This document presents the views of the National Association of State Directors of Vocational Technical Education regarding the challenge, mission, vision, underlying principles, practice, needs, and benefits/potential outcomes of vocational-technical education (VTE). The following topics are discussed: the challenge of making VTE the cornerstone of reconstructing the "American dream"; VTE's importance as a work force development system and provider of occupational education; the vision of VTE as a provider of education where teaching methods matched to learning styles are used to make all citizens employable at age 18; VTE's role in creating substantial economic opportunities for all students, training/maintaining the work force, providing customized training for large and small employers, establishing and promoting a school-to-work transition system, preventing failure, and encouraging employer participation in education; the importance of building on existing VTE systems to facilitate students' transition into the workplace; VTE's accomplishments in areas such as using the applied learning method, integrating vocational and academic education, identifying skills needed in the workplace, piloting performance standards and tech prep programs, pioneering performance-based assessment systems, and reaching out to special needs groups; and the financial, legislative, and other support needed by VTE to train a globally superior work force. (MN)
EDUCATION FOR A WORKING AMERICA

A VISION OF VOCATIONAL TECHNICAL EDUCATION

BY THE NATIONAL ASSOCIATION OF STATE DIRECTORS OF VOCATIONAL TECHNICAL EDUCATION
THE CHALLENGE

OUR CHALLENGE IS TO REVIVE THE AMERICAN DREAM OF PERSONAL ECONOMIC INDEPENDENCE AND SUCCESS FOR ALL WHO ARE WILLING TO WORK AND LEARN. TO MEET THAT CHALLENGE, WE MUST BE PREPARED:

■ To assure every citizen, who will commit to learning, the know-how to achieve economic independence.

■ To make workforce preparation for the 21st century the most important item on our agenda and invest in that effort accordingly. Efficiency requires we use the existing workforce preparation system. Each system, at national, state and local levels, must work with all other systems to accomplish this mission. None can do it alone.

■ To adapt our workforce development system for greater service and productivity in the face of the changing nature of work and the phenomenal development of technology, a history of underinvestment in occupational education, an enormous national debt, and ever decreasing public and private resources.

■ To make Vocational Technical Education the cornerstone in reconstructing the American dream.

WHAT IS VOCATIONAL TECHNICAL EDUCATION?

AMERICA'S ECONOMIC SUCCESS DEPENDS ON GREATER UNDERSTANDING OF VOCATIONAL TECHNICAL EDUCATION. WE ARE A MAJOR NATIONAL RESOURCE PREPARED TO DELIVER.

■ Vocational Technical Education is the country’s most effective workforce development system. Investing now in Vocational Technical Education is the fastest way to improve the workforce and make the United States more competitive in the global market.

■ Vocational Technical Education reaches students in sophisticated facilities in every community across this land. This modern system of more than 15,000 secondary and 6,500 post-secondary educational institutions is preparing youth and adults to enter and advance in the workforce. Working with some 11 million students each day, Vocational Technical Education stands ready to meet the country’s challenges and to solve today’s workforce development problems.
WHAT WE BELIEVE

OUR VISION FOR AMERICA’S FUTURE - AND OUR PLAN TO MAKE THIS VISION REAL - IS BASED ON UNDERSTANDINGS REACHED THROUGH YEARS OF STUDY AND EXPERIENCE. WE BELIEVE:

Federal and state policies must recognize the importance of the technical employee to the U.S. standard of living and commit resources to support a stronger technical workforce.

All students can achieve at higher levels if we offer the applied learning method to vastly larger numbers of youth and adults. (The 1989 National Assessment of Vocational Education revealed that poor mathematics students took and succeeded in advanced mathematics after taking applied mathematics courses.)

Making everyone employable by age 18 should become a major national objective. To be employable in the changing workplace, people must have basic academic and theoretical knowledge, occupational skills which meet employer needs, critical thinking and problem solving skills, an ability to work in teams, and to view their work from the customer’s perspective. This will enable high school graduates to choose either to embark immediately on a successful career, or better finance further education through skilled work. Such a policy is the only road to true economic independence for all.

The occupational education system must be built on achieving positive results for students. The system must recognize and reward exceptional performance or progress. The system must also intervene when programs fail to meet defined standards.

The States are responsible for assuring a world class workforce development system. State performance standards, based on voluntarily developed national employer/labor skills standards, must become the framework for accountability.

Qualified individuals from industry, unions and the military must be able to teach, without certification barriers, alongside qualified educators in secondary and post-secondary Vocational Technical Education programs.

States must provide technical assistance and special funds for program improvement initiatives beyond the resources of single localities. Such state involvement is responsible for the successful Tech Prep, Applied Academics, SREB High Schools That Work and other program innovations.

