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# THE TECHNE

LIFE WITHOUT LABOR IS A CRIME. LABOR WITHOUT ART  
AND THE AMENITIES OF LIFE IS BRUTALITY.—RUSKIN.

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Vol. XIX.

November-December 1935

No. 2

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"In men whom men condemn as ill  
I find so much of goodness still,  
In men whom men pronounce divine  
I find so much of sin and blot;  
I hesitate to draw the line.  
Between the two when God has not."

Joaquin Miller

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PUBLISHED BY  
KANSAS STATE TEACHERS COLLEGE  
PITTSBURG, KANSAS

# THE TECHNE

Published by the Kansas State Teachers College of Pittsburg

W. A. Brandenburg, President

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Vol. XIX

November-December 1935

No. 2

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THE TECHNE publishes, for the most part, papers on educational subjects, though articles on closely related fields are also used. Part of these papers set forth the results of research; others aim at interpretation of current developments. Through some of the discussions will interest the specialist, it is hoped that in every number there will be something useful for the average teacher.

THE TECHNE is sent free to the alumni, school officials, libraries, and, on request to any person interested in the progress of education.

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# INDUSTRIAL ARTS IN THE MODERN HIGH SCHOOL

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Radio address, Station KGGF, Coffeyville, Kansas, Wednesday  
evening, October 30, 1935.

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In discussing the place of "Industrial Arts in the Modern High School," I speak as a representative of a department of school work which has sometimes been misunderstood, both by its friends and by its critics. On the one hand, its friends have made claims for it which could not be justified; and on the other, its critics have found fault with it for not accomplishing results which it was not equipped to accomplish, or which it was never expected or intended to accomplish.

At the outset, it may be helpful to have an understanding as to just what is meant by industrial arts. This term is used in our high schools today to describe instruction with tools, and work-benches, and machines, in which the boys make a variety of useful projects, while at the same time they acquire information about the materials, processes, and products of industry.

This work has been a regular part of the high-school curriculum for over 50 years, and has been called, at various times, manual training, manual arts, mechanic arts, industrial arts, and sometimes just shopwork. It should be made clear that the appropriate place for industrial arts is not limited to the high school. In a well-organized curriculum, handwork instruction begins in the kindergarten, and should be found in some form in every grade at least until the completion of high school. In the kindergarten and in the elementary grades the work is usually carried on by the regular classroom teacher. In these grades, handwork activities are used as a means of encouraging the pupils to express themselves in ways that are impossible in the usual book subjects. Also, they help the pupils to gain more from the regular classroom subjects than they otherwise would.

As a good illustration of this point, it is well known that many children have difficulty with arithmetic, because they do not readily grasp the meaning and use of numbers, which, after all, are only abstract symbols. However, these same children may be put to work at such activities as measuring and counting pieces of yarn and planning a design to be used in weaving a small rug for a doll-house, or laying off the measurements for constructing a cardboard box or portfolio, or estimating the qualities and kinds of materials needed

to construct a play-house, and other similar projects. Through such undertakings they come to learn the uses and applications of numbers, and arithmetical computations, in such a practical way that genuine interest and achievement take the place of drudgery and discouragement.

#### EXPLORATORY VALUES

The next stage of industrial arts is found in the seventh and eighth years of the elementary school, or, as many school systems are organized now, in the junior high school. In these grades the boys begin to work with tools, materials, and equipment more closely approaching adult standards, and the processes and projects are chosen in such a way as to represent the simpler elements of industry. Recognizing the fact that we are today living in an industrial and mechanical age, the school aims to help the boy acquire some of the information about tools, machines, inventions, and mechanical appliances that is so necessary if he is to understand what is going on all around him. We recognize, further, that the growing boy is interested in these things, and that it is a part of his normal development to learn how to do things and how to make things with his hands.

Work of this type calls for teachers having special preparation and special aptitude for dealing with the problems which arise. To succeed in industrial-arts work in the high school, the man in charge must first of all be a good teacher, for his work must stand comparison with that of all the other members of the high-school faculty. He must be able to win and hold the confidence and respect of his boys, and one of the essential qualities is a thorough knowledge of the laws of child growth and development, and of the teaching process.

In addition to all this, the industrial-arts teacher must know tools, machines, materials, and mechanical processes, and how to select and organize these things for instructional purposes. In the more advanced stage, to which I will refer in a moment, it is necessary for the shop teacher to have a background of practical experience in some mechanical trade, by means of which he learns something of the methods by which the more common processes of manufacture are actually carried on in industry.

