



Coming of Age, 1926-1976

The major goal of federal aid, toward which the proponents of vocational education worked with tireless energy for 11 years, was reached with the passage of the Smith-Hughes Act. This was a tremendous achievement from many points of view. A national information service (the Federal Board for Vocational Education) provided guidelines in abundance covering a wide range of topics during the early years of its existence. A news bulletin, The Vocational Summary, was issued monthly together with a host of special bulletins. The Board administered the vocational education act at the federal level—an act that appropriated money in perpetuity. The vocational education act was a contract between the

states and the federal government and through the Federal Board, the American people reported to their President and Congress. The nation was ready for vocational education.

The first efforts in vocational education in 1917-18 were largely devoted to the needs of the nation in World War I. Ashamedly we were caught by World War I with our skills down, and vocational education came to the rescue. Thousands of civilian workers in the war effort learned their skills in vocational education classes—skills they put to good use in the post-war economy.

“The Smith-Hughes Act provided for annual appropriations starting with \$1,655,586 the first year and increasing annually until the maximum of \$7,161,726 was reached in 1926. There was a steady annual increase in enrollment

during this period of increasing appropriations. [By 1926 enrollment had reached almost 900,000 persons.]

“After the federal appropriations reached the maximum in 1926, enrollments in home economics varied, with small decreases and increases alternating for a number of years. The growth of the trade and industrial program continued, but at a reduced rate, while the agricultural enrollment showed no change in the upward trend. (Layton S. Hawkins, Charles A. Prosser, and John C. Wright. Development of Vocational Education, American Technical Society, Chicago, 1951.)

Coming of Age 1926-1976



George-Reed and George-Ellzey Acts

"In 1929 a supplementary law—the George-Reed Act—was passed authorizing additional and increasing annual appropriations for five years for education in agriculture and home economics. [The maximum authorization was \$2,500,000.] No additional funds were authorized for trades and industry. The effects of the increased funds were, to some extent, modified by the depression, beginning in 1929. The effects of the depression on trade and industrial education was quite marked with annual decreases for five years. For two of these years—1933 and 1934—these decreases were greater than the increases in agriculture and home economics. [As a result the total enrollment in vocational education shows a drop for these two years.]

"In agriculture and in home economics the enrollments continued to increase during the years 1930 to 1934. During the last two of these years the annual increases authorized by the George-Reed Act were not appropriated, and the amounts actually provided were less than for 1932.

"In 1934 a second supplementary law—the George-Ellzey Act—was passed to replace the George-Reed Act. It authorized annual appropriations [of \$3,000,000] for three years beginning with 1935 for vocational education in the three fields for which the Smith-Hughes Act made provisions. The effects of this increased aid were at once apparent, for all enrollments again showed an upward trend." (Hawkins, Prosser, and Wright)

The George-Deen Act of 1936

Early in 1935 plans were in process to prepare an entirely new vocational education act without term limitations and with increased appropriations more nearly corresponding to the needs of the expanding vocational education program. The act was passed by the Seventy-Fourth Congress, signed by the President on June 8, 1936, and effective upon the expiration of the George-Ellzey Act on July 1, 1937.

It authorized appropriations of \$4,000,000 to each of the fields of agriculture, home economics, and trades and industries, and \$1,000,000 to the new field of distributive education. Teacher training received an additional \$1,200,000, and the U.S. Office of Education an additional

\$350,000. The authorizations totaled \$14,550,000.

Unlike the Smith-Hughes Act, which provided a grant in perpetuity, the George-Deen Act merely authorized the Congress to appropriate an amount of money not to exceed the total authorization of the act. The amount actually to be appropriated was determined anew for each year's budget.

1942 Marks Silver Anniversary

By 1942 the total enrollment in all vocational education programs exceeded 2,600,000 persons. They were enrolled in home economics (35%), the trades and industries (30%), agriculture (23%), and distributive education (12%). They received their instruction in all-day, evening, and part-time schools and classes, and were either preparing to enter employment or pursuing courses supplementary to employment. Except for the depression years the total enrollment continued to climb, although at varying rates of growth.

Variations in enrollment and expenditures for vocational education were influenced by supplementary vocational education legislation, child labor and compulsory school attendance legislation, national defense activities, conditions due to the depression, and the policy of labor and management in opposition to child labor.

Also by 1942, federal funding authorizations were contained in two acts—Smith-Hughes, \$7,200,000; and George-Deen, \$14,200,000. About 95.3 percent of federal funds available were expended in fiscal year 1942.

In order to describe vocational education at the silver anniversary of the Smith-Hughes Act, reference is made to the Forty-Second Yearbook, *Vocational Education*, Part I, of the National Society for the Study of Education. In this volume more than 30 educational leaders speak out about vocational education and its relationships to a variety of current topics. Note the similarity and differences of points of view among these educational leaders when compared with contemporary views three decades later.

Franklin J. Keller,* Yearbook editor, and principal of Metropolitan

*Dr. Franklin J. Keller, 88, a pioneer in vocational education, died April 19 in Ohio. Besides his Yearbook, Keller authored six books on education topics. He was involved in war training, as well as public school vocational education and education in the performing arts.

Vocational High School, New York City, wrote about vocational education for American life:

"The most respected—and respectable—single word in the American language is 'work' Vocational education is learning how to work. For the educator, it is teaching others how to work. In the rise from savagery to civilization, people have learned to work in many different ways. At first they must have learned by accident, the Lamb-roast-pig method. Down through the ages, the the most popular method has been trial and error, mostly error—the automechanic-learning-on-your-car. Slaves learned under the whiplash.

"Duller folk often learn best when they are 'yelled at.' Average people learn by being told how and by being shown. Bright boys and girls need only watch the expert and then imitate. They learn by observation.

"It is obvious that, through these casual, fortuitous methods, all adult persons who earn a living must have received some kind of vocational education and always will. Planned, organized vocational education came late in the history of work. Apprenticeship is one of the early forms, the public vocational school one of the latest."

Keller made great contributions to the philosophy, theory, and practice of vocational education. Outstanding among his contributions are those related to the *primacy of the person* concept in vocational education.

Grayson N. Kefauver, dean, School of Education, Stanford University wrote "The urgent demand for technically trained workers for the war industries has made everyone conscious of the importance of vocational education. New schools have been developed and the programs of existing schools have been expanded to meet this demand. Youth surveys have shown that many young people who are unable to secure employment have not been trained for useful work. Hence, there has come the demand that the schools give more attention to vocational education and vocational guidance. We have never before witnessed as great an effort to strengthen and to extend the program of vocational education in the schools of this country.

"Persons interested in seeing the development of a unified educational program should be encouraged by developments in recent years. There has been a growing tolerance of the dif-

ferent educational groups and there is a recognized effort on the part of specialists in vocational and general education to establish effective cooperative relationships. In many situations these efforts have met with satisfying success. In the period ahead it is not unlikely that we shall not be as much concerned as we are today about the question as to whether or not a particular feature of the educational program is vocational or general. The more important questions will be: Is it useful? Does it contribute to the development of the individual? Does it enable him to serve social needs more adequately?"

Edwin A. Lee, first president of AVA, and dean, School of Education, University of California, Los Angeles, recognized the truth of Kefauver's point of view. Lee went on to say that "education is a coin, one face of which is vocational, the other nonvocational; for some the latter may be avocational, for others intellectual self-improvement, for still others purely leisure-time activity. Without both faces there is no coin, no legal tender, no true education. Even more accurately it is true that what for one man may be liberal education is for another indubitably vocational education. Indeed, it may be one or the other for the same man or woman, depending on time, place, and circumstances."

Lee also pointed out that the philosophy of vocational education could be stated in terms of certain assumptions regarding the place and nature of education for work in the social and economic order. As Lee stated them, these assumptions are:

"(1) The term 'work' includes all gainful occupations. Applied to a community, the work done by individuals means all the various kinds of work carried on by all the men and women who labor in that community.

"(2) The public schools should provide occupational orientation and vocational guidance for all who come under the purview of these schools. Implicit in this second assumption, too, is the inclusiveness of the vocational guidance function. It is for *all*—for children in the elementary schools, youth in secondary schools, men and women in adult classes; for those of limited capacity as well as for those gifted by nature and environment; for the crippled, the hard-of-hearing, the partially or wholly blind, as well as those who apparently are normal in every way.

"(3) There are many occupations for which the schools can provide practically complete occupational training; there are many others for which it is neither expedient nor possible to offer even partial training; and there is an almost illimitable area in which schools and industry or business can cooperate with extraordinary effectiveness.

"(4) Education for work includes not only orientation and training but induction into jobs. Getting a job, getting started in that job, growing and progressing in it are all a part of the process of induction. Any program of education for work which underemphasizes the induction phase is inadequate at a vulnerable point.

"(5) An adequate program of education for work requires cooperation with a wide variety of nonschool agencies and groups. Some of these are in the community immediately served by the schools. They include employers and employees both singly and in groups; they include parents and youth itself; and they include such organizations as public and private employment agencies, chambers of commerce, service clubs, and religious and charitable organizations. The list is almost as comprehensive as the gamut of such organizations represented in the community.

"(6) One final assumption [research] has been implied in all that has been written here. Any realistic program of education for work must be based on a continuing analysis of the social and economic needs and trends of the total area served by the schools. The geographical limits of the area to be served, the scope of the program of vocational education in terms of numbers involved, buildings to be constructed, possibilities of placement, as well as the determination of budget, personnel, public relations, and numerous other aspects of a total attack upon the problem must rest on the solid, unassailable foundations of research."

Stephen F. Voorhees, chairman, Advisory Board on Industrial Education, City of New York, writing about community relationships in vocational education, observed: "The great weakness of academic education has been its detachment from life. The growing strength of general education is its search for life. The soundness of vocational education is its foundation upon life. Everybody must work, so everybody must learn to work. Everybody, young in school but old on the

job, becomes the parent, the employer, the farmer, the mechanic, the mayor, the Rotary Club member, all pursuing their vocations. They have had experience, they know what life is, they know what it takes to become a productive member of the community.

"If the schools are to teach their children to become the next generation of productive members, they must keep a sharp eye and a receptive ear for this community of work. Vocational education has a good record for close contact with reality."

Robert Hoppock, professor of education, New York University, and Nathan Luloff, head counselor, Metropolitan Vocational High School, New York City, defined vocational guidance as follows:

"Vocational guidance is the process of assisting the individual to choose an occupation, prepare for it, enter upon it, and progress in it. It is concerned primarily with helping individuals make decisions and choices involved in planning a future and building a career—decisions and choices necessary in effecting satisfactory vocational adjustment."

Hoppock and Luloff presented an extensive review of vocational guidance, then stated in conclusion: "There is need for one word of caution. Enthusiastic propagandists for guidance sometimes have made extravagant claims for it. In contrast, the experienced guidance worker of today will state with the utmost candor that no one knows enough to tell anyone else what occupation he should follow and that no guidance program is likely to bring in the millennium anticipated by some of his predecessors. But careful, patient work over several years, with constant revision in the light of partial success and partial failure, should bring to any school improvement in the caliber of entering students and a curriculum better adapted to those admitted; should result in appropriate provision in one or another school for those who do not meet the exacting standards of the highest level of training; should achieve a reduction in the number of dropouts and transfers, a better adjustment for all pupils while in school, and a better placement service; and should insure better work on the job for which the school offers training.

"The reader will please note that all of these desirable results are stated in terms of improvement, not perfection. Moderate improvement is about all

that one may reasonably expect from any change in educational procedure."

Sidney Mattis, librarian, Metropolitan Vocational High School, New York City, discussed the library in the vocational school:

"The long-held concept that the vocational school which teaches manual skills holds little room for book learning, and therefore for libraries, is slowly, but no less positively, going by the board. The advent of professional librarians in vocational schools, the recruiting of better educated shop teachers, and the influence of the academic subjects have been responsible in part for this change in concept. The fact that vocational libraries are growing up and making their usefulness known is added reason for this.

"To be sure, the vocational-school library is not developing in precisely the same pattern as the well-established general-school library, for, consciously or unconsciously, the fundamental focus of the former must be on training the student for vocational competence, as well as for good citizenship, worthy use of leisure, and other competencies."

Gilbert G. Weaver, supervisor of industrial teacher training, New York State Education Department, presented the case for selecting and training teachers and supervisors in vocational education:

"The success of any educational program is predicated on the available number of properly qualified and effectively trained teachers. This concept is especially applicable to the field of vocational education where skill and technical knowledge are required in addition to professional education. No school can rise above the level of ability and professional outlook of the teaching staff and the type of leadership provided by the principal, supervisor, or director. The task of vocational teacher training has many ramifications, and, furthermore, is not limited to the offering of courses on a university campus or of extension courses under college supervision to all applicants who solicit registration.