Education must have the leadership role in developing school-to-work transition programs. Those programs must be based on clear industry driven standards. Proven methods of school-based and work-based learning depend on strong one-to-one relationships with adults. There must be adequate staff to work individually with students, teachers and supervisors at school based and work based sites or the promise of such programs will never be realized.

Federal, state and local public policy must recognize that the United States must build on existing systems. Vocational Technical Education is a system ready to commit itself to work with all institutions interested in workforce development to provide America with a world class workforce.
VOCATIONAL TECHNICAL EDUCATION IS READY AND WORKING

IN THE PAST 15 YEARS, VOCATIONAL TECHNICAL EDUCATION HAS MADE MAJOR ADVANCES WHICH ARE AMONG THE LEADING SUCCESS STORIES IN EDUCATION REFORM. WE HAVE:

- Demonstrated the success of the **applied learning method**, which teaches all subjects through the practical use of theories. This method appeals to the 75% of the population which does not respond to the didactic learning method, the traditional academic method of lecture and abstract reasoning. Applied learning is capable of vastly increasing students' academic education, theoretical knowledge and occupational skills simultaneously.

- Undertaken major efforts to integrate vocational and academic education which helps improve occupational skills while strengthening students' basic and higher order thinking skills.

- Sought out employers to verify what their employees need to know and helped national and state employer organizations establish voluntary skills standards for many occupations. Vocational Technical Education has redesigned programs to meet those standards so students and employers will both know they invested their time and money getting what they really need. Vocational Technical Education proposed federal incentives to develop voluntary national employer standards and is now working with national employer-labor-education coalitions to develop those standards.

- Piloted performance standards for Vocational Technical Education. In the 1990 Perkins law, Vocational Technical Education urged performance standards for the whole system. Student outcome based performance standards were implemented in each state in September, 1992.

- Encouraged and piloted Tech Prep programs in the 1980’s using combinations of federal, state and local discretionary funds. Tech prep is a cooperative arrangement between secondary and post-secondary institutions to provide four years of highly advanced technical programs. The result is a certificate or associate degree in a more advanced program than could have been offered by the high school or college alone. 50% of all secondary vo-tech schools are working with post-secondary schools to establish Tech Prep programs. A Tech Prep Network of some 10,000 providers across the country keeps faculty informed and provides them with professional development opportunities.

- Pioneered performance-based assessment systems and offered credentials which specifically describe the student’s academic, occupational and employability skills and guarantees those competencies to any employer.

- Recognized that technicians must be armed with advanced applied academics to work in the symbolic analysis world of global competition and that they must continue to learn and adapt to changing technologies over a lifetime. Since 1984 state agencies invested over $10 million in competency based curricula such as Applied Physics, Applied Mathematics through Algebra II, Applied
Communications, reading, writing and oral expression for the workplace, and Applied Biology and Chemistry. Applied academic programs are now used with tremendous success in thousands of locations.

- Reached out to groups in special need of access to Vocational Technical Education. According to an unpublished study by the GAO, 42% of secondary vo-tech students and 26% of post-secondary students are from at-risk populations, including women, minorities, disadvantaged, disabled and limited English-proficient. Those in need are receiving more special support services and remedial education than ever, through schools and community-based organizations, enabling them to enter and succeed in Vocational Technical Education programs. With our support these populations are gaining the academic, theoretical and occupational skills necessary to build economic independence.

- Encouraged the development of a system of vocational student organizations which further link students with employers, build students’ leadership skills, identity, teamwork, goal setting and management skills. VSO programs build student self-esteem, involve students in community service, and test students’ occupational skills in local, regional, national and international competitions.

- Improved the overall quality of secondary and post-secondary Vocational Technical Education programs. Since the 1990 reauthorization of the Carl Perkins Law, the GAO has observed the following:

  **Secondary Institutions:**
  - Improved Curricula: 63%
  - Trained Faculty: 54%
  - Expanded Programs: 40%
  - Added New Programs: 30%

  **Post-Secondary Institutions:**
  - Improved Curricula: 79%
  - Trained Faculty: 65%
  - Expanded Programs: 58%
  - Added New Programs: 40%

- Integrated Academic and Vocational Technical Education in 80% of all school districts to produce a style of education and advanced curricula which are consistent with the needs of today’s students and employers.

- Applied Performance Standards to virtually every system and used 3 to 6 measures, above federal requirements, in order to encourage local systems to evaluate and improve themselves. States also provide assistance to struggling local schools and districts after 2 years of failure to meet standards.

