industrial and agricultural training in presenting its findings in 1911, "must be a struggle for prosperity in manufacturing and in commercial pursuits and in intensive and specialized agriculture.

"Wisconsin's natural resources are not so large as those of a number of other states. Her prosperity in the future is to be dependent not only upon the bounty of nature but also upon the patience and hardworking qualities and the intelligence of her people. Her future greatest resource must be the superior intelligence of individuals in their various vocations.

#### Must Provide Education

"Changing as we are from an almost exclusively agricultural into a manufacturing and agricultural state, we must provide education adapted to both agriculture and manufactures. The older countries of the world and a number of older states in this country have already built up a great manufacturing population, and we must meet their competition while we are in this period of change.

"We have, then, to meet conditions in this country with which our fathers did not have to

contend.

"First, diminishing natural resources compel us to utilize fully those which remain. By study, by research, by enterprise, by training

alone can this be accomplished.

"Second, diminishing natural opportunity for the individual compels us to create an opportunity. If we desire the equality of opportunity which our fathers had to continue, this must depend not mainly, as it formerly did, upon new land or the chance to exploit mines or forests, but upon the brain power of the individual. This can be gained only through education which will fit him to meet his own needs and those of this state and country."

#### School Attendance Suffers

With its industrial life steadily growing, Wisconsin, as is the case in every other state, had a large percentage of children who were not going to school. They were dropping out, some from choice and most from necessity, as soon as they reached the age of 14, and were entering the occupations, with slim chances for becoming skilled workmen.

In 1910 the state bureau of labor reported that out of every eight children under 16 who were employed only one was in a position where a trade could be learned. In the state there

were at least 104,000 illiterates.

So the legislature appointed a commission of experts to discover what should be done. The work was divided up and Dr. Charles McCarthy was sent abroad. He spent several months in Germany, England and Belgium, and formulated a report on industrial education that was the basis for the vocational school laws passed in 1911.

The new school system is not a copy of the German system, but it is the German system modified and adapted to conditions in America. The experiment in Wisconsin will be of great value to other states when they establish vocational school systems, as it will give them something far more substantial than mere theory for guidance in formulating their plans.

# State Has Had Experience

When it went into vocational education Wisconsin was not without experience in some of the basic principles of the new school plan. The extension division of the state university, whose activities in carrying education to the people outside the college walls and in popularizing learning has been the wonder of the scholastic

world, has demonstrated certain features that were utilized in drafting the new vocational laws.

One of these ideas is that a teacher without shop experience rarely if ever is a success at teaching vocational classes. This, of course, leads directly to the question of separate control, a point that at present is at issue between the several elements in Illinois that have drafted bills for presentation to the legislature at Springfield next month.

On this question pronounced views are held by Dr. Louis Reber, secretary of the Wisconsin state board of industrial education. He is dean of the university extension division of the University of Wisconsin, so that his ideas are not those of a theorist, but of one who has had unusual opportunities for experience and observation in vocational training.

# **Favors Separate Control**

"Separate control is essential to the success of the vocational school," said Dr. Reber. "The teaching staff in the established schools is academic, it is prone to cling to pedagogic tradition, it lacks the atmosphere, the perspective, the local color, the personal experience, all of which are essential to vocational instruction.

"This has been demonstrated in the manual training work in the established schools. The academic teacher readily recognized the appeal of manual training to the brain, but, until recently, definitely repudiated the conception that the work might become a process of value in itself as a vocational asset. He was slow to see that the general educational value of manual training might be retained while at the same time the kind of training demanded by the industrial world might be secured.

"On account of this attitude on the part of the school force little that was worth while in the way of vocational education was brought into the schools until it was forced in by the call of the industries for an educational schedule that would relate the pupil's training with his life's experience, or, in other words, one that would make for efficiency. The present general movement for vocational training has sprung from industrial demand rather than from pressure from academic sources.

# Must Have Had Training

"Experience has demonstrated that the academic teacher, the teacher without experience in the occupations, is not a success in teaching vocational classes. Conversely, it may be argued that the shop man does not always make a good teacher. In Wisconsin, however, we have found it possible to get a supply of teachers with both academic training and shop experience. In nearly every community there are engineers and others who have taken technical courses and who are putting their knowledge into daily practice. For the present the greater part of the vocational training in Wisconsin is given in the evening schools, and these men readily serve.

"The work of the Y. M. C. A. in giving industrial instruction has been the most successful in this country of all similar undertakings of its scope. Why? It is attributable to the fact that the industrial classes of the Y. M. C. A. are taught by industrially trained men. The actual experience in shop practice gives the teacher not only the shop technique but also a useful appreciation of the conditions of shop life which the boys must meet in their

daily work.

#### Practical Men Succeed

"Wherever successful vocational teaching is found there will universally be found the teacher who can point to his practical training. No one has a higher appreciation of the value of the industrial schools for teachers than have I, but I do not believe that they can supply competent teachers of industrial subjects in vocational schools without requiring experience in a working plant as part of the teacher's preparation.