"The vocational teacher has a great influence on students and, therefore, he or she has a big responsibility in the development of character in general and of proper social attitudes in particular. This means that the vocational teachers should have a good basic training in essential subject mat-

ter and techniques necessary to meet the obligations of their positions. It is highly improbable that short, composite, intensive training courses will provide adequate professional preparation."

Paul R. Mort, professor of education, Teachers College, Columbia University, opened his discussion of financing vocational education, as follows:

"The first task to be faced in financing an educational project is to determine the nature of that educational project. This seems like a truism, but it is the most neglected phase of financing education. That our educational programs go along haltingly, inadequately financed, is too often a result of our failure to divest ourselves of more or less unconscious assumptions under which we must work.

"Vocational education has not been an exception. State after state has built its pattern of vocational education in the framework of the special aid of the Smith-Hughes and George-Deen Acts. The original Smith-Hughes Act, passed in 1917, was designed to stimulate development in the field of vocational education. This is reflected in the matching-grant plan of aid.

"To make up for the all too inadequate conceptual design in the minds of general educators, the Smith-Hughes Act provided for imposing the conceptions of the groups that were responsible for promoting federal participation. The imposing of such conceptions may not have been intentional but it has nevertheless been real, in spite of brilliant examples of federal office approval of unique programs. Federal leadership was always present to offset failure of state authorities to think through their problems. It was an ever-present crutch. This had distinct immediate advantages. It saved years of effort at informing the general educator. It gave him a more or less cut-and-dried conception.

"While such shortcuts to a better conceptual design which is as successful as the Smith-Hughes Act are great time-savers, unless [they are] accompanied by a vigorous program to stimulate thinking on the part of those who are in the last analysis responsible for operating the program, the general educators are doomed to become out-of-date and inadequate since they lack the corrective that comes from the slower but more permeating processes of thinking."

When Charles W. Sylvester, director, Division of Vocational Education, Baltimore, Maryland, wrote about vocational education for handicapped pupils, he discussed the need for such specialized training as follows:

"Vocational Education of less than college grade in America has been very largely for highly selected students. Only during recent years has proper and adequate attention been given to the many types of maladjusted pupils, including both mentally and physically handicapped groups. There are some outstanding examples of suitable educational programs, both academic and practical, for these handicapped and bewildered youth, but such types of education are by no means extensive.

"There has been a widespread feeling that vocational-industrial education should be for youth who desire to prepare for skilled work in industry and the mechanical trades. Agriculture, homemaking, and commercial education have been provided for students in the high schools. This leaves a large reservoir of boys and girls who will leave school below the high-school level, often below the junior high school level, who desire and should have the kind of education and training that is suited to their capacities and needs.

"There will always be a need for the training of youth for the skilled occupations but this classification contains only a comparatively small percentage of the working population. The youth who in large numbers possess only the aptitudes for work below the skilled-occupational level will be the semi-skilled and unskilled workers of tomorrow. The workers in the semi-skilled classification outnumber the skilled workers many times. There is a great opportunity, therefore, to give much in the way of usable education and training to the lower ability groups.

"Handicapped or maladjusted pupils are found in every category of mental ability. These groups vary in I.Q. ratings and aptitudes similarly to the physically sound pupils. The physical handicap is just an added impediment. The problem at hand involves a dual task; first to provide a program of vocational education for pupils of varying mental capacity who are physically sound; second, to provide vocational education for the physically handicapped pupils who possess various degrees of mental ability."

Introducing his topic, Walter M. Wallack, warden at Wallkill Prison, Wallkill, New York, said: "A description of vocational education per se in the correctional institution would differ from that of the ordinary vocational school. In some correctional institutions may be found all of the elements which one may believe to be required in good vocational teaching: purposeful objectives, effective methods, excellent equipment, skillful teachers. In others the program of instruction is as poor as one could imagine, while in many there is likely to be no instruction at all. In any correctional institutions there is always the advantage of being able to use real jobs in institutional maintenance and construction for training purposes.

"Of greatest importance, however, is the unique place vocational education may have, and in well-organized programs does have, in the larger purpose of the correctional institution—namely, correctional treatment. *Vocational education in correctional treatment is also social education* and is usually of great importance in that respect. A vocation is only one of the tools required by any man who would live constructively and acceptably in our society. One also needs other equipment such as mental and emotional stability, good health, a sense of belonging, an understanding of social purposes, and other implements required for effective social living.

"Those confined in correctional institutions are seldom deficient in one respect alone—vocationally, or otherwise. Their deficiencies are usually numerous. Consequently, several simultaneous approaches to correctional treatment must be made and all of these coordinated toward one objective, that is, the socialization of the individual. In so far as vocational education is concerned, the problem is to coordinate it with all other elements of correctional treatment."

Henry L. Amonette, associate education supervisor, State Education Department, New York, analyzed the role of the private vocational schools thus:

"The facilities for vocational education public control are being expanded at a tremendous rate throughout America. Moreover, the sphere of public support and supervision of occupational training is an ever-widening one. Opportunities for vocational education are now provided for many groups of persons entirely without the pale of consideration ten years



Back when the most popular visual aid was the blackboard, this boys' class in nutrition at the Woodrow Wilson High School in Washington, D.C., was learning how to choose a good lunch. The time was October 1943. (Library of Congress photo)

Women flocked to the factories en masse to help in the World War II effort. This young woman worked on the assembly line of a war plant and attended a WPA vocational training school six nights a week to learn welding. (Library of Congress photo)



ago. Public agencies are now directing an extensive program of adult education, foremanship, training, apprentice training, training for public servants, and many other types of training formerly considered beyond the scope of governmental activity. Apparently, there is no field in which it is not considered a function of the state to aid, promote, and provide vocational education.

"In spite of this growing area of governmental sponsorship, there still appears to be a legitimate place in our educational and industrial life for the private vocational school. Past experience has rather clearly demonstrated the need for this type of school, whether conducted for profit or operated on a nonprofit basis. Such schools serve large segments of the population to whom the public vocational schools and other public agencies are not available. The actual increase in the number of such schools, the fields in which they are operating, and the growing enrollments are further evidence of the need."

Vocational programs in junior colleges was discussed by Howard Campion, assistant superintendent, Los Angeles City Schools:

"The American junior college is

today emerging as one of the most potent influences in public education. Although a relatively young institution, it is already playing an important part in determining the place of vocational education in the schools of the nation. Its beginnings were not auspicious. At the outset it was little more than an attic built upon the high school or a basement entrance to the university. It either added some 'more of the same' to the high-school program or attempted to reproduce in detail the first two years of the liberal arts college. Both patterns fell short of the real need for a new and effective terminal facility for those who could and would remain in school beyond the high school but who did not need or want the four years or more of the kind of curriculum offered by the colleges and universities.

"Early reports of curricular offerings in junior colleges indicate but slight attention to the task of preparing students for occupational life. In 1917-18 only 18 percent of the total offerings in the public junior colleges and 9 percent of those in the private junior colleges were vocational in nature. By 1937 the terminal courses of a vocational nature had risen to 35 percent of the total offerings of public

junior colleges. It is evident that the junior college is destined to be the 'peoples college' of America and as such will recognize as one of its major functions the adjustment of youth to occupational life."

The National Society for the Study of Education, prior to Keller's Yearbook in 1943, had published four yearbooks on the general subject of vocational education—in 1905, 1907, 1912, and 1924. Keller's Yearbook not only summarized the status of vocational education but opened up views of the unexplored future for vocational education. In addition, it set forth clearly and concisely the nature of the mission of vocational education. In his concluding chapter Keller pounded hard on the Who? What? Where? When? and How? of vocational education.

Who should receive vocational education? Everyone who can work.

What? The content of vocational education is determined by the interests and capabilities of the potential learners and by the demand of the people who pay for the product of vocational ability.

Where? "People should learn to work wherever they can do so most economically in terms of time, energy and money and where the environmental influences will be such as to make them desirable social beings as well as skillful workers. Such places of work-learning should be accessible and available to everyone. They should be called 'schools.' A person who went to school a generation ago is astounded at the machinery, the activity, and the adult freedom of a vocational school. These new attributes require reorientation, a new concept of school, not entirely new, but drastically modified."

When? "More than a generation ago, when the movement for vocational education was gaining strength, the argument was that many boys and girls could not profit from academic education, that they became restless, unruly, delinquent, and went either to work or to jail. Now that we have, in many communities, vocational education beginning at the ninth or tenth school year, we note many educators advocating a program of general education exclusively during the high-school period and the postponement of vocational education until the thirteenth or fourteenth school year.

"This postponement of vocational education to the later school years is one of the most curious and inexplic-

able occurrences in the history of education. It does not make sense pedagogically, economically, socially, or historically. It runs counter to the psychology of learning and the philosophy of education. It ignores all the experience derived from the operation of vocational guidance programs. It is certainly not justified by the discussions in this Yearbook."

How? "The distinguishing characteristic of a worker at work is his activity. He is making a product or rendering a service. He is doing something. To become efficient he must learn to do it well. The way in which he learns to do it, especially if he is helped by another person, constitutes probably the most important phase of learning. The content, the place, and the time must be appropriate. The method must be right. It must be pleasant, quick, economical, otherwise the learning process might well remain the by-education that it has usually been, for the essence of good school education is what actually happens to a person in a shop or classroom at any particular time. The laws of learning a vocation are not necessarily very different from the laws of learning anything else, but the emphases are different." (Franklin J. Keller, editor. *Forty-Second Yearbook, Vocational Education*, Part I, National Society of the Study of Education, 1943.)

The philosophy, theory, principles, and practices advocated by the NSSE Yearbook provided a sound basis for the expansion of vocational education.

The nation was at war, and the call upon all people to "turn to" for the war effort found the system of vocational education ready, willing, and unquestionably able.

Vocational Education and World War II

Vocational education cut its teeth on the educational problems of World War I. That experience proved valuable in getting ready for a similar, but vastly expanded, experience in World War II. The activities of vocational education in World War II were carefully documented in the *Final Report of War Training Programs* published by the U.S. Office of Education in 1946. The story which follows, except for bracketed material, is taken verbatim from that report.

As early as 1938 the U.S. Office of Education was analyzing training problems and conditions that might

well develop in event of an emergency. J.C. Wright, Assistant Commissioner for Vocational Education, and L.S. Hawkins, chief, Trade and Industrial Education Service, together with other staff members met frequently with representatives of the War Department and other agencies in conferences pertaining generally to training for the mechanical trades and specifically to training for aircraft mechanics. The War Department was interested in initiating a program for training aviation mechanics. Maj. Frank J. McSherry, liaison officer of the War Department General Staff, made contact with the Office of Education regarding the public vocational school facilities available for emergency training.

At first there was some indecision as to whether this training would be done by the respective military branches or by outside agencies, a situation that was in all probability eased when representatives of the Office of Education learned, through these committee meetings, that facilities and potentialities of the public vocational schools were little known to military officials. Accordingly, Office of Education representatives made it their responsibility to see that interested military officials understood the scope and operation of the vocational education program at the several levels.

[Subsequently, through an exchange of letters between the War Department and the Department of the Interior, plans were made for a review of the facilities of vocational education and for an active survey of the nature and extent of the facilities. Reports sent to the President indicated the extent to which existing vocational training facilities could be utilized immediately.]

On May 17, 1939, the President directed the U.S. Office of Education to:

1. Encourage the public vocational and trade schools to assist aircraft companies in job training of employed workers and apprentices by (a) conducting foremen conferences; (b) conducting teacher training courses; (c) providing instruction facilities in related subjects for apprentices; (d) providing evening trade extension classes for employed workers.

2. Raise the standards of instruction in vocational schools as high as practicable in order that training received will be of greatest advantage to students when they enter industry.

3. Together with the Labor Depart-

ment cooperate with the War Department in making analyses of occupations in essential industries on which to base training programs.

4. Encourage the extension of state and local aviation school facilities of the technical type, to meet the need for junior technicians.

5. Encourage state boards for vocational education to furnish instruction in aircraft trades to qualified youths selected from resident work projects of the National Youth Administration.

6. Encourage state boards for vocational education to offer instruction in aircraft trades to qualified men, who are skilled mechanics or semi-skilled workers, selected from Work Progress Administration projects.