---

All this has been done with relatively little attention from the education establishment which holds a well documented bias in favor of the "college bound". But, over these past 15 years, Vocational Technical Education has become a vital, vibrant, active $13 billion a year system of 22,000 local secondary and post secondary institutions ready to help the country reconfigure and retrain its workforce.
WHAT VOCATIONAL TECHNICAL EDUCATION NEEDS

Our accomplishments are numerous, but we have much more to offer. To prepare a full scale, globally superior workforce, occupational education must have:

- **Strong political recognition and financial support.** Technician level jobs are expanding at an unprecedented rate. Vocational Technical Education prepares this vital segment of the workforce. Yet between 1980 and 1990, federal Vocational Technical Education resources were effectively reduced 13%.

- **A lead role designing and operating the new Workforce Development System** with the Program Administrator assured a seat on all appropriate policy councils.

- **Freedom** to offer our resources and services to prepare youth and adults for the workplace and to retrain the current workforce as new policies are developed.

- **A strong state role** to encourage local initiative and achievement through increased technical assistance and accountability. This will assure students and employers quality programs which prepare and certify that students meet national skills standards, while giving local institutions freedom to innovate and to respond to local needs and opportunities. Achieving such a state/local partnership requires high, clear state performance standards.

- **Systemic partnerships with the employer community to continually update vocational technical faculty.** This is the key to keeping the programs on the cutting edge.

- **Reform in career counseling** in all U.S. education and training institutions so that sound information about labor market opportunities, levels of pay, career development opportunities, education and training requirements, and availability and costs of such education and training are readily available to all youth, parents and adults who seek it.

- **Continuation of special investments where there are concentrations of disadvantaged and at risk populations.** We must ensure access to the workforce development system and to programs which meet employer standards. Further, we must provide support services necessary to succeed in the programs. Programs must be offered based on labor market demand. Program evaluation must be based on student outcomes. Sites failing to meet state standards should receive state technical assistance. Continued failure to meet those standards should result in sanctions.

- **A national data system** is essential to the success of modernizing the entire workforce development system and Vocational Technical Education in particular. The data system should inform educators, students, funding sources, businesses and the general public of Vocational Technical Education's accomplishments, efforts to improve, and still needed improvements.

- **A reliable flow of federal funds for innovation, program improvement and equipment updating** so that mainstream Vocational Technical Education is continually upgraded and kept at or above world class standards.
THE VISION

WE ENVISION A NATION WHERE EVERY CITIZEN:

- Is employable at age 18, prepared to learn for life in a seamless web of school and work based opportunities.
- Has learning opportunities where teaching methods match learning styles.
- Has a future limited only by the student's talent and commitment.
- Will thrive where education and training providers understand workplace needs and all agencies collaborate and contribute what they do best.

WHAT VOCATIONAL TECHNICAL EDUCATION CAN ACHIEVE

GIVEN THE RESOURCES, VOCATIONAL TECHNICAL EDUCATION CAN TAKE THIS COUNTRY TO NEW HEIGHTS IN THE GLOBAL MARKETPLACE. IT CAN:

- Create substantial economic opportunity for all students regardless of socio-economic background, by training large numbers of people through the applied learning method to do the advanced analytical work of the future.
- Train and maintain a workforce that will help our nation's technological industries excel. From computer, medical, construction and automotive technologies to service, design, marketing and manufacturing firms, and businesses of every description, we can provide the technicians without which the country will come to a grinding halt.
- Provide sophisticated, customized training for large and small employers, on and off the worksite.
- Establish the school-to-work transition system America needs now, through well designed combinations of school-based and work-based learning.
- Promote the school-to-work transition system to youth and parents from early to middle teen years and create individual career plans which will show each student how education leads to students' life ambitions.
- Prevent adolescent failure through alternative schools for those not yet ready to enter occupational or college prep programs.
- Encourage employer participation through our network of thousands of employers.
- Provide full time, experienced personnel to support students and employers at the school and work place learning sites so both students and employers will have successful experiences, assure opportunities for women and minority students and regularly evaluate and revise programs to meet student needs and employer skill standards.
Founded in 1920, the National Association of State Directors of Vocational Technical Education is the Washington based organization of some 50 state vocational education agency heads committed to leadership and outstanding performance in vocational technical education. The Association has a growing membership of over 200 senior state staff and concerned business, labor, and other education officials who share the directors' commitment to quality occupational education at the secondary, post-secondary, and adult levels.
III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

Associate Director for Database Development
ERIC Clearinghouse on Adult, Career, and Vocational Education
Center on Education and Training for Employment
1900 Kenny Road
Columbus, OH 43210-1090

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to: