During fiscal year 1994, enrollment in secondary and postsecondary vocational education (VE) programs in Maryland totaled 201,570 and 66,331, respectively. Career and technology education was provided to a total of 3,664 secondary disabled individuals, 762 disabled adults and postsecondary students, 6,177 secondary disadvantaged students, 6,221 adult/postsecondary disadvantaged students, 690 secondary students with limited English proficiency, 391 adult/postsecondary students with limited English proficiency, 3,840 single parents/displaced homemakers, 19,611 individuals enrolled in nontraditional and sex equity programs, and 991 criminal offenders. The following aspects/areas of VE also received special attention: professional development activities and curriculum development for an integrated education system, statewide curriculum development system, provision of guidance and counseling services through Maryland's coordinated Pupil Services Program, educational equipment/facilities acquisition/upgrading, and school-to-work transition and adult training/retraining programs/services. Major efforts were also made to improve/expand consumer and homemaking education, career/technology education delivered through community-based organizations, and tech prep. (Appended are secondary and postsecondary measures and performance standards and student performance data.) (MN)
MARYLAND
Annual Performance Report
1994

Schools for Success

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Division of Career Technology and Adult Learning
December 31, 1994
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The mission for the system of career and technology education for the state of Maryland is to prepare learners to begin careers and pursue lifelong learning through a process of career development, academic instruction, specific technical skills development, and work experience in order to meet the workforce preparation and economic development needs of Maryland. Through the provisions of the Carl D. Perkins Vocational and Applied Technology Education Act of 1990, the Division of Career Technology and Adult Learning was able to carry out its mission and make significant progress in achieving its goals during fiscal year 1994.

The Act made it possible to provide quality career and technology education to over 275,000 people throughout the State of Maryland at the secondary, postsecondary, and adult levels. Programs and special initiatives were designed and implemented during fiscal year 1994 to address the following eight goals of the Maryland State Plan for Career and Technology Education:

1. All completers of career and technology education programs will graduate from high school with a portfolio that documents core academic and workplace basic competencies, as well as appropriate technical, job-specific competencies.

2. Career and technology education student support systems will be successful in keeping secondary students in school.

3. All secondary school graduates will be prepared for either postsecondary education, employment, or both.

4. The educational and placement success rates for members of special populations will be comparable to success rates for all students.

5. The workforce requirements and economic development needs of Maryland will be met through a sufficient supply of technically prepared people.

6. Employers will be satisfied with the competence and workplace readiness of career and technology education graduates.

7. Career and technology education will enable employable adults to possess core academic and workplace basic competencies, as well as appropriate technical job-specific competencies.

8. Adult learners will enhance their job technical skills by participating in career and technology education programs.

Katharine M. Oliver
Assistant State Superintendent
Career Technology and Adult Learning
SECTION I

Career and Technology Education Opportunities for Special Populations
SERVING SPECIAL POPULATIONS

Objectives

All people must have educational opportunities to secure entitlements and have maximum opportunities to work, live and pursue life-long learning within the community.

In keeping with Maryland's vision to ensure that every student has the opportunity to experience success in quality career and technology education (CTE) programs, the Division of Career Technology and Adult Learning (DCTAL) assisted eligible recipients in setting forth a program of standard practices and procedures for a planning and self-assessment process. One major objective is to ensure special populations access to appropriate career and technology programs and success in their training for a career.

This section of the report will address those special populations, including individuals with disabilities, individuals who are educationally and economically disadvantaged, individuals who participate in programs designed to eliminate sex bias, and individuals in correctional institutions.

If students who are members of special populations are to be totally integrated into career and technology education programs, and successful in those programs, a highly coordinated and well planned system of support is necessary. The information provided in this report serves to encompass statewide objectives such as:

1. providing career information and related guidance services in order to ensure the selection of appropriate career and technology education programs;

2. developing strategies for the coordination and integration of academic and career competence;

3. supporting limited English proficient students, with modification of curriculum and other services as needed; and
4. developing and identifying effective collaborative relationships among school, parents and other stakeholders.

In addition, the DCTAL has established eight outcome measures to assess the effectiveness of local and state programs. Goals that apply specifically to students with disabilities and disadvantaged students include:

1. All completers of career and technology education programs will graduate from high school with a portfolio that documents core academic and workplace basic competencies, as well as appropriate technical, job-specific competencies.

2. The career and technology education system will be successful in keeping secondary students in school.

3. The career and technology education system will enable all secondary school graduates to be prepared for postsecondary education, employment, or both.

4. The educational and placement success rates for members of special populations will be comparable to success rates for all students.

5. Employers will be satisfied with career and technology education graduates' competence and workplace readiness.

The Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990 placed particular emphasis on services to special population students.

This emphasis of the Perkins Act on services for students who are disabled and disadvantaged and students with limited-English proficiency includes a number of specific components. Maryland documents how programs and activities will be provided for students with disabilities and disadvantaged students in the least restrictive and most integrated environment possible, and how services to these individuals are coordinated with the appropriate state agencies.

Vocational support provides direct and indirect assistance to students who are disabled or disadvantaged and to instructors working with them. Developing linkages with other service providers and informational resources is a continuous and necessary process.

Throughout the State of Maryland, there have existed services to assist special population students in career technology education programs. New demands are placed on educators as they seek to respond to the increased demands of the workforce, and the continued need for advocacy and services for special population students.
To better assist in serving and understanding the complexities of services to special populations, a three-phase process was defined to develop a support networking guide and to conduct staff development and pilot testing of networking efforts. During FY 1994, a task force was organized with key personnel in the Maryland State Department of Education (MSDE), local school systems (LSSs), community colleges (CCs), and other relevant agencies. This group identified common goals for networking of services and defined the parameters impacting a model network. Information was gathered on current support network efforts in the state. A model support network has been defined and a guidebook written to assist professionals at the local level in the development of a support network. This completed the first two phases of the process planned in the FY 1994 proposal.

In FY 1995, the task force will continue to meet to establish procedures for pilot tests of the model and related guide. Materials will be developed for the pilot test, and revisions will be made of the model, guidebook and materials based on results of the pilot test. The task force will also develop strategies for the state-wide dissemination of the model and guidebook.

Program Administration (state/local organizations)

Federal funds are allocated to 24 Maryland Local School Systems and 18 Community Colleges. Leadership, coordination, and technical assistance are provided by the state through a special populations state specialist. Local leadership, coordination, and implementation are provided by the LSS vocational director. The community college occupational career deans play a major role in the local administration of special populations programs.

Outcomes of the Program

The various vocational support services provided to special needs students to enable them to succeed in career and technology education programs are discussed in the following sections. Enrollment reports reflect a decrease in the number of students who are disabled and disadvantaged being served by vocational support services throughout Maryland.

A1. INDIVIDUALS WITH DISABILITIES - SECONDARY LEVEL

2,718 Number of individuals with disabilities receiving additional services in mainstream programs.

946 Number of individuals with disabilities served in separate programs.
Achievements in Recruitment

Achievements in providing equal access for students with disabilities continued throughout Maryland's 24 local school systems and 18 community colleges. Vocational program personnel in Maryland actively recruited these students. Through the vocational support services network, students identified as disabled were provided the services that are highlighted in this report.

Prince George's County Board of Education is proud of its achievements in providing equal access for its disabled students and offers a wide array of educational and vocational options and opportunities grounded in the principles of excellence and equity for all students. Students, regardless of their disabilities or disadvantages, are encouraged to participate in CTE programs. The Departments of CTE, Guidance, English for Speakers of Other Languages (ESOL) and Special Education have forged collaborative bonds in disseminating information to all potential CTE students. Information regarding opportunities available in career and technology education, requirements for eligibility, available courses, special services, employment opportunities and placement assistance is provided to all students and parents via: educational fairs, back-to-school presentations, displays, posters, tours of CTE facilities, open mall houses, guest speakers, school showcases, announcements in school newspapers, recruiting posters, brochures, etc.

Monitoring the provision and successful maintenance of members of special populations in CTE is a collaborative effort among special education, resource personnel, vocational support service staff, ESOL, vocational rehabilitation counselors, CTE, and guidance staff. Monitoring assists in determining that such education is provided in the least restrictive environment and is consistent with the disabled student's Individualized Education Program developed for each student under section 1414 (a) (5) of the Individuals with Disabilities Education Act. Students with disabilities who do not have individualized education programs, with respect to CTE programs, are also monitored to ensure that they are afforded the rights and protections in accordance with section 504 of the Rehab. Act of 1973.

The interdisciplinary approach to monitoring of Career and Technology Education for members of special populations is consistent with the provisions of section 1412 (6) of the Individuals with Disabilities Education Act and assures that special population students and students of limited English proficiency are fully represented in CTE programs in the most integrated setting possible.
Supportive personnel participate in the Annual Review and Dismissal (ARD), School Instructional Team (SIT), and Supplementary Services Team (SST) committee meetings to periodically review, monitor, and recommend needed modifications to assist special populations in successfully accessing and completing CTE programs.

Career technology education and the rehabilitation services staff further collaborate to coordinate procedures and activities necessary for special education students entering and completing CTE programs. Necessary modification of curriculum, facilities, and equipment are made to enhance student success. An ongoing Cooperative Agreement developed among CTE, special education and the rehabilitation services outlines delivery of services to disabled students at the local program level. The agreement ensures the continuation of vocationally-oriented services for disabled students exiting the public schools.

In Baltimore County, the numbers of students with disabilities and disadvantages being served in the CTE technical high schools indicate the progress in serving special populations, as recognized in the report of the DCTAL Office of Civil Rights Review conducted in the spring of 1994. Recruitment efforts were comprehensive for all students, including Open Houses at each of the schools of technology, a Magnet Fair, site visits by recruiting personnel to middle schools, and mailed brochures and flyers to the eighth grade students. Transition opportunities are expected to increase over the next several years as the offices of special education and career and technology education work together on the Occupational Analysis System (OASYS) job databank and on the new reorganization plan for the delivery of vocational assessment and transition services.

<table>
<thead>
<tr>
<th>School</th>
<th>Disabled</th>
<th>Disadvantaged</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southeastern HS</td>
<td>25.8%</td>
<td>31%</td>
</tr>
<tr>
<td>Eastern Tech HDS</td>
<td>8.5%</td>
<td>16%</td>
</tr>
<tr>
<td>Carver CAT</td>
<td>37%</td>
<td>1%</td>
</tr>
<tr>
<td>Western STES</td>
<td>9%</td>
<td>.4%</td>
</tr>
<tr>
<td>Milford Mill Acad.</td>
<td>8%</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

**Coordination with Special Education**

Excellent coordination has been established between special education and career and technology education. A full time Supervisor for Special Education/Career and Technology Education was added to the special education staff this year. The supervisor and the staff in the office of career and technology education collaborated to develop the Career Pathways Program, a new prevocational program.
Full Range of Programs and Services

Secondary students with disabilities received the following types of direct services and support:

- Advocacy
- Computer-assisted instruction
- Related math assistance
- Developing/adapting curriculum
- Related reading assistance
- Communicating with parents
- Job readiness skills
- Adapting teaching methods
- Tutoring
- Adaptive equipment
- Study skills
- Career counseling
- Child care services
- Vocational assessment

Additional or Supplemental Services Provided to Individuals with Disabilities

Maryland has always served students with disabilities and disadvantages in providing an appropriate continuum of services prior to and after completion of occupational preparation.

