

HISTORICAL DEVELOPMENT AND HIGHLIGHTS
OF VOCATIONAL EDUCATION AT
THE OHIO STATE UNIVERSITY

By

Richard Johnston

FORWORD

The reader will notice that the early use of the term "Vocational Education" was not the only one used by the advocates of certain occupational courses, or cooperative work programs, which would prepare the young to enter the work-a-day world. Early definitions had a semantic way of vacillating, dependent upon the person, the place, and the time period.

In order to clarify the term "Vocational Education," we find that since 1918, it has been described as a form of education that induces and implements the development of occupational skills, which, in turn, is correlated to the individual's attainment of the proper attitudes and adequate knowledge necessary to his vocational aspirations. The proper consideration of the vocational aspiration of the individual can be further projected in terms of his ability to attain the socio-economic goals vital to promulgating good citizenship within our society.

Similarly stated, we can say that vocational education permits the individual to make a personal selection of any occupation; to be properly trained in preparation for entrance, as well as to progress proportionate to his initiative, ability and knowledge. Vocational education, when the concepts of the course are defined, is considered to be any laboratory or related educational process that involves training or retraining for any vocation; but, which is not connected with any baccalaureate or technical degree program--vocational education for an occupation as opposed to a profession.

Today, vocational education embraces many fields of endeavor.

Currently the vocational umbrella covers five major occupational areas:

I. NHome Economics N

(Partial listing of services) N

A. NFood Preparation and Services

B. NAids or administrative assistants in nursery school
or nursing homes

C. NClothing Service Workers

D. NDrapery, slip cover, alteration business, etc.

II. NVocational Agriculture

A. NFarm Service Business

B. NFarm Implement Repair and Sales

C. NFood Processing

D. NHorticulture Establishments

E. NNursery and Garden Center Business, etc.

Since teacher education for teachers of the above vocations is within the College of Agriculture and Home Economics, their historical development will only be mentioned in the ensuing history in a cursory way in order to eliminate a duplication of effort.

III. Distributive Education

A. NAdult Distributive Education

B. Teacher Education and Supervision

D. NAdult Cosmetology

E. NMidmanagement Program, etc.

IV. Business and Office Education

- A. Secondary Cooperative Office Education
- B. Post-secondary Adult Education Supplemental
- C. Teacher Education and Supervision

V. Trade and Industrial Education

- A. Law Enforcement Service
- B. Fire Service
- C. Itinerant Teacher Education Service and Supervision
- D. Emergency and Rescue Service
- E. Rural Electrification
- F. Custodial Training Service
- G. Bus Drivers, etc.

The Ohio State University is, to a degree, involved with all of these occupational areas.

Difficulties become apparent in the historical compilation of this single categorical concept of education when one considers the multi-faceted educational elements of specialization which are germane to each occupational area. Problems of gathering early vocational research material have been magnified as a result of incomplete or missing records because of carelessness, deaths and personnel turnover. This writer has been made aware of the fact that authenticated historical documentation is extremely important to all educational areas, if for no other reason than that it creates a solid foundation upon which one may project or build toward the future.

Those of us in vocational education submit that this type of education builds a bridge to a more meaningful future heretofore reserved only for those with professional aspirations. We, in turn, contend that vocational education is an answer to the complex ramifications which have evolved from increased patterns of world-wide technological changes and population growth never experienced by any previous culture.

Vocational educators the world over are aware of the present and future challenges. Therefore, this brief history is presented to anyone who may wish to learn of the contributions, both past and present, which have been made by The Ohio State University to a most significant educational concept.

Richard E. Johnston

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CHAPTER I

PROLOGUE TO FORMALIZED VOCATIONAL EDUCATION IN OHIO

At the turn of the century, vocational education was beginning to gather momentum. Spasmodic skill training programs were beginning to crop up in various parts of our nation with increased rapidity and with repeatedly successful operations. The State of Ohio's interest in vocational education became evident as early as 1906-7. The City of Cincinnati, as an example of other cities similarly engaged, decided to initiate trade and industrial programs in order to alleviate some of the problems in industrial employment that were being experienced at that time. Prior to this, the seeds of formalized vocational education in Ohio were inadvertently conceived in the early beginnings of the Ohio State University, although specialized vocational skill development as such was not recognized nor encouraged in this institution until our nation was well into the transition cycle consisting of a movement from the rural to an urban society--the society which was, at that time, floundering in the throes of an industrial revolution.

It is to be noted here that the O.S.U. Archives document the fact that ten departments were initiated in the early organization of the college in the 1890's.

They were:

1. Agriculture
2. Mechanic Arts
3. Mathematics and Physics
4. General and Applied History
5. Geology, Mining and Metallurgy
6. Zoology, Veterinary Science
7. Botany, Horticulture and Vegetable Physiology
8. English Language and Literature
9. Modern and Ancient Language
10. Political Economy and Civil Polity

Later in this paper we will further develop the hypothesis that the second department listed (Mechanical Arts) is, in the broadest sense, harboring the beginnings of vocational education as we know it today.

Further research also indicates that as early as the late 1800's, advocates of vocational education were beginning to assert pressure at the national and local levels of education and government. Some of the questions most often asked of these agencies were: "Of what value is a strictly general or liberal arts education to the student who, after completing high school, indicates no desire to go on to higher learning and is yet still too ill-equipped in knowledge and skills to enter the world of work?"- "What provisions have you incorporated into your curriculum to provide for the student's early entrance into the labor force, who may decide to quit school because of the boredom of academic regimentation?" -"Since industry and business contribute to the bulk of the taxes for education, why must we assume the responsibility of training or educating employees in industrial and business acumen?" To these early advocates of vocational education, the educational practices of the period must have reminded them of the historical Boston Tea Party episode, wherein, taxes were paid on taxes. The vocational parable being: Money is spent on taxes for education and additional money is spent to train or re-educate people in order to reap any benefits from their education. From all indications, it would seem that many groups of businessmen and industrialists had become disenchanted with educational policies at this time and were beginning to rebel. The Douglas Commission of 1906, along with the President's Commission on Vocational Education of 1914, clearly pointed up the failure of the public schools to disseminate meaningful education to the American youth. It deplored

the cultural emphasis in manual training and recommended more practical courses in vocational education in order to meet the nation's needs. At this time, as usual, education was remiss in not taking the leadership role of an innovator--it tagged along, implementing (to a degree) the demands of an incensed nation of business and industrial leaders.

I. Early Vocational Organizations

An early forerunner of the pro-vocational groups, which were to experience continued growth and popularity, was in existence in Ohio as early as 1906. In 1909 the word "national" was added to its title and became an organization called, "The National Society for the Promotion of Industrial Education" with headquarters in New York City, New York. This was a group of eastern states that were well organized and structured within the realm of trade and industrial education. Ohio was considered a driving force in its early formation and growth. In 1917 this group changed its name to "The Society for Vocational Education."

At approximately the same time, we are made aware of the fact that a similar organization had been formed in 1913 in the middle states entitled "Vocational Art and Industrial Federation"--under the auspices of the Artcraft Institute, Agricultural, Manufactory, Domestic, and Recreative educational interests. This group also changed its name upon the passage of the Smith-Hughes Act to: "The Vocational Education Association of the Middle West." The convention brochures of 1921 inform us that these two groups had joined forces and had been holding joint conventions since 1914.

Buckingham to establish the Bureau of Educational Research.

Establishment of the Bureau of Educational Research. Dean Arps called the establishment of the Bureau "the crowning event in the developmental program of education in the state." Early work of the Bureau involved the preparation of various tests. In 1928 the Bureau formed three new divisions: evaluation, personnel and curriculum, headed by Professor Ralph W. Tyler, W. H. Cowley and Edgar Dale, respectively.

The Bureau was reorganized in 1957 as the Bureau of Educational Research and Service. It provided a means through which the College became recognized for vital programs of experimentation and publication.

Program Development. The program of the College was expanded in several areas some of which are mentioned below:

- (1) A new program to prepare physical and health education teachers and coaches was initiated in 1921;
- (2) In 1922 special programs were developed to prepare teachers for commercial subjects, journalism, and industrial vocations;
- (3) Beginning in 1923 Professor James R. Hopkins provided the leadership which turned the direction of fine arts education toward preparation of painters, illustrators and sculptors, as well as teachers;

The Ohio Legislature voted acceptance of the Smith-Hughes Act in 1918.

This act established two fundamental concepts:

1. That vocational education is a matter of national interest and is essential to the national welfare.
2. That federal funds are necessary to stimulate and assist the states in making adequate provisions for such training.

The Smith-Hughes Act provided that each state must match each dollar of federal funds with a dollar of state or local funds, or both. Part of the appropriation had to be used for the purpose of training teachers, supervisors, and administrators. The act also states: "that for the purpose of cooperating with the states in preparing teachers, supervisors and ... of trade and industrial subjects ... there is hereby appropriated ... the sum of \$1,000,000."

III. The Force Behind the Scenes

However, while President Thompson was busy taking bows for the university at the national level, we are apprised of the fact that a tremendous one-man crusade was being waged by a faculty member of the same university in the promotion of vocational education. He was William T. Magruder, professor and chairman of Mechanical Engineering for 34 years (1896-1930). Part of his personal papers, dating back to 1906, reveal him to be a person with considerable drive in regard to his personal conviction as to the merits of some type of preparatory work training courses in the public schools. As a dedicated educator at the university level, he, no doubt, must have witnessed and realized the total inadequacies of professional-level training for the masses. Also, in his position as an educator in a highly industrial

field, we can assume that he was well aware of the transition that was currently in progress--a switching from an agrarian society to a society of industrialization.

Dr. Magruder can be considered one of the earliest and foremost figures to advocate vocational education in the State of Ohio. His personal files contain correspondence with legislators, prominent businessmen, state educational institutes, boards of education, etc., to all parts of the nation. This stirred up interest and promoted ways and means to promulgate the vocational movement.

It also comes to light that, in his zeal to promote vocational education policies within his state, he was not above authoring and initiating vocational legislative bills in order to procreate its very implementation.

In 1906 he was elected secretary of the Ohio State Branch of "The Society for the Promotion of Industrial Education."

In 1910 he was elected president of the Ohio Branch of "The National Society for the Promotion of Industrial Education." This "Society" was considered one of the main forces in the implementation of the early secondary trade and industrial schools. They also advocated the innovation of cooperative vocational training at all levels prior to 1917.

His group fought vainly for many years for the initiation of a paid group of qualified people to serve on a commission for vocational education.

Whatever measure of success the State of Ohio has, or may experience in the future, in the field of vocational education, must, by all standards, be attributed to Professor Magruder's unswerving diligence to the prodigious task that lay at hand.

CHAPTER II

THEORETICAL DEVELOPMENT

In order to develop our theme of vocational education having its early beginnings within the department of Mechanic Arts, one must be made cognizant of the fact that the elements and theory of vocational education were being practiced without the realization of doing so. This becomes evident in evaluating the correspondence between Professor Magruder and Professor Herman H. Schneider, chairman of the Mechanic Arts Department at the University of Cincinnati. Schneider, through years of experimentation, was of the opinion that the laboratory or shop part of the students' training should be taken over by industry on a cooperative basis. Magruder agreed to a degree, but pointed out that most factories were not equipped with qualified teaching manpower nor do the factories possess the facilities necessary to do an adequate teaching job. In this respect, he advocated teacher training for those who would teach at the industrial level.

Magruder, in a presidential address delivered to "The Ohio Society of Mechanical, Electrical and Steam Engineers"--at the annual meeting of November 15, 1907--said that, in spite of the progress and success of the technical cooperative programs instituted by the "Case School of Applied Science" of Cleveland and the University of Cincinnati, the building of new manual training schools of grammar and secondary level, industries taking over the total education of apprentices--in proportion to all of the industrial growth of our nation--they were still falling way behind in the industrial education of the masses.

To quote his lament --

"With all this activity by these different agencies along these various lines, the most distressing part of the whole outlook is that (practically speaking) so little is being done for the industrial education of the masses. While the demand for the higher technical education practically doubles itself every six to eight years, for the reason that the supply has created the demand, yet anything like a real demand for industrial education has not yet arisen in this state for the simple reason that, not knowing by experience what industrial education really is, and why we need it, we have not asked for it. That something is needed for our industrial and manufacturing classes, and is craved by them, is well understood; but how to get it is the difficult problem . . .

. . . The state provides us with schools and colleges which train our children for positions as gentlemen and ladies, in the old aristocratic sense of those words, to be reservoirs of knowledge, to be literary and refined, cultured but unskilled. These are our classical schools and colleges. The state also provides us with professional schools and colleges, except in medicine, for the benefit of the favored few who have been blessed with brains. But when it comes to those technical, industrial, commercial, and utilitarian educations which are not professional, but strictly useful, and which teach a man or woman to make the most of their talents, how to earn the largest wages, and to be something more than merely a cog in the industrial machine, when it comes to those educations which are neither strictly cultural nor professional, the state relegates them to the public-spirited philanthropy of its citizens, and to selfish motives, or lets work go undone. As a result, the large majority of our school population are not receiving that training which will increase their ambition and intelligence as wage earners. Fortunately, we are still capable of learning by the experience of others."

These thoughts of Magruder were projected in spite of the fact that since 1893 a separate department of manual training had been initiated and was currently operating in Hayes Hall on campus. It must be noted here that the building of Hayes Hall was the direct result of the passing of the Hysell Act of 1891, which, in essence, allowed the state to tax the populace for the support of the state university. OSU was considered to be the second ranked land grant college in the nation at that time; yet, it would seem that the institution was continually in need of funds.

For this reason, we can assume that no vocational programs could be initiated without federal funding.

The Manual Arts concept, of the period, was never fully accepted by the other departments nor by the majority of the faculty members. It was originally set up as a department with equal rank to mechanical engineering. But, because of the outspoken criticism it received and the subsequent charges that were directed at Professor Williston, then chairman and originator, the department was regulated to a supportive role to mechanical engineering.

It is evident that vocational education was attempting to find its identity and its rightful place within the myriad streams of higher institutions of learning. It was, of necessity, exposed to a personal trial and error method of evolution, in order to continue to develop and attain its projected purpose.

With the above in mind, we can trace our vocational seedlings further to the founding of the College of Education. Towers informs us that there were two programs in operation under separate colleges--manual training was being taught in the College of Education and Industrial Arts was being taught in the College of Engineering.

Confusion becomes apparent at about this time because we find that the College of Engineering had adopted a motion, to wit:

Since the College of Education has now been established and a manual training course for high school teachers should be an integral part of the work of such a college, and since it was moved but not carried, about two years ago, that the manual training at present offered in the College of Engineering be abolished so as to leave the field open for said College of Education, it is now moved that a committee of three from the faculty be appointed by the Dean to confer with a similar

committee from the College of Education to consider the communication of the President and to propose to their respective faculties such action as to entrance requirements, courses of study and other related matters as may commend themselves to the said committee.

Until this time, a number of people had been shuffled in and out of the departments and the University with some regularity. After the departure of Williston, Professor Sanborn took over with a staff consisting of Assistant Professor Knight, Mr. Renck and Mr. Crow. From 1909 to 1913, Professor Eldon L. Usry was employed to develop a department of "Manual Training." Robert E. Smith, a patternmaker by trade, was employed at this same time by the college to teach some of the lab courses in the Industrial Arts Department. He later was asked to perform the same task in the Manual Arts Department of the College of Education. In 1919 the name for preparing manual training teachers was changed from manual training to Industrial Education. The Industrial Arts Lab program of the College of Engineering was changed in 1916-17 school year to simply "shop work."