"Experience has furnished ample evidence that a system of industrial education may be most effectively developed through separate control. Management under separate boards will bring into requisition the experience and knowledge of employer and employe, the two elements most personally interested in the results of vocational training. This new board, free from academic tradition, will not be tempted to organize compromise classes in industrial subjects with teachers at hand who are not equipped with vocational experience.

"The curriculum will not be passed upon by a corps of teachers who have not made a study of industrial conditions and of industrial teaching, but it will receive the earnest attention of men who have been in a position to feel the failures of the established school system and to study the reasons that contribute to those failures. The city superintendent may be relied upon to standardize the course from

the educator's point of view.

# Looks for Rapid Progress

"Under separate control, the vocational schools in Wisconsin should progress as far in the next ten years as they would in fifty under control of the established schools. It is a matter of overcoming the inertia that is inevitably encountered in trying to work a change in an established institution of many years' growth.

"This is not a reproach to the established school force, for it is a natural condition. The separate control for the vocational schools will enable us to overcome this inertia without waste of power. Later on, it may be that both systems may be brought together in closer articulation, but for a time at least separate control is requisite to assure the rapid and effective development of the vocational schools."

# SEPARATE CONTROL IS CALLED VITAL FOR VOCATIONAL SCHOOLS

Dr. Charles McCarthy, Wisconsin Expert, Cites Experience of Germany to Prove Training Under Regular Organization Is Failure and Explains Qualifications of Teachers — Lack of Constructive Faculty Pronounced Greatest Handicap of Present Day in Educational Work as Elsewhere.

#### BY ARTHUR M. EVANS

Madison, Wis., Dec. 24.—Whenever a constructive law "with teeth in it" is passed by the Wisconsin legislature, rest assured that a large part of the dental work has been performed by Dr. Charles McCarthy. He is professor of political science at the state university, author of "The Wisconsin Idea" and chief of the legislative reference department maintained by the state.

When Wisconsin took up the question of vocational education in 1909, Dr. McCarthy was sent to Europe. His report on industrial training, which was given wide circulation and was accepted as a notable addition to the literature on the subject, was the basis for Wisconsin's new plan.

Of all the group of progressives who were instrumental in bringing about the passage of the new laws, Dr. McCarthy, it is generally conceded by his colleagues, exerted the greatest influence in the establishment of the industrial schools under separate control.

As head of the legislative reference department, Dr. McCarthy's sphere of influence extends far beyond the confines of his home state. Constructive legislation is his specialty, and his counsel is constantly sought by states that

are taking up problems Wisconsin is already solving.

# Separate Control Vital

In his office at the capitol, Dr. McCarthy plunged into the question of separate control the moment the subject of vocational education was broached.

"If we do not establish these schools under separate control," he said, "we are simply counter to the experience of every country that has successful vocational schools. It is simply theory against experience. Place the vocational schools under the regular school organization and their purpose would be defeated.

"Both methods of management have been tried in Germany. Prussia placed control of these schools under the bureau of commerce and industry and later transferred them to the bureau which controls general educational affairs. This, it was found, made the work altogether scholastic and theoretical, and after six years under this arrangement, the industrial schools were again placed under control of the commerce and industry department.

"For a time, the tendency was directly away from educational supervisory bodies, but recently these bodies have been given supervisory

power, chiefly in an advisory capacity.

# Ordinary Teachers Fail

"The trouble with the ordinary teachers is that they know nothing of economic conditions.

"It takes a person who has been through the college of hard knocks, one who knows conditions in the shop, who knows the peculiar problems confronting each student, to teach successfully in the vocational courses.

"The teaching force in the established schools is academic. It is bound tight to pedagogic traditions; it hardly knows the world outside the classroom; it is always looking in the book for precedent and method, and it is not constructive, and constructive talent is the prime requisite in getting these schools established.

"Here I want a bill drafted embodying some new, vital principle that has evolved out of changing economic conditions. I call in one of our lawyers to draft it. He looks up cases and precedents and says, 'This can't be done.' 'It's got to be done,' I say. 'It's against precedent,' he says. Precedent! It is a solid brick wall a thousand miles high in front of that lawyer.

Lawyer Is Hampered

"We finally get a bill, but it has been an anguishing labor for that lawyer, who has been continually trying to check up what we are trying to do with something somebody else has done or has said cannot be done.

"The great lack today is the lack of the constructive faculty. Our great trouble is that our lawyers know nothing about economic conditions, while our economists know nothing

about law.

"I speak of this merely because it is analogous to educational conditions. The teachers are academic; they place everything on the cultural basis. 'Is it cultural?' That is the stock question of the pedagogue.

"Isn't it as cultural to teach a boy arithmetic applied to the problems of running a plumbing shop as it is to teach him to do little 'examples'

out of a text book? Cultural, indeed!

"Isn't it cultural to give a boy or a girl who has no chance to go through high school and college an opportunity to learn something that will result in greater efficiency in the occupations and in better citizenship?

### Other Schools Are Cited

"The academic teacher who knows nothing of economic conditions is unable to give that

sort of instruction. The manual training schools bear witness to that fact. So do the commercial high schools. The mere existence of the private business college proves this.

"The old-style evening schools bear additional witness. If they were operated in the proper way, giving students the sort of instruction they actually need, where would the private correspondence schools have any room for existence? The people whose school life has been curtailed by the necessity of becoming wage earners are clamoring for education.

"A few years ago an investigation showed that at least 35,000 students in this state were taking work in private correspondence schools. It shows that the demand exists for instruction that an individual can take without throwing up his employment, and it is that demand we

are trying to meet.

"And to teach in these schools we require teachers who have the atmosphere of the shop, who have been steeped in it. The established schools cannot furnish such instruction; history impeaches the ordinary educational system for the failure to furnish adequate instruction in the industries.

# Trade Schools Criticized

"I am not an advocate of the trade school," continued Dr. McCarthy, taking up another phase of vocational education. "What we require is continuation schools and part-time schools. Look at the boys and girls who leave school to become second-rate clerks, later to join the army of the unemployed.

"The growth of the modern factory system and the minute division of labor have given us new educational problems to solve. A boy goes out of school and learns to run a machine. After a few years the machine becomes obsolete and is abandoned, and the boy, grown to manhood,

is out of employment.

"The great trouble is that such a tremendous proportion of our boys and girls leave school and get into blind alleys of employment; blind alleys, because they lead nowhere and offer no prospect of advancement. The vocational schools are to give these boys and girls a broad view of other departments of the general work in which they are engaged.

"Everything the boy is taught is applied directly to the business in which he finds himself. Why, in Germany they even have continuation courses for waiters, adding a touch of dignity to that calling. They teach a waiter how to carve, how to buy; they teach him food values, sanitation and such things. Then when he gets a little capital he can open a restaurant of his own, or if advancement is offered he can take a position as manager.

# Training Always Useful

"A boy works in a bake shop. Teach him arithmetic as applied to buying and selling, teach him food values, sanitation, management, and then later he has a chance to go into business or to advance under an employer. And so on through all the vocations, train the youth of the state so that they will be able to seize opportunity; make the opportunity for them.

"Conditions are not what they were a quarter of a century ago. A boy today is not equipped for life as was his father when he stopped going to school, because the problems he must face are different. We can't start him off with capital, so we must start him off with the right kind of an education, one that will fit him for

life as it actually exists.

"And behind all this, training in citizenship is a basic element. The new plan isn't so much for the purpose of increasing earning power and productive capacity. It is to improve society, it is to develop citizenship; that is the great idea back of all this.

"Wisconsin in its new laws stipulates that a certain number of hours in the vocational schools must be devoted to citizenship. Here, too, the old dry bones are to be shaken. The courses are to be such that they will appeal to the students. Teach them how we are governed today, show them how laws are made, instruct them in ordinances, drill them in the essentials of good citizenship, link it all up with daily experience.

# Answer to Critics

"I notice that some critics say the establishment of vocational schools under separate control would create class distinctions. This is another demonstration of the ignorance of economic conditions.

"Our educational system has been a single track route. The elementary schools lead into the high schools—the aristocratic high schools into which only a small percentage of our students ever gets, and the high schools in turn railroad them into the universities. What chance to advance has the pupil who has dropped out to enter the occupations?

"In Germany they have established two routes, so to speak. For the youth who has to leave school to earn they have the continuation school and the part time school, which lead into a series of technical schools that in

turn lead into the university.

"An individual can get into the university by either road, the old established classical route or the technical route. One is recognized as just as good and honorable as the other. Either one leads to the same thing. The thing that has broken down class distinction in Germany is this system of technical education.

# Teachers Hold Monopoly

"What is the great aristocracy in this country? Isn't it the aristocracy of learning? And why are the teachers in the established schools

and so many of the professors in the colleges and universities against the idea of separate control? Isn't it because they are seeking to

protect their monopoly?

"But to get back to the question of control," continued Dr. McCarthy. "As I said before, separate control is the great essential in starting vocational schools. The teaching staff in the established schools needs to be jarred. I speak as a teacher myself.

"Place the management of the vocational schools in control of the established schools and I fear that no matter how bravely the new schools started out a tendency to move backwards would develop. The history of manual

training would be repeated.

"We need to throw a jar into the academic teachers; make them wake up to the fact that they are living and that economic conditions are not what they were a quarter of a century

ago.

"Consider the Babcock test, which revolutionized the dairying industry. Did Professor Babcock discover it while he was simply teaching chemistry in the university? No; his discovery was made after he had come into touch with the farmers, had rubbed shoulders with them and had found out their needs. It was made after the theorist had got into touch with the actual economic conditions."

# ADDRESS OF L. D. HARVEY, ESQ.

# Before the Western Economic Society, Hotel Sherman, December 7th, A. D. 1912.

L. D. Harvey: In being asked to speak upon industrial education, I do not know that I can do anything better in the little time at my disposal than to tell you of an experiment we are making in the State of Wisconsin. I am not sure that we are not making a terrible mistake, in view of some statements that have been made here this afternoon, but we are making it at any rate. It is an attempt to do something to solve partially this question of vocational education. I want to give you the basis of our procedure.

It grew out of a public sentiment crystallizing in the Legislature providing for the appointment of a commission three years ago last winter to investigate this subject of industrial education and the needs of Wisconsin. That commission made its report and legislation at the last session of the Legislature went into effect to carry out those recommendations.