Baltimore County Public Schools served 1003 students with disabilities in career and technology education completer programs. Students received a variety of academic services, depending on the school in which they are enrolled. At Milford Mill Academy, students received assistance by a resource teacher who worked with them and their teachers in their CTE classes; at Southeastern, Eastern, Western, and Carver technical schools, students received support services through in-class assistance as well as resource room assistance. At Southeastern Technical High School, students who participated in the Pre-vocational Business Program received concentrated assistance in learning academic and work-readiness skills in preparation for an on-site business experience.

Adaptive equipment was provided to one student who had severely impaired hand and finger mobility; he was provided with a laptop computer which enabled him to take notes and prepare assignments during his classes at Carver Center.

In Carroll County students with disabilities in the eighth grade are transitioned from middle school to high school via an Admission Review Dismissal (ARD) process. Information about vocational programs and their services of the vocational support services team (VSST) are presented to the parents in a pamphlet. That pamphlet is sent home to the parents with the invitation to the ARD meeting. Recommendations for a vocational assessment are then included in the student’s Total Service Plan. Vocational support teachers from their respective high schools refer students to the assessment center during their ninth and tenth grade year.
Students are identified as disadvantaged during their 8th grade year in a cooperative effort between the VSST Coordinator and the Coordinator of the Maryland's Tomorrow Program. Many of these students are afforded the same opportunities given to students with disabilities during their ninth and tenth grade years. Parents of identified students who do not wish to be part of the Maryland's Tomorrow program are sent a permission letter and a pamphlet describing the services of the VSST.

In addition, vocational support teachers administer a nonverbal interest survey called the Vocation Interest Assessment Survey (VIAS). They then review the computer scored results with the students during a later session. During that session, students also view a video-tape that describes the experiences provided by the Vocational Assessment Center.

Team members are involved in writing Individual Transition Plans (ITP's) at their home schools. In addition, they refer students to appropriate adult service agency providers, including Job Training and Partnership Act (JTPA), Department of Economic and Employment Development (DEED), and Division of Vocational Rehabilitation (DVR). Assessment personnel provide students with the opportunity to explore possible careers through the use of work samples. Assessment personnel also recommend vocational and pre-vocational courses that would meet the student's aptitudes, interests, and abilities. The assessment report provides further information to the home school that could be used to develop objectives for the Individualized Education Plan (IEP) and the ITP.

Support service personnel review the results of the assessments with students with disabilities and afford the students the opportunity to participate in a hands-on experience at the Carroll County Career and Technology center. VSST members also participated in the development of a transition manual for Carroll County.

All students in Carroll County schools are encouraged to enroll in any program, traditional or non-traditional, in accordance with individual interest and aptitude.

In Frederick County vocational services are provided at six (6) of their seven (7) high schools as well as the Career and Technology Center. The VSST staff provides support to all students with disabilities enrolled in state approved technical programs as well as those who are economically and academically disadvantaged. With additional curriculum provided by instructors and VSST staff, a student will be able to secure entry level employment in the field of his/her program of study. Students unable to complete the Essential Skills Profile with the assistance of VSST staff are then presented to the School Team for a more appropriate program of placement. The VSST staff participates in the School Teaming and ARD process for students with disabilities. The VSST continues support for students placed by the School Team on a Skill Specific IEP or Modified Skills Profile. Successful completion will make it possible for a student to transition to a specific area of employment. Students unsuccessful at this level will be
recommended to the VSST Employability Skills Class and/or Supported Employment. At this level students may experience on-the-job training or simulated work experiences, with coaching provided by the VSST staff. After a public or private sector job placement, job coaching is provided as necessary in order to ensure a smooth and successful transition to the world of work. Job site coordination and supervision is provided.

Career evaluations are required for all students with disabilities attending the Career and Technology Center. These evaluations are provided by the career evaluator located at the Career and Technology Center. Students complete formal and informal interest and aptitude tests, experiment with work samples and receive information related to career awareness and planning.

**Transitioning Activities**

Transition planning, now mandated for all disabled students receiving special education and related services, presents a further opportunity for career and technology education and special education to collaborate. Transition planning in Prince George's County Public Schools (PGCPS) includes the development of the ITP as an adjunct to the student's IEP. The ITP is initiated at age sixteen, or earlier, if determined to be appropriate by the ARD Committee. The ITP delineates in broad strokes the plan for the students remaining school years, as well as postsecondary planning.

Transition planning provides the bridge for the student as he/she exits high school and moves into adult appropriate employment, postsecondary education/training or agency referral and acceptance. The goal of transitioning is to facilitate optimal independence and success in interpersonal, social, vocational and avocational areas for the disabled student.

Disabled students with less severe transitioning needs can be served through CTE's two transitioning programs presently operating in Prince George's County Public Schools. The Vocational Transition Program (VTP) assists special needs vocational students who have exited the public school system and are experiencing difficulty accessing employment or employment-related services. This program is presently operating in all Perkins schools. In FY 1994, approximately 330 students have received assistance through the Vocational Transition Program.

The Bridge to Success program assists teen parent students and students who are exiting the Occupational Skills Center and wish to enroll in Prince George's Community College. This project provides students with an overview of college entrance procedures, financial aid questions and basic orientation procedures. Students who received Vocational
Support Services in their high school program are linked with the Office of Educational Opportunities at Prince George's Community College. Approximately 150 CTE students have taken the admissions test for Prince George's Community College via the Bridge to Success Program.

A2. INDIVIDUALS WITH DISABILITIES - POSTSECONDARY LEVEL

762 Number of individuals with disabilities receiving additional services in mainstream programs.

Individuals with disabilities are not served in separate programs at the postsecondary level.

Achievements

At Allegany Community College (ACC), a total of 183 students requested services and were determined to be eligible during the 1993-1994 academic year. Six of these students were identified as having disabilities. Perkins-eligible students received peer tutoring and professional tutoring. Tutoring sessions included math and reading assistance, study skills development, time management and test-taking strategies. Forty-four students used this service. Tutors were hired and trained. Peer tutors were required to attend an orientation session, view a tutoring video series and attend training workshops.

Computers purchased with Perkins funds were available for student use in a section of the college library. Software was available including word-processing, math, English and reading skills improvement, study skills, vocabulary development, test-taking and anxiety reduction. The computers were also used to supplement tutoring and as a tool to assist learning disabled students. A total of 32 students used the computers.

Two workshops were presented to students enrolled in ACC's Dental Hygiene program. The first workshop provided study skills/testing skills orientation to the freshmen class. Students were provided with information in study skills, test taking strategies, and techniques for dealing with stress and test anxiety. A second workshop focused on stress and test anxiety for current students. Fifty-three students were served by these workshops.

During 1993-1994, 32 students received academic assistance. When referred by faculty, self-referred, and when mid-term and final grade assessments indicate the need, students were served on a walk-in/as needed basis. Placement test scores were also used as an indicator of a need for academic assistance prior to the first semester. This assistance included evaluation of and instruction in study skills, test taking strategies, test anxiety management, and referral to other campus and community agencies.
Transitioning Activities

Prince George's Community College continues to inform students with disabilities of postsecondary education opportunities and to provide transition services. The coordinator of Disability Support Services (DSS) visits high school special education classes and schedules campus orientations and tours as requested by high school faculty. The DSS office continues a strong partnership with United Cerebral Palsy of Bowie, Division of Rehabilitation Services, and the High School/High Tech program for students with disabilities. A full range of accommodations is provided including modified assessment. The Career Center is accessible and staff have participated in workshops to increase skills in dealing with disability issues. VSST staff coordinate their efforts with other campus services for students with disabilities to avoid duplication of effort and increase level of service to the individual.

Exemplary Programs

At Anne Arundel Community College (AACC), specialized adaptive equipment is available to qualified students. For students with visual impairment, IBM computers and help software programs such as "Zoom Text," which magnifies the type on the computer screen, and "Synphonix with Business Vision," a taling interface that allows the student to hear everything that appears on the screen are available. Students who experience difficulty reading standard print can use the Vantage Closed-Circuit Television System, the Arkenstone reader, and halogen magnifying lamps. Hearing-impaired students use the Comtek Amplification system in conjunction with sign language interpreters. Tape recorders, note-takers and note-taking paper are provided to students experiencing difficulty taking classroom notes because of disability.

Many of the services provided by VSST are mandated by law and are routinely offered at all institutions. These services include note-takers, readers, scribes, modified testing, sign language interpreters, adaptive equipment, and advocacy. The vocational support services offered at Anne Arundel Community College, however, go beyond those mandated by law. They have expanded their services to include more direct student contact aimed at addressing specific needs, as well as more technology and technology education. They have evidence that these special services are responsible for increased student retention and success rate.

One program involves an ongoing study of success and retention rates for students using VSS-owned laptop computers. These computers are loaned, on a semester basis, to disabled and disadvantaged students for classroom note-taking and take home projects.
Each student is given formal instruction in the computer lab on computer operations and capabilities. Word processing software programs enable students to check for spelling and punctuation errors. Students with hearing impairments, learning disabilities or to whom English is a second language are given top priority.

Anne Arundel Community College is currently initiating a new program called "Apples for Academic Excellence." This program provides Apple IIe computers to qualified students for check out for the duration of their college career at AACC. The college is converting MicroLab 1 to an IBM lab and plans to donate the Apples to outside organizations. VSS saw this as a no-cost way to enlarge their current computer loan program. The college has agreed to allow VSS to use the computers to benefit qualified career students. They will provide selected students, based on need, with a computer system, appropriate software, and intensive hands-on training. They anticipate lending approximately 24 computers. VSS will continue to provide technical assistance to students using both the IBM and Apple computers. Students participating in the program will be monitored closely and their Grade Point Averages (GPAs) recorded for future reports and retention information.

Another exemplary program is aimed at institutionalizing communication skills with the hearing-impaired. VSS sponsors professional development workshops for faculty and staff in introductory sign language. They have trained personnel from Academic Advising, Testing and Tutoring and Vocational Support Service. The deaf Americans confront many frustrations in everyday interpersonal communication. Deafness often leads to isolation. It is an invisible handicap; a breeding ground for myths and misunderstandings. Loud and distorted speech, often associated with deafness, has led to deaf individuals being incorrectly viewed as having mental or intellectual weaknesses.

The professional development workshops are designed to dispel myths and ease communication between deaf students and college personnel. Participants are introduced to deaf culture, the causes of deafness, and American Sign Language. Participants meet two hours per week for eight weeks. Approximately 300 signs are taught in the introductory course. Faculty and staff who complete the introductory course are eligible to take the advanced beginning course. Approximately 500 additional signs are introduced in the advanced beginning course.