One of the problems which the Kansas State Teachers College is trying to solve in its efforts to make available a supply of adequately prepared teachers in this field is to aid promising young men in acquiring this necessary combination of mastery of the technique of teaching, skill in using tools and machines in making things, first-hand knowledge of methods and processes in modern industry, and, above all, ability to select and organize out of all this diversity of material those elements which are needed in a good high-school course in shopwork or drafting.

It is evident that, if the school shopwork is to accomplish for

the boy the purposes which I have outlined, it should not be thought of as narrow program of any one line of work. In some high schools, where only woodwork is taught, there is very little to offer the boy whose interest runs in some other direction; such as, for example, electricity, or metalwork of some kind; or poster making, or printing, or bookbinding. Even in the small high school, it is possible for a well-qualified teacher to introduce some of the needed variety by adding a small amount of equipment and giving the boys some elementary instruction in drafting, and at least one or two other lines of shopwork in addition to woodwork. This type of organization is called the "general shop," and the plan is spreading quite rapidly over the country.

#### VARIETY OF SHOP EXPERIENCE

To secure the advantages of this type of instruction, it is not necessary to discard the present shop and start all over again. A very satisfactory method is for the teacher to add just a little at a time. Thus, if the high school offers only woodwork, the most important feature to be added is some instruction in mechanical drawing. The additional equipment needed is not very expensive, and it can be kept stored in a cabinet when not in use.

After a program of woodwork and drawing is in good running order, the next step would be to add a few tools and appliances in another line of work, such as electricity, sufficient in quantity to provide instruction for perhaps one-third of the class, at one end of the shop. In this way, one-third of the boys will be at work on problems in electricity while the remainder are taking woodwork. At the end of six weeks, the boys are shifted, so that another one-third takes the places of the first group and receives instruction in electricity. A similar shift is made at the end of the second six weeks. By the close of the semester each boy will have received instruction in electricity for six weeks, and in woodworking for 12 weeks.

I mention electricity merely as an example. There are at least a dozen different lines of shopwork that may be readily adapted to the requirements of the high-school curriculum. The type of work that is added to the first shop must be something which the teacher is prepared to teach, and the lessons must be carefully organized. If any particular teacher is not competent to handle electricity, he may be prepared to offer some work in bench metalwork, or sheet-metal, or art metal. Some teachers have been very successful in this way with a short course in what they call home mechanics. Other teachers have added inexpensive equipment for printing.

The subject selected is not so important as that it shall be organized and taught efficiently. It is not necessary for the teacher to be an expert in every subject, for in these short courses it is not possible to proceed very far beyond the fundamentals. In fact, if the boys are to accomplish something worth while in a few weeks, the work must be limited to the elementary principles and processes.

It is easy to understand the value of giving the boy these experiences in two or three lines of shopwork, as compared with one only.

#### THE VOCATIONAL AIM

In those communities which are large enough to carry the industrial program still further, there is a third stage which may be distinguished from what has gone before by a difference in aim. In brief, it is the stage of beginning emphasis in preparation for vocation. After a boy has been given the opportunity to try himself out on two or more lines of mechanical work such as are offered in the larger school systems, he is in much better position to decide what his interests and abilities are, and along what line he can probably develop himself to the best advantage. If so, he then selects the particular type of shopwork or drafting in which he wishes to specialize, and then applies himself to mastering it as far and as fast as he can go.

It should be noted on the other hand also, that as a result of these "tryout" experiences, a boy may discover that he has no special mechanical aptitude or ability, and that his real life interests do not run in this direction. If this is the case, it certainly is worth something for him to find it out before too much time, and money, and effort have been lost.

It is also worth a great deal to the school system and to the community to find out, if it is at all possible, just which boys and girls will actually profit by taking any given vocational course that may be offered. This is no more true in regard to a vocational course than it is of any other kind of work offered in the school, but the truth is often lost sight of. Experience seems to show that the tryout experiences of the industrial-arts shops are a valuable aid to boys in selecting their high-school courses and in planning their life careers.

#### DETERMINING BASIC AIMS

With this explanation, I turn now to a consideration of the aims of industrial arts from a somewhat different angle. The reason for existence, or the purpose, of any subject in the high-school curriculum should be thought of in connection with the major purpose of the high school itself; and it should be possible to show that the purpose of any subject or department is in harmony with, and contributes toward, the purposes of the school as a whole.