There was a recognition of this fact, that we had in Wisconsin, as every other state has, a large number of people of school age who were not in school and it was a problem that no one was attending to.

The present school boards of education were doing all they could under the compulsory educational law to hold pupils in school under the age of 14 years, and between the ages of 14 and 16, when not regularly employed in some labor, and yet we had thousands of young people between 14 and 16 years of age not in the public schools, not getting the benefits of

the facilities there offered, and so the question arose: "What shall we do for those people?" "Has the State of Wisconsin done all it ought to do for this large number of young people, who by pressure of necessity or otherwise left the public schools?" I believe that at least fifty per cent of them have left school, not because of necessity and the necessity of earning a wage, but they have left because they didn't find in the public schools, as at present organized, the kind of work that appeals to them and appeals to their parents as being worth while, and to them, what is worth while is that which enables them to earn a larger wage. That is the first thing for them. No matter what you and I may believe about it, that is the attitude of a large percentage of these children who have left school at fourteen years of age, without even completing the elementary school. They are dissatisfied.

It seems to me, and I think it was in the mind of those who made this report and in the mind of the Legislature, that we had two distinct problems there. We have undertaken to solve one of them in Wisconsin. The other

is in the process of solution.

The one problem we have undertaken to solve is to see what we can do for the present number of young people 14 years of age and over, out in the industries inadequately educated, having no vocational training for their work, feeling the necessity for further work of a kind that will make them more efficient in the industries in which they are engaged. We are undertaking to do that. We are hoping that our present boards of education will undertake to solve the other side of the problem, and that is the fifty or sixty per cent of those that leave school before they ought to leave, and who do so because they don't find what they want. We are hoping that our boards of education will show that they can find, as was suggested by Superintendent Blair, the thing that is needed, and that that side of the problem will be solved, but just now I want to tell you briefly, what we are undertaking to do in Wisconsin.

The Legislature provided for schools that would furnish facilities for those of our young people who had withdrawn from the elementary schools and were engaged in the various industries. It provided that thirty cities might share and that the state would to the extent of one-half of the cost of maintenance of such schools assist those cities, provided that not more than three thousand dollars should go to one school, and not more than ten thousand dollars in any one city. We did do the thing about which there is question, and which has been questioned here today, and maybe unwisely, but our legislature did provide that the work of those schools should be administered first by a Central State Industrial Board of Education, having in its membership three representatives of employers, three of employees, and three men in educational work. Also that the local boards of education should consist of five members, two of employers, two of employees, and the local superintendent of schools ex-officio a member of that board. It provided further that the local board of education should appoint the local board of industrial education, and this would give us reasonable assurance that there would not be any serious clash of interests. Now, whether this plan is right or wrong, we have embarked upon the experiment.

We have thirty-nine cities making application for aid, when only thirty can receive it. The Legislature hoped at least there would be a call for thirty to thirty-five thousand dollars and made an appropriation for that amount. These thirty-nine cities have voted to raise by taxation one hundred eighty thousand dollars to be put into those schools for that sort of work this year.

The City of Milwaukee voted seventy-five thousand dollars of that one hundred eighty thousand. It now develops that to make good the spirit of the law, it will be necessary for the next Legislature to increase the appropriation of thirty-five thousand now available to one hundred eighty thousand dollars in order to make good to those different cities half the cost of the maintenance.

We have organized under that law four distinct types of schools. One is a night school, another a permit school for the children having permits to be absent from the public school, another the apprentice school, and another the all-day continuation school.

The night school and the part-time school the apprentice school being a part-time school and the all-day school, is for the permit children who have gone out to work, lost their job and have nothing to do. Those young people, under the law, are compelled to go back into the public school, or may go into the all-day continuation school. It is hoped that the all-day continuation school will be organized to give the kind of instruction that will best serve the needs of those pupils. The day school, that is the public school has been organized perhaps for that purpose, but I think primarily to fit people for the next higher grade. The night school is not a continuation of the regular class room work in the public school. It is reorganized in matter and method, adapted to the needs of the people who go to those night schools, both girls and boys, and I am very glad to say that we are getting a considerable number of girls and young women into these schools, because one of the vocations we are undertaking to teach, to some extent at least, is that of the vocation of home-making, which shall fit them better to discharge the responsibilities of home life. We are also giving

those girls the kind of instruction that they feel, and that they think will fit them to earn a better wage while they are engaged in the industries.

Now these separate boards of education have authority to levy taxes. They are compelled that tax under the law in any city of five thousand, or less, if the people desire, to levy money to support such schools, when there are twenty-five pupils over the age of 14 and under the age of 21 in that city ask for it.

Permit children are compelled by law to attend these continuation schools for at least six months in the year, six hours a week. The boy apprentices are compelled to attend five hours a week for six months in the year.

That in short is the plan we are pursuing. I know personally every city in the state in which this work has been started. Forty years of school work in the State of Wisconsin has taken me into every one of those cities. I know every superintendent under which this work is going on. I met a majority of those superintendents four weeks ago yesterday and in a half day's discussion I did not find a word of criticism in respect to the organization of the work under which we are now carrying it on.