Thanks to the programs VSS offers, Anne Arundel Community College continues to move toward institutionalizing communication skills with the deaf and hearing-impaired. These new programs are making a difference in the lives of deaf and hearing-impaired students at our college and in our community.

Although Essex Community College (ECC) considers their entire set of services to be exemplary for students with disabilities, they have grown considerably this year in the acquisition and training of students in the use of adaptive technology. Because of the addition of a special services assistant to the staff, (ECC) has been able to provide up to
30 hours per week of training for students in equipment such as scanners, IBM computers, MacIntosh computers, printers, and the visualtek. In addition, the students have been able to learn adaptive software which enlarge print, provide voice output, or are activated by voice. This equipment has increased considerably the ability of students to be independent in their chosen career areas and hopefully, will enable them to articulate their technology needs to employers. We have also initiated a program this year which places students in volunteer positions on campus. For those who have never worked, it gives them an opportunity to gain job experience which transfers well into a paid work study position.

Students who are disadvantaged, but whose learning problems appear to be more severe, have been given the opportunity to work with a consulting psychologist to determine if the severity of their learning difficulties is due to a learning disability. In addition, the psychologist has designed a program which emphasizes success in the classroom for a small group of students with psychiatric disabilities whose high anxiety interferes with this success.

Hagerstown Junior College (HJC) - The Universal Support Association (USA) is probably unique within the Maryland Community College system. The USA is a group of students with disabilities and their colleagues who promote activities to increase campus awareness of issues surrounding this societal dilemma. They also serve as support group for one another. USA receives funds from the Student Activities Fund and is on the list of approved HJC student clubs and associations. In the Spring of 1994, the USA sponsored a Disability Awareness Expo where all HJC students, staff and faculty were invited to take advantage of the opportunity to simulate a disability for the day. Wheelchairs, slings and walkers were provided for those simulating non-ambulatory disabilities. Blindfolds and earplugs were offered to those wanting to simulate sight and hearing impairments. Workshops were offered on various topics dealing with disabilities. A "try-it" room was available for everyone to try out the various adaptive equipment used on campus. The Expo ended with a comedian who happened to be disabled and whose show centers around disabilities.

At Montgomery College, the Job Placement Program has been exemplary in preparing students with disabilities for employment, identifying job opportunities, matching students with suitable employment, and tracking and documenting the success of these students.

An example of the services provided is the student who graduated from the Computer Science Program but had no success finding employment. She had multiple disabilities stemming from a brain tumor, including no use of her right arm, partial paralysis of her right leg, and blurred and double vision. Beyond the expected difficulties entry level workers face, she had to overcome the limitations introduced by her disabilities. After coaching her with respect to basic job search skills, job development activities uncovered an opportunity with an employer who agreed to make accommodations for her.
disabilities and to structure the position making use of the computer skills she had acquired at Montgomery College.

A computer science/office technology student with limited sight was provided instructional materials produced in large ‘type. This service was made possible by a flatbed scanner and a laser printer immediately available to the instructor who could access and individualize materials on the spot. This student stated that this was the first time in her educational experience that an instructor was willing to spend the time necessary to generate classroom material designed for her needs.

The VSS-funded Adaptive Technology Laboratory of Disability Support Services at the Rockville campus is an exemplary program enabling students to independently access instruction at the college. Additionally, Disability Support Services' Learning Center Program was selected for inclusion in the Anne Arundel Community College (AACC) monograph, "Disability Support Practices in Community Colleges," published in December 1993. It is a "good idea" resource for community colleges looking for ways to serve their students with disabilities more effectively.

B1. **INDIVIDUALS WITH DISADVANTAGES - (EXCLUDING LIMITED ENGLISH PROFICIENCY (LEP)) SECONDARY LEVEL**

- **5,368** Number of individuals with disadvantages receiving additional services in mainstream programs.
- **809** Number of individuals with disadvantages served in separate programs.

**Achievements in Serving Individuals with Disadvantages**

Baltimore County Public Schools served 366 disadvantaged students in career and technology education completer programs. Students received a variety of academic services, depending on the school in which they were enrolled. At Milford Mill Academy, students received assistance from a resource teacher who worked with them and their teachers. In the CTE classes at Southeastern, Eastern, Western, and Carver technical schools, students received support services through in-class assistance as well as resource room assistance. At Southeastern Technical High School, students who participated in the Pre-vocational Business Program received concentrated assistance in learning academic and work readiness skills in preparation for an on-site business experience.

The mission of the Prince George's County Public Schools is to ensure that all students acquire knowledge and develop the skills and work habits to enable them to become productive members of society. The mission is best accomplished in an environment characterized by strong instructional leadership, high expectations for success for all students, sufficient time for teaching and learning in a safe and orderly school
environment, frequent monitoring of student's progress, and effective home-school communication.

**Additonal or Supplemental Services Provided to Individuals with Disabilities**

To promote high expectations and achievement for all CTE students, a myriad of supportive services are available. This interdisciplinary networking of services and program promotes vocational success for all students. Guidance, Pupil Personnel Services, Special Education, Maryland's Tomorrow and other service providers work in tandem in developing interventions and strategies to successfully maintain and promote completion of vocational programs for all students. An active Vocational Support Service program, working collaboratively with vocational/academic teachers and other supporting personnel, provides the following services to the disadvantaged and disabled student: workplace readiness and career development activities, study skills, computer-assisted instruction, curriculum adaption, community outreach, instructional assistance, transition services, assessment of interests, aptitudes and special needs, and other services, as needed.

To further facilitate at-risk students' successful completion of CTE programs, the Department of Curriculum and Instruction has printed and distributed a booklet entitled: "State-approved Career and Technology Education Programs." This booklet provides students with the opportunities available in career and technology education, eligibility and enrollment requirements, specific courses that are available, and related employment and educational opportunities.

**B2. INDIVIDUALS WITH DISADVANTAGES - (EXCLUDING LEP) POSTSECONDARY/ADULT LEVEL**

6,221 Number of individuals with disadvantages receiving additional services in mainstream programs.

Disadvantaged individuals are not served in separate programs at the postsecondary/adult level.

**Achievements in Serving Individuals with Disadvantages**

Chesapeake College's efforts to increase retention for students in career and technology programs has been very successful. This Early Warning Retention System has allowed counseling staff to identify at-risk students at several junctures throughout the semester. Once identified, counseling staff are able to directly intervene with students and re-direct behavior. Disadvantaged students who would otherwise "slip through the cracks" are provided with a significant level of additional support.

At Allegany Community College, Carl Perkins eligible students were assisted in the
transition from high school or career center to the college by personnel from the Instructional Assistance Center who visited the Allegany County Center for Career and Technical Education to administer the ACC Placement Test. During 1993-94, 50 students were tested and received a follow-up advising session. These sessions included a review of each student's academic needs and the services available at the college and in the community to assist them. Students entering ACC career programs from sources other than the Career Center were also encouraged to attend a placement test follow-up interview. Six students received this service during the past year.

To assist students with the transition from college to work, Perkins Special Populations personnel worked cooperatively with the ACC Single Parent Program and Job Placement Office. One special cooperative activity was a Career Fair. Over 600 students participated in this event which provided an opportunity for career exploration and potential job placement. More than 30 employers from the tri-state region participated in the Career Fair. Several workshops were conducted during the event. Several of the ACC's career programs operated information booths about their curricula during the Career Fair.

Additional or Supplemental Services Provided for Individuals with Disadvantages

Two outstanding programs at Chesapeake College which serve the disadvantaged population were the Mentor Program and the New Horizons Program.

The primary goal of the Mentor program at Chesapeake was to provide active learning experiences for students in a productive and non-threatening environment. For the disadvantaged, this translates into an experience which is productive both in upgrading current skills and in proving self-esteem as well as in establishing a base of experience that will increase career opportunities.

The New Horizons Program assisted several disadvantaged populations including single parents, homemakers, unmarried pregnant young women and displaced homemakers to become self-sufficient. Inherent in the philosophy of New Horizons is the need for all individuals to be adequately prepared for the job market. Training/Education and the necessary personal support as well as tuition assistance are essential program components.

Typically, these disadvantaged non-traditional students go on to graduate at the top of their classes. In the process, they also become better prepared for life.

The vocational support services team at Essex Community College has increased its initiative in working with students in targeted programs who are on probation. In conjunction with members of the counseling department, a program was developed which included a newsletter, workshops on study skills, career counseling, expansion of the Orientation to College course, and increased efforts to match students with the
appropriate services on campus. In addition to the above initiative, the team has made an impact in the expansion of tutoring services. Tutors are now trained in understanding learning styles and disability issues and are targeted for their knowledge and abilities to work with students who are in high risk courses.

Students who score at the lowest levels on the placement tests continue to receive services through an Orientation to College course taught at their level. Included in this course are an orientation section, a study skills section, and information on career planning and job opportunities. The staff plans to use the APTICOM assessment instrument this year to help students more effectively determine their career goals.

Exemplary Programs

Dundalk Community College's program for serving educationally disadvantaged students is exemplary. An academic intervention system connected to support services including counseling, services to students with disabilities, advising, and tutoring provides an integrated web of support for educationally disadvantaged students. This web involves faculty and staff college-wide to structure the student's experience for success.

The integration of vocational education and academic instruction often exposes academic disadvantages. The VSS office at Anne Arundel Community College has targeted accounting, mathematics, reading, and writing as courses in which many students fail to attain minimal academic competencies. To aid these students, VSS sponsors open labs to help academically disadvantaged students gain the skills and knowledge necessary to succeed in vocational programs.

VSS has coordinated the writing and design of cards used primarily in the Reading and Writing Labs by VSS students with learning disabilities and academically disadvantaged students. Entitled SOS (Seek Optimum Skills), the cards are written by faculty on topics ranging from Test Preparation, Reading and Solving Mathematical Word Problems, and Improving our Vocabulary, to Don't Dangle your Modifiers, Reading Comprehension, and Webbing - Visual Organization of Content. These cards are available to students in the Reading and Writing Labs and are also distributed in classes. In addition, several Anne Arundel public schools and Vo-Tech Centers, as well as other community colleges, have requested copies of the cards for distribution.

Vocational Support Services coordinates a series of "Skills for Success" workshops targeting personal, academic and career skills. The series runs the first six weeks of each semester. This past semester the following workshops were offered: Note-taking, Improving Your Writing Skills, Memory, Test Preparation and Test Taking, Math Anxiety, Test Anxiety, Services and Adaptive Equipment, Introduction to Apple Works, WordPerfect Basics, Transfer Without Loss of Credit, Financial Aid Tips, and Career Planning. The schedule of workshops is included in the orientation packet given to all new students and is advertised on campus and in the campus newspaper. This past
semester many of the workshops were videotaped. The videotapes are available for student and faculty to check-out both on and off campus.