The passing of the Smith-Hughes Act permitted a program of vocational education to be organized and developed in the College of Education. By 1922, there were three related programs: (1) "shop work" courses in the College of Engineering, (2) courses in the Department of Vocational Education of the College of Education, and (3) courses in the Industrial Education Department. The first courses for the preparation of Smith-Hughes teachers were listed in the 1921-22 catalog, with Professors McDonald and Kent listed as the faculty.

The above confusion and the subsequent emergence of three highly related courses, in three different areas of endeavor, would tend to suggest the workings of some hidden force or an extremely poor effort on the part of the administration.

This writer takes the viewpoint that, perhaps the resultant vocational education courses in the College of Education can be attributed to Professor Magruder and the passing of the Smith-Hughes Act (in that order). Lest there be any doubt in anyone's mind as to the validity of this assumption, one only has to read a portion of any one of the many speeches Magruder was called upon to give during this early period concerning vocational education. (See Appendix B.)

CHAPTER III

A PERIOD OF CHANGE AND READJUSTMENT, 1916-30

It is perhaps a gross understatement of facts to merely point out that the period just prior to our entrance into World War I was one of concern; concern not only on the part of the government, but also in educational circles. Industry was switching over to war products, students were leaving education to enter the labor force. They were raw, untrained people possessing little knowledge of industrial processes. It was becoming increasingly evident to all that we were, as a nation, about to be involved in the conflict--a conflict for which we were ill-prepared because of our backward approach to the industrialization of the people.

Something had to be done to correct an obviously dangerous situation of trying to train an over-abundance of unskilled manpower in order to produce the articles of war, which, in many cases, required skillful workers.

As early as 1915-16, Senator Smith of Georgia had proposed Bill S. 703 to the 64th Congress which read:

"To provide for the promotion of vocational education; to provide for cooperation with the states in the promotion of such education in agriculture and trade and the industries; to provide for cooperation with the states in the preparation of teachers of vocational subjects; and to appropriate money and regulate its expenditure."

Senator Smith, in collaboration with Senator Hughes, finally had their bill passed in 1917, which set into motion a remedy to a national crisis.

Beginning Vocational Education Under the New Vocational Bill

In Ohio, as in the other states, provisions were made to set up the necessary machinery for federally aided vocational education. A state board for

vocational education was appointed by Governor James M. Cox. The six members of this first board were: Dr. Randall J. Condon, Superintendent of Schools, Cincinnati; Walter Edmund, Superintendent of Schools, Sandusky; A. C. Eldredge, Assistant Superintendent of Schools, Cleveland; Dean Alfred Vivian, Dean of the College of Agriculture, Ohio State University, Columbus; S. J. McCune, hardware dealer, Brilliant; and Mrs. Kent W. Hughes, housewife, wife of Judge Hughes, Lima, Ohio. The State Superintendent of Schools, Frank B. Pearson, served as the first ex-officio secretary of this state board.

The board's first purpose and function was to formulate a plan for the administration of vocational education which might be approved by the Federal Board of Vocational Education. This work was aided by the Director of Vocational Education who came from Washington to help. Thereby, the State of Ohio became eligible for federal funds which were matched by the state, dollar for dollar.

After establishing the plan, the State Board appointed supervisors of the three different vocational areas; Elbert E. Heusch for Trade and Industrial, W. F. Stewart for Agriculture, and Maud Adams for Home Economics. During these first years, both W. F. Stewart and Maud Adams served dual roles as supervisors and as teacher trainers for their respective areas and had their offices at Ohio State University.

During the first year, 1917-1918, the supervisors visited those schools where the local boards had applied to the State Board for permission to establish such a program. In some cities, Trade and Industrial programs were operating prior to the Smith-Hughes Act. Cincinnati, for example, started in approximately

1907. Such programs needed only to request approval for reimbursement after the State Plan was approved. The supervisors determined whether or not the school met the requirements of the State Plan as to equipment, qualifications of the teacher and the other provisions.

The superintendent of schools would file a request for a vocational program with the State Board, which acted upon the approval of the program. During the early years, the State Board met monthly to transact their business. If additional information was needed before approving a program, the supervisors were consulted.

During the war years, this institution was called upon to run various military training programs for the armed services. The period immediately preceding the end of the war found the university involved in a number of veterans' vocational educational programs in addition to a few programs in the area of rehabilitation.

O.S.U. functioned as a cooperating agency of the government, as witnessed by the following correspondence from Arthur Dean, Assistant Director, Rehabilitation Division, U. S. Veterans' Bureau:

September 22, 1921

My dear Doctor Thompson:

Since assuming the duties and responsibilities of the office of Assistant Director, in charge of the rehabilitation work of the United States Veterans' Bureau, I have learned of the cordial manner in which the Educational Institutions of the country have cooperated in the plans for re-training America's war disabled. As I become more familiar with the details of this work, I am appalled at the magnitude of the service rendered by these institutions to the government and its ex-soldier trainees.

I wish to express my personal appreciation of the valuable assistance that your institution has given in the re-training of disabled ex-service men, thereby enabling them to return to civil life as independent and self-supporting individuals.

Our government's program of vocational rehabilitation is the greatest educational undertaking ever assumed by any country. It is my firm conviction that its ultimate success depends upon the continuation of the cooperation of America's educational forces.

Some publicity has been given to the idea of the government's establishing a National University, but the starting of such a national training center or training centers will in no way upset the settled policy of the past in utilizing existing educational institutions. It will be the policy of the U. S. Veterans' Bureau to send trainees, so far as possible, to the regular standardized institutions of America, most of which have registration under State Boards of Education.

I trust that your institution and all others which have been cooperating and assisting in this work will be willing to continue until the government's program of rehabilitating the war disabled is completed.

Although these veteran's programs were considered to be vocational in nature, we actually find that the majority of the veterans were taking courses that were more professional in content as opposed to studies of an occupation or trade--courses in agriculture being the exception.

The 1916-17 catalog indicates that a four-year manual training degree was being offered. However, a Professor Eldon E. Usry and Robert E. Smith seem to constitute the total personnel of the department.

The passage of the Smith-Hughes Act in 1917 seemingly had no immediate effect on the university in regard to initiating any new vocational courses. This policy was to prevail until 1921 when it is noted in the catalog that industrial

education is listed with manual training in parentheses, and vocational and commercial education are now combined under the leadership of Professor D. J. McDonald, aided by Assistant Professor Sylvia Sicha and Miss Ramsdell. From 1921 to the middle of 1925, we can assume that the university was now receiving federal monies for their vocational programs. Vocational teacher training programs, in addition to the established in-plant industrial teacher training programs, were initiated. The industrial in-plant teacher or supervisor training programs were not new to the university since there is evidence that mechanical engineering had been involved in this type of education prior to 1914.

It is recorded that Ohio State University was cut off from federal vocational funds for some infraction of the funding law by the people responsible for administering the program.

The 1925-26 catalog lists a Professor Frederick Horridge and William H. Stone at the helm of the Vocational Education Department. From 1926 to 1929 would seem to be vocational education's "darkest hour" on the Ohio State University campus because all courses completely vanish from the school's catalog. If vocational courses are listed, they are only offered during the summer months with visiting professors doing the teaching.

In the final analysis we find that this non-productive period was not brought about through the lack of interest or national apathy, but reassessment and reorganization would seem to be the theme of the following annual reports:

1927-28 Annual Report

Industrial Arts, Vocational, and Commercial Education are organically related. They go together. Neither is complete without the others.

The history of Commercial and Vocational Education on this campus is not altogether a happy one. The field of Commercial Education represents a large and important area of public school service. A statistical investigation made by Mr. Runkle several years ago shows that one-third of the courses that are offered in the Ohio high schools are courses in Commercial Education. This represents, perhaps, a larger if not more important fraction of teaching in the secondary schools than any other one cognate group of subjects. In recommending a program for the development of commercial teachers, it is clearly evident that a large area and not a limited, restricted area is to be served. A curriculum for the training of commercial teachers has been approved and has been announced in the offerings of the College. No provisions, however, have been made for carrying the curriculum into effect.

The State Department has, from time to time, called attention to the State's responsibility in providing properly trained teachers for commercial courses. Thus far, the public schools have been dependent upon private business colleges whose interest in teacher training is a side issue. This condition is comparable to an outgrown condition which previously prevailed in the preparation of students for law and medicine. The State Department cannot raise the standards of preparation of commercial teachers when State teacher-training agencies fail to provide for such training. With a minimum of expenditure our program for the training of commercial teachers would be made effective, since such program naturally and normally belongs to the Department of Industrial Arts. The organization of a new department would be unnecessary. In view of the cognate relationships of the three lines of work referred to, in view of the existence of the Department of Industrial Arts, and in view of the scattered condition of both Vocational and Commercial Education, it would seem appropriate that unification should be brought about in this entire area of service.

1928-29 Annual Report

No report on general progress of practical phases of teacher preparation accomplished or hoped-for, may be complete without stress upon the desirability for clarifying this whole situation by replacing the two departments with one Department of Practical Arts and Vocational Education.

What appear to be salient considerations in this matter have been rather fully stated in budget memorandum, and referred to also in the section devoted to improvement of instruction hereafter.

However, the gravity of professional issues at stake is so great that re-emphasis here undoubtedly may be more than justified. As shown fully in budget memorandum, a minimum of vocational industrial offerings is possible even without added staff; although the University surely cannot afford to disregard more comprehensive facilities for vocational education, including commercial. Especially graduate facilities and fundamentals of guidance in all teacher preparation appear imperative.

Industrial Arts Education, as now conceived, and Vocational Education are comparative newcomers in the public-school program. In the past teachers and others in the personnel of these phases of education have been drawn largely from industry--hence have been craftsmen rather than educators; in fact, not a few have been entirely without formal professional preparation, and altogether too many have continued so. With these phases of education firmly established in the public-school program, the need for professionalization is very great, in the way of preparation of new teachers, in the upgrading of those already employed, and in research. While the first two needs mentioned are being provided in a limited way from various centers throughout the state, the public schools have come to look to the University for leadership too generally to make an exception in the case of vocational teacher preparation.

In research, the demand for continuation of graduate facilities here is even more insistent; in fact, this is the only institution in the state with facilities equal to the needs of creditable service of this type. It may be said with fairness to all concerned that, if vocational offerings on the graduate levels should be dropped by the University, the state would be without effective leadership in vocational research. And the case is, if anything, even stronger for commercial education, since outside of the University the schools have only the private business colleges to look to for professional preparation of teachers, and no place within the state to look for supervisors and directors.

The 1929-30 school year would seem to be the year that marks the end of disorganization and confusion within the ranks of trade and industrial education.

(Although later, we will note that this is not to be the case.)

Hope at this point is manifest in the fact that the newly formed department of Practical Arts and Vocational Education is now in the hands of some very capable gentlemen, namely, Professor Stone, Associate Professor Warner, and Assistant Professor Smith. Previously, Smith and Warner had been listed as part of the faculty under Industrial Education (Manual Arts).

This new attempt to create some kind of an educational concept that was somewhat occupationally oriented was brought to light in view of the major and minor offerings in Commercial Education, Industrial Arts and Vocational Education.

The fall catalog of the 1930 school year lists over 50 course offerings within the realm of Practical Arts and Vocational Education--progress at last, or so it would seem.

CHAPTER IV

THE EVOLUTION OF THE UNIVERSITY'S
VOCATIONAL EDUCATION COURSES

The Ohio State University's catalog listings of vocational courses under any specific educational industrial endeavor has already been pointed out as being dubious in nature. It has also been stated that the university offered a four-year Manual Training degree in 1916-17, yet the only courses offered in this subject matter were:

- #111 - Teaching Manual Training
- #112 - Materials, Methods and Equipment
- #117-18 - Construction Design
- #121-122 - Hand Work for Supervisors
- #123 - Special Problems in Manual Training

The 1920-21 student catalog combines industrial education with manual training. Lab courses can be taken in the shops of industrial engineering or mechanical engineer (pattern shops, foundries, machine shop, etc.).

A two-hour course in vocational education is listed in the curriculum under School Administration. A description of the course is not given.

In the school year of 1921-22, we see a new combination come to light in the form of a "Vocational and Commercial Education" title for the following courses:

- #601 - Organization of Vocational Education
- #602 - Problems in Part Time Education
- #603 - Problems and Principles of Vocational Education

#604 - Fundamentals of Vocational Teaching

#606 - Juvenile Employment and Vocational Guidance

#607 - Curricula for Commercial Courses

#608 - Problems in Commercial Courses

In the 1922-23 school year, in a move to the College of Education, we are given a new title--"Industrial Education (Manual Arts) and Shop Work."

No course work is listed, but #608, "Administration of Vocational Education," is again listed under School Administration curriculum. Course description: "3 credit hours, 3 lectures a week, assigned readings, investigation and reports, open to seniors and graduates. Note: Course will not be offered next year." Teacher education for distributive education was projected, but abandoned because of no enrollment.

The 1923-24 catalog lists absolutely nothing in the way of vocationally designed courses.

Course #627 now appears under the School Administration curriculum as "Administration of Vocational Education," yet vocational education is for the first time listed as a department of instruction.

Eighteen courses are listed in this 1924-25 catalog in this new department's offerings. Same for 1925-26.

The 1926-28 catalogs list only summer offerings.

In 1928-29 we see 20 courses being offered, yet instructors are not listed which would lead one to believe that if enough people wanted a class, an instructor would be found to teach it.

Thirteen courses were offered during the summer months by visting instructors.

The 1929-30 catalog notes yet another change of title to that of "Practical Arts and Vocational Education."

Twenty-five courses are offered in commercial education, industrial arts and vocational education.

In the years 1930-32, course offerings number 50-52 each year.

School year 1932-33 catalog now lists all courses under the College of Education under a major heading of "Practical Arts and Vocational Education"--parts of the previous offerings are now offered as partial listings under industrial education, commercial education, guidance and practical arts and vocational education. (Industrial arts offerings to all intent and purposes are now listed under industrial engineering.)

In 1933-35, basically the same pattern of course listings existed.

In the 1939-40 catalog is noted that the term "Industrial Arts Education" is now being used instead of "Practical Arts and Vocational Education."

Commercial education also has a separate listing.

Course #641 - "The History of Vocational Education" - is the only course listed that retains the vocational terminology. All others have been integrated or absorbed under new classifications.

The 1944-45 school year notes another change in the catalog because the title is now "Vocational Trades and Industries"--a curriculum designed for certification purposes. Course listings:

#575 - Job and Trade Analysis in Trade and Industry

#576 - Organization of Instructional Material in Trade and Industries

#577 - Methods of Teaching Trades and Industries

#578 - Vocational Tests and Measurements in Trade and Industries

#579 - Shop Management in Trade and Industries

#580 - The Conference Method of Teaching in Trade and Industries

In 1949-50, all of the above courses were listed, but a note stated that they were not being offered this year.

For school year 1954-55, vocational courses are now listed under Trade and Industrial Education. Basically, the offerings are the same as 1944-45 with the addition of:

#695 - Problems in Teaching and Supervising Trade and Industrial Education for Out-of-School Youths

#717 - Survey of Vocational Education

In 1960-69 a switch is denoted from the former catalogs to the college bulletin.