Now, if I were to ask you what you consider the chief aim or purpose of the high school today, your answer would probably depend to some extent at least on what you got out of your own high school training. If you are a college man or woman, you naturally think about what a fine thing it was that you were able to go to a good high school, maintained at public expense, and to get ready to enter college without having to bear the cost of attending a private school or employing a private tutor. On the other hand, if you are not a college man or woman, you may sometimes have had a question in your mind

as whether your high school course was of very much practical value to you.

Because of this uncertainty as to just what good was derived from high school education by some members of the older generation, unfortunately, some fathers and mothers have questioned the value of the high school to boys and girls who are growing up today. In so doing they overlook the fact that times have changed to such an extent that it is both unwise and unsafe to draw, from the experiences of 10 or 20 years ago, conclusions as to what is best for young people today. Incidentally, this observation applies to other matters than education.

The fact is, of course, that while preparation for college is one important purpose or function of the high school, it is by no means the most important. This fact is apparent at once, as soon as we look over the roll, and see who are the young people who go to high school. If we look back 10, or 20, or 30 years, or more, we will recall that very few boys and girls completed high school who did not expect to go on to college or university. The number of those who finish high school was strictly limited, and rather definitely selected, with reference to this prospect.

#### INCREASE IN HIGH-SCHOOL ENROLLMENT

During the past few years, however, conditions have changed to such an extent that few people realize just what has taken place. The number of boys and girls attending high school has increased enormously during the past 15 to 20 years; and not only has the number increased, but the proportion of boys and girls of school ages who are in school has increased greatly. Studies have been made of the figures published by the U.S. Census, and by the U.S. Office of Education, which show that the per cent of boys and girls 14 and 15 years of age who are attending school increased about 12 per cent from 1920 to 1930; the per cent of those 16 or 17 years of age increased more than 30 per cent; and the per cent of those 18 to 20 years of age increased nearly 50 per cent.

These increases in school enrollment have not only added to the burden and cost of public education, but they have changed profoundly the character of the task which public education, and especially the high school, must accomplish. These changes consist essentially in bringing into the high school hundreds of thousands of boys and girls of the types who formerly dropped out of school for various reasons, at the earliest opportunity. It used to be assumed that most of these children left school for financial reasons, and because it was necessary for them to find employment. But, whatever may have been the explanation in previous years, we know that wage-earning employment cannot now be a very important reason for leaving school before completion of the high school course, because of the scarcity of jobs.

Furthermore, there is good reason for believing that, even under former conditions, a more significant explanation why so many boys



and girls dropped out of school was the practical certainty that they could never go to college, and their inability to become interested in a high-school course that was laid out with that exclusive purpose in view.

It is true that the enrollment in colleges and universities has increased also, but not in the same proportion; so that now, more than ever before in our history, graduation from high school represents the end of formal school advantages for a large majority of our people. Notwithstanding the great increase that has taken place, we still find that not more than one in ten of our boys and girls complete a college course.

These facts are known to our people in a general way, but we do not fully realize their significance as applied to the proper functioning and organizing of the public high school, nor do our people generally appreciate what needs to be done, or what changes need to be made, because of these facts.

#### EDUCATION FOR CITIZENSHIP

One way of trying to see through this problem is to inquire what becomes of all these young people who do not go to college, and hence derive no specific advantage from preparation for college. What is the future of all these boys and girls? If they do not go to college, what else is there that the high school can or should be preparing them for?

In the first place, they are all citizens; are they not? Every one of them, as soon as he (or she) arrives at the prescribed age, acquires the right and incurs the responsibility of helping to elect candidates to public office and of helping to solve public problems. Many people, both young and old, ignore this right and shirk this responsibility, but this circumstance does not alter the facts. It may be that we have not learned how to place proper emphasis on adequate preparation for citizenship. The relationship between citizenship and the topic before us lies in the fact that one of the most important qualifications of the citizen is that he should have a useful job and pay his way, and in the industrial-arts shop is the place to seek the beginning of interest in a future job.

#### COMPLETE DEVELOPMENT OF THE INDIVIDUAL

From what has been said it is evident that the public welfare is the basis, or the foundation upon which we must build our scheme of public education. It is the starting point from which we must proceed in laying our plans and in determining what to do or what not to do.

Looking at the problem from this point of view, it seems perfectly clear that it is just as truly in the public interest that boys and girls who do not and cannot go to college should be developed to the limits of their capacities, as it is that suitable preparation for college should be provided for those who will make good use of it. We do not need to try to settle the question as to whether those who do not go to college are inferior or superior, intellectually or in any other way.

That is not the point. The significant thing is that their life problems, which high-school training should help them to solve, are *different* from those of the young people who do go to college; and, since there are ten times as many of them, there can be no excuse for neglecting them.

In considering ways and means for promoting the complete all-round development of the individual, therefore, we must include all normal boys and girls within the scope of our instruction, regardless of what their future occupations will be. And since the school must begin its work with the children while they are still too young to make definite choices as to the future, the instruction offered and the experiences provided must be of such a nature as to lay a broad foundation upon which any career can be built. To put it in another way, the school should encourage and stimulate boys and girls to begin thinking about the future, and at the proper time set up definite life plans and purposes for themselves, but it should not tie their hands in any way; rather it should leave them free to steer their courses in whatever direction opportunity and personal abilities may lead.

At this point I should like to return for a moment to the question in regard to the value of high-school training today as compared with that of 20 to 30 years ago, and the observation that some fathers and mothers who succeeded after a fashion without the aid of the high school seem to think that their children should do the same today. The fact that the public high school in recent years has added industrial and homemaking courses, agriculture, typwriting, stenography, and other subjects that are not essential in a college-preparatory curriculum, is sufficient evidence of the fact that it is now recognized that there are other appropriate aims for the high school than preparation for college. These changes and additions are being brought about by the demands of business, industry, and general social conditions.

Some interesting facts have come to light recently which have a bearing on the point I am trying to make.<sup>1</sup>

In 1930, a study was made of employment conditions in 51 industrial and commercial establishments in Chicago, for the purpose of discovering the requirements which these employers set up in the way of training. The investigation showed that these 51 establishments employed workers in 190 different kinds or classes of positions, ranging from messengers and clerks to expert mechanics and certified accountants. Comparing conditions in 1930 with those in 1920, it was shown that the educational requirements had been raised in specific instances in 148 of the 190 positions. Of the 190 positions, 65 required candidates who were high-school graduates, and in some cases they must have attended college in addition; in 34 classes of positions, the com-

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<sup>1</sup>See, "Is American Education to be Curtailed Permanently?" by Dr. Charles H. Judd, in *Trained Men*, Vol. 12, No. 3, Autumn, 1932, pages 51-53.

pletion of two years of high school was required; and in 49 classes of positions, the applicant must have completed the eighth grade. In only 42 of the 190 classes of positions were applicants considered without regard to educational qualifications, and even in many of these cases preference was given to those with good school records.

These educational restrictions show more clearly than almost any other evidence available just how keen is the competition for positions, and how much emphasis is placed on high-school training in selecting employees. The fact that business and industry are able to demand and to secure high-school graduates for a rapidly increasing number of positions, of many kinds and classes, makes it more and more difficult every year for any boy or girl to secure a foothold without such preparation. These conditions have not been modified to any great extent by the depression, and there is no reason to suppose that, with the return of better times, it will be any easier for a boy or a girl to secure employment without high-school training.

#### A "COMMON-SENSE" PLAN

There are several ways by which we may approach a study of what the schools should properly attempt to do. Some educational leaders have said that the common-sense plan is to "prepare boys and girls to do well those things which they are going to do anyway." The practical application of such a common-sense plan calls for an examination of the important activities in which children can or do actually engage, and in which they will engage as they grow older and approach maturity.

For example, there are many things which can be done in and around the home, and which are within the capacity and interest of high-school boys and girls. We may leave out of account the big city apartment-house, and consider the homes in which you are listening to me this evening. Here are some of the things which boys and men are actually doing in these homes, nearly every day: Repairing, adjusting, and replacing window-shades, rollers, and fixtures; repairing and adjusting locks, hinges, and knobs; repairing and refitting screen doors and windows, and storm doors and windows; replacing broken glass in doors, windows, mirrors, and picture-frames; patching and repairing walks, driveways, and steps; care of lawn, shrubbery, garden and fences; painting, varnishing and whitewashing; repairing and renovating furniture; care and maintenance of a variety of household electrical appliances, as well as the family automobile; and finally, adjustments and minor repairs on the plumbing and electric lighting systems.

It is safe to say that there are very few homes in which there is not opportunity for activities of these types to occupy a good many hours of spare time, and which are well within the capacity of the high-school boy and his dad, working together. Also, it is safe to say that there are very few homes in which living conditions would not be much more agreeable and satisfactory if boys and men would prepare them-

selves and take a real interest in looking after some of the things I have enumerated.

Now, it is not to be expected that the school can teach very many of these specific processes, for it would be difficult to provide the necessary equipment. But it is possible to teach the construction and operation of many of these devices and appliances, to explain the nature of the chief difficulties and how to remedy them, and to describe the tools and materials needed to keep the ordinary household equipment in good running order.

This type of combined knowledge of mechanical processes and manual skill, which has been called "handy-man ability," is one of the important products of a good course in industrial arts in the school shop. Since it is a valuable personal asset for any boy or man, no matter what his future career, it is a good item to include in the school training of every boy.

Let me digress just for a moment, to say that many communities are experimenting with special courses for girls, which they call home mechanics, or home maintenance. They find that girls are very much interested in this work, and take to it with considerable enthusiasm. But that is another story, which I cannot go into at this time.

#### LEISURE AND THE HOME WORKSHOP

What I have just been saying is really a part of the larger problem of the profitable use of leisure time. Too many people are dependent on commercial facilities for recreation and amusement; they seem to be lacking in personal resources and interests. They get very little real pleasure or satisfaction out of a half holiday for the reason that they "do not know what to do with themselves;" time hangs heavy on their hands; they become restless and discontented, hardly realizing what the true cause is.

The industrial-arts department in the high school is helping directly to solve this problem, by furnishing the means of filling the hours of leisure with activities which any person can follow with keen interest and pleasure. The beginnings of manual skill are acquired in the high-school shop, and these, with a few inexpensive tools and a corner in the basement, are all that is needed to set up a home workshop. I need not enlarge on the value of providing a place where father and the boys may spend some of their evenings together, and I have already suggested some of the practical projects that may be undertaken in such a shop.

A striking illustration of the contribution which the schools are making along this line comes from Kansas City, Missouri, where the public-school authorities recently completed a survey. Out of 11,000 boys enrolled in industrial-arts classes in the junior and senior high schools, it was discovered that more than one-half, or nearly 6,000 boys, have home workshops of one sort or another. Some of these home workshops are well equipped, while others have very little equip-

ment; some have only a few hand-tools, while others have complete tool-kits; also, many of these home workshops are provided with inexpensive electric motor-driven jig-saws, lathes, planers, tool-grinders, and other machines which add much to the pleasure of the worker, as well as to the variety of work turned out.

We can all appreciate the significance of the fact that these thousands of boys are not roaming the streets and alleys of Kansas City, and getting into trouble, when they are spending their afternoons and evenings in these home workshops. No one will ever be able to measure the value of what the industrial-arts departments of the high schools are accomplishing in promoting this movement. Kansas City is only one of many cities in which this problem is being worked at in a very practical way. It is a kind of service which can be rendered by the industrial-arts shop in the village or rural high school just about as effectively as in the big city.

#### BEGINNINGS OF EDUCATION FOR VOCATION

A few moments ago I raised the question as to what becomes of the millions of boys and girls who do not go to college, and who do not engage in occupations which require college or university training, and the further question as to what the public high school can do that will be as helpful to these people in preparing for life as the college-preparatory course is for the others. This is neither the time nor the place to try to enumerate the many occupations by which our people make their livings today. Even in a small community it is possible to draw up a considerable list of jobs and positions. Some authorities tell us that there are at least 3,000 to 4,000 different and distinct ways of making a living.

Because of the magnitude of the problem it is very easy to become confused in talking about vocational education. It is manifestly impossible for any of our largest cities, or indeed for any of our wealthiest States, to provide schools or classes to prepare young people for 3,000 different occupations, or even 300 occupations. There are too many obstacles in the way, chief among which are the enormous expense that would be involved, and our lack of knowledge as to how many workers would be needed in each occupation, and as to how to select and sort out the applicants for training.

However, the fact that it is not possible to provide a complete program of vocational education is no excuse for not trying to do something; and we should not be satisfied with a public-school system that is as one-sided as ours is today. By one-sided, I mean that our school system offers very superior vocational preparation at public expense for the select few who decide to become doctors, lawyers, teachers, engineers, and a few other groups, and these advantages are available in every State in the Union. On the other hand, only a few scattered cities maintain vocational schools which afford adequate

preparation for a limited number only of the much more numerous occupations.