Professional tutoring is available in math, English, reading and accounting on a walk-in basis. The labs are staffed by qualified professionals and are designed to provide an individualized approach to students experiencing difficulty in these areas. Diagnostic testing is available to students in the Reading Lab. Based on learning style and ability, specific remedial assistance is provided.

C1. LIMITED ENGLISH PROFICIENT (LEP) - SECONDARY LEVEL

690 Number of individuals with LEP receiving additional services in mainstream programs.

Individuals with limited English proficiency were not served in separate programs at the secondary level.

Achievements in Serving Secondary Individuals with LEP

In Prince George's County, seven of thirteen schools receiving funding under Perkins have English for Speakers of Other Languages/Language Minority Programs (ESOL/LMP) in the following centers: Bladensburg, DuVal, High Point, Laurel, Northwestern, Parkdale, and Suitland. Students in the other six Perkins-eligible schools have the option of transferring to an ESOL-center school.

ESOL programs have provided the basic communications skills of listening, speaking, reading and writing assistance to approximately 625 students for FY 1994. These skills help the students make the linguistic, social and cultural adjustments necessary for success in both the school and community. ESOL staff have provided the following services in the seven high schools receiving funding under this grant:

1. in-service training of vocational and academic staff working with ESOL students;
2. in-service training and support to other instructional and equity programs;
3. implementation assistance in multicultural initiative;
4. resource assistance to classroom teachers and students; and
5. transition assistance of instructional, and assessment teaching/learning units.

In Carroll County, the Career and Technology Center provided a food production class taught by a certified special education teacher assisted by a VSST aide.
It was a job-specific program that worked closely with the Culinary Arts program. Students enrolled through an ARD and Teaming process. This program provided a viable option for students, who due to their disabilities, were unable to be successful in other technical programs regardless of VSST support.

Through the cooperation of the food production instructor and the work study coordinator, all of the seniors in this program were placed on paid job training sites in the community.

C2. **LIMITED ENGLISH PROFICIENT (LEP) - POSTSECONDARY LEVEL**

- 391 Number of individuals with LEP receiving additional services in mainstream programs.

Individuals with limited English proficiency were not served in separate programs at the postsecondary level.

**Achievements in Serving Secondary Individuals with LEP**

According to Radiologic Technology program, the students who voluntarily participated in the speech tutoring session have made adequate to good progress in their spoken English skills. With continued practice in class and the clinical areas, improvement over the summer following the tutoring sessions is evidenced. It is felt that these sessions will be mandatory in the future and also will be addressed in the curriculum by changing the curriculum to include a whole semester course in voice and diction. This activity has been very helpful and has led to some very positive potential changes in the program.

Essex Community College has been committed to reexamining their entire set of support services for LEP students this year. With the input of an outside consultant a college committee which includes representation from vocational support services has begun the process of examining current offerings including curriculum, assessment, placement, and support services for these students. As an outgrowth of the tutoring program, an English conversation partners program was developed. This new program involved matching ESL students from targeted programs with a tutor for the purpose of practicing English conversation skills. In addition to these initiatives, the vocational support services team members continue to provide specific services to this population for those whose problems also include disabilities. These services might include referral for diagnostic testing, career decision-making, or disability related support.
D. **SINGLE PARENT, DISPLACED HOMEMAKER, AND SINGLE PREGNANT WOMEN PROGRAM**

671 Number of single parents and single pregnant women served at secondary level.

3,169 Number of single parents, displaced homemakers, and single pregnant women served at postsecondary level.

**Overall State Plan**

Maryland divides the Single Parent, Displaced Homemaker, and Single Pregnant Women funds between programs for adults and programs for adolescents (known as the Adult Single Parent and the Adolescent Parent Programs respectively). Funds are distributed through the Request for Proposal process. Eligible recipients for grants are community colleges, local school systems (LSSs), and community-based organizations. During FY 1994, both the Adult Single Parent and the Adolescent Single Parent Programs were administered by the Perkins Sex Equity Administrator; this is a change from the past when the Adult Single Parent Programs were monitored by another specialist in the Division of Career Technology and Adult Learning. Each proposal submitted for funding must describe how the recipient assures that project participants with the greatest need will be served.

The Sex Equity Administrator provides leadership at the state level, assesses the need for staff and program development, monitors the achievement of objectives, provides technical assistance, conducts inservice activities, and collaborates with many groups outside the Maryland State Department of Education (MSDE) to achieve the goals of the Single Parent, Displaced Homemaker, and Single Pregnant Women Program.

The total set aside for adult and adolescent programs in FY 1994 was $1,030,762, with $765,000 reserved for the adult program and $265,762 for the adolescent program. An additional $12,038 was available for the adolescent program through some unused FY 1992 funds. In FY 1994, seventeen community colleges completed their third year of three-year grants that were awarded in FY 1992, and LSS grant recipients completed their one-year grants awarded for FY 1994. The program results are discussed below. Under each major heading, results are first given for the Adult Single Parent projects, then the Adolescent Single Parent projects.

**Objectives**

**Adult Single Parent Program**

The objective of the Adult Single Parent, Displaced Homemaker, and Single Pregnant Women Program is to provide services that will enable the targeted group to become
economically self-sufficient.

**Adolescent Single Parent Program**

The objective of the Adolescent Single Parent and Single Pregnant Women Program is to provide services that will retain students in school or provide them an alternative method of continuing their education so that they can become productive workers and responsible parents.

**Outcomes of the Program**

**Adult Single Parent Program**

In FY 1994, sixteen community colleges and one community-based organization, working with a community college, received Adult Single Parent funds. Each grant was for $45,000. The 17 projects completed their third year of three-year grants awarded through a competitive process begun in FY 1992. All but one of the 17 projects completed an extensive three-year evaluation process that consisted of a self-study in year one, a program-enhancement plan in year two, and a third-party review in the last year. The one project not completing the entire process has its third-party review scheduled for December, 1994.

Numerical Outcomes for FY 1994 include the following:

1. 2,925 served (1654 single parents, 1179 displaced homemakers, and 62 single pregnant women); 37 of those served were men; those served had a total of 4,216 dependent children.
2. 160 associate degrees were earned.
3. 340 certificates (from training program or college certificate program) were earned.
4. 204 completers were placed in full-time, training-related jobs; 56 completers in part-time jobs.
5. 43 others were placed in full-time, training-related position; 65 others in part-time, training-related positions.
6. 149 people were placed in jobs not training-related.

Other outcomes include serving 311 Project Independence clients who were enrolled in Maryland's welfare-to-work program, continued improvement of the links with the Adolescent Single Parent projects in the local areas, and successfully completing (except
in one case) the three-year evaluation.

**Adolescent Single Parent Program**

In FY 1994, fourteen grants were awarded for projects to serve teen single parents and pregnant teens. Thirteen projects were funded at $20,000 each and one at $16,500. Eight grants went to local school systems, five to community colleges, and one to a community-based organization. One site was new to the program and had never been funded before (Somerset County). All projects provided comprehensive services for their participants, designed an individual learning plan for each student, and participated in the new DCTAL assessment and evaluation system for all single parent and sex equity projects.

Numerical data for FY 1994 include the following:

1. 942 people were served (19 of whom were males).
2. 246 of 273 seniors graduated.
3. 153 of the 246 who graduated planned to work (either full-time or part-time).
4. 23 of the 246 who graduated planned to be homemakers.
5. 148 of the 246 who graduated planned to enroll in college or trade school.
6. 7 of the 246 who graduated planned to enter the military.
7. 3 of the 246 who graduated accepted apprenticeships.
8. 17 of the 39 GED students in the program completed their GED.
9. 39 of the 942 served had repeat pregnancies.

Other results of significance are how many pregnant or parenting teens are on welfare; out of the 942 total served, 192 received Aid to Families with Dependent Children (AFDC) in their own name, and 36 participated in Project Independence (Maryland's welfare-to-work program).

**Services Provided in Successful Single Parent, Displaced Homemaker, and Single Pregnant Women Programs**

**Adult Single Parent Program**

Key components of the program at each site include the following:

Access for participants to credit and non-credit college instructional programs and courses. Clients were enrolled in degree or certificate college programs. In many cases, customized non-credit programs are developed.

Instructional support is provided. Allied health occupations and business are the two areas of most frequent enrollment. Support services include tutoring, teaching study skills, and encouraging computer-aided instruction.
Career, personal, and academic counseling are provided to ensure that clients enter into appropriate training programs. Counseling duties are divided between the college's student services staff and staff of the Perkins-funded projects.

Financial support services were provided. Students who met funding criteria were offered partial tuition, assistance with books, child care, and transportation. Child care was selected by the clients; payments were arranged and services accounted for by the project staff.

Referral to appropriate agencies were made. Clients often needed services not provided by individual projects. Community resource networks were used with effectiveness to ensure that participants received necessary services, including housing, medical care, and legal services.

Job placement services were offered to every client. Each college's job placement office worked with the project to prepare clients for job applications and interviews. Placement assistance is an important component of each project's grant application.

In most cases, the colleges provided additional support services beyond the grant resources to the projects. Project directors were attached to a college's division of instruction, continuing education, or student services. Other important services included the following:

1. 186 of those served received scholarships during the year.
2. 284 received child care assistance.
3. 182 received transportation assistance.
4. 1,064 received tuition assistance.
5. 556 received assistance for books and supplies.

Adolescent Single Parent Program

Key components at each site included the following:

Delivery of comprehensive services, including, but not limited to career, academic, and personal counseling; pregnancy-prevention information and/or referral; career development, exploration, and actual training, where possible; health services or referrals; teaching parenting skills; and appropriate referral to other agencies or groups for further access to resources (for example, some projects offer child care and transportation assistance through the project, but others refer clients to other sources for aid).

Design and completion of an individual learning plan (ILP) for each student in the program. An ILP may include the student's career, personal, and academic goals and action steps to reach those goals; assessments that provide valuable information for
educational decisions; plans for special instructional strategies to accommodate any needs the student has; and general procedures for the action plan of the student.

Continued efforts to connect adolescents with the Adult Single Parent, Displaced Homemaker, and Single Pregnant Women projects at the local community colleges.

Active attempts to ensure that teens who are parenting and/or pregnant are recruited for all vocational programs, especially those in the Tech Prep and School-to-Work initiatives.

Other important services for teen parents included career advisement for 698 individuals, assessment and testing for 557, pre-employment preparation for 437, and vocational/skill training for 353.

Unique or Effective Delivery Methods

Adult Single Parent Program

Each program participant completed an individual, personalized plan that included short- and long-term goals and steps to achieve the goals. The participant's progress was regularly followed and any necessary changes made to help the client reach her/his ultimate goal. The objective was to provide a system of services that began with career assessment and culminated with job placement and follow-up services.

The 17 projects used their funding very effectively. Since some of them also received state displaced homemaker funds, they carefully assess client needs and eligibility for other kinds of funding so that the most services and aid possible go to each person.