Trade and Industrial education is still the main heading, but all course work is integrated into the total curriculum listed under the College of Education.

The following is a current listing of courses within the realm of vocational-technical education:

Business Education

206 - Typewriting I (2)

207 - Typewriting II (2)

208 - Shorthand I (2)

209 - Shorthand II (2)

210 - Advanced Stenography I (4)

211 - Advanced Stenography II (4)

- 212 - Advanced Stenography III (4)
- 520 - Teaching Typewriting and Office Practice (2)
- 521 - Teaching Shorthand and Transcription (2)
- 523 - Teaching Bookkeeping and Office Machines (3)
- 524 - Methods of Teaching Basic Business Subjects (3)
- 587.23 - Student Teaching in Secondary Schools: Business Education (3-15)
- 601 - Business and Office Education Programs (2)
- 602 - Cooperative Office Education (3)
- 693.23 - Individual Studies in Education: Business Education (1-4)
- 800 - Principles of Business Education (3)
- 801 - Organization and Teaching of Office Practice (3)
- 802 - Administration and Supervision of Business Education (3)
- 803 - Improvement of Instruction in Basic Business Subjects (3)
- 804 - Improvement of Instruction in Bookkeeping and Data Processing (2)
- 805 - Improvement of Instruction in Secretarial Subjects (2)
- 925.23 - Seminars in Education: Business Education (2-5)
- 993.23 - Advanced Studies in Education: Business Education (3)
- 999.23 - Research in Education (arr.)

Distributive Education

- 529 - Methods of Teaching Distributive Education (3)
- 587.29 - Student Teaching in Secondary Schools: Distributive Education (3-15)
- 605 - Curriculum Content for Distributive Occupational Subjects
- 606 - Operation of Distributive Education Programs (3)

- 608 - Practicum in Distributive Education (2-5)
- 693.29 - Individual Studies in Education: Distributive Education (1-4)
- 807 - Survey of Vocational Education (3)
- 925.29 - Seminars in Education: Distributive Education (2-5)
- 993.29 - Advanced Studies in Education: Distributive Education (3)
- 999.29 - Research in Education (arr.)

Trade and Industrial Education

- 251 - Work Experience in Industry (3-6)
- 575 - Vocational Trade, Industrial and Technical Teaching (3-18)
- 587.22 - Student Teaching in Secondary Schools: Trade and Industrial Education (3-15)
- 649 - Vocational Trade, Industrial and Technical Education for Out-of-School Youth and Adults (3)
- 693.22 - Individual Studies in Education: Trade and Industrial Education (1-4)
- 925.22 - Seminars in Education: Trade and Industrial Education (2-5)
- 993.22 - Advanced Studies in Education: Trade and Industrial Education (3)
- 999.22 - Research in Education (arr.)

The following graduate courses in the College of Agriculture are frequently taken by students from other vocational areas:

Agricultural Education

- 810 - Principles of Vocational-Technical Education (3)
- 811 - Administration and Supervision of Agricultural Education (3)

823 - Program Planning and Development (3)

899 - Interdepartmental Seminar (2-3)

Home Economics

794.09 - Special Group Studies (3-5)

The occupational competent person who has taken some of the above designated courses prescribed by his teacher educator or faculty advisor can be vocationally certified to teach in any one of the following 78 different programs of vocational education operating in the Ohio high school in 1969-70:

Vocational Agriculture

Production Agriculture
 Agricultural Business and Supply
 Agricultural Equipment and Mechanics
 Agricultural Processing
 Horticulture
 Forestry
 Agricultural Resource Conservation
 Agriculture for Special Needs

Business and Office Education

High Skilled Steno
 Medical/Dental Steno
 Clerk-Steno
 General Clerical
 Entry Data Processor
 Account Clerk
 Senior BOE CORE - 12th
 Coop. Office Education - 12th
 Office Duplication Spec.
 Office Machines Operator
 Clerical Services - DAVY
 Work Experience in Business - DAVY

Distributive Education

Retailing
Food Distribution
Petroleum Service
Vocational Coop. DE
Fashion Coordinating
Performing Arts
Disadvantaged DE Coop.
In-School Project Programs
Communications Technician
Occupational Work Adjustment

Home Economics

Homemaking
Child Care Aides
Child Care Assistants
Cooperative Institutional Aides
Cooperative Homemaking Aides
Cooperative Food Service Aides
Coop. Clothing Seamstress
Coop. Drape/Upholstery Seamstress
Food Service - Occupational
Homemaking Aides - Occupational
Multi-Coop. Program
Multi-Occupational

Trade and Industrial Education

Appliance Repair
Aircraft Maintenance
Carpentry
Painting and Decorating
Drafting
Industrial Electronics
Graphic Arts Occupations
Machine Tool Operator
Cosmetology
Refrigeration
Millwork and Cabinet
Nurses' Assistant
Body and Fender Mechanic
Commercial Art Occupations

Electricity
Construction and Maintenance
Industrial Electrician
Radio/TV Repair
Foundry
Sheet Metal Operator
Baker
Dressmaking
Dental Assistant
Occupational Work Experience
Auto Mechanic
Commercial Photography
Diesel Mechanic
Motor Repairman
Fabric Maintenance
Machine Shop
Welding and Cutting
Cook-Chef
Tailoring
Practical Nurse
Diversified Cooperative Training
Masonry

The above vocational programs are but a small portion of a multitude of occupations that could be taught to our secondary school students.

The greatest lack is in finding competent and acceptable candidates for the teaching profession. The second lack is finding personnel to train them.

The 1968 Amendments will, hopefully, give us some new guidelines to follow as did the Smith-Hughes Act of 1917. (See Appendix C for all federal legislation that pertains to vocational education.)

CHAPTER V

INCEPTION AND GROWTH OF SPECIALIZED FIELDS AND SERVICES

I. 1917 - Vocational Home Economics Education

The program of Vocational Home Economics was begun in Ohio with the passage of the Smith-Hughes Bill in 1917. Three institutions--Ohio State, Miami, and the University of Cincinnati--were approved for training teachers. Maude Gregory Adams of the Ohio State University home economics department was placed in charge of the teacher training program, assisted by Treva Kauffman, who was named field supervisor. Ohio State University established centers for supervised student teaching at North High School, Reynoldsburg and Canal Winchester. The growth of the program in intervening years is reflected in the fact that in the 1968-69 school year 57 different schools and 68 different home economics teachers in Ohio participated in the Ohio State program of supervised student teaching.

The George-Deen Bill in 1937 and the George-Barden Bill in 1947 made possible funds for expansion of the program and for the addition of staff. A program of research in home economics education was begun at Ohio State in 1937 with an experiment in student guidance under the direction of Drs. Scott, Morgan and Lehman. Subsequent research activity was carried on by Dr. Lehman until her retirement in 1965 and presently is being conducted by Dr. Julia Dalrymple.

Dr. Dorothy Scott served as chairman of the division of home economics education at Ohio State University until 1955 when she became Director of the School of Home Economics. Dr. Marie Dirks has been division chairman from 1955 to the present.

Since passage of the Vocational Education Bill of 1963, home economics programs

at the secondary level have been developed to train students for wage earning as well as for homemaking. The teacher education curriculum at Ohio State is being expanded to meet new certification requirements that are pending for teachers in this new aspect of the program. Changes in the 1968 amendments to the 1963 bill are leading to new emphases in consumer education and the education of teachers for work in depressed areas.

(For a more comprehensive historical account of the total home economics program, see their separate listing under agriculture education.)

II. 1937 - Business Education

Prior to 1937, business education was located in the Vocational Department of the College of Education, under the direction of Professor William H. Stone, the chairman.

With the reorganization of the various departments into one Department of Education, Professor Stone continued to guide the area.

In the Autumn of 1937, Inez Ray Wells was the only instructor in business education during the academic year. She supervised student teachers, teaching the advanced stenography sequence (now Education 210, 211, 212) and taught the one methods course that was offered.

The first doctorate in business education was awarded in 1945. Dr. Stone was his adviser. The second was awarded to Inez Ray Wells in 1947. Dr. J. Marshall Hanna was the adviser.

With the addition of Professor J. Marshall Hanna to the staff in 1946, the doctoral program began to expand. The average enrollment in the doctoral program during the academic year in the 1960's has risen to about ten. The summer enrollment of graduate

students averages thirty. The offerings in both the graduate and undergraduate levels has been expanded.

The Vocational Education Act of 1963 caused some changes in the program. In the Autumn of 1965, Professor William E. Jennings joined the staff on a part-time basis, giving service also to the State Department of Education, Area of Business Education, in coordinating the work of the University and the State Department. New teachers and teachers in new programs (BOE and COE) are visited and late afternoon seminars are arranged for the development of improved and enriched classroom experiences in vocational education.

With the addition of two courses which are required by the State Department of Education for vocational certification, The Ohio State University was recognized by the State Department of Education as one of five universities for the preparation of vocational teachers.

Since the recent reorganization and the creation of the Faculty of Vocational and Technical Education, business education has been more closely allied with the other vocational areas. Two courses--Principles of Business Education and Administration and Supervision of Business Education--draw enrollments from the other vocational areas, especially from the graduate students with majors or minors in Vocational Education.

An example of their service contributions over the course of the years is evidenced by the business education staff serving as officers in state and national business education organizations. For example, Professor Hanna has been president of the National Business Education Association, on the publications board for the American Business Education Yearbooks, and has held other offices. Professor Wells has been vice president and

president of the Ohio Business Teachers Association and Dean of the Institute for Certifying Secretaries.

III. Distributive Education - 1948

Dr. William B. Logan was the first full-time Distributive Education teacher educator at Ohio State (July 1, 1948, to June 30, 1967). However, some D.E. summer courses had been offered between 1939 and 1948. During that time, he established all of the undergraduate and graduate courses, prepared course outlines, and secured approval of them through the Council on Instruction and the Graduate School. The program gained national recognition under his guidance. During his tenure, an adult continuing education program was also developed.

In 1961 and 1962, he was selected to serve as a member of President Kennedy's Panel of Consultants on Vocational Education.

Dr. Logan states that Dr. J. Marshall Hanna should have much recognition for his support, cooperation, and contributions to the teacher education program over the years.

IV. Vocational Agriculture

The Department of Agriculture Education formally became a department of Agriculture mainly through the efforts of Dean Alfred Vivian. Dean Vivian was one of the more outspoken advocates for vocational agriculture at the high school level. Long before the advent of the Smith-Hughes Act, which we are told, only made it legal for 58 schools, we find that in 1908 at least 50 of the 225 township schools had some form of vocational agriculture education as part of a science course.

One of the very first programs that was operated on an intensive basis was located at New Holland. It is recognized that many of these early programs were not vocational in intent, yet many were--due to the needs of the community and the competence of the instructor. Professor Vivian campaigned long and hard as a leader in the "National Association for the Advancement of Agriculture Teaching" at the secondary and adult levels.

W. F. Stewart, the first department chairman, was hired in 1918. Up until this time Dr. Vivian had acted as an interim chairman; he was then regulated to his permanent position as the Dean of Agriculture.

In order to get potential teachers for vocational agriculture, Dr. Stewart set about recruiting agriculture graduate students from other universities and land grant colleges.

From 1918 until the present time, growth has been the order of the day rather than the exception. The exception being the war years when instructors were drafted along with some of their students.

Since 1965, over 11,000 students have been trained yearly.

Dr. Ralph Bender is currently the department chairman and has been since 1948. In addition to Dr. Bender, there is a staff of 407 instructors dispersed into 312 departments.

The farmer of 50 years ago is no longer with us, his sons and grandsons have been absorbed into a many faceted conglomeration of occupations that still fall under the major heading of agriculture. Although farms have diminished in size, agriculture technology has more than taken up the farmer's occupational need.

(For a more comprehensive historical account of the total agriculture program, see their separate listing.)

V. Trade and Industrial Education

Drs. Smith and Stone are noted to have filled in the time between 1931 to 1949 with a mature leadership that seemed to have a steadying effect upon the total vocational program.

Dr. Joseph Stroebel's tenure between 1949 and 1951, in addition to the employment of Dr. George Brandon as a consultant on public service training, increased the stature of vocational education at Ohio State University. The trend was toward more and more teacher education for occupations within industry. Dr. Brandon served in this capacity for six years, contributing greatly to an organizational training format that is still being utilized to some extent in the public service field of education.

Dr. Robert M. Reese, former state supervisor of vocational education, was hired in 1954 as the first Director of Trade and Industrial Services at Ohio State University. In 1968, he was made department chairman of Vocational-Technical Education-- a position he still holds. His leadership, organization and management expertise have literally put the Ohio State University and the State of Ohio on the map in regard to vocational education on a national level. As an example of some of his leadership roles, he has served for the past five years as the Executive Director of the Ohio Vocational Association (O.V.A.) in addition to serving a team as the "national membership secretary" of the American Vocational Association (A.V.A.).

As head teacher educator of Trade and Industrial Education at O.S.U., he has been of service on many committees, both as a panel member and consultant, at the local, state and federal levels. He has been instrumental in the refinement of the pre-service and in-service teacher education training manuals for vocationally competent

itinerant teachers who may or may not have a college degree which thereby allows them to teach trade and industrial subjects under some type of vocational certification.

In order for one to see the tremendous differences in Trade and Industrial teacher education concepts that have evolved over the years, we will have to start at the beginning.

It is to be noted that organized teacher training in Ohio's trade and industrial education program began with the acceptance by the state of the provisions of the Smith-Hughes Act of 1917. However, the first state plan to incorporate a program of teacher training was that of 1921-22. This plan stated that: "The Ohio State Board of Education will train teachers for trades and industries through staffs of teachers attached to approved institutions in the large cities of the state. (1921 Ohio State Plan for Vocational Education)

This plan further defined the teacher training requirements as follows: "The 256 hours of class work necessary to meet the State Board's requirements will be distributed as follows:

Trade English	32 hours
Trade Mathematics	32 hours
Trade Analysis and Theory of Teaching	48 hours
Trade Practice Teaching	64 hours
Trade Drawing	32 hours
Trade Science	32 hours
Theory and Administration of Vocational Education	<u>16 hours</u>
	256 hours

A rather straight-laced program compared to what is presently being made available for the vocational teacher.