[A copy of the President's declaration was sent to all executive officers and state directors of vocational education. The training of aircraft mechanics was begun and the U.S. Employment Service reported on the extent and availability of workers and potential workers for training. Total unemployment in the nation had reached ten million. Training was the obvious solution—both to upgrade skilled and semi-skilled workers and to prepare new and inexperienced workers for production jobs. Vocational training record cards were developed so that persons being trained in public vocational schools would not be lost in chance employment.]

While events were moving rapidly in the nation's capital, the states, too, were preparing for the important job ahead. The states fully realized the seriousness of events for they had been cooperating with local industries in the solution of training problems and, too, they were conscious of the President's early directive sent to them via the Office of Education.

Furthermore, the states had received cooperative response from local school systems indicating the readiness of vocational education to meet specific defense training needs. In many cases, schools organized classes, employed instructors and supervisory personnel, and obligated local school funds for defense training purposes before there was any indication that reimbursement would be made for such expenditures.

The magnitude of the job confronting a number of states surpassed all available facilities. Without further recourse, states in critical need of additional facilities were obliged immediately to request funds of the Office of Education. The state director of vocational education in Washington

requested \$8,000 to \$10,000 on May 22, 1940, to train 400 aircraft workers at the Edison school in Seattle. The state director for New Jersey likewise justified a need for additional funds to increase the state vocational training program. This placed the problem of providing emergency training funds squarely in the hands of the federal office. Accordingly, Dr. Wright, at the suggestion of the Commissioner, called a conference for May 28, 1940, to discuss the problems of a pending emergency vocational training program. In addition to members of the federal staff a number of state vocational education persons were invited to attend.

From this representative group it was possible to get a picture of what the schools of the country were doing in the way of defense training and to what extent the vocational schools might be expected to participate in a program of this kind. Several state and local representatives cited actual instances of how short courses for extra shifts were meeting the specific demands of industry.

Even though the short unit courses were proving successful, members of the group were not prone to overlook the problems generally developing in the states. For example, the lack of equipment was universal; funds were needed for operations not included under the "regular" program, and qualified instructors were scarcely obtainable since the manpower requirements of the armed services together with the opportunities for more highly paid industrial employment had begun to cut seriously into the supply of instructor personnel. These problems were important. However, the major issue remained that of obtaining federal funds to support a national defense training program.

Federal authorities, increasingly aware of the efforts and activities of the states, realized that it was necessary immediately to aid the states financially in order to expedite defense training. The President, in his message to Congress May 31, 1940, stated that provisions should be made for expansion of the defense program immediately by training and retraining workers for employment in industry.

Two days earlier (May 29, 1940) the United States Commissioner of Education released a report entitled "Training for National Defense." The first of its three parts dealt with the "Use of Existing Public Trade School Facilities." It outlined possible use of these facilities for an emergency voca-

tional training program in specialized occupations and in addition contained a budget. On June 1, 1940, the Commissioner sent this report to all chief state school officers. On June 8, 1940, a group of some 25 school officials from the states met in Washington, D.C., for a conference called by Dr. Studebaker to discuss ways and means of carrying on a national defense training program.

The Office of Education was fast becoming involved in the development of a national training program. It appeared likely that the public vocational schools would be asked soon to go all out for defense training. The President, at the request of the National Defense Advisory Commission, referred to the Senate Appropriations Committee a supplemental estimate of funds needed for national defense. This was in the form of an amendment to H.R. 10104 including \$16,200,000 to the Office of Education for defense training.

At the Senate Appropriations Committee hearings the following information, gathered through the survey made of available vocational education facilities in the nation, was revealed:

1. There were 1,053 public trade schools, representing a capital investment of about a billion dollars, half of which was in machinery.

2. There were about 1,000 state and local supervisors of trade and industrial education.

3. Twenty-two thousand teachers, of whom 15,000 were workmen, were trained teachers of trades and industries related to national defense.

4. About 500,000 trainees received training in those schools that year.

The President's request for a defense training appropriation did not linger in the Senate. It was time for action and the fact that France was already overrun by German troops was grim warning to America that its labor and resources must be rapidly mustered for defense production. The Senate quickly followed the President's recommendations by approving the \$16,200,000 request for national defense training. However, this figure was reduced to \$15,000,000 by the conference committee. The appropriating act, Public, No. 668, covered the cost of courses supplementary to employment in occupations essential to the national defense and preemployment refresher courses for workers preparing for such occupations selected from the public employment office registers.

Initial steps had already been taken by the Office of Education to launch the pending Defense Training Program. National and state vocational education leaders met in conference in Washington, D.C., on June 26, 1940, to plan for the administration and operation of emergency defense training. This meeting was more than a conference—it was a series of working committees which included state directors and supervisors as well as members of the federal office staff.

From the work of these respective committees, several releases were developed which determined administrative policies. With minor changes these releases became the guiding policies used throughout the operation of the program. While the committees were still at work the President approved Public, No. 668, on June 27, 1940. By July 1, 1940, national defense training classes were in operation in many States. Thus the basic steps necessary in inaugurating a far-reaching program were taken in rapid succession as follows:

(a) May 29, 1940.—Office of Education proposal for training program released.

(b) May 31, 1940.—The President in his message to Congress stated that provisions should be made for the expansion of the defense program by the immediate training and retraining of the American people for employment in industry.

(c) June 1, 1940.—Commissioner Studebaker mailed copies of the proposal for a training program to all chief state school officers, city superintendents, and presidents and deans of engineering colleges.

(d) June 5, 1940.—Dr. Wright and Commissioner Studebaker spent the afternoon at the Bureau of Budget assisting Mr. Carr, its legal counsel, and Mr. Calhoun, assistant general counsel, Federal Security Agency, in the preparation of language authorizing an appropriation of \$16,200,000 for initiating the program. It is of historical interest that the term “refresher courses” was first used, in this country, in the language providing for this appropriation.

(e) June 8, 1940.—Twenty-five representative school officials assembled in Washington to consider the proposal of the Office of Education and to discuss ways and means of carrying on a national defense training program. The program was unanimously endorsed by the group.

(f) June 19, 1940.—The President transmitted his recommendation of



Work experience long has been a part of vocational education. Pictured here is a 1940's work experience program in retail sales in San Diego, California. The students attended school in the morning and worked a minimum of 15 hours a week in local stores. (Library of Congress photo)

the proposed appropriation of \$16,200,000 to the Senate Appropriations Committee as an amendment to a pending appropriations act, H.R. 10104, that had already passed the House.

(g) June 23, 1940.—Congress approved an appropriation of \$15,000,000 for the program.

(h) June 25, 1940.—The Office of Education convened a conference of 42 state leaders in vocational education to map out policies and procedures for beginning the program.

(i) June 27, 1940.—The President formally approved the appropriation act known as Public, No. 668.

(j) July 1, 1940.—Hundreds of vocational schools were in operation under the program from coast to coast with enrollments of approximately 75,000 trainees during the month.

[Nine other national defense training appropriations were made by the Congress which brought the total to \$754.9 million including funds for liquidation of the Office of Education war training programs.]

As the National Defense Training Program started, amid national unemployment and world-wide uncertainty, few expected that the job would pyramid to the extent of training nearly 7,500,000 persons for defense and war production employment. Regardless, this undertaking was destined to become a vast enterprise, for vocational training was a medium through which millions of untrained workers could readily be fitted for the vacancies that existed in armament, aircraft, and shipbuilding factories all over the nation.

As it turned out the industrial bottleneck of untrained or insufficiently trained personnel, which could have easily retarded the war effort with disastrous results, was eliminated to a large degree. Furthermore, training for the military forces substantially increased the war training job.

The U.S. Office of Education practiced firm control and liberal assistance to the states in the administration of the VTWPW program. Even though the program was supported entirely from federal funds its operation hinged wholly on cooperative relationships with the several states as set forth in approved state plans.

Each state guided by a state plan for defense training was solely responsible for the correct conduct of the program within the state. This provided a wide latitude of authority much of which was delegated to vocational authorities

at the local level. By reason of these standard practices a simplified, cooperative mechanism was established whereby training activities were duly expedited and too, the program was made more elastic which, of course, expanded the training services available to industry and the armed forces.

Actually, local vocational authorities with the aid and counsel of representative labor-management advisory committees or comparable groups worked out the best possible solution to their problems and proceeded with training.

Beginning before Pearl Harbor, this program got underway in July 1940 and terminated after five strenuous years on June 30, 1945. During these five years with the aid of industry, government, and a host of other outside sources, the federal, state, and local vocational authorities cooperated magnificently to provide the best training possible for war production purposes. This training for both unemployed and employed persons was given by 18,000 instructors in 2,600 training centers throughout the United States, Hawaii, Puerto Rico, and the District of Columbia.

While training was given in all kinds of war industries the biggest jobs were in aircraft industries which comprised 24 percent and shipbuilding which was 20 percent of the total volume of training.

The urgency of producing defense items did not permit an extensive period of training for war workers. Consequently, the public vocational schools did not attempt to turn out finished craftsmen. Instead, training objectives were limited to job units which could be learned by most all workers in a comparatively short time. In this way war production training made useful workers of large numbers of men and women who were considered unemployable prior to this program due to lack of training. For the most part trainees were placed on the job as soon as their training practices rendered them reasonably efficient in the job for which they were trained.

The coordinated efforts of industry and the vocational schools brought about experiences that very early improved training and continued to improve it throughout the life of the program. Industry learned more about its specific needs and thus was better able to describe the jobs for which training was requested. On the other hand, the vocational schools learned more about the specific jobs

for which workers were to be trained and therefore designed courses that aimed squarely at these needs. This culminated in better training programs and better prepared trainees.

At the outset and during the entire training period preemployment training was given for persons in the labor market who lacked the necessary experience and skills for industrial employment. Regular supplementary training, likewise beginning early in the program, was given in schools and vestibule programs for inexperienced workers who were employed as green workers and assigned to training before actual induction on the job, and for experienced workers needing additional training.

During the fore part of 1942 preparatory supplementary or on-the-job training developed for war production employees who were engaged in actual production jobs. Supervisory training, also for employed persons, was first given on a large scale early in 1942. At the peak of the program in July 1942, preemployment and supplementary courses together reached an active enrollment of 350,000 persons. This figure tapered to 106,452 active enrollments in April 1945.

Upon completion of the VTWPW program, participating vocational schools had set a precedent for training huge numbers in short unit emergency courses. Also unexampled in such a short span of training was the fact that 1,501,453, or 20 percent, of all trainees were women. Other facts, too, lend emphasis to the bigness of the war training job. For instance, included in the enrollment figures for aircraft, shipbuilding, and machine trades courses were a tremendous number of welding trainees.

From time to time new fields and phases of training developed; radio and radar courses were provided for the military services; training for certain aircraft plants had a definite bearing on the manufacture of jet propulsion planes; and courses were given that helped to expedite the actual production of atomic bombs and other items unique in modern mechanics and warfare.

Altogether this blanket of training was fitted to the needs of the nation's war industries everywhere and could easily have had a direct bearing on the production of practically all of the equipment used by our fighting men in World War II.

Closing of the VTWPW program in the spring of 1945 came just as suddenly as its beginning in the summer

of 1940. With the course of the war in Europe changing rapidly the need for war training diminished. Promptly the states were notified of the closing of the program in a memorandum from the U.S. Commissioner of Education dated May 5, 1945.

The states readily complied by meeting the termination dates established. Congress acted in accordance and passed Public Law 124 which provided in part for the liquidation of the program conducted during prior fiscal years under the heading "National Defense Training" which was also known as Vocational Training for War Production Workers.

The War Training Program did not pass without leaving a wealth of broad experiences. Due to the emergency nature of the training, vocational authorities, more than usual, were confronted with new and changing problems. From these experiences grew a number of conclusions and recommendations which the states very adequately covered in their descriptive reports. (*Final Report of War Training Programs*, U.S. Office of Education, 1946.)

The AVA Convention of 1941

This section and the next (Demise of the Federal Board) are taken directly from the History of Industrial Education in the United States.

The historic scenes of our first war for freedom—Bunker Hill, Lexington, and Concord—must have deeply impressed the early AVA delegates who viewed these sites on Sunday, December 7, 1941. Mingled with the recollections of the past was the reality of the present—the attack at Pearl Harbor. The AVA convention in Boston, December 10-13, 1941, was at once dedicated and thoroughly aware of its responsibility in providing for the defense of the nation. Only a few hours after Congress declared war on the Axis powers, the official representatives of 26,000 AVA members pledged "the united and untiring efforts of our membership and the complete utilization of our vocational schools and training facilities throughout the nation in an all-out Training for Victory program."