I do not mean to say, because I have been too long in this business to be optimistic, and I do not mean to say that we may not find difficulties, or that we may not find in certain localities objections. We find them under any system, but today we are finding hearty co-

operation.

We are finding this, just now, in Wisconsin, and I think generally, that a board of education organized for a specific piece of work—mark you now, for people who have left the public school, who are beyond the interest of the present board of education, not being cared for by that board of education—we find that a board created for that specific purpose made

up of two representatives of the moneyed interests of the city and two representatives of the labor interests of the city is enlisting hearty co-operation in their work.

I know from personal observation, and from statements made to me by superintendents that that has resulted in many cases-I do not know how many, but in at least two cases, that this has been the result. These manufacturers have gone back to other manufacturers, to men in their manufacturing associations and have said: "What are we going to do?" "What can we do?" "What will be worth while?" with these labor men on the board, they have gone back to their labor organizations and have said to them: "What is worth while for our children?" "We have gotten what is new in Wisconsin, an enlightened interest on the question of education, in a great number of the manufacturing interests in these thirty We have also an interest more enlightened and more interested than ever before, on the part of the labor interest in those thirty cities, and better than that, we have the laboring man and the manufacturer standing side by side for the purpose of working out that problem, in a way that will be for the best interest of the young people in the community and for the best interest of society, and for the best interest of the state and in that way, they are working together. I do think that is worth a great deal. I know from experience that whenever you get the interest of a body of men of any class in educational work, it is far easier to lead them on to an interest in all phases of educational work than where you don't have such a point of approach.

Those are the points, ladies and gentlemen, that I wanted to call to your attention, as to the experiment that we are making. It is yet too early to know what the results will be. We are not making any claims. We are simply trying out this experiment. We believe from

all the data available that it will prove satisfactory for us.

It may not do so elsewhere. I am simply presenting it to you as one of our first steps in trying to solve this problem that confronts all of us. You may have a better way. It may not fit your conditions elsewhere, but at any rate, it will contribute something in the working out of these problems.

Ladies and gentlemen, I thank you.

# CHICAGO VOCATIONAL SCHOOL PLAN CALLED BETTER THAN SUCCESSFUL WISCONSIN IDEA

Illinois State Teachers' Association Hears Racine Man Who Has Watched Working of the Practical Education Plan in Badger State Tell of Its Value as Already Seen and of Weaknesses Found in Application of the Existing Statute Covering Compulsory Attendance.

Peoria, Ill., Dec. 26.—Vocational education under the Wisconsin law was described in detail before the Illinois State Teachers' Association today by B. E. Nelson, superintendent of schools at Racine, Wis. At the joint session of the high school and principals' sections Mr. Nelson, after outlining the provisions of the new laws with which the Badger State is endeavoring to solve the problem of industrial education, told his listeners what was being done in Racine.

"The law establishing these schools," he said, "became effective in June, 1911. At the July meeting the attention of the board was called to its provisions. A committee was instructed to report at the August meeting. At that meeting another committee was appointed to recommend persons for membership on the industrial board. At the October meeting, on the 19th, the new board was appointed. On the 27th the Racine common council voted an appropriation of \$6,500, and on the last day of the month the industrial schools were opened.

"During the year 559 pupils were enrolled in these schools. At the end of the eighth month the attendance was the same, though there was a decrease of one-fourth in the evening school enrollment, offset by an increase of onefourth in the day school classes. Classes were conducted in printing, shop mathematics, electrical construction, bookkeeping, stenography and typewriting, salesmanship, banking, pattern making, cabinet making, mechanical drawing, house design and construction, and the various lines of domestic science—cookery, dressmaking and millinery.

#### Have Practical Men

"Employed in these schools we have so far as possible practical shop men. The man in charge of pattern making is at the head of this department of the \$40,000,000 J. I. Case Threshing Machine Corporation. Our teacher of drawing is a University of Wisconsin graduate and now mechanical designer for the Case company. Shop mathematics was in charge of a former designer for the New York Central shops, now in the extension division of the University of Wisconsin. This year the whole responsibility rests upon a man who is a normal graduate, a graduate of an industrial course of a university and was taken from the Case plant. In all classes special instruction is given by a teacher who does nothing else, in hygiene, home and shop sanitation, citizenship and safety devices.

"This year the classes are larger than they were last year, the increase being in the day

classes.

"It should be understood that no child under 16 years of age may attend an evening school. Last year this age was not fixed, and we found it to be often true that as soon as we compelled a child to go to day school an employer insisted upon the time being changed to the evening classes. Our law does not specify that a child shall attend a day class of five hours per week. It does state that the employer shall permit the child to take five hours out of the forty-eight during which he may be employed.

#### Schools Have Done Much

"In administration, this question raises itself with us: The law is worded loosely enough to permit a child to work forty-three hours and attend a commercial or other school at night. We are making cheap commercial schools in some Wisconsin cities rich while we wait for a decision on this point.

"I wish it were possible for me here to tell you what these schools have done for us. I could cite a single instance in which a street loafer has been made into a man. And then I could give another instance and another until I would test your confidence as with the stories of the fisherman just returned from the northern woods

"Our employment agency in connection with our modest vocation bureau has done wonders

to put our boys on good behavior.

"Grave dangers lurk about the administration of this law. The red light should be kept burning until you have placed at the head of the state work a man of broad culture, wide experience and deep study as well as intelligent observation of all that have been done anywhere. A schoolmaster with the schoolmaster's prejudice will dampen the ardor if he doesn't kill the interest in the movement.

"At the head of the work in the city must be placed a man who knows the shop, who knows shop practice and who knows the relative value of practical and formal instruction—a man of sufficiently broad capability to associate with and satisfy the doers of big things in the community, so that he may impress himself favorably upon those interested in industrial work or in school work. The pity of it is that such a man will command a higher salary than boards at first will be willing to pay.

Must Make Teaching Real

"Another danger lies in the temptation to

make the instruction very similar to the regular work. Unless such teaching is full of interest, full of life, full of practical instruction, we shall discourage the child and disgust

the employer.

"The law should be so explicit that whatever so-called commercial education is given shall be given under the industrial board. And the administration should not over emphasize this department of the school. A course in salesmanship is more to be desired than a course in shorthand.

"The great problem in the administration of industrial schools today—the great problem of the decade—will be the teacher problem. As it was in manual training schools, when manual training swept the country, so it will be in industrial education. A trained workman earns more than the teacher. Add to his equipment a normal school or college education and his earning capacity will be almost twice the salary of the teacher. Will that salary be paid or is there a better way?

"Some state, some day, will be wise enough to appropriate for a period of years what other states are now appropriating for maintenance, an amount great enough to provide for the operation of industrial training schools to educate industrial teachers for the state. It will subsidize these teachers so that the cost to them shall come back as additional salary in the immediate years, or as a pension for service in later years.

#### Need Skilled Teachers

"Just now these teachers are not to be had. We can't get enough educated mechanics to fill the administrative places at the salaries now current. To take the mechanic from the shop for hours of teaching added to his hours of labor is not satisfactory. To overload the teacher with additional trade school hours is to be continued only so long as there is no other way.

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"There is grave danger that we shall run upon the rocks in this great enterprise before the pilot gets his bearings, if not before we find a pilot. There are and will be serious difficulties in working out the law.

"The law provides that the industrial schools shall, so far as possible, use the public school buildings for their work. Cities are usually behind, rather than ahead, in schoolhouse construction, and finding room for day continuation classes is extremely difficult. In Racine classes are now waiting until room can be secured. State aid in the construction of building for industrial education might help. Such aid is promised in Wisconsin, but the appropriation is insufficient.

"In the Wisconsin law there are grave weaknesses in the compulsory features. An eighth grade graduate out of school and at work must attend day continuation classes. If loafing he is not compelled under the law to go to school anywhere any of the time.

"Under the same law a boy or girl employed in office, store or shop must go to school. working at home he cannot be compelled to go to school.

# Likes Chicago Club's Plan

"These weaknesses will be corrected as soon as possible. I presume your law leaves no such

loopholes.

"There are two or three important differences between the Wisconsin law and the law proposed by the Commercial Club of Chicago which, to my notion, is much the best of the three proposed laws I have seen. The proposed law of the Commercial Club is a better law than we have in Wisconsin in certain respects.

"It provides for compulsory attendance in the industrial schools until the child is 18, while

we release him at 16.

"It is clear in its definition of what constitutes a school and is specific in its provision for state aid and in its statement as to ho

such money may be used.

"It is not so good in my opinion as the Wi consin law in that it provides for seven boar members, where we have five. Our board is a large as such a board should be. The Comme cial Club draft provides for the appointment of the industrial board by the common council believe it would be better to have this boar appointed by the board of education.

"In neither of the laws is it required the the authority issuing permits shall notify the superintendent of industrial education immediately that such permit has been issued. The should be incorporated into both laws.

# Is for Separate Board

"While I think it may not be important later on as to whether the same board or different board shall administer the industrised ducation law, I cannot construe the figure against a separate board in other light that the opposition is prompted by the conservatism of the old time schoolmaster. It the same spirit that rebels each time state an national legislative bodies attempt to planew educational policies in a distinct bures

or department

"If conservatism is not back of the opposition, then possibly selfishness may be charge That selfishness cannot be prompted by the few of loss of power because there can be no lose. Thirty superintendents in Wisconsin in even city maintaining these schools hold that the are as influential with the new as they would be with the old boards. Is it then because added responsibilities in connection with it dustrial education promise increased remuner tion to the superintendent if the same board a ministers the law? Such hopes are far be neath the men of Illinois in whom I have succonfidence. Besides, no superintendent

schools in a city larger than 10,000 can do more than is now laid out for him, provided he does his work well, and he should not be paid for more than he can do.

"When he assumes responsibility for new schools conducted in connection with his schools, something will be missing in his regular work and the best we can expect is that his services to the people shall aggregate about the same as before. His services either are worth no more to the city under the double responsibility or they were overestimated before. I never have been able to understand how a superintendent of schools could do more than superintend schools.

# Superintendents Are Satisfied

"Considerably more than half of the thirty superintendents in Wisconsin after one year of experience say that so much as has been accomplished under the new board could not have been accomplished under the old board. And almost every superintendent says he was at first skeptical if not prejudiced.

A similar questionaire reached nine cities eligible, but in which no move had been made to organize industrial schools, and without exception the superintendent was sure the law would work better if one board administered both activities. It is not difficult to make a deduction from the results of this canvass. I can find six good reasons for a separate board. I can give one reason against such an organization.

"Certainly prejudice as a factor in this question need not be considered here.

"I realize that manual training teachers are uneasy. There is no reason for that if they will stay in the open and co-operate with these schools as they should.

"In Racine I offered the manual training supervisor the directorship of the industrial

schools. When he had figured for an hour, he declined. He receives regularly \$100 less than the director. He has charge of an evening in dustrial class and supervises the purchase of industrial materials and receives added salary making his pay \$300 more than the industria supervisor receives. And both are fairly paid The manual training supervisor is satisfied.

"I have not mentioned a department organ ized for research work making industrial sur veys and providing for consultation and instruction in vocational guidance.

"This department is just started, but it efficiency already has been demonstrated.

# This Only a Start

"This is one of the big agencies in con nection with the new order of things. W soon shall know how many men are employed in each industry. We shall know the remuner ation which the occupation promises. We shall know how the returns from skilled and un skilled labor compare. We shall know th advantages and the disadvantages connected with each employment. We shall know wha tradesmen own their homes-in what trade may be found men of higher types and in which are found just men. We shall know where th social atmosphere is right.

"And best of all the boy shall know thes things and through vocational guidance shall choose and shall aspire to something worth while. Whether his hopes shall dissolve them selves into mere dreams is not so importan He has formulated an ambition and has accumulated intelligence that shall bless him and serve the state through the year that he lives. If the 'one sheep' parable ha merit, then how shall we measure the pleasur of the master when the tenth annual volum of Wisconsin Industrial Schools shall hav

been written."

# WISCONSIN VOCATION SCHOOL SUCCESS ACCREDITED TO DOUBLE CONTROL PLAN

Badger State's Experience Has Been That Successful Schools May Be Got Under Full Way in From Three to Twelve Weeks, With an Amplitude of Teachers of More Practical Value Than School-Taught Instructors Would Be.

#### BY ARTHUR M. EVANS

Wisconsin's experience in establishing vocational schools under separate control has made educators in the Badger State more deeply convinced than ever of the wisdom of placing the new industrial school system in the hands of special boards. The separate control scheme has resulted in such quick and efficient action and in such an awakening of interest in education throughout the state, that theorists among the school superintendents who originally opposed the separate control idea are fast becoming converts to its efficacy.

The manner in which it is working out in specific localities is shown in letters from numbers of city superintendents to H. E. Miles, of Racine, president of the Wisconsin State Board of Industrial Education and chairman of the Committee on Industrial Education of the National Association of Manufacturers.

Mr. Miles' acquaintance with the subject of vocational training comes from personal experience and observation in the actual establishment of industrial schools, in addition to long study of the question of education in all its aspects. He has been identified prominently with the Wisconsin movement from its inception, as witness his selection as head of the State Board, and the fact that he is in the

closest touch with actual working out of the problem in Wisconsin, attaches weight to his views on phases of the subject with which the legislatures of Illinois and of several other states will wrestle this winter.

#### Should Have Dual Control

"The development of industrial education," said Mr. Miles, "should be placed in the hands of a special state board and of similar local boards in the various communities, as in Wisconsin. Objections have been raised by some against the idea of a separate board, with the possibility of friction with the other, or general, state and local boards of education. Ir reply it is suggested that the regular school boards have never undertaken a special task of this difficulty or magnitude. They are busy with their regular duties.

"In Wisconsin the State Board of Industria Education consists of one-third employers, one third employes and one-third eminent educa tors. The local boards, likewise, consist of two employers, two employes and the city superin tendent. This personnel implies that the worl

shall be particularly practical.

In a sense it is a sort of tripartite agreement between the three great social interests concerned, employers, workers and school ment that each shall devote its utmost of energy and ability to the common cause.

It implies new obligations, a new apprecia tion of mutuality and social interest, concen tration upon a single new project and a work ing hold upon each section in interest tha could not otherwise be obtained.

"Not only is this special board occupied to the extent of its time and ability, but it is often found desirable to have special committees of employers and of workingmen, the local board needing even more of time and judgment than its own exclusive devotion to this purpose se cures. Among the incidental advantages of great value are this social leavening and this

mutuality of effort and obligation.

"In favor of the separate board it may be said that the old-time boards are overworked now. They have fallen into a certain routine. Practical men upon such boards do little more than look after repairs, finance and new buildings, and approve, with no depth of study, recommendations of professional educators.

"Place development of a great new system of industrial education in their hands and their work would be doubled. They would require special committees, which would not be much

different from the separate boards.

# Single Board Assures Interest

"Without question as to the ultimate desirability of a single control, a special board devoted solely to the one purpose is an assurance of depth of consideration, quick action and sound conclusions.

"All these contentions have been demonstrated absolutely and justified by the experience in Wisconsin. Talk is cheap and argument endless. By her separate boards of control twenty-five schools have been developed in from four to twelve weeks each, in all the best industrial centers of Wisconsin.

"One has only to visit Racine, Sheboygan, West Superior, Beloit or other cities that might be mentioned to find a heretofore inconceivable interest in the education of 'all the children of all the people,' to find the working people, the employers and the school teachers acting with a force, happiness, mutuality of interest and enthusiasm and success not elsewhere seen. The children in the industrial schools have a new outlook on life, and are acquiring habits, ambitions and balanced conceptions impossible by any other means.

"Look at this testimony," continued Mr. Miles, picking up a sheaf of letters. "Says one

of these city superintendents:

"You cannot imagine the change this work is making in me and in all of the common school teachers. It is having a marvelous effect upon the regular schools, giving us new vision and new ways, heretofore undreamed of, of reaching and developing the youthful mind.

" 'I was opposed to the separate control. I now see that it is the one particular feature

necessary to success.'

# Pupils Flock Back

"Says another superintendent:

"We are astonished at the revelations concerning common school education, upon which we have depended. Young people are returning to the industrial school who quit the common school at 14, in the fifth grade, and we find that if they ever learned spelling, punctuation, English and arithmetic they have forgotten them almost completely. Very seldom can they do simple fractions.'

"Says another superintendent:

"'Men are coming back to us-supposedly educated, American mechanics—from 19 to 25 years of age, and we find sometimes that they have to go back to the primer for reading, and also have to brush up on addition, subtraction and division.

"Our day continuation school is not only interesting boys and girls who never were much interested in the regular day schools, but it relieves the regular schools of problems which were a constant source of annoyance and problems which they could not possibly solve, leaving them free to expend their ener gies on others who are being benefited by their efforts.

"There is hearty co-operation on the par

of everybody concerned, and at present every permit pupil in the city that comes under the law is attending the continuation school regularly. We have several boys and girls in the all-day, five times a week industrial school, every one of whom is there voluntarily, and I have applications from twice the number we are able to accommodate. Invariably applicants are those who need the work, and who are not profiting greatly in the regular school.

#### School Is Well Filled

"'I believe people are beginning to appreciate the possibilities, and I am sure that we shall have no difficulty in keeping our schools filled to the limit.'

"These statements are fairly representative.

"As to teachers, there is no difficulty in finding them. There are from two to four teachers for every one needed. A very noted representative of the National Society for the Promotion of Industrial Education is reported as saying that other states were not equal to assume Wisconsin's position, that if forty-eight states should do so there would be some 2,000,000 children 14 to 16 years of age, now out of school, who would have to enter the new industrial schools; and that there would not be 100 teachers competent to teach them.

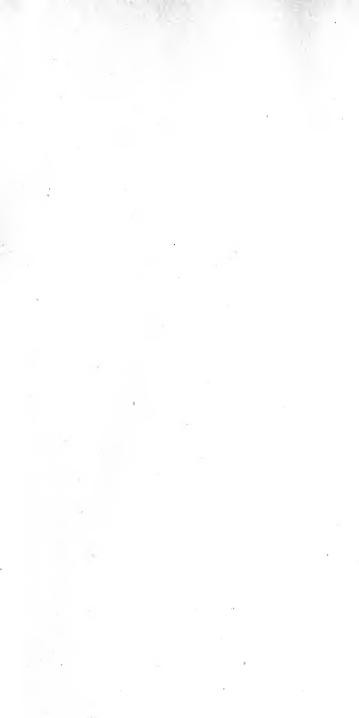
"This statement can be hade only by one who turns his back upon the source of supply, by one who looks to normal schools for teachers of manual training, and that sort of thing. Look to the industries. In any bright, progressive, up-to-date industrial community a perfect industrial school can be started in from four to twelve weeks. Teachers of mechanical drawing can be got from the schools, though there is danger that their inexperience will cause them to teach drawing that will not work out in the shop. Better, even here, to try for teachers who have had practical experience.

#### Teachers Are Plentiful

"Teachers of hand and machine work can be found in abundance by careful inquiry. For instance, in one Wisconsin town of 40,000 people, woodworking is taught by a middle-aged German whose heart is as young as his pupils. He was an apprentice and then a journeyman, thoroughly well taught; then a journeyman, foreman and employer in Wisconsin. The development of the big factories made his little shop unremunerative. After returning to his bench for a time he is now most happy and successful in this class work, and more inspired pupils than his can be found nowhere.

"In another Wisconsin town pattern-making was taught for the first few weeks by a trade school graduate. He left for a higher salary. The school authorities were distressed. They temporarily secured a pattern-maker from a near-by shop, when it developed that the graduate had been making patterns without allowing for shrink in the casting, and patterns that would not, in some cases, draw out of the sand.

"In conclusion, let me remark, Providence seems to be waiting with one or two million children on the one hand, educationally hurt, spiritually wounded, cheated of their birthright—the real and general developing education—and on the other hand a superabundance of practical, enthusiastic, inspiring teachers in the shops, waiting for the old-fashioned school teachers to get through ruminating (i. e. language chewing), and make way for a new and better era; waiting, in truth, for the common sense judgment of the American people to assert itself, to save its own youth, to require the sort of education it has felt all along in a dul way to be essential."



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