	<u>Clock Hours</u>
Introduction to Vocational Trade and Industrial Teaching	
Pre-service Workshop, Summer (1-4 weeks in length)	25
Eighteen Week in-service training (regular school year)	25
Organization of a Local Vocational Trade and Industrial Education Program	35
Teaching Methods and Techniques in Trade and Industrial Education	
Questioning Techniques	10
Methods of Group Instruction	20
Methods of Individual Instruction	10
Organizing and Conducting Effective Demonstrations	10
Principles of Learning	20
Individualized Instruction in the Related Classroom	10
Conference Techniques in Teaching	20
Techniques of Developing Trade Skill	10
Use of Laboratory Procedures in Teaching Trade Technology	5
Correlating Shop and Trade Technology Instruction	10
Selection and Use of Teaching Aids	20
Use of Counseling Techniques	15
Selection and Organization of Subject Matter in Trade and Industrial Education	
Instruction Sheet Writing	15
Trade and Occupational Analysis	20
Course Outline Writing	10
Course of Study Construction	25
Preparing and Using Lesson Plans	10
Effective Teaching of Safety	10
Developing and Constructing Teaching Aids	15
Collecting and Classifying Instructional Materials	15

Shop and Laboratory Organization and Management	
Organizing and Operating Tool or Storage Rooms	10
Organizing and Using Shop Personnel Systems	10
Developing Appropriate Student Conduct	15
Organizing and Controlling Student Groups	10
Sponsoring a Vocational Industrial Club	15
Care and Maintenance of Equipment	10
Evaluating Techniques and Practices in Trade and Industrial Teaching	
Methods of Evaluating and Recording Student's Progress	15
Developing and Using Objective Tests	20
Relation of Standardized Tests to the Vocational Program	10
Individual Differences	15
Educational and Industrial Coordination	
Instructor's Responsibility for Coordination	10
Coordination in Vocational Education	25
Shop and Laboratory Design and Layout	
Shop Design and Layout	15
Trade Technology Design and Layout	15
Coordination and Supervision	
Conferences or Workshops of One to Three Weeks in Length	25-50
Understanding and Using the Ohio Plan for Trade and Industrial Education	25
History and Philosophy of Vocational Trade and Industrial Education	30
Organization and Administration of Trade and Industrial Education	30
Administration of Vocational Education	30
Practice Teaching	
Industrial Relations and Personnel Problems	30

Determining Trade and Industrial Needs	30
Techniques of Improving Trade Skills and Technology	
Conference Leadership	30
Supervision of Trade and Industrial Education	30
Research--Minor Problems in Trade and Industrial Education	

Pre-service and in-service education, over a period of 2-4 years, amounts to 200 clock hours of specific work equivalent to 16 quarter hours of university credit.

Approximately 158 itinerant teachers are presently being serviced by three full-time and one half-time teacher educators here at Ohio State University. They are Mr. James Provost (1963-present), Dr. Donald Karr ($\frac{1}{2}$ time, 1964-present), Mr. Russell Riley (1968-present), Mr. Richard Johnston (1969-present). Others who have served in this capacity are: Robert Carter, 1961-62; Frank Oliverio, 1962-64; Calvin Cotrell, 1955-60.

At present, an undergraduate curriculum in trade and industrial education is available, but in most instances, is only used for in-service teachers. It is possible, however, in cooperation with other colleges on campus, for individuals already qualified by occupational competency to enroll in and complete a program leading to the baccalaureate degree. These individuals receive their major in the trade and industrial field by special course work in many of the areas listed above, plus credit (up to 30 hours) obtained by an occupational competency examination following junior standing.

Currently both Masters and Ph.D. degrees can be obtained in vocational and technical education by taking some of the following courses in addition to courses from the various colleges on campus:

#693.22 - Individual Studies in Trade, Industrial and Technical Education (1-4 quarter credit hours)

#649 - Trade and Industrial Education for Out-of-School Youth and Adults (3 quarter credit hours)

#807 - Survey of Vocational Education (3 quarter credit hours)

#925.22 - Seminar in Trade and Industrial Vocational Education (2-5 quarter credit hours)

#993.22 - Advanced Studies in Education (3 quarter credit hours)

#999.22 - Research in Education (Dissertation Registration)

Special facts on services and activities

1. Non-credit and credit in-service education

The non-credit and credit in-service education within the trade and industrial education services at Ohio State is one of the largest within the state. The total state program is one of the largest in the country.

2. Institutes

From five to seven institutes, short courses, workshops and other similar meetings are held annually under the sponsorship of the Vocational Trade and Industrial Education Services at Ohio State. The enrollment in these institutes ranges from 20 to more than 300. A few of the institutes held annually in recent years are: Law Enforcement Institute, Rural Electric Cooperative Managers Institute, Ohio State Fire School, Ohio Plumbing Inspectors Seminar, Experience Teachers Institutes in a variety of subject areas, Pre-service Workshops for first year coordinators and Pre-Service Teachers Workshops.

The following histories are of services that are currently functioning under the jurisdiction of trade and industrial education.

HISTORY OF LAW ENFORCEMENT TRAINING

Law Enforcement Training for the State of Ohio began in 1939 under the sponsorship of the State Department of Education. This was a result of the George-Deen Act of 1936, amendment to the Smith-Hughes Act of 1917, whereby monies are provided for public service occupational training.

The training was implemented from Toledo University and Cincinnati University for a period of three years. The two men responsible for the training were Inspector E. J. Irwin and Captain C. L. Hennessy who terminated their employment to serve in the Armed Forces during World War II. As a result of their termination, the training ceased for a period of twenty years. In the interim period, a file of inquiry letters concerning Law Enforcement Training had built up in the office of the Supervisor of Trade and Industrial Education Services. Dr. Byrl R. Shoemaker, then Supervisor, took a look at the file and decided to call an advisory committee meeting of Law Enforcement people on May 16, 1960.

The first item on the agenda was to determine the need for Law Enforcement Training in Ohio. The committee agreed unanimously that there was a need for state leadership in Law Enforcement Training. Training for law enforcement officers was on a "hit or miss" basis in the majority of departments.

Another outcome of this meeting was the recommendation to form a state Law Enforcement Advisory Committee from the parent law enforcement associations, namely, The Buckeye State Sheriffs' Association and The Ohio Association of Chiefs of Police. This was accomplished by October of 1960. The function of the committee is to advise and counsel in the development and implementation of training. The original committee

were as follows:

George Scholer, Chairman - Chief of Police, Columbus, Ohio

Mrs. M. Ross, Executive Director - Buckeye State Sheriffs' Association

Sheriff Carson Davis - Hancock County

John Shryock, Chief of Police - Kettering, Ohio

Arthur Shuman, Sheriff - Clark County

H. S. Weaver, Chief of Police - East Cleveland, Ohio

On October 13, 1960, the Committee met to plan for providing an organized program of Law Enforcement Training in Ohio.

It was determined by the committee that every police and sheriff's department should receive the application forms for employment in the two positions. Criteria for evaluation of applicants was established, and November 21, 1960, was the date set for oral interviews.

On November 21, 1960, seventeen applicants appeared for oral interviews. Robert S. Takacs, Ashtabula County Sheriff's Department, was selected as the specialist. The committee felt that a Consultant should be selected at a later date from a larger group of applicants. Dr. Shoemaker then explained to the committee and Mr. Takacs that the two positions are classified as special services, and that a cooperative arrangement with The Ohio State University, School of Education, for the hiring and housing existed. Furthermore, that the facilities of the University were available for development of the program.

Mr. Takacs was appointed February 1, 1961. He was relegated to researching the prior materials developed and visitations of existing police academies in Ohio. This was done in order to develop a systematic and logical approach, with necessary guide-

lines, to the type of program needed by Law Enforcement. All prior materials developed were scrutinized carefully and only those pertinent to present Law Enforcement procedure were kept. A synopsis of academy operation and curriculum was developed for presentation to the committee.

A committee meeting was called on August 29, 1961. Mr. Takacs presented his observations and evaluation of Law Enforcement Training as he had observed it in Ohio. The committee then recommended that a curriculum committee be formed to assist Mr. Takacs in the development of content. The committee consisted of Dr. R. M. Reese, Director, Trade and Industrial Education, The Ohio State University; Chief George Scholer, Mrs. M. Ross, William Berndt, Consultant, Instructional Materials Laboratory (Ohio State University), and Chief H. S. Weaver. It was also decided by the committee that the content be published in manual form so that each officer may have a copy from which to work. They felt that this would provide for uniformity of training throughout the state. A question was raised during the meeting as to how the training would be implemented inasmuch as the load would be too great for two people. Dr. Reese then explained that in Vocational Education we have a system of instructor training. This same system would apply to Law Enforcement Training. The police chiefs and sheriffs would select from their personnel, those persons they felt most qualified to become instructors. Mr. Takacs would then train them in the vocational method of teaching over an eighty clock hour period. Subsequent instructor institutes since 1962 have provided Law Enforcement with 278 trained persons to carry out the program. During this same meeting a title was selected for the training, namely, "The Ohio Law Enforcement Officer's Training Program." So that proper credit may be noted, the committee decided

that the following format be used: The Ohio Law Enforcement Officer's Training Program, State Department of Education, Vocational Trade and Industrial Education Services, in cooperation with The Ohio State University, The Buckeye State Sheriffs' Association and the Ohio Association of Chiefs of Police.

On December 4, 1961, Sgt. Frank Winkler, San Jose Police Department, California, was hired as a consultant in the program. Mr. Winkler and Mr. Takacs then began the development of the curriculum and its content. When the lesson units were completed, they were submitted to the curriculum committee for their evaluation. Finally, in April of 1963, the manuals went to press. In 1963, Mr. Winkler resigned to take a position in his home state of California. Mr. Takacs was promoted to the Consultant position. On February 3, 1964, Harry L. Smith, Chief of Police, Ashland, Ohio, was hired as the specialist.

The initial basic course consisted of forty clock hours of training in basic Law Enforcement procedures such as: Orientation, Acquiring and Maintaining a Uniform, Daytime-Nighttime Patrolling on Foot, Daytime-Nighttime Patrolling in a Patrol Vehicle, Handling Misdemeanors Witnessed by an Officer, Handling Felonies, Handling Misdemeanors not Witnessed by an Officer, Handling Traffic Violations, Handling Traffic Accidents, Arresting, Testifying in Court, Dealing with Civil Complaints, Handling Fire Scenes, Handling Disaster Scenes, and Handling Traffic Congestion. While the initial basic course was being conducted all over the state, Mr. Takacs and Mr. Smith prepared the second phase of basic training. This was tested and 24 clock hours assigned. The basic course then became a 64 hour training program.

On June 6, 1965, Governor James A. Rhodes signed into law the Peace Officer Training Act, which requires a minimum of 120 hours of training. Mr. Smith and Mr. Takacs wrote additional lesson units which now comprise 130 hours of training in basic Law Enforcement. Each of the lesson units is actually a procedure to be used by officers in the handling of the particular situation. Each technique or skill advocated incorporate personal safety factors for the officer and public. Included are the methods which lead to the most effective disposition of a situation to the satisfaction of the Law Enforcement Agency and the public.

Since 1961, a total program has been developed to provide training at every level or position within a Law Enforcement Agency. The basic course has graduated well over 8,000 officers since 1963. There has been provided each year since 1961, a three-day administrative institute during May. Each year a concentrated and intensive program is developed for the chiefs, sheriffs, and/or their command personnel to apprise them of new methods, new ideas, or improving on old methods. The graduates of this phase of training number over 600. The number of instructors trained is 278. These men and women are the backbone of Law Enforcement Training in the State of Ohio. A recent innovation combining Law Enforcement and our public schools is the establishment of a two-year post high school associate degree program. This is done at our technical institutes. It is a direct result of concern by Law Enforcement agencies to upgrade themselves and seek assistance from public education. The first program began at Penta County Technical Institute in September, 1968, after three years of development by Law Enforcement and education personnel. There are approximately six more technical institutes in various stages leading to implementation of a similar program.

After nine years, most of the law enforcement building blocks are laid and shape of training programs can be discerned. The program leading to training provided from the day a man is hired to the day he retires commensurate to his level or position is a realization. There shall emerge, as a result of The Ohio Law Enforcement Officer's Training Program and the concern of many people, a new profession, recognized and accorded the support of the people.

STATE OF OHIO FIRE SERVICE TRAINING PROGRAM

Fire Service Training is made available to all firemen in the State of Ohio through the adult extension program of the Trade and Industrial Education Services of the Vocational Division of the State Department of Education. This program was inaugurated in 1939 and was intended to serve the fire departments of the State of Ohio which at that time numbered a few more than 500.

Since Fire Service Training on a general basis was relatively new at this time, a program had to be developed adhering to the following objectives: (1) to determine local, county, regional and state needs and to implement a program to adequately meet these needs on a continuing basis, (2) to improve the competencies and skills of local fire personnel in the specialized fields of the Fire Service.

A State Fire Service Advisory Committee was organized and the members represented all branches of the Fire Service which included the following organizations: Association of Ohio Professional Fire Fighters, State Fire Marshal's Office, International Association of Fire Fighters, Ohio Fire Chiefs Association, International Association of Fire Chiefs, The Ohio Inspection Bureau, and the Ohio Firemen's Association.

The first course offered consisted of 30 hours of basic fire training. In the initial years of the program, approximately 800 to 1000 firemen were provided the training each year in their local communities.

In 1946, full-time coordinators were employed cooperatively by the Vocational Division of the State Department of Education and The Ohio State University, University of Cincinnati, and Kent State University. Each coordinator was assigned a section

of the state and is responsible for developing instructors, developing text materials, promoting and coordinating fire service training courses in his area.

The instruction presently being offered is a 36-hour basic course. The instructional materials consist of three separate publications--The Fire Service Training Text, Learner's Workbook, and an Instructor's Manual--all published by the Trade and Industrial Education Services, The Ohio State University.

In addition to the basic and advanced courses, one- and two-day regional schools are held in all sections of the state throughout the year. Finally, an Annual Ohio State Fire School is held on campus of The Ohio State University each year. This State School was first held in 1930 and was possibly the first school of this type in the nation. The school was discontinued during the years of World War II but was later renewed. This year, the twenty-fourth consecutive school will be held on campus and will offer nine courses in administration, fire prevention and inspection, victim care and rescue operations, apparatus maintenance, operational instruction, and firefighting techniques. The school is planned to offer instruction in specialized and newly developed practices as a supplement, but not to duplicate, the instruction provided at either the regional or departmental levels.

The school is sponsored by the Trade and Industrial Vocational Education Services of the State Department of Education and the Academic Faculty of Vocational-Technical Education at The Ohio State University, in cooperation with the Office of the State Fire Marshal.

The 1969 school was held from September 8 through September 12. The enrollment is limited to 393 participants and the teaching staff numbers more than eighty persons from the insurance industry, legal, medical, engineering and educational

professions as well as municipal administrators and fire service personnel from all sections of the state.

The school is directed by Robert M. Reese, Professor of Education and Chairman of the Academic Faculty for Vocational-Technical Education of The Ohio State University. The Assistant Director is W. Joseph Heinzen, Fire Service Training Coordinator of the Vocational staff.

During the 23 year period from 1939 to 1962, 64,800 paid and volunteer fire fighters attended 2,061 classes in the State of Ohio. From 1962 to 1969, approximately 98,000 firemen attended 2,845 classes.

At the present time, there are approximately 250 part-time certified fire service training instructors in the State of Ohio. The firemen are required to renew their basic and advanced training every three years and the text materials are continually being upgraded to meet the present-day needs. The training manuals are quite popular outside of the State of Ohio; in fact, many state vocational departments have adopted the Ohio manual as a basis for their fire training instruction. Many large cities such as Chicago and Pittsburgh have adopted the Ohio manual as a supplement to their own materials.

The two coordinators at Ohio State University have been responsible for servicing the Southeast and Northwest sections of the state arranging approximately half of the total programs which involves 1200 fire departments in the State of Ohio. In addition, a monthly training letter is made available to the State Fire Marshal's Office.

THE RURAL ELECTRIFICATION TRAINING PROGRAM

The Rural Electrification Administration was organized in 1939. It then became increasingly apparent that the need for trained personnel was a "must." Through the efforts of the administrator and the cooperation of the U. S. Office of Education, a training program was set up as a Vocational Education Service. Funds were allotted from the Smith-Hughes, George-Barden Act, since the program involved rural people. These funds were to be matched by state funds for instructor salaries. An advisory committee was to be appointed by each state. This committee was composed of a representative group of all the rural electric systems within the state. The local cooperative groups were responsible for providing the funds to cover the cost of equipment, visual aids and instructor travel.