Six of the directors of the Adult Single Parent projects served on a planning team with the DCTAL Perkins Sex Equity Administrator to provide direction and input for decisions affecting the program. This group aided in the development of a new data collection form and helped to plan training to meet the staff development needs of the group.

Adolescent Single Parent Programs

The individual learning plan required for each student ensures that the instructional needs of the student are of major concern and that a detailed, specific plan is arranged for each participant. Many of the participants in the program have never had this kind of intensive, focused attention paid to their learning needs. The approach allows the student a great deal of input into her/his own learning and raises expectations that students will achieve their goals by implementing the plans they and the project personnel designed together.
Money for the Adolescent Single Parent projects is used effectively at each site with various methods of delivery. Three of the projects operated at Family Support Centers, which provided on site many of the services that the clients needed. Five of the projects operated at sites that also had Adult Single Parent projects, thereby more likely ensuring continuous service from the secondary through the postsecondary level. One project was housed at a Multi-Service Community Center, again ensuring that multiple services would be available to participants. One project was operated by a community-based organization that conducted a pull-out program which relied heavily on employer-school connections to provide job-exploration opportunities for the project participants. One project operated at an urban school for pregnant teens and included an entrepreneurship program for the project clients. Another local school system used its $20,000 to include the parenting class and teen parent services in nine schools in the county. All the projects certainly used the grant award strategically to get as many services for clients as possible.

Methods for Determining Greatest Financial Need and Number Served Who Met the Criteria

Adult Single Parent Program

Of the 2,925 served, 2,049 (70%) had family incomes under $10,000. The projects ensure that the neediest are served first by identifying those eligible for help from other financial sources, thereby ensuring that Perkins project funds are used only when all other sources are exhausted. FY 1994 data show that the following number of clients received financial aid from other sources:

1. 980 were Pell Grant eligible.
2. 272 received Job Training and Partnership Act funding.
3. 311 participated in Project Independence.
4. 561 were aided by state displaced homemaker funds.
5. 31 had help from the Department of Rehabilitation.
6. 352 received help from Vocational Support Services.
7. 186 received scholarships.
8. 187 received help from miscellaneous sources.

Adolescent Single Parent Program

Maryland gives priority to the deprived areas of the state by awarding extra points in the Adolescent Single Parent proposal-evaluation process to eligible recipients based on their ranking on the DCTAL Priority List. This ensures that deprived areas have a better chance of receiving grants than other areas that have access to more financial resources. In addition, all single pregnant and parenting teens with custody of their children in the area served by the grants are eligible for services under the grant so no one is denied service if she/he fits the definition of "single parent" or "single pregnant woman" under Perkins.
Exemplary Programs

Adult Single Parent Program

All of the Adult Displaced Homemaker, Single Parent, and Single Pregnant Women projects operate at community colleges with the exception of one, which operates at the YWCA in Annapolis and Anne Arundel County, Maryland. The project at the "Y" is chosen as exemplary because it has done such a good job of working with the local community college to form a partnership that benefits clients because of the linkage between the two agencies.

The Single Parent project is one of the Career Services programs within the "Y" and is designed to identify Anne Arundel County residents who are eligible for services. The project successfully uses the Maryland State Department of Education's eight step Career Development Model. In addition to receiving specialized services (skill identification and development, access to domestic violence counseling and shelter program, and personal growth workshops, for example) at the "Y" Career Services Center, clients in this project can tap a broad diversity of community organizations as well as attend the local community college for training. In fact, the community college receives most of the program training participants and provides academic advising, evaluation, and tutoring; it co-sponsors special program activities, provides space for meetings and participates in the project's advisory board and steering committee. Prospective students are also referred to other training institutions such as proprietary schools, the Maryland External Degree Program, and vocational centers. The multiple options available in this project expose its participants to wide choices of vocational training opportunities and broaden and strengthen the project services.

The director and coordinator of the project maintain positive, supportive behaviors while also working with clients in realistic, concrete ways to ensure success. There is an emphasis on leadership development for the staff as well as for clients, and the Career Center activities are conducive to continuous personal and professional growth. Close ties are maintained with the State office and other project directors across the state. The staff models the kind of behavior and environment needed to encourage everyone associated with the project to see life-long learning and productive work as reachable goals.

Adolescent Single Parent Programs

Somerset County received a grant for an Adolescent Single Parent and Single Pregnant Women project for the first time in FY 1994 and is noted as an exemplary program for what it was able to accomplish during its first year.

The project was housed at Washington High School in Somerset County, which is also the site for the Multi-Service Center, but it also served several other schools.
activities of the project included aggressive recruitment of the target audience in the community, middle and high schools, community-based organizations, Head Start, the county health department, and Somerset Social Services Department. The project served 45 teen parents, with 37 choosing to enroll directly in the project. Thirty-six completed the project with the following observed as notable successes:

1. Based on GPA tracking and deficiency report feedback during the project year, 80% of project participants completed the vocational training program with either a certificate or enough credits earned for promotion to the next grade.

2. Clients have improved their reading and math scores based on pre- and post-tests.

3. Students who were on Home Bound Study received visits by project personnel who continued the project services with the students while they could not attend classes at school.

4. Tutoring was provided to each student.

5. All project clients participated in the enrichment field trips with the Maryland's Tomorrow Program (a drop-out prevention program), the Opportunity Skyway Club (encouraging careers in aviation), and trips to the local college.

6. There were only two repeat pregnancies among project participants.

7. There was a decrease in the number of low-birth-rate babies from the preceding year.

8. Of the 17 seniors in the program, 16 were graduated and they all planned to go to work either full-time or part-time.

In addition to these client outcomes, a stronger partnership exists among the school system, the health department, and the social services department as a result of their working together to serve teen parents. The coordinator of the project delivered direct instructional and case management services to all the clients and increased greatly the chances that the project participants would complete their individual learning plans and continue to the next step of their plans to be more productive workers and effective parents.
E. STUDENTS IN NON-TRADITIONAL PROGRAMS (SEX EQUITY)

6,454 Numbers of students in non-traditional instructional programs.

13,157 Number of students served in sex equity programs.

2,157 Number of educators, business and community representatives, and parents served in the sex equity programs.

Overall State Plan

The overall state plan for Sex Equity in Maryland during the past three years has been to continue a two-pronged approach to eliminating sex-role stereotyping in career choice:

1. offering individual grants to local school systems, community colleges, and community-based organizations to implement projects that recruit and retain students in non-traditional programs; and

2. offering three specialized grants that provide statewide training of project staff, development of resources, and design of an assessment and evaluation system for the Sex Equity and Single Parent Programs.

The Perkins Sex Equity Administrator monitors and provides technical assistance to all the Sex Equity and Single Parent projects. She provides leadership at the state level, assesses the progress and the planning of the activities, provides staff development, monitors the achievement of projects' objectives, conducts inservice workshops, and collaborates with many groups inside and outside of the Maryland State Department of Education to achieve the goals of equity in Maryland.

Objectives

In FY 1994, the objective of the Sex Equity Program was to provide Perkins Sex Equity funds on a competitive basis to eliminate sex bias and sex-role stereotyping by awarding grants that did the following:

1. recruited more females into career and technology education;

2. recruited more females and males into non-traditional career and technology education programs;

3. provided inservice to combat the adverse effects of sex-role stereotyping on career choice and to infuse equity issues into curricula;
4. located, reviewed, purchased, housed, and disseminated sex equity resources and materials; and

5. produced an assessment and evaluation system for the Sex Equity and Single Parent Programs.

**Outcomes of the Program**

In FY 1994, eleven Sex Equity projects were funded in the Sex Equity Program. Listed below are the major accomplishments of the program as a whole. Individual grant accomplishments are discussed in a later section.

1. 2,983 career and technology education students were served.

2. 10,174 other students received services.

3. Design of an assessment and evaluation system was completed. A document was produced that was circulated to all project personnel, career and technology education supervisors and occupational deans, and selected state staff. The notebook contained performance measures and standards and quality indicators for Sex Equity and Single Parent projects, new data collection forms, the DCTAL Sex Equity Action Plan (a model for achieving sex equity), and results of surveys and studies that were used to design the RFP for FY 1995.

4. A written instructional manual designed to accompany a video on sexual harassment.

5. Selection of 25 new participants in the DCTAL Leadership Development Project for Women and Minorities. First training session in this three-year project was held.

6. Three issues of a newsletter with news about sex equity programs, services, and resources.

7. Over 2,361 individuals received professional development training on sex equity issues.

**Achievements and Services to Reduce Sex Bias and Stereotyping**

Three of the 11 grants awarded in FY 1994 significantly contributed to Maryland's goal of reducing sex bias and stereotyping statewide. These three projects operated statewide and provided a systematic approach to achieving equity. Each grant project is discussed separately.
1. The Assessment and Evaluation Grant for Developing a System of Evaluation for Maryland's Sex Equity and Single Parent, Displaced Homemaker, and Single Pregnant Women Programs. This grant was awarded to Carroll Community College in FY 1992 with the charge of studying the past delivery system, designing a new system, and providing training for implementation of the new system. In FY 1994, the work was completed with the delivery of a major document that contained all necessary reporting forms, performance standards and measures, key components for required elements in the projects, and a model for achieving sex equity. The Sex Equity Action Plan was approved for distribution in the RFP package; each potential grant recipient has to address the Action Plan as does each local in its application to DCTAL.

2. The Professional Development Grant for Sex Equity and Single Parent Projects completed its third year of operation at the University of Maryland, College Park. During FY 1994, the project funded six "mini" grants to locals or other DCTAL-funded projects, sponsored and/or supported 22 workshops/conferences and four professional development training sessions. This project is the major source of support for the following:
   a. DCTAL’s Leadership Development Project for Women and Minorities;
   b. regional equity briefings held each fall in collaboration with the State Department of Education's Equity Assurance and Compliance Office;
   c. major statewide conference on sex equity and single parent issues (this past year's emphasis was sexual harassment);
   d. inclusion of sex equity training in the activities of other DCTAL inservice/meetings;
   e. major staff development workshops for the directors of Sex Equity and Single Parent projects; and
   f. 2,361 individuals receiving professional development training.

3. The Resource Development Grant for the Sex Equity and Single Parent Programs completed its third year of operation with the notable following accomplishments:
   a. Circulated 798 print and nonprint materials.
   b. Disseminated 3,083 print materials.
   c. Distributed resource catalogs to all directors of career and technology education, occupational deans, and all DCTAL-funded Sex Equity and
Single Parent project directors (80 individuals).

d. Sponsored Maryland's participation in the National Alliance for Partnerships in Equity Consortium.

e. Prepared fourteen major displays of resource materials.

f. Produced three issues of an equity newsletter.

g. Produced numerous miscellaneous bulletins and mailings on resources.

h. Served 2,277 individuals by lending materials.

Accomplishments of Preparatory Services and Vocational Education Program and Supportive Services for Girls and Women Ages 14 to 25

Eight of the Sex Equity grants provide services in this category. Each project is briefly described below with only major accomplishments mentioned.