Instead, therefore, of undertaking the impossible task of providing special courses for a great variety of vocations, the public-school system in the small community can organize what the U. S. Office of Education calls a "general industrial course." The aim of such course or class is to include a number of elements that are fundamental, and common to as many trades or occupations as possible. This would seem to be a more practicable plan than the attempt to organize a complete system of vocational classes, not only because of the prohibitive expense of providing all the different types of instruction that would be called for, but also because of the lack of any satisfactory basis upon which to select the occupations to be included in the scheme, and the difficulty of selecting the young people who should receive the training for each occupation.

No expensive investigation is needed to prove that a very large proportion of our people earn their living with their hands. They are engaged in occupations in which the possession of hand skill of some kind is a valuable asset. In many cases manual skill is a necessity; the possession of a high degree of skill and adaptability means success; and the lack of these qualifications means failure.

For these reasons, a well-organized department of industrial arts in the high school, which offers several different kinds of shopwork and drafting, renders a unique service: (1) it helps boys to acquire some of the elementary skills that are useful no matter what one's future career: (2) it helps boys to learn something about the mechanical things which they can do and enjoy doing; (3) it helps them to learn something about tools and how to do things with tools; (4) it helps them to learn something about mechanical appliances, how they are put together and how they are repaired or adjusted when they get out of order; (5) and, finally, in many cases, it helps the boy to decide for or against further training for a job in which he can use to advantage the manual skill and the mechanical interests which he has discovered.

Following the work of the industrial-arts shop and drafting-room, if the community is able to supply further training with the vocational purpose in view, it is a decided advantage to be able to select a group of boys for such training who have demonstrated, by their record of performance in the industrial-arts shop, that they have the ability and the liking for the chosen work which are necessary to insure success in it and to justify the expenditure of time and effort.

#### CONCLUSION

To sum up in a few words, I have tried to show that the industrial-arts course is one of the most important elements in the high-school curriculum today. By supplementing the work of the usual book subjects, it provides types of instruction, practical experience, and op-

portunity for growth, such as are entirely neglected if industrial arts is not included in the curriculum.

Without omitting or curtailing the opportunity to prepare for college, which is required for about one in ten of our boys and girls, let us also consider the needs of the very much larger number whose success and happiness in life depend upon their acquisition of mechanical skill and technical knowledge.

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### A NEW TEST IN MECHANICAL DRAWING

Baxter, Earnest W. *Mechanical Drawing Performance Test.*

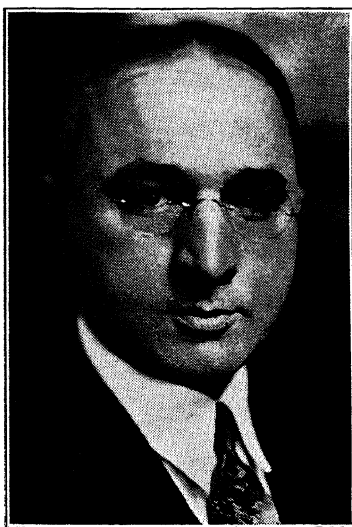
Milwaukee: The Bruce Publishing Company, 1935.

This test is unique in that the minimum of equipment and time is required of the student to get into action. The directions to students are brief and simple. A pictorial view is provided for each problem which is to be expressed orthographically. Only standard mechanical drawing principles and practices are involved thus eliminating opinion and doubt as to the accuracy of response of students. Since little drawing skill is required to take the test it proves to be a test of ability to think in terms of mechanical drawing. Concise directions are given for administering the test. Scoring is made easy by means of transparent score sheets.

Instructors of mechanical drawing in the public schools as well as technical schools should find much needed assistance in this new publication. Because of its method of approach and its simplicity, this test should prove to be a leader in its field.

Reviewed by

F. K. Bryan



DR. W. T. BAWDEN

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Member of editorial staff, Industrial Education Magazine, since 1909. Charter member, Manual Arts Conference of the Mississippi Valley, and General Chairman since 1914. Life member, N.E.A.; member of Department of Superintendence, American Vocational Association. National Vocational Guidance Association, Western Arts Association, Eastern Arts Association; Phi Beta Kappa, Phi Delta Kappa; A.A.A.S.

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#### SOME NEEDS OF EDUCATION AS I SEE THEM.

After so many others have tried their hands at this assignment, it is not likely that I can offer anything new or original; however, I believe that education needs more sincere recognition of the value of expert service in teaching, on the part of the general public and of those who direct the spending of public funds. Education makes its most significant progress as we move in the direction of higher standards of attainment and performance in the teaching profession. To promote progress in this direction is one of the most important missions of the Teachers College.