The Trade and Industrial Education Service, under the State Department of Vocational Education, was then responsible for the staffing and operation of the program in cooperation with the advisory committee. It was then that the Ohio State University's Department of Agriculture became involved in the program to provide office space on campus, to be used as headquarters for the Rural Electric Job Training Instructor. The chairman of the Agriculture Engineering Department became an advisor.

After interviewing several candidates for the position of instructor, Mr. L. A. Ehmsen was accepted for the post. During the year he was in the post, he started the training programs for 22 rural electric systems. In 1941, Mr. Dean Horsewood took over the office and the number of systems in operation increased to 28.

World War II interrupted the progress of the program because Mr. Horsewood was called into military service, leaving the program without an instructor until Mr. Chester A. High accepted the position late in 1942. However, Mr. High had only a few

months at Ohio State University before being called to fill the vacancy in the manager's office at the Morrow Rural Electric Cooperative in Mt. Gilead, Ohio, after their manager was also called into the military.

The program was resumed after the end of the war in 1945, under the direction of Mr. High. Because there had been no construction during the war, the need for a large expansion program was immediately apparent. The first step was the hiring of an additional instructor, followed by the addition of the first Municipal Electric System in 1947. Two men began the training of employees in Dover.

The advantages of the training program were brought home by the fact that the program was expanding throughout the United States. By 1950, 37 states had initiated similar programs for their rural electric systems. This was further expanded by the development of on-the-job training programs by individual cooperatives.

There were many opportunities for advancement in the program with trained personnel to fill the positions. Mr. Owen D. Manning, who had been the instructor at O.S.U., was replaced by Mr. Wayland F. Hamilton, to work with Mr. High. Through the efforts of these two men, a series of training manuals were developed. The "Electric Lineman Training Manuals" were compiled in the Instructional Materials Laboratory at O.S.U. and are now being used nationally in training employees by cooperatives, municipals and power companies.

Six more municipal electric systems were added to the program during the years between 1955 to 1964, largely through the efforts of Mr. High and Mr. Hamilton. Mr. High retired after 22 years of service, having become nationally known for his work in expanding and improving job training programs. Both Mr. High and Mr. Hamilton have served as chairman of the National Association of Job Training Instructors Conference,

which has met each year since 1943. Mr. High was replaced by Mr. Mark Hawkins, who was an expert in watt-hour metering. This was a most helpful contribution to the program. During his three years with the program, it was expanded to include two more municipal electric systems.

The electrification training program is now being expanded to include instruction in the use of video-recorder tape, which should add to the efficiency and effectiveness of the program. At the present time, there is a shortage of trained qualified personnel. For this reason, training programs for vocational high school students are being considered.

During the years of great changes in the electric utility industry, the job training instructors have been able to make a significant contribution. However, the training of new personnel to these ever-changing methods and equipment is a continuous problem.

INSTRUCTIONAL MATERIALS LABORATORY, OHIO STATE UNIVERSITY,
COLLEGE OF EDUCATION AND TRADE AND INDUSTRIAL EDUCATION
SERVICES, WITHIN THE VOCATIONAL DIVISION, OHIO STATE DEPARTMENT
OF EDUCATION.

Early in 1946, the Ohio Trade and Industrial Education Instructional Materials Laboratory was founded by Robert M. Reese, who was State Supervisor of Trade and Industrial Education at that time.

In these early days, Dr. Reese pointed out the difficulties in obtaining instructional material or any adequate guide or outline for the beginning teacher. As a result of this, Dr. Reese has said, the curriculum development effort was duplicated among many teachers working in similar occupational areas. It was realized that the curriculum materials must be organized in some way to be at all effectual.

Dr. Reese felt that this need for development of unified curriculum material was further emphasized during visits throughout the state where the programs offered were reimbursed by the state. The attitude of the schools which had developed their own program was that they were not willing to share their material or make it available to other schools.

To initiate a program of instructional materials development for Ohio, Mr. John Doughman was appointed as Coordinator for the state, with his office at the University of Akron, which was one of the universities which participated in trade and industrial teacher education. However, the laboratory was transferred to The Ohio State University the next year, in July of 1947.

Mr. Doughman's first task was to analyze the programs already under way throughout the state. He developed and made available to all schools, analyses of source material, including trade analyses, course outlines and actual job or assignment sheets.

The analysis emphasized the fact that the teacher training program was helpful in the field of trade analysis, since most teachers had a fairly complete analysis available. However, it was also learned that even when teachers had fairly adequate course outlines available, they very often did not follow them. The most important finding was that teachers were very widely short of individual instructional sheets to be used in the teaching process.

Shortly after Mr. Doughman came to The Ohio State University, the Curriculum Library was organized, which would be instrumental in producing materials as well as housing a state-wide library of occupational resource materials. The first of these were instruction plans for the trades of bricklaying and carpentry.

Resources were meager in these formative years, with very little equipment available. The reproduction of materials was difficult, but through the dedicated efforts of a selected group of Cleveland teachers who worked during the summer and part-time during the school year, the first instructional materials were prepared. Then, too, instructors were employed during the summer to refine the materials on which they were working. These materials were then reproduced and distributed by the Trade and Industrial Education Laboratory. In the summer of 1947, the Laboratory, which was located at The Ohio State University, was

producing a meaningful quantity of material, most of which was prepared by individual writers who were local teachers.

In July of 1950, the local Trade and Industrial Supervisors' Workshop was held at The Ohio State University. At this meeting, a state-wide Instructional Materials Advisory Committee was elected. On the committee were seven local supervisors and directors with one teacher educator in trade and industrial education. The aims of the program of development of instructional materials, duties and responsibilities of the person in charge of the program were detailed in the Ohio Plan for Professional Services. The aims of the plan are set forth in the following objectives:

1. nTo keep abreast of the need for the development or revision of instructional materials not available from existing sources.
2. nTo produce instructional aids that are needed for use in trade and industrial education programs and new instructional materials from commercial and educational sources.
3. nTo evaluate existing instructional materials in the trade and industrial education field.
4. nTo assist programs in local communities to obtain needed instructional aids.

The Ohio Instructional Materials Laboratory operates within the Trade and Industrial Education Services established in the Department of Education at The Ohio State University. Administratively, the laboratory functions as a part of the University by virtue of a contract with the State Department of Education's Division of Vocational Education.

The Director of Trade and Industrial Education Services at the University represents both agencies in the operation of the laboratory. The State Supervisor

of Trade and Industrial Education, however, retains, by cooperative agreement, final authorization for the use of the rotary funds resulting from the sale of materials. This is probably due to the fact that this rotary was established within the State Department of Education, rather than at the University. The Consultant of Instructional Materials Development is the responsible operating head of the laboratory and its functions.

Membership of Ohio's statewide Trade and Industrial Education Instructional Materials Advisory Committee is composed of six local trade and education supervisors, one representative from labor and one representative from industrial management, one teacher educator, and the executive secretary of the Ohio Apprenticeship Council.

Mr. Carl J. Schaefer directed this very important operation of curriculum development from 1950 to 1954. In 1954, Merle Strong came on the scene and managed to put added emphasis on this service through facility reorganization and management. The function of the Materials Lab was greatly expanded under his direction. Dr. Strong left to take a similar position with the federal government in vocational education.

William Berndt was retained from 1958 to 1963 where it is noted that the need for the vocational instructional materials is increasing rapidly on a nationwide basis.

Since 1963, the Laboratory has been under the direction of W. F. Stover, and is located at 1885 Neil Avenue (Townshend Hall), The Ohio State University, Columbus, Ohio. Since 1963, yearly distribution of publications has increased from 68,000 to over 85,000. The annual sales volume has gone from \$85,000

to over \$180,000 during the same period. Recent publications published include a 3-manual series on Basic Electronics, Guidelines for 10 trade areas, Instructor Guides, and Occupational Work Experience Manuals. Some to be issued are Printing Manuals for Learners and Instructors, a School Bus Driver Training Manual, an advanced course for Electronics and Apprenticeship Manuals for Asbestos Workers.

PUPIL TRANSPORTATION TRAINING PROGRAM
IN THE UNITED STATES AND OHIO

As early as 1869, laws were enacted which governed the transportation of children to school. Quincy, Massachusetts, was the first city to provide transportation facilities for students in 1874.

Kingsville Township, Ashtabula County, and other small districts decided to transport their students to a village school rather than build a new school building, when it was proposed that some of the school districts be consolidated. This was the initial pupil transportation program in Ohio, in 1892.

In order to legalize this procedure, a bill was introduced into the General Assembly of Ohio, and became law in April, 1894. The first state-wide law providing for pupil transportation was enacted by the General Assembly four years later.

There have been many significant changes in the Ohio pupil transportation program. The first school "buses" were horse-drawn vehicles which were sometimes owned by the school board, but most often were privately owned vehicles which were rented by the board, together with a team of horses.

Through the years, from these horse-drawn carts to the most modern school buses, there has been a constant increase in the number of students who benefit from this school transportation program. The development of the automobile and the building of hard-surfaced roads are the factors which have contributed most significantly to the rapid growth of this service. The expansion of the transportation area of the Ohio school districts has been due to many factors, including implementation of the Fair Bus Bill, the reorganization of school districts, the great move to suburbs, the manufacturing of larger buses, and the building of better roads. Considering all this, the school bus

driver's and the school's responsibilities have increased tremendously.

According to historical data concerning school bus driver training, the first such program was undertaken at The Ohio State University in May of 1949. A conference conducted by Dr. Robert Reese and his aide, George Brandon, of The Ohio State University, Trade and Industrial Education Services, brought out these facts.

Discussion at the conference centered around vehicle maintenance, rules of the road, and driver training. The conference participants were selected from personnel who had a keen interest as well as experience in school transportation. The committee included school administrators, safety engineers, driver education consultants and law enforcement officers.

The program did not go beyond the discussion phase until January, 1963, with no record of additional conferences. At that time, Trade and Industrial Services, together with the Ohio State University and the State Department of Education, established the job classification of School Bus Driver Training Consultant. The State Department of Education had this to say:

"A few short years ago pupil transportation was a small auxiliary service to be tacked on the school budget and easily administered by spending a few hours with some of the drivers. Today the cost of transportation is a major item in the school budget and administrators spend many hours struggling with the problems that accompany this growth."

School district reorganization and consolidation plus the migration of masses of people to the suburbs have created problems of larger rural school attendance areas. To the bus driver, this means more students to transport, more daily miles to travel, and more daily time to devote to the transportation program. It is imperative that a person should not be employed to do this work unless some training in the skills and

knowledge of driving a school bus has been acquired. The bus driver is responsible for a most precious cargo.

With the above mentioned thoughts in mind, James Provost was hired by the State Department of Education in February of 1963 as transportation consultant under the Division of Vocational Education. Mr. Provost was well qualified because of his experience in bus driving, driver education, and bus fleet supervision, and school administration.

A study of programs in other states was undertaken and an advisory committee was activated. Material and literature were reviewed, after which an outline was developed. This outline was a composite of units that the committee thought should be included in Ohio's manual of instruction.

Mr. Provost completed the final pre-publication copy of the manual, which was then used in two pilot programs to test the instruction time involved and the value of the material. The pilot program was held in a large city school, then in a rural school to determine the practicality of the program for all types of schools. From this testing, necessary revisions were made in the manual, which went to press late in 1963. An instructor's guide was also developed to assist instructors in the sequence of instruction and in timing the instruction units. Both units were edited and reproduced by January 1, 1964, and the first official classes began shortly thereafter. This was the beginning of Ohio's practical program in school bus driver training.

In addition to Mr. Provost, people who have occupied the position of Consultant, School Bus Driver Education are Charles Dysert, October, 1965, to February, 1966; John Magaw, May, 1966, to June, 1967; and Robert Whisman, November, 1967 to the present time.

Significant Changes in Program

1. 1967 - Major revision of basic manual and changing from fifteen (15) to eighteen (18) hours of instruction.
2. 1969 - The School Bus Driver Education program has been expanded to include a thirty-six hour pre-driver education program for people with no experience driving large vehicles. A new manual has been completed for an advanced program for drivers who have completed the basic course.

EMERGENCY AND RESCUE SQUAD TRAINING

The importance of adequate training for emergency squad personnel, in rescue procedures and victim care beyond basic first aid, has been obvious for some time. International as well as national medical and rescue associations have expressed a dire need for a solution to this training problem.

The Ohio Trade and Industrial Education Service, Division of Vocational Education of the State Department of Education, has taken an active part in the training of fire department personnel since 1939. Through the training and utilization of part-time instructors, the Trade and Industrial Education Service has been able to make Fire Service Training available to all fire departments in the state. This training has given assistance to paid departments, and has been of particular help to volunteer departments. In 1958, a similar program was developed for training emergency squad personnel in victim care and rescue procedures.

In 1959, the Ohio Trade and Industrial Education Service published an Emergency Rescue Squad Manual as a part of its training program. This comprehensive text was a pioneer in its field. A survey of literature had failed to disclose adequate materials for a complete training program. The materials available were fragmentary; each omitted vital phases of emergency and rescue squad work. The Emergency Rescue Squad Manual therefore filled a critical need. It has been widely distributed and has been reprinted every year since its publication.

The preparation of the first Emergency Rescue Squad Manual was a cooperative effort involving many persons concerned with this area of training. The State Fire Service Advisory Committee for Trade and Industrial Education has given their support and leadership toward providing for an adequate training program

in the area of emergency and rescue work and the developing of appropriate training material.

Members of this committee and the organizations they represented were: C. E. Blanchard, Toledo, Ohio Fire Chiefs' Association; E. P. Brush Jr., Columbus, State Fire Marshal; E. B. Haggerty, Cincinnati, Association of Ohio Fire Fighters; W. E. Kingzett, Cleveland, Ohio State Firemen's Association; J. J. O'Doherty, Lorain, International Association of Fire Fighters; J. W. Rutter, Columbus, Ohio Inspection Bureau; W. G. Strickfaden, Columbus, International Fire Chiefs' Association; Gerald Vernotzy, Akron, former representation of Ohio Fire Chiefs' Association.

As a first step in providing for materials in this field of training, an outline was developed by the Trade and Industrial Education personnel including: C. J. Getz, Fire Training Coordinator, Kent State University; H. A. Ohlrich, Fire Training Coordinator, University of Cincinnati; C. J. Schaefer, Assistant State Supervisor; Azor D. Sheffield, Fire Training Coordinator, University of Toledo; Elmer W. Weis, Fire Training Coordinator, The Ohio State University; Merle E. Strong, Consultant, Instructional Materials Laboratory, The Ohio State University.

A copy of the outline was sent to a number of persons in Ohio and to persons in several other states involved in emergency and rescue work for their reactions. The comments received were helpful in improving the written outline.

The Trade and Industrial Education staff of State Fire Service Training Coordinators including C. J. Getz, H. A. Ohlrich, Glenn Rehfuss and Elmer W. Weis, along with Jack Liberator who was the first Emergency Rescue Squad

Training Coordinator for Trade and Industrial Education, were responsible for compiling the information in the first manual. In doing so, they had cooperation from many fire department personnel throughout the state who have shared their experiences and have given constructive criticism.

A medical advisory committee assisted on the chapters dealing with victim care, in order to provide the latest recommendations for care by squadmen. The committee consisted of the following: John G. Boutselis, M.D., Obstetrician; C. Joseph Hatfield, M.D., Internal Medicine; Walter M. Haynes, M.D., General Surgery and Chest Surgery; J. J. Jacoby, M.D., Chief, Department of Anesthesiology, O.S.U. Hospital; Robert R. Kessler, M.D., Orthopedic Surgery; Charles R. McClave, M.D., Pediatrician; Jack Teterick, M.D., General Surgery and Chest Surgery; William W. Wiltberger, M.D., General Surgeon.

With the completion of all text material, a forty-hour course of instruction was developed which covered the full range of emergency and rescue situations that would confront the emergency squadmen of that period. A group of experienced, qualified emergency squadmen were selected from throughout the state to receive instructor training that prepared them to teach this program at the local level. The training was enthusiastically received by the squadmen of Ohio. The program received national recognition immediately.

In 1964, new medical findings about closed chest heart compression, manual and mechanical resuscitation, first aid for laryngectomy victims, and other phases of emergency care were introduced into Ohio's training program, along with the most recent rescue procedures and techniques. A major revision

of the original text was initiated at this time by Mr. Jack Liberator. Prior to the completion of the proposed major revision, Mr. Liberator resigned as the State Coordinator for Emergency and Rescue Squad Training. This indeed was a great loss to Ohio, for the names Liberator and Emergency Squad were now synonymous.

In March of 1965, Mr. Rocco V. Morando was hired to succeed Mr. Liberator as the State Consultant for Emergency and Rescue Squad Training. Mr. Morando had served with the Yorkville Fire Department as Emergency Squad Captain, having organized that department's first emergency squad. He was among the group of original instructors and worked diligently in teaching the majority of emergency and rescue squads of Eastern Ohio.

Mr. Morando completed the revision of the original text and entitled the new text, "Emergency Victim Care and Rescue." He also developed an instructor's manual to assist the instructor in the field and to insure uniformity in the teaching of this most important program. A revision and updating of the courses taught was completed and now afforded training, not only to fire departments, but included private ambulance companies, funeral directors and morticians, rescue units within industry, police departments and nurses.

Ohio's Emergency and Rescue Squad Training continued to receive national recognition. In 1967, a survey was conducted by the National Research Council-National Academy of Sciences, Division of Medical Sciences, of all available training material in this field. As a result of this survey, Ohio's program was selected as one of the most comprehensive in the nation. Many requests have been received

from cities and states for guidance and assistance in the development of similar programs. The Ohio State University's Trade and Industrial Instructional Materials Laboratory has extended copyright waivers to several states so that they may reproduce our text material in part.

As the State Consultant for Emergency and Rescue Squad Training, Mr. Morando has represented the Division of Vocational Education as an invited member of the National Academy of Sciences-National Research Council's "Task Force" to establish guidelines for the training of ambulance attendants, fire and police emergency squads and others involved in the response to the scene of accident or serious illness.

He has also served as a consultant to the Federal Department of Transportation, to assist in the development of guidelines to aid the fifty states in the implementation of the Federal Highway Safety Act-Emergency Medical Services.

Currently Mr. Morando is serving as a member and secretary of the NAS-NRC Subcommittee to study and assist in the development of the emergency ambulance service throughout the nation, and to provide the medical requirements for the ambulance vehicle and equipment.

The fact that Mr. Morando has been called upon to serve at the national level is proof of the excellence of the program.

TRADE AND INDUSTRIAL EDUCATION ACHIEVEMENT TEST PROGRAM

The Achievement Test Program is operated cooperatively through The Ohio State University and the State Department of Education, Vocational Division, Trade and Industrial Education Service.

In the summer of 1958, at the Local Supervisor's Workshop, held at Indian Lake, the supervisors made demands for instruments to measure success in a trade area. Mr. William Berndt, Consultant, Instructional Materials Development, and Mr. William Dunton, Supervisor, Trade and Industrial Education, Warren, Ohio, were assigned the task of developing the Ohio Machine Trades Achievement Test. They organized a committee, and with the help of University personnel, prepared a test that was administered to 508 machine trades seniors in Ohio. They followed with a revision based upon an item analysis and the test was then ready for continual use.

In the fall of 1960, and while the Ohio Automotive Mechanics Achievement Test was being developed, Mr. W. F. Stover became the first Consultant, Testing and Research to work under the direction of William Berndt. While in this role, Mr. Stover worked with committees in developing the Automotive Mechanics, Basic Electricity, Basic Electronics, Mechanical Drafting, Printing and Sheet Metal Achievement Tests.

Mr. William Berndt left the Instructional Materials Laboratory in the fall of 1963. Mr. W. F. Stover then became the Director of the Instructional Materials Laboratory and Mr. George C. Kosbab became the Consultant, Testing and Research, in 1964.

While in this capacity, Mr. Kosbab developed achievement tests in Cosmetology, Welding, and Auto Body. In 1964, a study of "Factors Contributing to Student Achievement"

and "A Five State Statistical Analysis" was completed. A national grant was received in 1965-66 to do a validity and reliability study of the Printing Achievement Test.

The trade tests have been used in over thirty states and numerous schools. State norms have been developed for Ohio, Kentucky, Indiana, Illinois, West Virginia, Massachusetts, and Utah. National norms for Printing and Sheet Metal have also been published.

In 1969, the tests were administered to 13,661 high school juniors and seniors enrolled in Vocational Trade and Industrial Education programs--a total of 177 schools in eleven states. Our current plans call for developing two new tests in Carpentry and Dental Assisting, plus revising the Auto Mechanics Test. Our anticipated participation for March, 1970, is 20,000 high school juniors and seniors.

Our program is most unique and is an extremely effective tool for program and instructional improvement. The "Achievement Test Program" has the following eight goals:

1. Pto help determine if the objectives of instruction have been achieved.
2. to provide a basis for reviewing the curriculum and improving instruction.
3. to provide motivation for students and teachers. P
4. Pto identify facility and equipment deficiencies.
5. Pto assist in the process of supervision.
6. to help identify strengths and weaknesses of the instructor.
7. Pto help identify strengths and weaknesses of the student.
8. Pto help evaluate reference material.

Ohio's Trade and Industrial Education Achievement Test Program does offer a most effective tool for leaders in vocational education. This is evidenced by its wide

acceptance and adoption by schools and states throughout the nation. Teacher educators and school administrators found the test results to be most beneficial as they provide for program improvement, development and expansion.

HOSPITAL HOUSEKEEPING TRAINING PROGRAM

The Ohio State Hospital Housekeeping Training Program was established in 1959 by the Ohio Hospital Association through its Hospital Housekeeping Committee and the Trade and Industrial Vocational Educational Service of the State Department of Education.

It was found, after a survey, that in 1959 there were about 6,000 housekeeping personnel in 208 hospitals. These people were of every age and educational background. Since it was learned that only a few hospitals had been successful with an in-service training program and since housekeepers who have been properly trained would contribute to safer medical care for the patients, the need for a program to train a large group of employees through planned instruction was desperately needed.

The program was developed for all types and sizes of hospitals, with special attention being given to the needs of the smaller establishments.

Once the financial arrangements were worked out, Miss Alice Wayland of Dayton was selected to be responsible for the training program and was appointed by the Ohio State University as instructor trainer for the Hospital Housekeeping Training Program. The first phase was the preparation of a "Hospital Housekeeping Instructor's Guide" which was written in very simple language and was well illustrated. This was to be used as a textbook for supervisors. The Vocational Trade and Industrial Education Services of the State Department of Education and the Ohio Hospital Association assumed the responsibility of initiating the program.

Under the supervision of Dr. Robert M. Reese, Director of Trade and Industrial Vocational Education Services at the Ohio State University, Miss Wayland started an intensive training course. Promotional letters were dispatched to all

hospitals and many nursing homes explaining the plan. The letters included an application form for workshop participation, for which a twenty-five dollar fee was charged. Supervisors were given practical instructional techniques to use in their local institutions in teaching housekeeping personnel. They were taught how to analyze their individual needs and to organize, or reorganize, their own teaching program. The teacher-trainer followed up each workshop with a personal visit to the participating institutions in order to be of further assistance in working out individual problems. This was again followed up with a visit after approximately six weeks.

The teacher-trainer reported each month on the progress of the program both to the State Supervisor of Trade and Industrial Education and to the Ohio Hospital Association. The workshop courses were organized from proven programs of teaching people to instruct others and were practical, down-to-earth courses. Executive housekeepers, housekeeping floor supervisors, group leaders, etc., benefited from these workshops.

After the second follow-up visit, if satisfactory progress had been made in the application of training, the supervisor was awarded a certificate.

The project was designed to be a basis for a continuing program which is urgently needed for housekeeping personnel in order to provide better over-all care for hospital patients.

THE CENTER FOR RESEARCH AND LEADERSHIP DEVELOPMENT
IN VOCATIONAL AND TECHNICAL EDUCATION

The personnel in agricultural education had long recognized the need for a national center for advanced study and research in agricultural education and took steps in 1959 to formally recommend this to the national government. Committees were appointed to study the matter in detail and to draft a proposal for the establishment of a unified National Center for Advanced Study and Research. After much study and refinement, the proposal was submitted to 22 land grant institutions who had indicated an interest in having such a center located on their campus. After more detailed applications were solicited, five universities applied for the site. The original draft of the proposal submitted by the Ohio State University was compiled by Robert E. Taylor, Ralph E. Bender, William B. Logan, Edward R. Towers, Inez Ray Wells, Ruth T. Lehman, and Robert M. Reese.

The realization of the need for developing off-farm training programs for agricultural industry prompted several conferences to form a national coordinated research and development effort in this area.

As the National Center for Advanced Study and Research in Agricultural Education pursued its goals, it became apparent that key problems were not confined to the field of agricultural education but were common to most vocational service areas as well. From this recognized need evolved the plans to develop a proposal for establishing a National Center for Research and Leadership Development in Vocational and Technical Education. Proposals were submitted to the U. S. Commissioner of Education, which were accepted in 1964, and the

Vocational Education Center was given a \$610,130, 18-month planning grant beginning March 1, 1965.

Organization of The Center

The Center for Vocational and Technical Education is organized as an independent unit on the campus and operates directly under the office of the Vice President for Academic Affairs and Provost of the University. The Center is comprehensive and is multidisciplinary in its approach and interinstitutional in its program.

The Major Objectives of The Center

1. } To provide continuing reappraisal of the role and function of vocational and technical education in our democratic society;
2. } To stimulate and strengthen state, regional and national programs of applied research and development directed toward the solution of pressing problems in vocational and technical education;
3. } To encourage the development of research to improve vocational and technical education in institutions of higher education and other appropriate settings;
4. } To conduct research studies directed toward the development of new knowledge and new applications of existing knowledge in vocational and technical education;
5. } To upgrade vocational education leadership (state supervisors, teacher educators, research specialists, and others) through an advanced study and in-service education program;
6. } To provide a national information retrieval, storage, and dissemination system for vocational and technical education linked with the Educational Resources Information Center located in the U. S. Office of Education;
7. } To provide educational opportunities for individuals contemplating foreign assignments and for leaders from other countries responsible for leadership in vocational and technical education.

The major objectives of The Center have been translated into six major program areas. These program areas are State Leadership, Vocational Curriculum, Vocational Teacher Education, Occupationally Disadvantaged, Vocational Development and Adjustment, and the Change Process in Vocational and Technical Education. Each program area embraces several specific research and development training projects.

Staff

At present, the professional staff of The Center include 26 full-time staff members. These senior staff members are supported by 37 half-time research associates who are pursuing the doctorate in various areas of vocational and technical education, education, and the behavioral sciences.

CHAPTER VI PROFESSIONAL ORGANIZATIONS

Iota Lambda Sigma, as an example of one of vocational education's many professional organizations, was founded at Penn State University in 1930-31, with Dr. Struck as its first president.

The purpose of the fraternity was to (1) promote the cause of vocational education by the recognition of professional training; (2) colation and maintenance of a fraternal bond between actual and prospective technical supervisory and directoral personnel; (3) and for special recognition of high scholarship.

The membership was to include vocational, distributive educators, as well as technical and industrial educators. Also included were industrial arts personnel of good character.

There were four types of membership classifications: (1) active - students and field workers, (2) associate - teacher educators, (3) honorary - visiting faculty and outstanding contributors to vocational education, (4) life.

The major goals of the fraternity are to promote vocational leadership and good fellowship.

The Ohio State University chapter, Alpha Gamma, was chartered on October 29, 1966, through the efforts of Mr. Donald L. Karr, a graduate student and technical and industrial teacher educator. There were 15 charter members, including the following: Calvin Cotrell, Harry Davis, John Furrer, Sig Guckenheimer, Joseph Heinzen, Don Karr, George Kosbab, Aaron Miller, Rocco Morando, Ralph Neal, James Noel, James Provost, Robert Reese, Wilbur Stover, and Ivan Valentine.

Several Ohioans have served as Grand Chapter Presidents: Dennis Price, 1942-43; Joseph Strobel, 1948-49; Aaron Adams, 1957-58; Clyde Stiner, 1962-63.

There are now more than 30 chapters throughout the nation with a total membership of over 3,000.

The formal installation of the chapter was held on March 2, 1967, with Omicron Chapter of Cincinnati and Delta Chapter of Kent officiating. The Grand Chapter Secretary, Dennis Price, presided over the installation.

The first election of officers brought John Furrer to the chair as Chapter President with Sig Guckenheimer, Vice President; Calvin Cotrell, Secretary-Treasurer; and Robert Reese, Historian; the council consisting of Ralph Neal, Harry Davis, Aaron Miller, Wilbur Stover, and George Kosbab.

Succeeding presidents have been Sig Guckenheimer, who served in 1968, Russ Riley in 1969, and William Shipe in 1970.

Currently, the membership rolls include 78 active members.

Examples of other professional or fraternal organizations that vocational educators mainly became affiliated with are as follows:

1. Gamma Sigma Delta - honor society of agriculture organized on campus in 1926.
2. Delta Pi Epsilon - national honor education fraternity. RHO Chapter established on campus in 1946. Dr. William B. Logan from business education was one of its first presidents. Most distributive educators are also affiliated with this fraternity.
3. Phi Upsilon Omicron and Omicron Nu are also national honorary organizations presently functioning on campus for the home economics people.

In addition to the above, we find that many of the vocational education people still retain membership in unions and non-education professional organizations pertinent to their individual fields of endeavor, along with retaining membership in their state and national vocational associations--the Ohio Vocational Association (O.V.A.) and the American Vocational Association (A.V.A.).

CHAPTER VII

CONCLUSION

It is conceivable, from this writer's viewpoint, that you may wonder at the rather halting steps that vocational education has taken, not only here on campus, but across the nation. To fully realize the full portent of this thought, we would have to rationalize and say that first, educational change is considered to be almost non-existent in various parts of the country. Second, our Puritanical ties to the European classics and class distinctions has all but throttled our efforts to bring meaningful education to the masses. Thirdly, there are some people who think that the majority of all high school graduates are going on to college and become professionals. Fourth, some academicians are afraid of letting vocational education share a burden they can no longer support and which is evidenced by the dropout and militant student.

Vocational education has weathered its indistinct beginnings and, at present, all conditions across the nation indicate a green light. Can it now assume its rightful role within the circle of education?

APPENDIX A

The 1909 officers of Ohio's state organization in which Magruder played the major role in its creation are also listed below:

Ohio State Branch of the National Society for the Promotion of Industrial Education

President

WILLIAM T. MAGRUDER, Prof. of Mechanical Engineering, Ohio State University, Columbus.

ROBERT H. JEFFREY, Vice-President, Jeffrey Manufacturing Co., Columbus.

LEWIS L. LEWIS, President, Ohio Federation of Labor, Martins Ferry.

FRED. A. GRIBB, President, The Cincinnati Milling Machine Co., Cincinnati.

WONDERFUL R. WARNER, President, The Warner & Swasey Co., Cleveland.

JACOB A. SHAWAN, Superintendent, Board of Education, Columbus.

Secretary

WALTER D. MCKINNEY, 504 Board of Trade, Columbus.

Vice-Presidents

WM. RINICK DUNLAP, State Commissioner Dairy and Food, Kingston.

EDMUND A. JONES, State Commissioner of Common Schools, Massillon.

J. K. TURNER, President, Manufacturers Information Bureau Co., Cleveland.

Directors

J. W. ZELLER, State Commissioner-elect of Common Schools, Findlay.

G. W. SAYAGR, Secretary, United Mine Workers of Ohio, Columbus.

JOHN MORGAN, State Inspector of Workshops and Factories, Cambridge.

Treasurer

H. E. OWEN, Secretary, Young Men's Christian Ass'n, Columbus.

REV. THEODORE IRVING REESE, Rector, Trinity Protestant Episcopal Church, Columbus.

HERMAN SCHNEIDER, Dean, College of Engineering, University of Cincinnati, Cincinnati.

JOHN I. SHEARER, President of Faculty, The Ohio Mechanics Institute, Cincinnati.

FRANCIS F. PRENTISS, President, The Cleveland Twist Drill Co., Cleveland.

GROROR B. LANDIS, Secretary, Y. M. C. A., Commission on Industrial Ohio, Dayton.

The 1910 national officers of the "Society," in which Magruder also had a personal hand in its formation, are listed below:

National Society for the Promotion of Industrial Education

PRESIDENT
CHAS. R. RICHARDS
VICE-PRESIDENT
J. W. LIEB, JR.

20 WEST 44TH STREET, NEW YORK

TREASURER
FREDERIC B. PRATT
SECRETARY
EDWARD H. REISNER

Board of Managers

JOHN GOLDEN, GEN. PRES. UNITED TEXTILE WORKERS OF AMERICA, FALL RIVER, MASS.

CHAS. S. HOWE, PRES. CASE SCHOOL OF APPLIED SCIENCE, CLEVELAND, O.

MAGNUS W. ALEXANDER, GEN. ELECTRIC COMPANY, WEST LYNN, MASS.

JOHN MITCHELL, 2D VICE-PRES. AMERICAN FEDERATION OF LABOR, NEW YORK.

ALEXANDER C. HUMPHREYS, PRES. STEVENS INSTITUTE, HOBOKEN, N. J.

ARTHUR L. WILLISTON, DIRECTOR DEPT. SCIENCE AND TECHNOLOGY, PRATT INSTITUTE, BROOKLYN, N. Y.

FLORENCE M. MARSHALL, STATE BOARD OF EDUCATION, BOSTON, MASS.

J. W. FERGUSON, ENGINEERING AND BUILDING CONTRACTOR, PATERSON, N. J.

T. W. ROBINSON, VICE-PRES. ILLINOIS STEEL COMPANY, CHICAGO, ILL.

R. FULTON CUTTING, PRES. N. Y. TRADE SCHOOL, NEW YORK.

LESLIE W. MILLER, PRIN. PENN. SCHOOL OF INDUSTRIAL ART, PHILADELPHIA, PA.

MISS JANE ADDAMS, HEAD OF HULL HOUSE, CHICAGO, ILLINOIS.

FRANK A. VANDERLIP, VICE-PRESIDENT NATIONAL CITY BANK, NEW YORK.

F. J. McNULTY, GRAND PRES. INT. BROTHERHOOD OF ELECTRICAL WORKERS, SPRINGFIELD, ILL.

WALTER M. WOOD, GEN. SEC. Y. M. C. A., PHILADELPHIA, PA.

FREDERICK W. SIVYER, PRES. N. W. MALLEABLE IRON CO., MILWAUKEE, WIS.

LOUIS ROULLION, DIRECTOR MECHANICS INSTITUTE, NEW YORK.

JAMES P. HANEY, DIRECTOR OF ART, HIGH SCHOOLS, NEW YORK.

HENRY S. PRITCHETT, PRESIDENT CARNEGIE FOUNDATION, NEW YORK.

V. EVERET MACY, CHAIRMAN BOARD OF TRUSTEES, TEACHERS COLLEGE, NEW YORK.

FREDERICK P. FISH, OF FISH, RICHARDSON, HERRICK & NEAVE, BOSTON, MASS.

FRANK DUFFY, SEC.-TREAS. UNITED BROT'H'D OF CARPENTERS AND JOINERS OF AMERICA, INDIANAPOLIS, IND.

FREDERICK A. HALSEY, EDITOR "AMERICAN MACHINIST," NEW YORK.

MRS. B. D. MUNFORD, PRESIDENT RICHMOND EDUCATION ASSOCIATION, RICHMOND, VA.

G. GUNBY JORDAN, PRESIDENT BOARD OF TRUSTEES, COLUMBUS, GA.

HORACE E. DEEMER, JUSTICE SUPREME COURT, RED OAK, IA.

GEORGE N. CARMAN, DIRECTOR LEWIS INSTITUTE, CHICAGO, ILL.

The personnel make-up at both the state and national Society's administrative level indicated an interest in the vocational movement that crossed all conceivable boundaries of human endeavor.

The following is the State of Ohio's total 1908 membership in the "National Society for the Promotion of Industrial Education": (names, address, company affiliations)

J. G. Schmidlapp, Cincinnati

John Gordon Battelle, c/o Cols Iron & Steel Company, Columbus

Fred A. Geier, Cincinnati Milling Machine Company, Cincinnati

P. D. Amstutz, Pandora

Simon Bacharach, 224 East Seventh Street, Cincinnati

Frank H. Ball, Supervisor Manual Training, Cincinnati

Jas. F. Barker, Principal, Technical High School, Cleveland

H. M. Blair, Y.M.C.A. Ed. Secretary, Columbus

W. W. Boyd, Ohio State University, Columbus

J. W. Carr, Superintendent of Instruction, Dayton

Herman V. Chase, Hamilton

J. E. Cutler, 11322 Hessler Road N.E., Cleveland

William H. Elson, c/o School Headquarters, Cleveland

Edmund A. Jones, 327 Broad Street, Columbus

L. H. Kittridge, c/o Peerless Motor Car Company, Cleveland

George B. Landis, 511 Schultz Building, Columbus

Platt R. Lawton, Y.M.C.A., Dayton

Professor William T. Magruder, Ohio State University, Columbus

Charles Martin, Jewish Orphan Asylum, Cleveland

W. D. McKinney, Room 4, Board of Trade, Columbus

S. F. MacDonald, Ashtabula

M. J. Riggs, c/o The American Bridge Company, Toledo

W. E. Roberts, Board of Education, Rockwell Building, Cleveland

Herman Schneider, University of Cincinnati, Cincinnati

John L. Shearer, Ohio Mechanics Institute, Cincinnati

Edwin L. Shuey, 204 Central Avenue, Dayton

Walter S. Tobey, Hamilton

J. K. Turner, President, The Manufacturers Information Bureau Company, Cleveland

William Mayo Venable, 3649 Vineyard Place, Cincinnati

W. R. Warner, Warner and Swasey Company, Cleveland

Henry Wick, Youngstown

L. A. Woodward, Poland

List of members of the National Society in Columbus, Ohio:

John Gordon Battelle, c/o Iron and Steel Company, Columbus, Ohio
(sustaining member)

H. M. Blair, Y.M.C.A., Educational Secretary, Columbus, Ohio

W. W. Boyd, Ohio State University, Columbus, Ohio

Edmund A. Jones, 327 East Broad Street, Columbus, Ohio

George B. Landis, 511 Schultz Building, Columbus, Ohio

William T. Magruder, Ohio State University, Columbus, Ohio

W. D. McKinney, Room 4-5-6 Board of Trade, Columbus, Ohio

295-53

ADVANCE PROGRAM
JOINT CONVENTION
OF THE
National Society for
Vocational Education
AND THE
Vocational Education Association
of the Middle West

CHICAGO, ILL.
February 19, 20, 21, 1920

Main Topics

VOCATIONAL EDUCATION
AND THE PRESENT
ECONOMIC UNREST
VOCATIONAL EDUCATION
IN CONJUNCTION WITH
MILITARY SERVICE
FULL AND PART-TIME
VOCATIONAL EDUCATION
IN SECONDARY SCHOOLS
FUTURE PROBLEMS OF
STATE AND NATIONAL
ADMINISTRATION OF
VOCATIONAL EDUCATION

Convention Headquarters—Hotel La Salle
La Salle and Madison Streets
Chicago, Ill.

NATIONAL HEADQUARTERS
140 West 42d Street
New York City

10/23/13.

Mr. T. Vernetta Morse,
2827 Michigan Ave.,
Chicago, Ill.,

Dear Sir:-

In reply to your letter of October 17, I beg to say that it will not be practicable for our men to go to the convention in Chicago. Four of them are to be in Washington the week previous to attend the National Association of State Universities, and the meeting of the Agricultural Colleges.

With appreciation,

Yours very truly,

W. O. T.

02

Thirteenth Annual Vocational Art and Industrial Federation 2

Hotel Sherman

November 20, 21 and 22, 1913

Under Auspices of the Artercraft Institute, Agricultural, Manufactory,
Domestic and Recreative Educational Interests

2827 Michigan Avenue

Chicago, _____ 191
October 17 1913

EXECUTIVE COMMITTEE

MRS. T. VERNETTE MORSE
DR. FRANCES DICKINSON
MRS. ROBERT L. MCCALL
MISS FRANCES THOMPSON
MRS. FREEMAN E. BROWN
MRS. FREDERICK A. DOW
MRS. CHARLES D. BETTS
MRS. MAURICE O'CONNOR
MRS. CHAS. ZIMMERMAN
MRS. FRANK B. ORR
MISS FLORENCE KING
MRS. JAMES HARRIS
MRS. CHAS. H. THOMPSON
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MRS. BELLE M. STEERE
MRS. ALICE DOW ALLINSON
MRS. JOHN C. BLEY
MISS HARRIET VITUM
MRS. ORVILLE T. BRIGHT
MRS. GEORGE PACKARD
MISS HELEN BUCHANNAN
MRS. JOHN C. GOODWIN
FRANK H. ARMSTRONG
JOHN D. SHOOP
A. W. EILFUSS
E. H. BENNETT
W. L. ABBOTT
O. C. SIMONDS
C. G. MORSE
H. E. YOUNG
CLARENCE SHAMEL
JUDGE EDMUND W. BURKE
E. B. DEGROOT
F. WAGNER
SPENCER R. SMITH
WILLIAM J. BARTHOLF
PROF. FRANK M. LEAVITT
PROF. PH. B. WOODWORTH
PROF. P. G. HOLDEN
FRED L. HATCH
THEODORE GROSS
CHARLES A. SARTAIN
V. K. BROWN
J. R. RICHARDS

President State University

Dear Sir

In arranging plans for the above meetings we are desirous of bringing together as many of the diversified interests in vocational education as possible with the hope that such a conference may assist somewhat in solving this great educational problem.

Knowing that the University is especially interested in all advance movements along those lines we earnestly request that you appoint one or more delegates to attend these meetings and assist in discussing this all important question from your point of view.

Awaiting your reply with any suggestions that you may have to offer I remain

Very truly yours

T. Vernetto Morse
Chairman Ex. Committee

FINANCE COMMITTEE

WILLIAM B. AUSTIN
ROBERT W. MUNT
ADOLPH W.

10-15
2/15

THE VOCATIONAL EDUCATION ASSOCIATION OF THE MIDDLE WEST

83

JAN 24 1921
PRESIDENT'S OFFICE

President—EDWIN A. LEE
Indiana University, Bloomington, Ind.
Secretary—LEONARD W. WAHLSTROM
1711 Estes Avenue, Chicago
Treasurer—JAMES MCKINNEY
American Correspondence Schools, Chicago



Vice-President—WILLIAM BACHRACH
Board of Education, 650 S. Clark St., Chicago
Vice-President—JOHN N. GREER
Supervisor of Vocational Ed., Minneapolis, Minn.
Vice-President—LORRAINE E. WOOSTER
State Supt. of Public Instruction, Topeka, Kan.

January 21, 1921

Wm. Oxley Thompson, President
Ohio State University
Columbus, Ohio.

My dear Mr. Thompson:

The Vocational Education Association of the Middle West is to have its annual convention February 10, 11, and 12, in Minneapolis. These meetings have always been extremely worthwhile to all teachers and especially to those interested in the problems of vocational education. In the past the attendance has been on the personal rather than the institutional basis. This year the executive committee is very desirous of securing accredited delegates from such institutions as do teacher training work in vocational education.

To accomplish this the executive committee asks that each institution, if possible, send a delegate with expenses paid, whose duty shall be to carry back to the institution the results of the convention. I hope that it may be possible for your institution to send such a delegate as a legal and accredited representative with travel and living expenses provided by your institution.

The railroads will grant a reduced rate of one and a third fare on the certificate plan, and the hotels will also grant special rates to the members of the association who attend.

The chairman of the Home Economics committee is Miss Alice Loomis, State Director of Vocational Education in Nebraska. The other members are Professor Ethelwyn Miller, State Agricultural College, Ames, Iowa; Professor Edna White, Head of the Merrill-Palmer School, Detroit, Mich.; Miss Agnes Tilson, of Perdue University; and Miss Leila Gerry, of the Girls' Vocational High School at Minneapolis, which means that the Home Economics Section will be well organized and the discussion profitable. The exhibits at the Hotel Curtis are to be a very valuable feature of the convention. I do not need to go into detail as to the value of this association for vocational education in the Middle West, as you are as familiar with its work as I am, but I do wish to urge the appointment of a Home Economics delegate from your institution to the Minneapolis meeting.

Yours very truly,

A. L. MARLATT,
Member-Committee on Delegates
Home Economics Section

The Vocational Education Association

OF THE MIDDLE WEST

SEVENTH ANNUAL MEETING
MINNEAPOLIS, FEBRUARY 10, 11, 12, 1921

Organized October, 1914
Incorporated June, 1918

¶ The objects of this Association shall be to study problems relating to vocational education and to bring the results of this study to public attention for the purpose of fostering types of education that will meet the vocational needs of youth and the reasonable demands of industry for efficient workers, while preserving those elements of general education necessary for good citizenship in a democracy.—Extract from the Constitution of the Association.

Why This Association Merits Your Support.
Record of Its Work

The Past

THE Annual meetings of this association have constituted an open forum for the exchange of ideas which have done much to further the cause of vocational education in the Middle West. The association has invited discussion on debatable questions, speakers of opposing views often appearing on the same program, believing that free and open dis-

Middle West Bulletin

ISSUED BY THE VOCATIONAL EDUCATION ASSOCIATION
OF THE MIDDLE WEST

Seventh Year

January, 1921

No. 3

SEVENTH ANNUAL CONVENTION—MINNEAPOLIS, MINN., FEBRUARY 10, 11 and 12, 1921

THE Program Committee announces the following preliminary program. This is necessarily incomplete at this time. Negotiations are under way for additional speakers, many of whom are of national reputation in the United States and Canada. The program gives promise of being one of the best which has ever been presented on the subject of vocational education. The many committee reports will represent the results of the most advanced study by specialists and will be an important feature of the meeting. The general sessions will be addressed by the most stimulating speakers obtainable, and the entire meeting will be filled with that democratic spirit which has always characterized our meetings. If you have attended previous meetings your year's program will be incomplete without this stimulation. If this is your first time with us you will be sure to come again.

Thursday Morning, February 10th

The morning will be devoted to sectional meetings under the direction of the chairmen of the various committees.

Industrial Education—F. M. Appleman, Assistant Director of Vocational Education, Indiana, Chairman.

Topic: "Standards in Part Time Education," a report of a special committee studying this subject. The following will take part in the discussion:

Geo. F. Buxton, Indianapolis.
R. L. Cooley, Milwaukee.
D. J. MacDonald, Cincinnati.
Arthur S. Allen.

APPENDIX B

The following are highlights of Magruder's speech presented at the Thirtieth Meeting of the Central Ohio Schoolmasters Club, December 1, 1909, Columbus, Ohio.

...In order that we may have the same starting point in the discussion which I trust this subject will arouse, it may be well to define some of the terms which will be used. A vocational school is one in which the youth, either boy or girl, receives that education and the necessary accompanying training and skill which will be required in one of the vocations, callings or businesses of life. Hence, the present grammar and high schools, colleges and universities, and professional schools are all vocational schools for that citizen whose vocation is in one of the learned professions or in pure culture. Industrial education may be defined as the education that is needed and required for productive physical labor. Trade education is the education required by a person who proposes to practice or follow a trade ... Under this title we recognize the mechanical, machine and building trades: the mercantile and commercial trades: the household trades, for it must be remembered that industrial education is equally applicable and desirable for girls as for boys: and, lastly, and especially since the introduction of machinery, we have the agricultural trades.

Since the decay of the old and rigorous apprenticeship system, nothing has come up to take its place until the recent demand for industrial education. In thinking of education, we naturally look to the public schools: there we find nothing that tends towards trade or industrial education. On the contrary, we find that our schools have been educating the boys and girls away from shop and from household work. As a result, as a nation, we have become topheavy educationally. We have educated many persons to become captains of industry, and even some majors, and possibly a few colonels, and an innumerable host of privates and rookies, and but few corporals, sergeants and lieutenants, except those who have forced their way up against professional etiquette and trade customs. We have failed to put "the whole boy to school." Statistics of the Bureau of Education show that of the 30,000,000 persons of school age, from five to twenty-years of age, only about one-half get beyond the fifth grade of the grammar school, only one in three finishes the grammar school, and only from one in ten to one in twenty is graduated from the high school. As the schools have not been giving the boys and girls the kind of an education that the majority of them, and their parents, think that they need for use in the ordinary occupations of life, the demand has been made upon the schools for the desired kinds of education. This has been met by the introduction of manual training. Now manual training is a most helpful addition to the curriculum of the ordinary public school; but manual training uses the motor faculties and is for culture and not for skill.

Manual training is for everyone who has motor faculties, whereas industrial education is for the wage-earner. Manual training is for the hand and eye, for the manual being and for the physical boy and girl. "It gives the boy a broader moral and intellectual equipment with some manual dexterity and mental conception of shop processes, hence is helpful in the training of the wage-earner." The difference between manual training and industrial education can best be illustrated by an example. Penmanship and drawing are fair samples of manual training work. Bookkeeping and engraving are the corresponding vocations. No competent educator would think for a moment of recommending a boy as a bookkeeper, simply because he was a good penman, nor as an engraver because he could make drawings worthy of exhibition at commencement.

...The term industrial education, as President Elliott said two years ago, means trade education. However, Professor James E. Russell, Dean of Teachers College of Columbia University, in an article on "The School and Industrial Life," in the Educational Review for December, differentiates trade and vocational education from industrial education, and pleads for a three-fold division of the work of the first six grades into humanistic, scientific and industrial. He advocates industrial education in the grades for all children, and states that his opinion is, "that industrial education is essential to the social and political well-being of a democracy. It is the privilege of all rather than the duty of a few to be informed on matters affecting the social welfare of the body politic; that the public schools should and must teach that which all should know; that joined with the humanistic and scientific subjects a study of the industries rounds out the education of the citizens and equips him to begin his vocational training; and, that it assures him that kind of equality which is the opportunity of every American." By "Industrial education" he seems to mean what heretofore has been known as industrial technology, or a knowledge of the processes used in the industries. He advocates it not as a special study, but as an intimate part of arithmetic, nature study, and geography.

For the purposes of this discussion I would prefer to limit industrial education and make it synonymous with trade education and vocational education.

...Analogy as well as experience proves that few private individuals and still fewer corporations will continuously play the role of philanthropist in matters concerning which they have only a financial interest. It therefore seems eminently proper that this whole subject of industrial education should be referred to and reserved for the public school authorities. Three suggestions have been made and two of them put into practice for securing this result. The first is that vocational education should be compulsory for all persons who are under sixteen or seventeen years of age, (1) who have not learned a trade or mastered a skilled occupation, or (2) who are

not attending a classical high school, a commercial high school, a manual training high school, or a grammar school, or the equivalent, or (3) who have not at the beginning of the regular scholastic school secured a regular, permanent, lawful, and gainful occupation and are engaged in the exercise thereof, or (4) who are not possessors of some grave and serious mental, physical, or moral defect, to be decided by the principal, or by the superintendent of schools, or by the board of education of the home district.

...Let the child who has not the mental or the financial ability, and who therefore cannot hope to obtain a classical or manual training high school education, and who must yet earn a living, be required by the state, by law, to attend a vocational school part of the time, and to attend his trade, or vocation, part of the time each day until he is sixteen, or seventeen, years of age, or until he has finished learning his trade or vocation. The problem for the support of the child will be immediately solved, and the question of where to get more employees will be answered.

The second suggestion is that boards of education shall organize and maintain industrial, trade, and vocational schools. To permit this to be legally done Revised Statute (4020-18) of the State of Ohio was amended by the legislature last winter so as to permit boards of education to establish and maintain agricultural, industrial, vocational, and trade schools and pay the expenses of establishing and maintaining said schools from the public school funds as other school expenses are paid.

...The old academic idea is still retained, as may be seen in the statement that preference will be given to the boy who does not have a cultural bent. I dislike to see a statement of this kind made at the inauguration of what, in my judgment is, and I trust may prove to be, a successful movement in Columbus. I am led to ask, why deny the cultural value of laboratory work; why emphasize a negative characteristic; why damn a boy with faint praise by telling him that he is "not a bad boy"; why not give "preference to the boys who have a mechanical bent"? What would you men think of a law school which put itself on record as "giving preference to those young men who did not have a theological bent"? How long will it take the members of our boards of education to overcome their training in scholasticism, and their mediaevalism?

Again, why by this statement deny the cultural value of scientific work, of laboratory work, of all work that is not solely mental, or which pertains to more than a single sense?

Why magnify the use of only one faculty, and divide the bents of our children into those which are only mental and those which are both mental and manual? Why should the brain stimulus to the eye be labelled cultural,

while the brain stimulus to the ear, the hand, the mouth must be termed non-cultural? I must confess that I am not sufficiently versed in pedagogy to answer these questions, nor yet in the psychology of prejudices. On the other hand, I think it only fair to state that doubtless the persons who prepared and approved the rules of the board of education for admission to the Columbus Trades School had no prejudices and only the kindest of feelings towards the Trades School project. It is only a sample of the stereotyped language of the academic mind.

...I content most earnestly for the inclusion in the curriculum of the history of our country and its government, and the study of so much of the subjects of civics and business customs as will make the tradesman an intelligent citizen, possessed of practical knowledge of business methods. To this end, the teachers of the trade subjects must be practical experts in their trade, skilled in the art and versed in the knowledge pertaining to the trade and capable of imparting that knowledge. This means that they must be not only mechanics of the highest grade, but have studied, either practically or theoretically, some psychology and some pedagogy the better to enable them to impart their knowledge. Hence it should create no surprise if competent teachers for such work cannot be obtained for less than the salary paid an equally competent high school teacher.

...The third system of trade instruction which has been introduced is known as the Fitchburg plan and is the adaptation of the Cincinnati plan of cooperative engineering instruction to the training of artisans. Quoting from a paper by Mr. M. A. Coolidge of the Fitchburg Machine Works, "the Fitchburg plan of cooperative education for mechanics is an arrangement between the high school and the manufacturers for a four-years course of apprenticeships; the first year all school work, the next three years school and shop work, one week in school and one week in the shop. The boys work in pairs - as an example, if a shop takes eight apprentices it has four working at all times. The boy going to work next week goes to the shops on Saturday before closing time, for an hour or half hour according to the nature of the work, and watches the job his alternate is on, and then is prepared to take up on Monday morning the operations he has previously made himself familiar with, and with such additional information or instruction as he feels he may need from his foreman.

Manual training schools have also failed in their effort to do practical work along the line of the Fitchburg plan primarily, I believe, for two reasons: They have failed to put the shop part on an equality with the academic and were not able to work under real commercial conditions. Under the Fitchburg plan the boys are paid for their time in the shops 10 cents per hour the first year, 11 cents the second year and 12½ cents the third year. The young men taking this course have just the same standing

in the high school on the football team, athletics, lectures, and all advantages as the other students and put it all over the other boys by always having some real money to do as they wish with, and enjoying that feeling of independence, human in us all.

...Let us therefore deal justly by both our girls and boys, and when giving them trade education, give them the genuine article and one which is neither a fad nor a fancy.

APPENDIX C

Federal Legislation for Vocational Education (Chronological Order)

<u>Year</u>	<u>Title</u>	<u>Brief Description</u>
1917	Smith-Hughes Act	First vocational education act for high schools. Federal money for training in agriculture, home economics, trades and industry and teacher training.
1929	George-Reed Act	Expand vocational education in agriculture and home economics.
1934	George-Ellzey Act	Provided for further development of vocational education in the states and territories.
1935	National Youth Administration	Vocational training and employment.
1936	Fitzgerald Act	Promotion of apprenticeship-related instruction by national agreement.
1936	George-Deen Act	Added distributive occupations to vocational education authorizations.
1940	War Production Training	Training of defense workers. Discontinued in 1945.
1943	National Planning Resources Board	Recommends doubling of expenditures for technical schools and increasing adult education and training by 5 and one-half times.
1944	Serviceman's Readjustment Act	GI Bill - vocational education opportunities for veterans.
1946	George-Barden Act	Superseded George-Deen Act and added funds for guidance, teacher training and research.
1956	Health Amendments Act	Practical nurse vocational education training and health occupations.
1958	National Defense Education Act (NDEA)	Training of highly skilled technicians.
1962	Manpower Development and Training Act (MDTA)	Training or retraining of unemployed to fill demand occupations.

<u>Year</u>	<u>Title</u>	<u>Brief Description</u>
1963	Higher Education Facilities Act	\$230 million, 22% earmarked for technical institutes and community colleges.
1963	Vocational Education Act	Sweeping provisions include: <ol style="list-style-type: none"> 1. Maintain, extend, and improve vocational education. 2. Develop new vocational education program. 3. Provide part-time employment while participating in vocational training. 4. Expand training opportunities for all ages in all communities.
1965	Elementary and Secondary Education Act	Consists of 5 separate titles - allows for grants to: <p>Title I - Educational deprived children Title II - School library resources Title III - Supplementary centers and services Title IV - Educational research training, construction, research Title V - Strengthen state departments</p>
1967	National Vocational Student Loan Insurance Act	Provides insured loans for students enrolled in approved vocational education programs.
1968	Vocational Education Amendments	Title I - Amendments to the Vocational Education Act of 1963 <p>A - General provisions and authorizations B - State grant programs C - Research and training D - Exemplary programs E - Residential vocational schools F - Consumer and homemaking education G - Cooperative vocational education H - Work-Study programs I - Curriculum development</p> <p>Title II - Training of vocational education personnel</p>

YearTitleBrief Description

Title III - Miscellaneous provisions

Total Authorizations (includes both regular and special programs)

Fiscal Year 1969	\$542,100,000
1970	857,650,000
1971	870,150,000
1972	<u>910,150,000</u>
Total (1969-72)	\$3,180,050,000

Plus such sums "as may be necessary" for certain administrative costs and dissemination activities. (Authorization for regular vocational education programs is made permanent at the level of \$565,000,000 for Fiscal Year 1973 and each year thereafter.)

Adult Education Act of 1966

Public Law 89-750

PROGRAM: Title III--Adult Education

PURPOSE: To initiate programs of instruction for individuals who have attained age 18 and whose inability to read and write the English language constitutes a substantial impairment of their ability to get or retain employment.

WHO MAY APPLY: Local educational agencies through state educational agencies.

APPLICATION PROCESS: Local public and private (nonprofit) agencies make application through the state agency for approval, allocations made as per approved state plan.

MAJOR PROVISIONS: See Digest.

FUNDING: Grants 90% for FY 1968
Basic allotment to each state plus formula based on the number of individuals who have attained age 18 and have not completed more than 5 grades of school or equivalent level of education.

	<u>Authorization</u>	<u>Appropriation</u>
FY 1968	\$60,000,000	

CONTACT AGENCIES: Chief State School Officer

U. S. Office of Education
 Division of Adult Education
 Bureau of Adult and Vocational Education
 Program Officer - Derek Nunney
 Approval Authority - Commissioner of Education

A Digest of
Adult Education Act of 1966

Public Law 89-750

This Act initiates programs of instruction for individuals who have attained age eighteen and whose ability to read and write the English language constitutes a substantial impairment of their ability to get or retain employment commensurate with their real ability, so as to eliminate such inability, to raise the level of education of such individuals with a view of making them less likely to become dependent on others, improving their ability to benefit from occupational training and otherwise increasing their opportunities for more productive and profitable employment.

Not less than 10% nor more than 20% of total allocation shall be for special experimental projects and teacher training. Institutes can be funded directly or by contract to make grants to colleges, universities, state or local educational agencies, public or private (profit or nonprofit) agencies and organizations. The teachers are paid stipends of \$75 per week plus \$15 per week for each dependent.

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Mr. Wayland F. Hamilton - Rural Electrification Training
Dr. Donald Karr - Teacher Education - Professional Organizations
Mr. George Kosbab - Testing Services
Miss Joanne Littell - T & I Secretary
Dr. William B. Logan - Distributive Education
Mr. Rocco Morando - Emergency and Rescue Squad Training
Dr. Bernard Nye - Distributive Education
Mr. James Provost - Bus Transportation - Driver Education
Dr. Robert Reese - Teacher Education - Professional Organizations
Mr. Wilbur Stover - Instructional Materials Laboratory
Mr. Robert Takacs - Law Enforcement Training
Dr. Robert Taylor - National Research Center
Mr. William Volmar - O.S.U. Archivist
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Mr. Robert Whisman - Bus Transportation - Driver Education
Dr. Willard H. Wolf - Agriculture

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