Math Engineering Science Achievement (MESA)

MESA identified minority and female students in three career and technology education schools to become MESA students. They participated in extra-curricular and in-school activities to develop and enhance their skills and interests in math, science, and technology. Teachers were trained to provide support services and special activities to encourage participants to consider careers in the targeted careers. One significant outcome: 85% of the career and technology education graduating seniors who participated in MESA were accepted into a college or university for the 1994-1995 year.

Prince George's County Schools

Teens on the Scene, a student performing group conducted presentations to promote non-traditional careers among other students, to facilitate discussions about sexual harassment, and to help students learn conflict-resolution skills. The project was connected with a teen parent project in the same county. One significant outcome: over 1,600 students saw presentations by the performing group.

Allegany County

A consortium between Allegany County Schools and Allegany Community College continued. It provided staff development, special recruitment efforts, and scholarships for the area. One significant outcome: This project hosted the Second Annual Statewide Equity Conference in May.
Cecil Community College

A Family Support Center with multiple services available for clients was the setting for this grant. The STAR Program recruited and helped place women in nontraditional classes and jobs. Child care and transportation were available at the site. One significant outcome: 25 students received focused, individualized service as they learned about/prepared for nontraditional careers.

Maryland New Directions

This community-based organization developed a manual on sexual harassment to accompany a video for students. Four regional trainings were conducted using the resource. The video and manual are now available statewide for use by career and technology education personnel and project directors and other equity advocates. One significant outcome: Convening of a roundtable on sexual harassment led to a partnership with business and community leaders who have become active in trainings on sexual harassment and sharing additional resources with the career and technology education system.

Howard County

This grant funded a consortium among Howard County, Baltimore City, and the Maryland Correctional Institution for Women. Mini grants were awarded to schools and educators within these three systems. Recruitment and staff development were major activities. One significant outcome: The opportunity through scholarships for six young women (two single parents) to attend postsecondary training or college, majoring in programs which will qualify them for non-traditional careers.

Hagerstown Junior College

A special training program for technology and technical literacy was taught to 13 women who were all single parents. The program was called "Transformations" because it used a curriculum by that name from the Center for Occupational Research and Development. The eighteen-week curriculum was supplemented by special services to the participants and special training for the instructors. One significant outcome: Finding multiple funding sources (Nine of the 13 students served were JTPA eligible, six were receiving AFDC, six were Pell Grant eligible, two were eligible for college instructional support services, and one participated in Project Independence.

East Johns Youth Center, Inc.

This community-based organization provided after-school services for 75 students recruited for and 55 enrolled in Project GET UP. Students received tutoring, exposure to computers, information on non-traditional careers, and general motivational strategies for
planning for the world of work. One significant outcome: The institution of a monitored homework session for participants. Many of the students served in this program were academically and economically disadvantaged, and their responses to exposure to computers and a structured learning environment were very positive. Collectively these eight grants served these audiences:

1. 2,398 students in career and technology education
2. 10,174 other students served
3. 1,152 administrators, teachers, and counselors
4. 2,157 business/industry people

Exemplary Program

All the Sex Equity projects were models in one way or another, but the one described here is an example of how to provide the necessary support and motivation to recruit and retain low-income women in training in high-wage non-traditional areas. The Sex Equity project at Hagerstown Junior College recruited 72 individuals for possible participation in the Transformation Project. After determining eligibility, providing information to students so that they could decide if they wanted to participate, and applying other participation criteria, 13 people were chosen to participate in the training program.

The project is called "Transformation" because that is the name of the instructional materials used in the classes. The curriculum is often described as a technical literacy course that teaches fundamental technical skills that can be used in several high-wage technical areas.

The participants received support services, referrals, financial aid, and moral support to complete the 670 hour training. In June of 1994, eight of the participants successfully completed the training. Of those who did not complete, three obtained employment prior to program completion, and two individuals withdrew because of medical reasons.

The project is exemplary because it combines several support mechanisms with focused, individualized instruction over a whole year so that students can move at their own pace, support each other in their study, and receive the attention they need to learn sophisticated technical skills.
F. CRIMINAL OFFENDERS IN CORRECTIONAL INSTITUTIONS

Numbers served through programs in correctional institutions. There are many more inmates enrolled in vocational programs at any given time. However, because these are open-entry/open-exit programs, the number given reflects the number of individuals who received vocational certificates in FY 1994.

Names and Addresses of Participating Institutions

Roxbury Correctional Institution
18701 Roxbury Road
Hagerstown, MD 27146

Maryland Correctional Institution-Hagerstown
18601 Roxbury Road
Hagerstown, MD 21746

Maryland Correctional Institution-Jessup
Route 175, Box 549
Jessup, MD 20794

Maryland Correctional Institution-Women
Route 175, Box 535
Jessup, MD 20794

Maryland Correctional Training Center
18800 Roxbury Road
Hagerstown, MD 21746

Eastern Correctional Institution
30420 Revells Neck Road
Westover, MD 21871

Baltimore City Correctional Center
901 Greenmount Avenue
Baltimore, MD 21202

Pre-Release Unit for Women
301 N. Calverton Road
Baltimore, MD 21222

Overall State Plan

In keeping with Maryland's Vision and the Division of Career Technology and Adult Learning goals, Correctional Education will provide, to all residents without adequate preparation for employment, the opportunity to acquire occupational skills through appropriate employment related experiences including academic instruction, vocational education, guidance, assessment, career education, and integrated work and job skills training.
Objectives

The following are the FY 1994 Correctional Education Vocational objectives:

1. Continue to develop employer input to guide curriculum upgrading.
2. Maintain developed vocational fiscal priority systems to distribute both state and federal funds.
3. Continue to develop pre-program placement assessments.
4. Evaluate standardization of vocational entrance tests.
5. Provide technical assistance for curriculum improvement.
6. Implement articulation between State Use Industry and Apprenticeship Programs.

Outcomes of the Program

1. Support institutional, regional and statewide positive communications.
2. Develop industrial advisory groups.
3. Enhance curriculum based on employment needs.
4. Support professional staff input on program needs.
5. Provide program goals which are mutually shared and agreed upon.
6. Provide trust, support and freedom for individual differences.

Types of Services or Programs Provided and Achievements

The correctional vocational programs directed by the Maryland State Department of Education are located in the eight adult correctional institutions in Washington, Anne Arundel, and Somerset counties and in Baltimore City, as well as in the three pre-release units—Poplar Hill, Baltimore City Correctional Center, and Pre-Release Unit for Women. These programs are included in the Maryland State Plan for Career and Technology Education. This plan currently supports 44 vocational programs for incarcerated adults. However, only 36 programs are presently operational due to program shut downs, retirements and staff illnesses/injuries.
All vocational programs offer entry-level skills training except child care, child development, home management, and guidance. Forty-three of the forty-four approved programs are located in the Division of Correction's major maintaining institutions as shown below:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Number of Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WESTERN REGION:</strong></td>
<td></td>
</tr>
<tr>
<td>Maryland Correctional Institution - Hagerstown</td>
<td>4</td>
</tr>
<tr>
<td>Hagerstown, Maryland</td>
<td>2 (non-operational)</td>
</tr>
<tr>
<td>Maryland Correctional Training Center</td>
<td>13</td>
</tr>
<tr>
<td>Hagerstown, Maryland</td>
<td>3 (non-operational)</td>
</tr>
<tr>
<td>Roxbury Correctional Institution</td>
<td>6</td>
</tr>
<tr>
<td>Hagerstown, Maryland</td>
<td></td>
</tr>
<tr>
<td><strong>CENTRAL REGION:</strong></td>
<td></td>
</tr>
<tr>
<td>Maryland Correctional Institution - Jessup</td>
<td>3</td>
</tr>
<tr>
<td>Jessup, Maryland</td>
<td></td>
</tr>
<tr>
<td>Maryland Correctional Institution - Women</td>
<td>3</td>
</tr>
<tr>
<td>Jessup, Maryland</td>
<td></td>
</tr>
<tr>
<td>Occupational Skills Training Center</td>
<td>6</td>
</tr>
<tr>
<td>Baltimore, Maryland</td>
<td></td>
</tr>
<tr>
<td><strong>EASTERN REGION:</strong></td>
<td></td>
</tr>
<tr>
<td>Eastern Correctional Institution - East</td>
<td>4</td>
</tr>
<tr>
<td>Westover, Maryland</td>
<td>2 (non-operational)</td>
</tr>
<tr>
<td>Eastern Correctional Institution - West</td>
<td>4</td>
</tr>
<tr>
<td>Westover, Maryland</td>
<td>1 (non-operational)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>43</td>
</tr>
</tbody>
</table>

The 44th vocational education program, *Contracted Services for Adult Offenders*, offers internal and external participation. The internal participation was offered in the Western...
Region at the Maryland Correctional Training Center and Roxbury Correctional Institution by Hagerstown Junior College and in the Central Region at the Maryland Correctional Institution - Jessup by Catonsville Community College.

External contractual services were provided to the Poplar Hill Pre-Release inmates who were transported to the Multi-Service Community Center for training after the end of the regular school day.

Activities funded with additional funds expended for Criminal Offenders from the Perkins Act

In all three regions, vocational instructors have actively developed linkages and articulations with private business and industry. In both the Eastern and Central regions, such articulations have recently provided valuable material and equipment donations for instruction.

In the Western region, vocational educators have enjoyed the benefits of private industry's support of our correctional programs. These articulations have netted material gain such as; raw construction materials, autos from the major auto manufacturers for diagnostic instruction, and cut-away demonstration models for theory instruction. Beyond the material gain is the invaluable input these companies can share with our instructors for curriculum updating.

The important activity of formally establishing advisory/craft committees is ongoing, and a meeting took place for the Occupational Skills Training Center in October, 1994 for the Greater Baltimore Businesses.

Statewide fiscal vocational priorities were established. Institutional and regional priorities were gathered. This method of distribution provides not only accountability but also front-end decision making for representatives from each region.

Currently, vocational students must pass a vocational shop test to be eligible for program entrance. During the process of review and standardization, information was made available by Dr. Stephen Steurer, Correctional Academic Coordinator, that suggests that the testing process may utilize the standard used by academic students. This would enable Dr. Steurer's automated testing program to be used for all potential students, academic and vocational. As stated in last year's report, the final decision was to use the TABE test to provide more validity in test scores to place individuals in occupational programs. Instructors and field administration helped expedite this activity by providing math and reading needs of their individual programs. This action also was attributed in part, to the business/industry linkages made by instructors. The evaluation process continued during FY 1994.
Professional development, staff development, and the improvement of support services have all felt the impact of budget cuts. However, some of these activities are now in the planning stage for FY 1995.

Maryland's Correctional Apprenticeship Program, a cooperative effort between State Use Industries and the Maryland State Department of Education, had an enrollment of 103 as of May 6, 1994. Of the total enrollees, 90 completed the 144 hours of related instruction and 3 received their journeyman papers. There are 7 apprenticeship programs approved and active within correctional education.