The convention picture was revised on the spot. Carefully prepared speeches were discarded or redrafted to involve the important task at hand. The AVA, in a sense, went on a war-time basis. Emphasis centered on the following six points:

1. Speed up training to all-out proportions, so that war production demand for a 24-hour day, 7-day week might receive maximum aid from vocational schools of the nation; retraining of workers displaced in non-defense industries for jobs in war production.

2. Immediate exploration and every possible expansion in the V-Training of qualified women workers for jobs in war industries, especially in sections where there is increasing difficulty in obtaining qualified men for training.

3. That agricultural production must be increased in the "Food for Freedom" campaign with the assistance of every facility available through the agricultural education program; that programs of instruction in repair and maintenance of farm machinery should be made available to both rural youth and rural adults.

4. Full realization of the fact that the home must play a vital part in the conservation and utilization of material and human resources necessary for military, industrial and civilian defense.

5. Immediate exploration looking to desirable expansion of vocational education through federal aid in the establishment, assistance, and maintenance of vocational and trade schools serving large areas.

6. Determination of the place that vocational education will occupy in the period immediately following the war, and what should be done now to prepare for the efficient performance of that duty.

One of the principal convention speakers was Paul V. McNutt, Federal Security Administrator and director of Defense and Welfare Service. Well-informed concerning the service of vocational education, he made a special point of calling attention to the fact that, because of world strife abroad, more than a million and a half defense workers already had been trained under the supervision of vocational educators throughout the country, using school buildings and equipment. He regarded this as a "truly remarkable accomplishment," and noted that since World War I the nation had been quietly developing a basis for war production. This was never its major aim, but the possibility of converting school shops to training schools for war production was not overlooked. Federal aid in support of such programs was a means by which the government realized one of its primary responsibilities to the entire

social group, so as to "provide for the common defense." (*History of Industrial Education in the United States*, pp. 317-18.)

Demise of the Federal Board

Vocational education was the victim of Congressional economy measures in the early 1930's. On February 24, 1932, an Economy Committee was organized by the House of Representatives for the purpose of curtailing federal expenses. On April 25, this Committee submitted a report proposing some drastic steps in connection with vocational education and the Federal Board for Vocational Education. It was recommended that the permanent annual appropriations under the Smith-Hughes Act be reduced in the sum of ten percent for the fiscal year 1934, and progressively by ten percent more for each year thereafter, so that by the end of the fiscal year 1942 the appropriations would have been abolished.

The permanent annual appropriation to the Federal Board for administration was also abolished; the report recommended the substitution of a year-to-year appropriation of the same amount, \$200,000. This too was to be eliminated at the end of the fiscal year 1942.

Although there was much sentiment in favor of these moves, there was also a storm of protest. Concurrently with the report of the Economy Committee, various senators and representatives were reading into the *Congressional Record* resolutions, memorials, and petitions against curtailment of funds for vocational education.

As an example, on April 26, Representative William H. Sutphin of New Jersey introduced into the *Congressional Record* views of some of his constituents, who practically demanded retention of federal aid for vocational education. Sutphin cited many values of the program, then challenged the Committee concerning its alternative proposals, characterizing them as "simply an attempt to slowly and surely abolish vocational education rather than destroy it by immediate action."

Finally Representative Sutphin urged his colleagues to action saying, "It is my earnest and sincere hope that every member of the House of Representatives will vote against this attempt to abolish the appropriations for vocational education entirely or to suspend or curtail it in any measure."

On Friday, April 29, 1932, House

discussion reached deeply into the fundamental purposes of federal participation in vocational education. One member of the House found it difficult to believe that the Economy Committee had given the subject "more than cursory attention," because otherwise it would have found evidence that the need for federal aid existed. The move was regarded as a false economy because, "It will not save a dollar."

On the other hand, some members of Congress argued that it would return the problem of vocational training to the states, where it belonged. In rebuttal it was recalled that the Congress had previously appropriated money "for the erection of monuments in honor of Indian chiefs," millions had been provided to "dredge and widen streams barely navigable by punts," and huge sums of money had been allocated "to irrigate waste land when a vast number of fertile acres were growing up in bushes."

"And now when it is proposed to continue an appropriation for vocational education—an appropriation that dollar for dollar has in results accomplished as much as any like amount ever before appropriated by the Federal Government—an attempt is made to strangle it." (*Congressional Record*, April 29, 1932, p. 6.)

In the end, the logic of the opinion in favor of retaining the permanent appropriations for vocational education prevailed. The Federal Board for Vocational Education, however, fared badly. Parallel with the general economy measures and with the review of permanent funds was the desire to consolidate governmental agencies in order to reduce expenses. The President was authorized to issue executive orders to this effect, although a Senate amendment mentioned specifically that the Federal Board for Vocational Education "shall not be abolished."

On December 9, 1932, President Herbert Hoover, by executive order, attempted to transfer to the Office of Education the duties, powers, and functions of the Federal Board for Vocational Education, and instructed the Board itself to serve in merely an advisory capacity to the Secretary of the Interior. This action encountered opposition in Congress (principally on the basis that the incoming President should have the opportunity to reorganize the Executive Department). Hence a resolution was passed in January, 1933, which postponed the reorganization.

Congressional opposition was supported by the American Vocational Association, whose legislative committee was quick to muster sentiment in opposition to the proposed change of status for the Federal Board. Vocational educators, too, were strongly against any change in the Board, and said as much in thousands of letters to the Congress.

Furthermore, in April, 1932, in connection with general discussion of the economy measure, the House had reviewed reasons for establishment of an independent board. They had held that the opposition to it was "largely the result of misinformation and misunderstandings" concerning the work of the Federal Board. The reasons advanced for continuing the program of vocational education under an independent board were essentially the same as they had been in 1917. It was imperative that a practical program intended by the federal acts be under the direction of persons who understood the nature and values of practical work.

Generous reference was made to the testimony and rationale of 1916-1917, which Congress had used in establishing the necessity of the Board. No evidence had been advanced in the discussions of 1932 to show that the interested parties had protested against "anything with which the Board had been concerned." Evidence revealed that national organizations such as the American Federation of Labor, United States Chamber of Commerce, national manufacturers' associations, and others had voluntarily adopted resolutions commending the work of the Board.

Tampering with the Federal Board for Vocational Education was looked upon by vocational educators as only slightly short of a major crisis. The American Vocational Association kept key vocational educators of the nation well informed about the day-to-day developments.

It is understandable why William N. Doak, chairman of the Federal Board for Vocational Education, did not urge positive action. His position as Secretary of Labor placed limitations upon his vigorous opposition to measures initiated by the administration. Nevertheless, his subtle recognition of the controversy is to be noted in his article in the May, 1932, issue of the *American Vocational Association News Bulletin*. The title of the article was "Changing Economic Conditions and Vocational Educa-

tion." He reviewed the social and economic conditions which led up to the passage of the Smith-Hughes Act, pointed to the achievements of the past 15 years, and complimented vocational educators in general for their wholehearted cooperation.

His identification of vocational education's achievements and the Federal Board's relationship to those achievements was an open invitation to vocational educators to advise their congressional leaders on the matter of the Federal Board. This the vocational educators did, through the well organized channels of the American Vocational Association. Their efforts, however, did not prevent the change of status.

Early in March 1933, the Act was amended, authorizing the President to make certain reorganizations in the Executive Department. On June 10, 1933, President Roosevelt transferred the functions of the Federal Board to the Department of the Interior and ordered that the Board serve in an advisory capacity without compensation. On October 10, 1933, the administrative functions of vocational education were transferred to the U.S. Office of Education. After 1933 the Board ceased to be an important force in vocational education, and it met infrequently in its advisory capacity. Finally on May 16, 1946, President Truman, by executive order, abolished the Federal Board; its valuable contributions, however, had been terminated 13 years earlier.

Control of the vocational program was obviously regarded as one of the key issues throughout the life of the Federal Board. During the formative period of national legislation the American Federation of Labor, the National Education Association, and other groups sought to clarify this element of control. It is understandable why the Federal Board would be so keenly aware of, and sensitive to, appropriate relationships with the states.

Precedent existed prior to 1917 for the federal government's interest in legislation of an educational, social, and moral nature. This interest was manifested in many ways, such as in the government's concern for "dependent peoples," and in the general desire to eradicate illiteracy. The establishment of the Bureau of Education in 1867, the Morrill Act, and other acts gave evidence of the government's attempt to seek a more vigorous role. The problem of control was

present in every act of the Congress, but at no time previous to the Smith-Hughes Act had it been so prominent, nor had it created so much discussion. All bills in connection with vocational education prior to the passage of the Smith-Hughes Act had provided for cooperative relationships between the states and the federal government. As first proposed, the 1917 legislation would have set up programs to be administered by a federal unit. However, certain educators felt that this would lead to a dual system of education, and so they spoke out in defense of a unified system.

By terms of the Smith-Hughes Act, the Federal Board had six basic responsibilities: administrative, advisory, service, research, quasi-judicial, and regulatory. An independent board has been established by Congress for the following reasons:

1. To provide serviceable education and training which would assist people to "get a job, hold a job, or get a better job."

2. To prevent the work from becoming so academic in character that it would fail in its fundamental purpose.

3. To insure that the funds would be used as intended and not diverted to general education.

4. To recognize that vocational education was a means of bringing economic benefits both to employers and to employees.

Because of its independent nature the Board could equitably represent labor, employers, and other interested parties; it has been entirely free of partisan politics, a situation about which Congress had boasted in 1917 and again in 1932.

Persons who believed that the independent status of the Board tended to separate vocational education from the other areas of education went to the extreme of retarding the program. The problem of control was, and still is, a touchy subject. Yet, "Every effort was made by the Board in its relations with the States to avoid a dictatorial attitude, and these relations were throughout the period of its administrative activity entirely on a basis of service and cooperation."

For nearly 16 years the Federal Board held a leading role in the development of vocational education. Delegating its powers and changing its function to an advisory one were, in the opinion of educators and labor leaders, "steps backward in industrial education progress." The American

Federation of Labor regarded the action as a "serious mistake" and urged the President to restore the Board, but opposition groups eventually won out. Nevertheless, evidence indicates that the Federal Board, as an experiment in relationships and control, was highly successful. (*History of Industrial Education in the United States*, pp. 127-31.)

The George-Barden Act, 1946

Immediately following World War II the American Vocational Association and representative state leaders of vocational education sought to introduce into Congress an amendment to the George-Deen Act. The amendment proposed material increases in the appropriations of the George-Deen Act. After the usual Congressional delays and expressions of interest in the bill by local representatives of education and industry throughout the states, the amendment was passed and was approved by President Truman on August 1, 1946. The vocational education act of 1946 provided that the amended appropriations authorize \$10,000,000 for agriculture, \$8,000,000 for home economics, \$8,000,000 for trades and industries, \$2,500,000 for distributive education, and \$350,000 for the United States Office of Education.

Representative Graham Barden of North Carolina, commenting about the bill and vocational education, said, "The public vocational schools in peacetime and in war time, have demonstrated their ability to train people for gainful and useful employment. The availability of additional funds provided by S. 619 [the George-Barden bill] will make it possible for public vocational schools to make a necessary contribution to the nation's post-war reconversion program. New occupational fields in industries requiring new skills, new tools requiring development of other new skills, new materials, and new processes will require additional vocational and technical knowledge and skills. This bill provides a way to encourage it. This is building and doing in the American way by Americans."

Roy W. Rogers, in his book *Vocational and Practical Arts Education* (Second Edition), analyzed the bill, saying in part, "The George-Barden Act made no specific allocation of funds for teacher training or for vocational guidance, but each state board



The George-Barden Vocational Education Act, signed by President Truman in 1946, increased federal funding for vocational education and added impetus to the growth of voc ed.

for vocational education was permitted to use such amounts for these purposes as it deemed necessary. The George-Barden Act authorized the uses of federal funds for some items not specifically authorized in previous acts. Among these were funds for the salary and expenses of state directors of vocational education, for salaries and travel expenses of vocational counselors, for training and work experience training programs for out-of-school youth, for supervision of Future Farmer and New Farmer activities, and for the purchase or rent of equipment and supplies for vocational instruction. The Act provided that after June 30, 1951, not more than 10 percent of these funds could be used for the purchase or acquisition of equipment. The Act provided for more flexibility in the use of funds for administration, and, in general the use of funds was subject to the conditions and limitations included in the previous vocational education laws." (p. 136).

The combined funding of the Smith-Hughes Act and the George-Barden Act provided slightly more than \$36 million for the nation's vocational education program. This new funding and the flexibility of the Act

was evidenced immediately in the growth and development of vocational education throughout the nation.

Related Legislation of the Sixties

During the late fifties and throughout the sixties a rash of legislation appeared in response to the growing social revolution. Great concern was beginning to develop around certain groups of disenfranchised persons who needed attention. In one way or another these people had fallen through the cracks of the social structure and their plight had become a national problem. They were described by various terms such as *underemployed, unemployed, and disadvantaged* and were primarily black or poor white. The civil rights of all persons, but particularly of the groups suggested above, were the objects of deep social and economic concern and these concerns were translated into legislation. On a parallel course, the general plight of women in American cultural and economic life gained attention.

The needs of these people involved a variety of health, occupational, economic, and educational characteristics which were translated into

public laws as a means of providing solutions to these major public problems. Without providing an analysis of each of the laws, 16 are listed as representative of the period:

P.L. 84-911, August 2, 1956, Health Amendments Act of 1956.

P.L. 84-1027, August 8, 1956, To promote the fishing industry in the United States and its territories by providing for the training of needed personnel for such industry.

P.L. 87-22, April 24, 1961, The Practical Nurse Training Act of 1961.

P.L. 87-27, May 1, 1961, Area Re-development Act.

P.L. 87-415, March 15, 1962, Manpower Development and Training Act.

P.L. 88-452, August 20, 1964, Economic Opportunity Act of 1964.

P.L. 89-4, March 9, 1965, Appalachian Regional Development Act of 1965.

P.L. 89-10, April 11, 1965, Elementary and Secondary Education Act of 1965.

P.L. 89-136, August 1965, Public Works and Economic Development Act of 1965.

P.L. 89-287, October 22, 1965, National Vocational Student Loan Insurance Act of 1965.

P.L. 89-290, October 22, 1965, Health Educational Assistance Amendments of 1965.

P.L. 89-329, November 8, 1965, Higher Education Act of 1965.

P.L. 89-385, March 3, 1966, Veterans Readjustment Benefits Act of 1966.

P.L. 89-752, November 3, 1966, Higher Education Amendments of 1966.

P.L. 90-35, June 29, 1967, Higher Education Act of 1965, Amendment. (Introduced the concept of Education Professions Development.)

Much of the legislation was related to manpower problems in general, preparation of people for employment, a variety of health related problems (including socialization of some health services), and was emphasized by rapid technological advances in the late fifties. Vocational education began to receive a good share of criticism—it did not address the needs of the slow learner, the maladjusted, the handicapped, the disadvantaged (social, educational, and economic), and in certain circles vocational education was thought to be inefficient and unconcerned about its relationship to social problems.

It was true that vocational educa-

tion legislation previously had not dealt with these problems adequately, and the financial resources had not been provided to work in these areas. However, vocational education, because of its previous exemplary record in dealing with programs that prepared people for work, was beginning to receive attention. Two major vocational education bills, one in 1963 and amendments in 1968, vastly expanded the role and scope of vocational education, and a new day dawned in which vocational education could serve the American people.

Panel of Consultants on Vocational Education

"Each year a committee of the Congress of the United States conducts hearings on appropriations for all government agencies. These are held to determine if adjustments of appropriations for any activity of the federal government are necessary, and the committee's conclusions are embodied in a recommended budget. The hearings in 1960 were thus a part of the normal routine of the Congress, but included in the recommendations for the fiscal year 1961 was a cut of \$2 million in the authorization for vocational education.

"During the normal course of events the committee took up the matter of the appropriations for education, and the recommended cut in vocational funds came into full view. This recommendation did not have the approval of either the United States Commissioner of Education or the Secretary of Health, Education, and Welfare. During the discussion of vocational education, Commissioner Lawrence G. Derthick referred to the National Defense Education Act as the 'third great milestone in education.' Congressman John Fogerty (Rhode Island) immediately inquired about the other two milestones. These were identified by Commissioner Derthick as the (1) Northwest Ordinances of 1785 and 1787 and, not forgetting the Morrill Act of 1862, (2) the Vocational Education Act of 1917 (the Smith-Hughes Act) with its amendments. Congressman Fogerty replied that to cut funds for an Act referred to as the 'third milestone' in education did not seem appropriate.

"The probe into the deep recesses of the appropriations for vocational education brought forth the idea (evidently suggested by Arthur S. Fleming, Secretary of Health, Education,

and Welfare) that the national vocational education program needed redirection. Vocational education programs had been experiencing continuous readjustment because of social, economic, and technological change. New courses were being added in response to new occupations and to the growing importance of science and mathematics as related to the processes of technology. Further evidence of change was the development of area vocational schools and other special training programs for displaced and unemployed persons. At length, on the basis of testimony before the committee, the cut was adjudged to be ill timed and inconsistent with the needs of the nation, and the committee restored the \$2 million to the budget." (Barlow)

The year 1960 was a presidential election year and following its previous custom the American Vocational Association sought the opinions of the candidates about vocational education. Both John F. Kennedy and Richard M. Nixon replied to the AVA request and both cited their support for the area of vocational education. These views together with the opinions of many prominent Americans were studied by the delegates to the AVA convention in Los Angeles in December 1960. A conviction arose from the convention that vocational educators must become even more dedicated to a greater effort in the area of vocational education—an effort that extended the range and scope of vocational education.

In his message to Congress on American Education, February 20, 1961, President John F. Kennedy said:

"The national Vocational Education Acts, first enacted by the Congress in 1917 and subsequently amended, have provided a program of training for industry, agriculture, and other occupational areas. The basic purpose of our vocational education effort is sound and sufficiently broad to provide a basis for meeting future needs. However, the technological changes which have occurred in all occupations call for a review and re-evaluation of these acts, with a view toward their modernization.

"To that end, I am requesting the Secretary of Health, Education, and Welfare to convene an advisory body drawn from the educational profession, labor, industry, and agriculture, as well as the lay public, together with representatives from the Departments of Agriculture and Labor, to be

charged with the responsibility of reviewing and evaluating the current National Vocational Education Acts, and making recommendations for improving and redirecting the program."

On October 5, 1961, the White House announced that the Panel of Consultants on Vocational Education had been appointed. A month later, November 9-11, the Panel began work with its staff in Washington, D.C., and after six interim meetings, concluded its work in November 1962. Involved in the Panel's year-long effort were various consultants, a number of special conferences, special studies commissioned by the Panel, and studies prepared by the Washington staff.

The Panel had the advice and recommendations of a broad cross-section of the American population—producers and distributors of goods and services as well as educators and others interested in the nation's social and economic well-being. The Panel members themselves were a representative group of citizens who believed in the importance of education and tried to use reliable information and methods to arrive at their recommendations.

The Panel's report, *Education for a Changing World of Work*, was published in 1963 with a five-page summary, which is reproduced here verbatim. The Panel summarized its report thus:

By 1970, the American labor force—those working or seeking work at any time during the year—will total 100 million people. There will be 87 million Americans working full time, the year round. Of these, 58 million are working now, 26 million will be young workers entering the labor force during the 1960-70 decade, and three million will be women entering or reentering the labor force.

The Panel of Consultants of Vocational Education has considered the educational needs of all nonprofessional workers. Many now at work will need training during this decade to keep pace with new methods, new materials, new opportunities. Many others will require retraining as their jobs disappear due to automation or economic change. The local-state-federal vocational and technical education program, which is the subject of this report, can provide appropriate training and retraining for them.

It is especially important that the 26 million young workers who will start work in this decade adapt to the needs of a changing economy. The eight out of ten students now in elementary schools who will not complete four years of college may gain occupational competence in many ways: through on-the-job training organized by employers; through apprenticeship and journeyman training, or other trade union programs; in public and private technical institutes or in vocational and general high schools; from the armed services; by individual study and work; and especially through the public program of vocational and technical education.

The three million wives, mothers, and widows who will shift from full-time housework to jobs during the decade ending in 1970 will also need marketable skills. Public vocational and technical education programs can help these women improve old skills, and gain the new ones needed in a changing world of work.

The local-state-federal public program of vocational and technical education was inaugurated in 1917 with enactment of the Smith-Hughes Act. Subsequent legislation expanded and extended the original program. Today it benefits about four million students (half of whom are adults), and involves more than \$250 million in local, state, and federal funds expended in an estimated two-thirds of the high schools and many colleges and universities.

Every state and territory now offers federally aided vocational education programs. Each state has a vocational education board to set policy. Federal funds can be used for program operations but not for the construction of buildings; nearly all the federal funds are used by the states as partial reimbursement for teachers' salaries. In all but the most recent programs—those under the Area Redevelopment Act and the Manpower Development and Training Act—states must match federal funds dollar for dollar. In general, state and local expenditures far exceed the matching requirements. The types of reimbursable vocational instruction are specified in several federal statutes, as well as the age and job status of students.

Federal law limits funds for vocational instruction of both young people and adults to the following broad categories, among which current enrollment is distributed as follows:

| Vocational Category | Enrollment (1960-61) |
|--------------------------|----------------------|
| Agriculture | 805,322 |
| Distributive occupations | 306,083 |
| Homemaking | 1,610,334 |
| Trades and Industry | 1,360,609 |
| Practical nursing | 47,264 |
| Technician training | 122,952 |

A major concern of the Panel has been to study the strengths and limitations of these local-state-federal programs, including the implications of automation, technological advance, population mobility, discrimination, urbanization, and the administration of the programs.

The Panel is convinced that vocational and technical education are sound investments in people. Data indicate that graduates of high school vocational education programs are less likely to be unemployed than other high school graduates, that vocational education graduates do in fact work in the occupations for which they prepare, and that vocational education increases their subsequent earnings. The Panel is satisfied that the local-state-federal partnership in vocational and technical education is capable of imparting virtually any specific production service or technical skill that may be required by national or international crises or emergencies. The evidence includes the program's record of training production workers during World War II, the rising number of technicians being trained under the National Defense Education Act, and the increasing number of practical nurses and other health workers graduating annually from vocational education courses.

However, the Panel found that vocational education is not available in enough high schools. In a special study made by the Panel of 3,733 public high schools in six representative States, only five percent offered distributive education courses, only nine percent offered trade and industrial courses, and less than half offered courses in homemaking or vocational agriculture. Even in the largest cities, less than one-fifth of the high school students are enrolled in vocational education programs, although two-thirds of those completing the high school curriculum will not complete four years of college education.

The Panel also found that voca-

tional education programs are not preparing people for enough kinds of jobs. One study which compared vocational education enrollments with subsequent occupational employment found that only 10 boys studied vocational agriculture for every 100 males employed in that field. The ratios were even less satisfactory in wholesale and retail trade (1:200) and manufacturing and construction (2:444). In only nine states can one learn to be an office machine repairman through the federally reimbursed vocational education program. Similarly, only 11 states offer federally reimbursed courses in electric appliance repair, only six teach heating and ventilating mechanics through this program, and only 11 prepare people for work as drycleaners, spotters, or pressers.

Post-high-school technical training is an especially critical need, the Panel found. Estimates of the number of new technicians needed in every year of the present decade range from 67,800 to 200,000. Technician training is presently offered under a variety of auspices, public and private, with the federally reimbursed programs authorized for Title VIII of the National Defense Education Act producing a major share of the graduates.

The Panel's general recommendations are that, in a changing world of work, vocational education must —

- Offer training opportunities to the 21 million noncollege graduates who will enter the labor market in the 1960's.

- Provide training or retraining for the millions of workers whose skills and technical knowledge must be updated, as well as those whose jobs will disappear due to increasing efficiency, automation, or economic change.

- Meet the critical need for highly skilled craftsmen and technicians through education during and after the high school years.

- Expand vocational and technical training programs consistent with employment possibilities and national economic needs.

- Make educational opportunities equally available to all, regardless of race, sex, scholastic aptitude, or place of residence.

The Panel believes that the federal government must continue to work with states and local communities to develop and improve the skills of its citizens. In place of the occupational categories specified in the present statutes, the Panel recommends that

the local-state-federal partnership increase support of vocational and technical education for —

I. High school students preparing to enter the labor market or become homemakers.

II. Youth with special needs who have academic, socioeconomic, or other handicaps that prevent them from succeeding in the usual high school vocational education program.

III. Youth and adults who have completed or left high school and are full-time students preparing to enter the labor market.

IV. Youth and adults unemployed or at work who need training or retraining to achieve employment stability.

V. Adequate services and facilities to assure quality in all vocational and technical education programs.

The Panel urges that occupational preparation be available to all American youth. The world of work requires many more young people well trained to enter employment in agriculture, the skilled trades, business, industry, merchandising, service occupations, and technical and health fields, as well as homemaking. Since the American population is highly mobile, responsibility for occupational preparation must be considered by every high school, but the need for vocational and technical education is especially evident in urban centers, which offer the greatest number of employment opportunities.

For young people in high school who are preparing to enter the labor market or to become homemakers, the Panel recommends that present vocational education programs be expanded. Training for office occupations should be included among the federally reimbursed vocational education programs. Preemployment training for the distributive occupations should be eligible for federal support in addition to the present cooperative (work-school) programs. The vocational agriculture program, under federal reimbursement, should permit instruction for occupations related to agriculture as well as for actual farming.

For high school age youth with academic, socioeconomic, or other handicaps that prevent them from succeeding in the usual high school vocational education program, the Panel recommends that instruction be highly individualized. Specially qualified and highly motivated teachers with occupational compe-



Although Rosie the Riveter usually returned to housework in the immediate post-war years, her daughter was less likely to pursue a traditional "woman's role." Today, thanks to U.S. civil rights legislation, girls across the U.S. are studying industrial arts, trade and industrial, and other subjects once thought to be the exclusive province of boys. Not that boys got the bad end of the deal; today such traditionally female classes as home economics are open to them, and as the stigma of wearing an apron subsides, more and more boys are taking advantage of subjects they didn't before. Top photo shows one of the female students in the Wahpeton, North Dakota Career Development Institute. Above is one of the male students in the food services program of the Walled Lake Consolidated Schools, Walled Lake, Michigan.

tence, who understand the needs of disadvantaged youth, should be employed for this purpose. Occupational information of practical significance and expert vocational counseling must be made available to their students. Diversity and flexibility must characterize these programs; experimental or pilot projects to develop more effective instruction should be fully supported by federal funds.

For youth and adults who are full-time students preparing to enter the labor market, having completed or left high school, the Panel recommends that the federal government increase its support of full-time, post-high school vocational and technical training. An advancing technology constantly demands more skilled craftsmen and highly skilled technicians in occupations requiring scientific knowledge. Vocational and technical education must prepare many more technicians and skilled craftsmen for employment in industry, business, agriculture, and the health fields.

Both the area vocational schools and the specialized vocational schools in large urban centers provide a diversity of occupational training programs to large numbers without the usual restrictive residence requirements. Many more of these schools are needed, especially for training highly skilled craftsmen and technicians. Technician training is also available in community or junior colleges, agricultural and technical institutes, and vocational-technical schools. Expanding their output is also a national need of urgent importance.

For youth and adults unemployed or at work who need training or retraining to achieve employment stability, the Panel recommends that part-time, short-term training courses be expanded. Millions of workers also require updating and upgrading—lifelong learning—in an era of changing materials, processes, tools, and techniques. Courses in many more fields, including the office and service occupations, should be made available to both groups. More equipment and facilities must be provided to extend educational opportunities to many more workers, especially those living in communities where training is a critical need. Apprentice and journeyman training opportunities should be expanded by mutual action of employers and unions.

For services required to assure

quality in all vocational and technical education programs, the Panel recommends that—

- Teacher and leadership training programs be improved and enlarged. Institutions of higher education, especially land grant colleges and state universities, should provide for the professional growth of vocational and technical teachers.

- Basic education material oriented to specific occupations be available for all programs. For this purpose, instructional materials laboratories should be established in appropriate institutions and financed and coordinated through the Division of Vocational and Technical Education, U.S. Office of Education.

- Occupational information and guidance services be available for all students. State and national leadership for these programs should be supported and coordinated by the Division of Vocational and Technical Education, U.S. Office of Education.

- Research and development in vocational and technical education be encouraged, supported, and coordinated at the national level. The results of this research and development should be made available on a nationwide basis.

To finance expanding programs of vocational and technical education, support from all sources must expand as enrollments expand, as dropouts diminish, and as adult training and retraining become more urgent. Local and state governments should increase the \$500 million they now provide annually for operation, administration, and construction costs. The federal government should provide at least \$400 million as its investment in the six million young people and adults who currently benefit from vocational and technical education. This should include for the 1963-64 school year:

I. For youth in high school who are preparing to enter the labor market or to become homemakers: \$200 million

II. For high school youth with academic, socioeconomic, or other handicaps that prevent them from succeeding in the usual high school vocational education program: \$10 million

III. For youth and adults who have completed or left high school and are full-time students preparing to enter the labor market: \$50 million

IV. For youth and adults unemployed or at work who need training or

retraining to achieve employment stability: \$100 million

V. For services required to assure quality in all vocational and technical education programs: \$40 million

(*Education for a Changing World of Work*. Report of the Panel of Consultants on Vocational Education. U.S. Department of Health, Education, and Welfare, Office of Education, 1963, pp. xv-xx.)

Thus the Panel succinctly stated its position based upon its comprehensive review. This action represented the perfect example of reinterpretation of the principles of vocational education in accord with social, economic, and technological need. It had been 48 years since the last comprehensive review of the need for vocational education in 1914, when the Commission on National Aid to Vocational Education reported its views as follows:

"There is a great and crying need of providing vocational education . . . for every part of the United States—to conserve and develop our resources; to promote a more productive and prosperous agriculture; to prevent the waste of human labor; to supplement apprenticeship; to increase the wage-earning power of our productive workers; to meet the increasing demand for trained workmen; to offset the increased cost of living. Vocational education is therefore needed as a wise business investment for this nation, because our national prosperity and happiness are at stake and our position in the markets of the world cannot otherwise be maintained."

Vocational Education Act of 1963

During the late fall of 1962 the Administration's bill was structured and on January 29, 1963, S 580 and HR 3000 were introduced—"A Bill to Strengthen and Improve Educational Quality and Educational Opportunities in the Nation." Title V of each bill contained the provisions for vocational education, replaced the George-Barden Act entirely, and removed all earmarked funds. Although many of the Panel's recommendations were included in the bills, there were serious objections to the omnibus bills.

In order to overcome the objections the Program Development Committee of AVA met in Washington late in January and early February to work out provisions for a substitute bill. These recommendations were included in a new bill, HR 4955, which

was introduced in the House of Representatives by Carl D. Perkins (Ky.), on March 18, 1963. During late March and April public hearings were held on the bill.

In the meantime, the Senate Republican Policy Committee conducted an independent study of vocational education and issued a report on March 4, 1963: "The Forgotten Youth, Vocational Education in the United States." Although the report contained nothing new it did represent a strong emphasis on vocational education, as an aspect of party policy, and it provided a convenient means of attack on the administration for its timid support of vocational education. The report included the following statement:

"A partial solution to the problems of unemployed youth as well as those of the employer looking for skilled or semi-skilled help does exist within our educational system—the *vocational or technical* school—but it has been neglected and ignored. In some cases it almost seems that our administrators have taken the attitude that if they don't look, maybe these schools will go away."

The report was widely distributed among members of the Congress and was available at a time when the legislative problems of the omnibus bill seemed to spell doom for the vocational provisions of the bill. Whatever impact the report may have had was cut short on June 19, 1963, when the Administration's message to Congress requested an expanded program of vocational education.

House bill 4955 was reported out of committee and back to the floor of the House on June 18, 1963. The bill was debated on August 6, 1963, with strong support from the members of the House. When the final vote on the bill was taken, the yeas were 377, the nays 21 (35 did not vote) and the bill was passed.

Although hearings on S 580 had been held by the Senate, the bill was not reported back prior to the receipt of President Kennedy's June 19th message which contained the following recommendations:

"That the pending vocational education amendments, which would greatly update and expand this program of teaching job skills to those in school, be strengthened by the appropriation of additional funds, with some of the added money earmarked for those areas which show a high incidence of school dropouts and youth unemployment, and by the addition of

a new program of demonstration youth training projects to be conducted in those areas.

"That the vocational education program be further amended to provide a work-study program for youth of high school age, with Federal funds helping their school or other local public agency employ them part time in order to enable and encourage them to complete their training."

On July 18, 1963, the recommendations of the President were introduced as an amendment to S 580, and on August 7, HR 4955 was received in the Senate and referred to committee. In executive session on September 10 and 11, the education subcommittee of the Senate recommended a revision of HR 4955 and reported the bill favorably to the Senate as amended.

On October 7, the Senate took up the matter of vocational education. Senator Wayne Morse (Oreg.) opened the debate on the bill. He discussed the education legislation before the 88th Congress, cited many facts about the educational needs, and compared the Senate and House versions of the bill citing particularly why differences existed, then said, "I urge my colleagues to help American girls and boys of all ages to obtain, [in] all the areas covered by the bill, educational objectives suited to their individual talents and abilities. In my judgment, this can be done at this time through support of this first installment of educational legislation in the 88th Congress, without amendment."

Senator Abraham Ribicoff (Conn.), a former HEW Secretary, spoke highly of the Panel and its work and commented, "It would be a tragedy for the country if this legislation is not enacted. Its underlying purpose is to improve our vocational education system so that all people, whatever their age or level of academic achievement, may have an opportunity to acquire the education and training necessary to make them employable."

Senator Joseph S. Clark (Pa.) felt that the people of the nation needed to be aroused to the seriousness of the crisis facing the American people and that vocational education could help meet that crisis.

"In many ways," he said, "we are engaged in a race between education and catastrophe; at present catastrophe is winning, because there is no sense of urgency in the White House, in the Senate, in the House, or, I regret to say, among the American people. We have come out with fine

words; we receive wonderful messages; we make splendid speeches; and we hear excellent testimony. But—to use an analogy which I have used before on the floor of the Senate—then, like Ferdinand the bull, we sit down under a tree, smell the beautiful flowers, and let the rest of the world go by.”

One senator after another rose to support the vocational education bill and the debate was continued into the next day, October 8. Senator Birch Bayh (Ind.) offered an amendment that increased the amounts under consideration by the Senate, saying that the original amount was “only a half a loaf.” Not enough money had been proposed to support the great need for vocational education, he said; the amount the committee wanted to allocate was like delegating “one beaver to dam the roaring Colorado.”

Senator Bayh wanted to support the minimum recommendations of the Panel of Consultants. He continued his discussion at length, totally supporting vocational education and citing carefully the reasons why it would aid the American economy. When he had finished his speech, the senators congratulated him on his stand. Senator Daniel K. Inouye (Hawaii) indicated his approval and support of the bill, as did Senator Hubert H. Humphrey (Minn.), who observed that “no nation ever spent itself into bankruptcy by educating its people.”

When the final vote on the bill was called for, the result was ayes 80; nays 4; not voting 16. The bill was passed. A conference committee was appointed to meet with the House to iron out the differences between the two bills.

“The tragic death of President Kennedy, on November 22, 1963, came in the midst of the conference proceedings. Vocational education had lost one of its strong supporters. Just a year earlier President Kennedy had received the Panel of Consultants at the White House. The informal reception in the rose garden just outside his office brought to each person a vivid experience of the President’s warmth and dynamic personality. The group was impressed with his sincerity and his remarkable understanding of the program of vocational education. He had asked that a national study be made, had followed the project into its legislative phase, and had further stressed its importance by special messages to Congress.

“Formal recognition to President

Kennedy’s faith in vocational education was given at the American Vocational Association meeting in Atlantic City a few weeks later, and the continuing sense of personal loss among the vocational educators of the nation was strong.” (Barlow)

A dark cloud hung over the AVA convention in Atlantic City because there were indications that the conference committee members were “chasms apart” concerning some of the features of the bill. It was reported that President Johnson called key members of the conference committee and urged that they find agreement so that the bill could get out of committee and back to the houses of Congress. On December 10, the conference committee did reach an agreement and reported the bill back to the Senate and the House for final consideration.

On December 12, the House considered the conference report on HR 4955. Controversy continued on certain aspects of the bill. Motions were received, debated, and rejected and finally the conference report was put to a vote resulting in 300 yeas, 65 nays, with 69 members not voting.

On December 13, the conference report was considered in the Senate. Senator Morse asked for unanimous consent of the Senate indicating that the conference report was sound and deserved support. Most of the discussion turned out to be praise for the bill. There was a faint boast that the Senate had lost very little in the conference with the House. When the vote was called for the yeas were 82; nays 4; not voting 14.

On December 18, 1963, President Lyndon B. Johnson signed into law the Vocational Education Act of 1963, Public Law 88-210.

Golden Anniversary 1917-1967

The American Vocational Association observed the fiftieth anniversary of the Smith-Hughes Act by devoting the March 1967 issue of the American Vocational Journal to a review of progress in the 50-year period. In his column, Latest Word from Washington, Lowell A. Burkett, AVA executive director, wrote:

“This issue of the Journal attempts to depict the progress made in vocational education since the Smith-Hughes Act was signed by President Woodrow Wilson on February 23, 1917. We salute the vocational educators who have been, and currently are, a part of this great movement.

“The years ahead offer a great challenge. Technology is advancing at an accelerating pace, there are more people to be served by vocational education at all levels, and the confusion that exists over why, how, and by whom vocational education should be administered and conducted is overwhelming. The people best qualified to deal with the issues and problems in manpower training are found in the vocational education profession. I am confident that they will rise to the challenge, and that the history of vocational education for the next 50 years will be recorded as a period of phenomenal growth and improvement.”

Melvin L. Barlow discussed the foundations of vocational education, saying in part: “The strength of vocational education develops largely from its soundness of purpose in relation to the society it serves. This is a tribute to the educational vision of the founders of the vocational education movement. It is a ‘well done’ to those who have ‘kept the faith’ through half a century.”

Walter M. Arnold, Assistant Commissioner for Vocational and Technical Education, USOE, traced the concept of federal-state partnerships over the 50-year period, stating that the passage of the Smith-Hughes Act had initiated a long and successful relationship “founded on the unique concepts of the state plan and matching funds.” Arnold continued:

“All of the federal acts stipulate that the vocational education programs must be under public supervision and control, and further, that the instruction shall be designed to lead to employment in recognized occupations other than the professions. The philosophy of the federal-state administrative relationship is simply that federal and state offices are service offices set up to help the states and local districts meet standards of good programs, not to control these programs.

“The cooperative federal-state-local relationship in vocational education is well described in the foreword of the first Statement of Policies, Bulletin No. 1, of the Federal Board for Vocational Education, issued in 1917. The foreword stresses that under the Smith-Hughes Act the federal government did not propose to undertake the organization and immediate direction of vocational training in the states, but did agree to make substantial financial contribution to its support and to foster and promote vocational



training and the training of vocational teachers.

"The Smith-Hughes Act clearly paved the way for the unity of federal-state relationships."

Roy W. Roberts, professor emeritus of vocational education, University of Arkansas, reviewed the progress of 50 years in agriculture education. Concluding that imaginative planning would be required in the years ahead, Professor Roberts said:

"It has been suggested that the technological changes in agriculture are not a result of happenstance but of a century of study and experimentation in agriculture. The changes have resulted in a division of labor in agriculture that has made farming and agriculture no longer synonymous. The reduction in the number of farmers has been accompanied by an increase in agribusiness occupations that require knowledge and skills in agriculture. Agricultural educators must take cognizance of these facts and make adjustments in courses, curriculums and methods of instruction in agriculture in the secondary and post-secondary schools."

S.S. Sutherland, professor emeritus, Department of Agricultural Education, University of California, Davis,

predicted there would be greater acceptance by society of responsibility for occupational education in agriculture "stemming from a growing realization of the vital importance of the production of food—not only for our own country but for the world. A growing recognition will develop of a concept of agriculture that includes not only farming, but the input and output agencies serving it, as well as the concept of multiple use of land and natural resources and their conservation."

Harry Huffman and Franklin H. Dye concluded their remarks concerning business and office education with this statement:

"Business and office education has in the past prepared millions of effective office workers for the American economy. It has also provided general and economic education for millions of youth. The increasing demand for information to operate business, industry and government has accelerated the need for information handling, information management and other administrative services.

"No end is seen by forecasters to the unprecedented need for these services. Hence, business and office education programs must grow proportionately



Health occupations education has become an important area of vocational education, coming a long way from the days of leeches and mustard compresses. Top photo, a student in the Galveston (Texas) College Associated Health Occupations Program reads an electroencephalogram. Above, a senior dental assisting student applies topical fluoride to a preschooler as part of her training at the SUN Area Vocational-Technical School in New Berlin, Pennsylvania.

and be expanded into a variety of levels. Research should guide the growth of these programs and the development of curricula for them. The next years in business and office education are bound to be eventful and challenging."

Neal E. Vivian, Ohio State University, recounted the achievements of distributive education, discussing its beginnings, the influence of the Act of 1963, USOE's role, the high school program, post-high school program, adult program, teacher education, and the state of research and leadership development. In his summary he indicated that distributive education was on the threshold of its greatest growth and recognition.

"The responsibilities for meeting these challenges and taking advantage of the opportunities in the pursuit of excellence is up to us, the distributive educators," he said.

Alberta D. Hill, head, Home Economics Education Department, Iowa State University, offered four "selected" answers to the question of what had been learned in 50 years of home economics experience. They were:

1. Vocational home economics education serves multiple, interrelated purposes in American education.
2. Contributions of home economics to the development of a proficient labor force is both direct and indirect.
3. Obsolescence of content and method is a constant threat.
4. Effective programs adapt to and resist change.

A fifth answer was of a somewhat different dimension, Dr. Hill said, adding that "home economics has become accepted as an essential and integral part of vocational education and grows in its influence through the sustaining support of school administrators, organizations of professional educators, local school boards, state legislatures, and the Congress."

In his discussion of industrial arts, H.H. London, professor of industrial education, University of Missouri, recalled some of the problems of confused objectives with this commentary:

"Look critically at the objectives of industrial arts which have been proclaimed during the past 50 years, and it is apparent that the subject has been advocated as almost everything for everybody. Right now some of the proposed innovations in industrial arts appear more like an effort to take over the social studies, to fashion a pro-



Through displays such as this one, created by a class at Athens Senior High School in Troy, Michigan, distributive education is one of the most visible areas of vocational education.

gram for the upper five percent of the student body, or to win academic respectability, than they do as goals of a realistic program to better meet the needs of youth and adults normally enrolled.

"Despite the various claims made for industrial arts over the years, the things that appear to have endured are its *unique purposes and values*—skill in the use of common tools, materials and machines, the ability to make and read working drawings, exploratory values, and consumer knowledge of industrial products.

"The interpretation of industry and technology has received considerable attention recently, but this is an objective also of the sciences, the social studies and even of mathematics broadly conceived."

New goals for trade and industrial education were reviewed by Lee W. Ralston, director of practical arts education, Los Angeles County Schools. Ralston said that despite evidence of progress, vocational education in 1967 could not afford to become complacent. It still had a long way to go to achieve the goal established by the Act of 1963, namely to make vocational and technical programs readily accessible to persons of all ages in all communities of the United States. Ralston continued:

"To achieve this goal, vocational education should enroll at least 60 to 75 percent of all high school students in some kind of vocational education courses. This means that vocational educators must work more effectively with the counseling staffs of their schools.

"Vocational educators must develop occupational programs appropriate to meet the needs of a given area in all types of educational institutions—comprehensive high schools, specialized vocational-technical high schools, junior colleges, area vocational and technical schools (both secondary and post-secondary), other public and private institutions, and private schools under contract with the state or local education agency. Programs must be offered to cover the entire occupational spectrum, excluding only those occupations generally considered professional or which require a bachelor's degree or more."

The commemorative issue included sketches of the lawmakers who had been prominent in the development of vocational education legislation. In addition, eight educators reminisced

on the theme, "Yes, I Remember February 23, 1917." All eight—David F. Jackey, Edna P. Amidon, Franklin J. Keller, Walter B. Jones, Herbert M. Hamlin, Verne C. Fryklund, G.A. Schmidt, and William T. Spanton—were at some stage of an educational career, either as students or teachers, at the time the Smith-Hughes Act was passed in 1917.

Five years before the Act was passed, Theodore Roosevelt had commented that the educational system must change if it was to meet the needs of the future. "My plea," he said in 1912, "is for a tremendous expansion of the vocational, industrial, and technical side of education, so that the children shall not leave school with a broad smattering only of all kinds of knowledge, but so that they shall be prepared to do the work of the future; so that they shall be able to do every form of work well in the shop, in the factory, and in the home."

Now in 1967, certainly the system had changed and the great expansion movement in vocational education had begun.

The Advisory Council on Vocational Education, 1966-68

One part of the Vocational Education Act of 1963 required that the President appoint an Advisory Council on Vocational Education in 1966 and that the Council report not later than January 1, 1968, on the program of vocational education in the United States. The Council focused its attention primarily on the period after July 1964, when the first indications of the impact of the Vocational Education Act of 1963 could be noted. See Appendix I for the Council's 1967 summary report.

The Vocational Education Amendments of 1968

Long before the report of the Advisory Council on Vocational Education was available for printing, rough drafts of the report and other papers had been submitted to Senator Morse, at his request. These materials were published in March 1968 under the title *Notes and Working Papers Concerning the Administration of Programs Authorized Under the Vocational Education Act of 1963, Public Law 88-210 as Amended*, and were made available to the Senate Subcommittee on Education and to other members of Congress.

Both the House and Senate introduced vocational education bills and issued reports on the bills. On July 15, 1968, the House considered and passed HR 18366. On July 15 and 17, the Senate considered, amended, and passed HR 18366 in lieu of S 3770. A conference committee was appointed to iron out the differences between the two bills and on October 1 and 2, the Senate considered and agreed to the conference report. On October 3, the House considered and agreed to the conference report and on October 16, 1968, the bill was signed by President Johnson as Public Law 90-576.

The total authorization under the bill was in excess of \$800 million for fiscal year 1970, but only \$365,347,467 was actually appropriated for that fiscal year. On two occasions during the preparation of the Council report the White House called the Council for progress reports to put before the President.

Effect of the '68 Amendments

The 1968 Amendments were like a shot in the arm to vocational education. Built upon a sound basic act (the VEA '63), the Amendments provided new opportunity for vocational education to serve a larger segment of the population as these persons prepared to enter the labor force or to gain mobility in the labor force.

The new law's declaration of purpose represented two major convictions. First, it represented a mandate from the Congress to the American people about needed adjustments in American education. Second, it represented a confirmation and dedication of vocational educators to the imperative needs of a larger segment of the population for quality vocational education programs.

To ensure the accomplishment of these convictions, Congress made some increases in financial aid and liberalized definitions of what constituted vocational education. But in the main the major purpose of vocational education in 1968 (and in 1976) was basically the same as in 1917—vocational education is concerned with people and the work they do.

The 1968 Amendments emphasized some of the central themes of the 1963 Act such as: research and training in vocational education students; curriculum development in vocational and technical education (for which funding has never been made available); consumer and homemaking education;

cooperative vocational education programs; work-study programs for vocational education students; curriculum development in vocational and technical education; and a new program, leadership development in vocational education.

Congress has always held a strong and abiding interest in vocational education, so it was no surprise when interest developed in the Congress to find out how well the new Amendments of 1968 were being received by the nation. The foreword of the 1973 review by Congress includes the following information which summarizes hundreds of reports from the various states.

In November, 1971, the General Subcommittee on Education, House of Representatives, published a volume entitled, *Reports on the Implementation of the Vocational Education Amendments of 1968*. That volume documented the changes which had occurred in vocational and occupational education since the enactment of Public Law 90-576. Its publication was well received by the education community and proved to be very useful to researchers, educators, and the public at large. The Subcommittee, therefore, in continuing to fulfill its responsibility to oversee the administration of federal education programs, decided to compile a second volume containing current information on vocational and occupational education in every state, the District of Columbia, the Virgin Islands, and Puerto Rico.

Again the volume included reports from the state directors of vocational education, the National Advisory Council on Vocational Education, and the state advisory councils on vocational education. The reports from the state directors of vocational education were contained in Part I, since these reports presented the most comprehensive and detailed information on the implementation of the Vocational Education Amendments of 1968 in each of the states and in other jurisdictions. The Subcommittee was indebted to the state directors for the time and energy which they obviously expended in preparing their reports.

The 1972 Annual Report of the National Advisory Council on Vocational Education was contained in Part II of the report. The Subcommittee was impressed by the work of the National Advisory Council and its staff.

An analysis of the reports of the state advisory councils on vocational

education for fiscal year 1972 comprised Part III of the report of the subcommittee. That analysis, which was prepared by the staff of the National Advisory Council, identified the components of each of the state reports by subject area. A comparison of these state reports with the state reports contained in the Subcommittee's 1971 publication showed clearly that many state advisory councils had grown to be perceptive, independent evaluators of the vocational educational programs within their states.

There is no question that the Vocational Education Amendments of 1968 have provided new opportunities for many youngsters and adults. In the first report, the Subcommittee had indicated that while great strides had been made in vocational education since 1968, a great deal remained to be accomplished. The 1973 volume clearly showed that progress was continuing to be made in vocational education. It showed also how far we are from achieving our goal of securing for every American citizen an opportunity for vocational or occupational training in secondary schools, in post-secondary institutions, or in other institutions.

National and State Advisory Councils

Advisory groups to keep the program up to date and in tune with needed changes in instructional and related areas are not new in vocational education. Such advisory groups were integrated into the structure of vocational education by the deliberations of the National Society for the Promotion of Industrial Education prior to 1917. In fact, a good case can be made for the claim that vocational education invented advisory groups as a quality control device in education.

Nevertheless, initial attempts to formulate national advisory groups in vocational education were not too successful. Throughout our history, beginning with the Federal Board for Vocational Education, we have had such groups, but in the main, their purposes were ill-defined and very little of positive value was gained.

To correct this situation, the 1968 Amendments provided for both national and state advisory councils. Their charge, as stated in the Amendments, appears in Appendix II. It is included in order to clarify the purposes and responsibilities of the councils within the limits of the law. The law does not provide all of the answers.

There are questions about duties and responsibilities that still could be raised in the interests of preserving some degree of freedom for the councils.

But that the councils are *advisory*, and not *administrative*, is most certainly intended by the law.

From an historical point of view the national and state advisory councils must be regarded as positive gain in vocational education. The 1968 Amendments made it possible for more than 1,000 persons across the nation, assembled in councils, to be concerned with the general well-being of vocational education. In every sense the councils were intended to move the planning and operation of vocational education closer to the people they serve.

Although the law does not provide any connection between the national and state advisory councils it has been the practice of the national council, in cooperation with state councils, to call one or two national meetings each year, and from time to time regional meetings, in order to strengthen the efforts of all councils.

Enter Career Education

Concepts of career education came into view prominently in 1971 when U.S. Commissioner of Education Sidney P. Marland, Jr., used career education as a term to express a major reform needed in secondary education. Commissioner Marland backed up his convictions about the centrality of career education as a part of a person's total educational experience by assigning a significant portion of the Commissioner's discretionary vocational education funds to projects in the area of career education.

In a short period of time the Commissioner's actions attracted the attention of the educational world and converts by the score embraced the idea and moved actively to implement concepts of career education in the general program of education. The American Vocational Association, at its convention in Portland in December 1971, held special meetings to formulate its concept of career education and outline an action program of support.

Like many other movements in education, career education is not new. Its essence was clearly evident in the work of the National Society for the Promotion of Industrial Education prior to the passage of the Smith-

Hughes Act. Subsequent "great ideas" about education such as "life adjustment education" and the "imperative needs of youth" embraced themes that were not contrary to much of the emphasis upon career education. Unfortunately these earlier efforts were not backed up by funds needed to experiment with and prove the point about career education.

Within a short period of time a mountain of literature was developed on the subject of career education—from theory to how to do it—and with this effort a number of "instant experts" on career education appeared on the scene. The "in" ideas about education were embraced in programs of and about career education. With so many persons involved in attempting to pursue ideas related to career education it was inevitable that conflict would develop among the various protagonists. What was career education? Was it vocational education with a new name? Was it unrelated to vocational education? Why can't it be defined?

At this stage in the review of history it is not possible to ferret out all of the ideas about career education and to proclaim a consensus. However, many people believe that career education is an educational continuum that starts with early childhood and extends to old age and that its mission is primarily job- or work-related. This theme is persistent in vocational education because the selection means by which a person enters an occupation to earn a living has been largely one of "settling for" whatever was available at the time. This means of selection appears to avoid matching jobs and people. If concepts of career education could enter the educational system, then persons would select occupations on the basis of conscious effort to relate themselves to the world of work. If such a system were a part of the education of all people, then those who select occupations in the realm of vocational education would be better prepared to enter training programs for those occupations.

Congress has taken an active interest in career education, and added its philosophy and thoughts on the subject to federal education legislation in the form of Section 406 of Public Law 93-380. This amendment was passed on August 21, 1974, and is reproduced in Appendix III.

The Advisory Council on Career Education was formed shortly thereafter, with Marland, now president of

the College Entrance Examination Board, appointed as chairman. The Council began work immediately to meet the requirements imposed upon it by law, and in particular, to make recommendations for new legislation.

Kenneth B. Hoyt, was appointed director of the Office of Career Education, and proceeded immediately to call a number of conferences and mini-conferences as a means of developing unity among the states and school districts of the nation as they worked on the various tasks of vocational education. In addition Hoyt funded a number of demonstration projects throughout the nation to further develop programs and procedures for career education.

During the late summer and early fall of 1975, Chairman Marland developed the bases for new legislation which was submitted to Congress. On December 4, 1975, Congressman Carl D. Perkins introduced HR 11023, The Elementary and Secondary Career Education Act of 1976. The Act is intended to provide implementation funds for career education throughout the nation.

Summary of Enrollment

Tremendous progress has been made in vocational education since 1918. Almost any statistical summary reveals the continued development of vocational education among the states. It was this consistent growth in enrollment in vocational education that, in part, caused the late vocational educator Herbert Hamlin to talk and write about "Vocational Education: The Success Story of the Century." Hamlin, like many others in vocational education, was enamored of the potential effect the changes in vocational education could have, and in fact did have, on the social and economic condition of the people who had chosen to participate in the vocational education program.

The following figures from the U.S. Office of Education indicate the total growth in vocational education enrollment by decades:

| | |
|------|------------|
| 1918 | 164,186 |
| 1928 | 999,031 |
| 1938 | 1,810,082 |
| 1948 | 2,836,121 |
| 1958 | 3,629,339 |
| 1968 | 7,533,936 |
| 1974 | 13,555,639 |

The table shows clearly the effect of the Vocational Education Act of 1963

and the Vocational Education Amendments of 1968. It suggests also that the faith of Congress in vocational education to serve the American people has not been misplaced.

AVA: the Strength of Vocational Education

The second greatest influence on vocational education has been its professional association. (The first has been the Congress.) Throughout the years, since 1906, it has been true that the principles, concepts, and issues of vocational education have been reviewed in detail by the professional association before the total group was willing to embark upon a course of action. Such activity has kept the standards of vocational education high and in tune with social and economic needs. The founders of the vocational education movement wanted the best—the best in program, teachers, administration, and service to the occupational needs of people in pursuit of an occupational future. Anything else was not acceptable.

It is interesting to note that the Dolliver-David bills (1908-1911) were not supported by the National Society for the Promotion of Industrial Education because the Society felt that the concepts behind the movement had not been thoroughly analyzed and formulated into action steps. The Society actually stalled Congressional action during that period of time because it was not satisfied with the soundness of the proposed program for vocational education.

The strength of the professional organization has resided largely in its executive secretaries, all of whom have been dedicated to the mission of vocational education. For a long period of time the secretaries served without salary. Later they were employed by the association part time and occasionally full time, until 1934 when a permanent executive secretary became essential. A listing of the executive secretaries since 1906 appears on page 109, following Appendix III.

The first person to serve for an extended period as full-time secretary was Charles A. Prosser. The minutes of the executive committee of the National Association for the Promotion of Industrial Education read as follows:

"The Committee on the Secretaryship recommended that Mr. Prosser be appointed secretary at a salary of \$6,000 per annum for a period of five years; this contract being terminable



Vocational education has grown to encompass a wide range of services and increasingly is better integrated with academic education. The wave of the future seems to be combining aspects of academic and vocational education to outfit people with the skills they need for daily life. Here an inmate of the Massachusetts Correctional Institution in Norfolk works to assess his reading level. The materials are vocationally oriented to better acquaint the student with the world of work.

at the end of three years with one month's notice from either of the contracting parties. It also recommended that Mr. Prosser's engagement begin with March 1st [1912]."

The Committee's recommendation was accepted by the executive committee and Prosser became the nominal leader of NSPIE, an organization of 847 persons as of March 21, 1912.

By 1933 the necessity of having a full-time secretary had become critical and the executive committee of the American Vocational Association, meeting in the Statler Hotel in Detroit on December 8th of that year, recommended that an executive secretary be appointed on a full-time basis and that the headquarters of the Association be located in Washington, D.C. A special committee appointed by the president of AVA made the following recommendations, which were accepted:

"We recommend the employment of a full time executive secretary as of January 1, 1934, who may provide the professional leadership and conduct such administrative and executive services as may be directed by the Executive Committee. The appointment of such executive secretary shall be made by the recommendation of the Executive Committee with such compensation, travel allowance, expenses of office management and other incidental expenses as may be included within the budget authorized by the Executive Committee. It is further recommended that the candidate for the office of the executive secretary enter into a contract with the president, acting for the Executive Committee, for a period of three years, with the explicit understanding that in its direction the Executive Committee shall have power to terminate the contractual relationship with such executive secretary at the close of any one year, if and when three months notice have been presented in writing to the executive secretary. It is further recommended that the president, acting for the Executive Committee, secure legal counsel in drafting such contract as may properly protect the American Vocational Association, and the individual members of the Executive Committee. We recommend that the executive secretary be authorized to render professional services to organizations, when such services are requested, and to receive honorariums therefor, provided:

"(1) That the professional activities rendered by him shall be approved in advance by the president, and

"(2) That if the honorariums, exclu-

sive of expenses of travel, in any one year shall exceed five hundred dollars, such excess amounts shall be pro-rated on the basis of 50% to the executive secretary and 50% to be allocated to the American Vocational Association.

"The executive secretary, when contractual relationships shall have been completed, shall be responsible to the president of the American Vocational Association in the discharge of all necessary duties and in filing necessary reports. We recommend that the president appoint a legislative committee of at least twelve members, and furthermore, that the president name five such members as a steering committee. The functions and services of the legislative committee shall be primarily policy forming. Such activities as the legislative committee, or as members of such committee, may perform in carrying forward the details of accepted policies shall be conducted only upon the full knowledge and approval of the executive secretary.

"The executive secretary shall have such duties and shall discharge such responsibilities as may be directed by the Executive Committee in addition to the duties and responsibilities designated in Section 7 of the Constitution of the American Vocational Association."

The budget recommended for the maintenance and operation of the office and services of the executive secretary at the Washington headquarters totaled \$9,500 "exclusive of the expenses incurred in the preparation and sending of the News Bulletin." The breakdown was as follows:

Salary, executive secretary, \$4,500
Travel, \$1,000
Salary, office secretary, \$1,500
Office rent, \$600
Equipment and supplies, \$500
Communication, \$300
Printing, stationery, postage, etc., \$600
Undistributed and miscellaneous, \$500

L.H. Dennis, as executive secretary of AVA, was involved prominently in the preparation of the George-Deen and George-Barden Acts for vocational education. The Association seemed to "come alive" with its concentrated attention to vocational education in its new Washington, D.C. office in the Denrike Building, 1010 Vermont Avenue. The membership had grown from an initial 1,222 in 1926 to 33,810 when Dennis retired.

Mayor D. Mobley, MD to nearly everyone, became executive secretary in 1950 and served for 16 years during the period of greatest expansion and

change of vocational education. MD worked closely with Congress and the author learned some of the secrets of close Congressional relationships. First, as MD would say, always tell Congress the truth—even if it hurts, and this MD always did. Second, be sure to deal in facts. MD had embraced the position that while everyone was entitled to his own opinion, no one was entitled to be wrong in his facts.

When MD retired as executive secretary he urged the board to elevate his replacement to the position of executive director. Vocational education had grown so rapidly and the responsibility of the professional association had changed so markedly it was imperative that new leadership have the capacity to live with the fabulous future of vocational education.

In December 1965, Lowell A. Burkett, after serving a ten-year apprenticeship under Dr. Mobley, was appointed as the first executive director of the American Vocational Association. Burkett was instrumental in developing and getting through Congress the Vocational Education Amendments of 1968, and currently is heavily involved in the 1976 educational legislation.

Under his administration, the AVA has reorganized and increased its headquarters staff and services to members. Since Mr. Burkett assumed his post the following divisions have been added to the AVA structure: New and Related Services, Technical Education, Health Occupations Education, Guidance, Manpower, and Administration. Five regions were formed and have just completed their first year of operation. Membership has climbed from the 33,983 Mr. Burkett inherited from Dr. Mobley to 48,515 as of January of this year.

...

The growth in enrollment and interest in vocational education over the past 200 years has been astounding. Yet as we move towards the nation's Tercentennial it is well to ponder not only the advances and changes in vocational education, but also the heritage. For although vocational education has moved out of the home and into the classroom; although parent has yielded to teacher the role of formal education; and although students have changed in interests and outlook, nonetheless vocational education remains today what it always has been—the transmission of the nation's skills from one generation to another.