During FY 1994, Correctional Education and State Use Industries personnel continued efforts to complete the construction of the new industrial building (Envelope and Graphics Shop) located at the Roxbury Correctional Institution in Hagerstown. The project started in April, 1992 and was successfully completed in September, 1993. This project was the third of its kind in the western region. A construction project was started in October, 1993 to build a new facility for case management and education of the Maryland Correctional Training Center in Hagerstown. This venture will give many more opportunities for the vocational and apprenticeship masonry students.

Computers purchased in past years have shown sufficient impact on program delivery. Program instructors continued to enhance their curriculum by purchasing additional computers and software programs. In FY 1994, five additional computers and other hardware were purchased to enhance the technology delivery of career programs.

The Occupational Skills Training Center (OSTC) continues to be a major project to facilitate the transition of incarcerated persons (male and female) from economic dependence to economic independence. A critical need is preparation for civilian employment and support in the transition into the civilian labor market at the point of release. The Occupational Skills Training Center was officially opened to students February 19, 1993 offering three programs; office technology, graphics/printing, and automotive technician training. Job development and placement is also an integral part of the ongoing training process at the center. Three new program areas, warehousing, home improvement, and heating, ventilation and air conditioning, were opened in FY 1994. Also to enhance the skill training programs, a computerized related Job Skills Program (JSEP) was installed as a network for use by all students assigned to the center and a "What Life Could Be" Grant that covers wellness, communication and employability skills training. Both enhancement programs were integrated into each student's schedule to give every OSTC student the opportunity to complete a total integrated training program. MSDE's Correctional Education has directly contracted Baltimore City Community College to handle the daily operations of the center and to utilize other Greater Baltimore Community Colleges for assistance in providing quality training in the targeted areas.
SECTION II

Program Improvement
Accomplishments
Under
Title II, Part C
SECTION II - TITLE II, PART C: SECONDARY, POSTSECONDARY AND ADULT OCCUPATIONAL PROGRAMS, SERVICES, AND ACTIVITIES

A. PROFESSIONAL DEVELOPMENT AND CURRICULUM FOR AN INTEGRATED EDUCATION SYSTEM

Overall State Plan

Develop, implement and define an integrated learning concept for educational programs that consists of broad learning outcomes and ensures that students acquire the broad, transferable knowledge and skills necessary to prepare them for work, further education, or both.

Outcomes of the Program

Applied Mathematics I and II, products of the Center for Occupational Research and Development, were reviewed by a committee led by Dr. Bob Caret of Towson State University. Meetings were held with local tech prep consortia representatives, deans of instruction, local directors of career and technology education, and chief academic officers of four year colleges and universities to address acceptance of applied academics, dual enrollment, and broader issues related to tech prep.

The Upper Eastern Shore Consortium, comprised of five local school systems, planned and implemented three professional development activities to support (initiate and expand) blended instruction and the integration of academics and career technology education. Workshop participants consisted of teams of academic, vocational and special education instructors from each school system. Workshop topics included the following: Integration of Mathematics and Career Technology Education; Applied Learning and Infusion of Mathematics, Communications, and SCANS Competencies for Technology and the Workplace; and Reading for Learning. These professional development activities result in the following accomplishments:

1. Cross visitation and cross curricular planning and teaching among/between vocational, academic and special education teachers.

2. Integrated projects blending math skills into occupational teaching/learning activities.

3. Integration of tech prep curriculum and materials with "standard" classroom practices.
4. Inclusion of interdisciplinary units across all curricula.

5. Infusion of higher order thinking skills in classroom learning experiences.

6. Implementation of strategies to enhance reading in all content areas.

7. Implementation of plans which enable teachers to share new learnings with other staff.

8. Increased demand for follow-up workshops.

The Department awarded a grant to Dundalk Community College to host an Applied Academics Institute the last week in June to expand the use of applied academics and integrated learning in Maryland. More than 70 teachers participated in concurrent, hands-on sessions on Applied Mathematics, Principles of Technology and Applied Communication.

All of Maryland's High Schools that Work Sites (HSTW) participated in a workshop led by a representative from the Educational Testing Service to assist site coordinators in analyzing data to include findings and develop actions for school improvement plans. A videotape explaining the assessment process and data was provided to each local site. Dr. Gene Bottoms presented the HSTW initiative to members of the State Board of Education on January 26, 1994. Later he made a presentation to recruit school systems not involved in the initiative. As a result, additional sites have expressed interest in joining the initiative. In February and March educators in Baltimore City and the Eastern Shore participated in Reading to Learn telecasts with Dr. Ray Morgan, Professor of Reading at Old Dominion University in Virginia. Southeastern School of Technology in Baltimore County participated in the Ford Academy of Manufacturing Sciences (FAMS) program through the Southern Regional Education Board (SREB). The FAMS program has been fully implemented at Southeastern during the 1994 school year. St. Mary's county participated in a work-based learning initiative also sponsored by SREB. This activity provides teachers with opportunities to shadow employees in businesses and industries to learn about the skills employers want students to have upon graduation. Finally, Dundalk Community College received a grant to provide leadership development to Queen Anne's County's school improvement team to promote the integration of HSTW activities in systematic school improvement planning. Additional information about integration initiatives can be found in the section titled Tech Prep.

B. CURRICULUM DEVELOPMENT SYSTEM

Overall State Plan

The Division of Career Technology and Adult Learning remains committed to the
concept of competency-based/performance-based curriculum development. The state agency provides leadership, coordination and expertise in the curriculum development process. Curriculum development at the local education level is supported by a variety of state-sponsored memberships and activities.

The objectives for the Maryland curriculum system are to:

1. Provide state leadership, coordination, and expertise in the development of a curriculum system design. Plan and implement a process and format for curriculum development.

2. Establish a statewide networked data system for curriculum to include consortia of local education agencies and community colleges to enhance the flow of information concerning curriculum models, instructional strategies, and resources.

3. Establish technical committees to advise on the development of model curricula that will address state labor market needs.

Outcomes and Results

1. As local education agencies and community colleges are identifying competencies and standards needed to develop or reconstitute programs, they look to the Vocational-Technical Education Consortium of States (V-TECS) to provide nationally validated curriculum materials for occupational education. Maryland has been a member of V-TECS since 1977, and has disseminated curriculum materials produced by this consortium since that time. During the past two years, V-TECS has been developing software that allows every element presently contained in each V-TECS product to be computerized. The result is V-TECS DIRECT, a software package designed for storing and retrieving V-TECS material. The entire V-TECS development/distribution utilization process has been converted to this microcomputer-based system. The focus in Maryland has moved from the marketing and distribution of paper curriculum to assisting local education systems as they begin using this system. This past year two inservice activities were held to provide training on the new V-TECS DIRECT software by the curriculum specialist. Four other training activities were provided by local education systems who were given a V-TECS DIRECT grant through the proposal process. Nineteen V-TECS DIRECT sites in Maryland were provided with technical assistance and training opportunities.

2. The Maryland Agriculture Education Foundation, Inc. completed a curriculum product entitled Aquaculture Technician as Maryland’s product development contribution to V-TECS. This product was developed with the assistance of the aquaculture industry and agriculture teachers in Maryland. It contains industry validated competencies for aquaculture technician, standards for each
Given the statewide emphasis and actions to support manufacturing in Maryland, the High Performance Technical Committee's project is providing an essential look at the workforce development responses needed to support, enhance and build on this initiative. This year, the extensive planning phase of this manufacturing project has provided the right mix of vision and activity, enabling the project to serve several key functions:

a. a catalyst for action in developing high performance manufacturing curricula at the secondary and postsecondary levels;

b. a connector for a variety of manufacturing related initiatives in education, economic and employment development, business and industry, and labor;

c. a configurer for a response that is systematic, comprehensive, participatory, collaborative and future-oriented; and

d. a jumping-off point for next step initiatives, such as National Standards projects.

Because of the relationship of this project to a highly visible and important statewide economic development agenda, and because of the need to involve a variety of partners, there was a need to create and sustain alliances to support the various elements of the project and, perhaps more importantly, to continue to support the initiatives locally after the project is completed. This year was spent meeting with potential partners to plan efforts for the coming year. Various partners committed services and financial support to enlarge the project's scope. The activities in this project are modeled after the very successful Biotechnology/Life Sciences Technical Committee project completed two years ago. Because of the wider scope of this project, and based upon learnings from this previous project, the resourcing for this activity is being shared by various project participants. During this fiscal year the DACUM Resource Center has obtained commitments from various agencies, secondary schools, and postsecondary schools to assist in that resourcing. Planning for the second year of this two year grant has been completed. During the coming fiscal year, two additional tech scan activities will be initiated, DACUM charts will be developed for three areas in manufacturing, and a Tech Prep 4 + 2 curriculum planning activity will be initiated with academic and occupational teachers from the high school and community college levels.

With the limited availability of courses for trades and industry teachers, opportunities for obtaining standard certification have been severely constrained.
in the last few years. Because of this, it was necessary to establish alternative avenues to enable teachers to meet certification requirements. In order to establish standards for these courses, the Division of Career Technology and Adult Learning in collaboration with Dundalk Community College, established a list of learner outcomes for the professional development sequence of a trades and industry teacher. The list, which was established using the DACUM process, was validated by local directors of career and technology education and correctional education principals.

5. In January 1994, a task force was established to develop new specifications for career and technology education (CTE) programs in Maryland. The task force created a new vision for program specifications - one that is consistent with the workforce preparation needs projected for the twenty-first century. The new specifications will enable school system leaders to create flexible and dynamic programs that are responsive to economic development needs. They focus on outcomes, as well as content, and will clearly delineate what a graduate will know and be able to do as a result of completing a CTE program. In addressing all aspects of an industry, they emphasize technical and academic preparation, as well as employability skills.

The task force developed a program specifications prototype document validated by local education agencies. These agencies have begun to use this document to develop new program proposals.

C. GUIDANCE AND COUNSELING

Overall State Plan

Career guidance and counseling in Maryland is a part of a coordinated pupil services program for all students. This program contributes to students' optimal academic growth by fostering physical and mental health and well being. Through the use of a team approach, a systemic, integrated, and coordinated program delivery system is provided to create a positive learning environment where students acquire needed competencies.

In terms of career development, Maryland is a leader in the promotion of comprehensive career development programs that are interdisciplinary and competency-based. Career development is the responsibility of a team of staff from several divisions of the State Department of Education, including the Division of Compensatory Education and Support Services, and the Division of Career Technology and Adult Learning. The team is responsible for setting state goals for career development, and providing leadership and technical assistance to local school systems and community colleges.
Program Administration (state/local organization)

The guidance program is part of a coordinated pupil services program with leadership provided by two state specialists and a guidance supervisor in each local education agency. All counselors in Maryland are state certified. Through the coordinated pupil services program, a team approach is used for appropriate activities/objectives. School counselors serve on curriculum teams, school management teams, school improvement teams, pupil services teams, student support teams, vocational evaluation teams, and often serve as the school's resource to the outside agencies, business, and industry. The staffing ratio is more than 400 students per counselor.

In terms of career development, the state career development team works with local guidance supervisors, supervisors of career and technology education, and supervisors of instruction to implement Maryland's Career Development Model and the National Career Development Guidelines.

Outcomes of the Program

1. At least eight local school districts have used Maryland's Career Development Model to redesign their delivery of career development services, with the assistance of the state career development team.

2. Maryland's career development team has presented the vision and goals for career development to several diverse groups, including the Extended Leadership Team of the Maryland State Department of Education, and local assistant superintendents of instruction.

3. The state career development team convened four meetings of the Maryland Career Development Steering Committee. The committee includes members from such organization as public schools, community colleges, the Department of Economic and Employment Development, the National Career Development Association, the State Occupational Information Coordinating Council, and others. The group has provided guidance and direction for career development efforts in Maryland.

4. The career development team has coordinated professional development activities and services, including:

   a. Conducted a statewide career development conference in December, 1993.

   b. Conducted four regional training activities on how to implement the
Career Development Model. The training audiences were composed of teachers, counselors, and other staff from all levels, K-Adult.

c. Presented the Career Development Model at two national conferences.

5. The state career development team provided assistance to the Maryland State Occupational Information Coordinating Council (SOICC), including:

a. Helped to design and implement VISIONS, the career information delivery system for middle school students;

b. Coordinated the dissemination and implementation of the National Career Development Guidelines, as part of the implementation of Maryland's Career Development Model;

c. Promoted the use of VISIONS PLUS, Maryland's career information delivery system for high school students.

d. Assisted in the delivery of Improve Career Decision Making training.

e. Presented the Career Development Model at the 1994 National SOICC Conference. The Maryland Occupational Information Coordinating Council (MOICC) director was the facilitator.

Maryland's sixteen Tech Prep consortia have provided substantial assistance to the implementation of comprehensive career development programs. Tech Prep funds have been used to provide professional development opportunities for counselors and teachers in all sixteen consortia.

Exemplary Programs

The Carroll County public school system has developed a high school curriculum based on students career interests rather than their postsecondary plans. High school students select career clusters and plan their programs of study accordingly. This change involves restructuring the entire system to deliver comprehensive career development, kindergarten through adult. This program is based on Maryland's Career Development Model and the National Career Development Guidelines.

D. EQUIPMENT AND FACILITIES

Equipment

Based on information obtained from the FY 1994 equipment inventory reports, local education agencies and community colleges used federal and state funds for equipment.
acquisitions to upgrade career and technology education laboratories. The vast majority of the equipment purchased consisted of computers and computer related equipment. As a direct result of the education purchases, a wide range of career and technology education programs enhanced their high tech capabilities and increased their ability to provide students with the high tech skills necessary to enter and to advance in a continually evolving job market.

Facilities

Wicomico County has completed drawings for the construction of an addition to Parkside High School for the delivery of career and technology education programs. Pending funding, actual construction of the new facility will begin in June of 1995.

E. SCHOOL-TO-WORK TRANSITION

Overall State Plan

The need to comprehensively address school-to-work transition is now at the forefront of policy-making at both the state and national level. In Maryland, one of the State's most important missions is that of preparing young citizens for productive careers. For too long a significant percentage of the population has left school unprepared to enter either college or the workplace. To address this population -- and to ensure equal access to career-based learning for every student -- Maryland has outlined a new, broad-based initiative called Career Connections. This initiative brings local public schools, postsecondary institutions, government, parents, and the private sector together in a community collaborative to build on existing efforts and begin new ones aimed at providing students with the best, most efficient, Career Connections to the world of work.

Career Connections is a strategy for system-wide change. As such, it is different from past approaches that resulted in add-on programs. Career Connections is a key strategy for school and postsecondary improvement that will be woven into the fabric efforts to strengthen education at the secondary and postsecondary levels. Moreover, it will be led by business/education partnerships that will design and implement school and work based learning avenues and outcomes tailored to local needs.

Career Connections centers on a combination of work-based and classroom learning for every student, and a host of connecting activities that will smooth the school-to-work transition. Specifically, Career Connections aims to:

1. Prepare every graduate to transition into a job or further education;
2. Provide every student with a learning rich work-related experience that combines both work-based and classroom-based learning;
3. Identify the competencies demanded in a changing economy and ensure that every graduate masters the academic, work-related and life skills required for a smooth transition into a productive career;

4. Lay a foundation for lifelong learning that will enable students to progress and adapt to meet changing workplace demands.

The 1992 Maryland School Performance Report showed that almost 38% of high school graduates were neither prepared for college study nor for entrance to the workplace, and only 20% of Maryland's high school graduates had completed a program in career and technology education. The remaining 42% were prepared to enter college, although it is expected that approximately half of them will not complete degree programs. These statistics show that if college-bound students are not prepared simultaneously for success in the workplace it is all too likely they will end up without a college degree or the skills needed to get an entry-level position. These statistics reflect the existence of a large number of students who may be termed "destination unknown". This number also includes four-year college bound students who do not have a career focus. Coupled with projections that indicate that most careers of the future will require some kind of post-secondary training that is less than a baccalaureate degree program, there is a clear need to provide systems of career development and school-to-work transition. Therefore, Career Connections must address the needs of all students.

Maryland's education reform movement, Schools for Success, established a new course for education in Maryland that complements the six national education goals. Maryland's school reform movement encompasses several areas:

Accountability

Through the Maryland School Performance Program (MSPP) and the Maryland School Performance Assessment Program (MSPAP), schools are held accountable for the achievement of performance standards.

Criterion-Referenced Testing System (CRTS)

Students in grades three, five, and eight are assessed with tests that require problem solving and teamwork skills.

School Improvement Plans and Teams

Each school that has not met the satisfactory standard in one or more of the state assessment areas must develop a school improvement plan. School-based teams review current data and monitor planned benchmarks to meet the performance standard.
New Graduation Requirements

Beginning with the September 1993 school year, graduation requirements have specified more rigorous academic content and have eliminated the general track, so that all students will graduate prepared for work, post-secondary education, or both. New graduation requirements also specify that all students must take a one-credit course in Technology Education and complete seventy-five hours of community service. The Maryland State Department of Education is currently soliciting comments on a proposal to develop performance-based assessment requirements for high school graduation.

Integrated Instruction

The elimination of the general track and the focus on student achievement means that students must receive quality learning opportunities with career applications that systematically bridge theory and practice. Integrated, or blended instruction is a major initiative of the Maryland State Department of Education. Employers' continued involvement in this initiative will be an important aspect of Career Connections.

Career Development

Maryland is determined to incorporate career development into all aspects of the K-adult environment. One strategy to accomplish this has been the promotion of the MSDE Career Development Model. The model, together with the National Career Development Guidelines, calls for comprehensive career development services which will be interdisciplinary, collaboratively delivered and based on outcomes that are measured. Maryland has also expanded VISIONS, Maryland's career information delivery system for use in middle schools as well as high school. VISIONS for middle schools is customized for each school with each program of study in it. Students are able to design the draft of their high school program based upon input they have received from the program.

A number of effective model school-to-work programs targeted at specific populations already exist in Maryland. These programs will be used by Career Connections as the foundation on which to build a comprehensive, coherent and dynamic school-to-work system. Some of these models include:

1. Cooperative Education
2. Tech Prep
3. Career Academics
4. Apprenticeships

5. Maryland's Tomorrow

While there are many successful school-to-work strategies in Maryland such as those illustrated above, they are all limited to special student populations or to a few select industries. The purpose of Career Connections is to build on past successes and expand effective strategies to provide all students with access to career-based education and the opportunity to benefit from workplace learning. Maryland's vision is for local collaboratives to develop plans for a systemic approach to school-to-work transition using appropriate resources and based on specific needs. Each local Career Connections system will be required to incorporate the four organizing principles, and state-level guidance, structure, assistance and follow-up will be an integral part of Career Connections.

Organizing Principles

There are four key organizing principles for Career Connections:

1. Universal Access
   Career based education should be provided for all students.

2. Defined Academic and Occupational Skill Competencies
   Developed by both educators and employers, academic and occupational skill competencies will be tailored to specific occupational clusters, and will lead to a high school diploma, certificate, or degree from a post-secondary institution.

3. Integrated Work-Based Learning and Classroom Learning
   Learning rich work opportunities give students the chance to apply skills learned in the classroom. This, coupled with employer involvement in identifying workplace competencies, will shape appropriate curricula. Integration of these two learning environments will be reinforced through student reflection on what has been learned.

4. Active Adult and Employer Participation
   Adult role models of success in the students' chosen field provide invaluable mentoring support to the student, helping to shape ideas and values about work.
Objectives

1. Develop a high performance work force;
2. Establish an active community collaborative for all STW activities;
3. Connect learning and work so that education is more relevant and dropouts less likely;
4. Provide students with the foundation for lifelong learning and the ability to adjust to the demands of the future;
5. Provide an avenue for employers and parents to impact on STW activities;
6. End "Destination Unknown" graduates and replace them with graduates who are career targeted and focused.

Program Administration

All relevant state agencies will be collaborating to assist in the coordination and development of an integrated seamless delivery system of services for Career Connections. The primary service state agencies will provide is a host of connecting activities linking public secondary education, postsecondary education, students, businesses, parents and the community at large.

In February of 1993, the Maryland State Governor established by executive order the Cabinet Council for Career and Technology Education, composed of the Secretaries for the Department of Economic and Employment Development and the Maryland Higher Education Commission, and the State Superintendent of Schools. This Cabinet Council will have joint ownership and accountability for the development and implementation of Maryland's Career Connections.

The Governor's Workforce Investment Board's Education Committee will serve as the policy advisory body to the Cabinet for implementation of Career Connections. This committee will track progress on the plan development process, facilitate state level coordination and planning among participating state agencies, and support local groups in establishing local Career Connections teams. Local areas which may have implementation grants will be asked to serve on this committee.

The Maryland State Department of Education embraces school-to-work transition as a part of school reform and improvement. As a reflection of its importance, the Department has established a School-to-Work Transition Services Branch which will
facilitate the implementation of Career Connections at the secondary level. Among this branch's primary duties will be the full implementation of MSDE's Career Development Model that details career awareness, exploration and development strategies for Kindergarten through adulthood. This branch will also work to encourage a variety of school-to-work approaches, and expansion of established initiatives. In addition, MSDE will continue to expand the development of skills standards for targeted occupational clusters and coordinate skill standards development with plans for performance-based graduation requirements when adopted. Within the State Department of Education, the Division of Career Technology and Adult Learning will continue its partnerships with the Division of Instruction to promote integrated, or blended instruction and with the Office of School Performance to develop accountability measures.

The Department of Economic and Employment Development will encourage and promote active employer participation in the development of skill standards and the provision of work-based learning opportunities. In addition, DEED will take the lead in developing skill standards for occupational clusters. These clusters will be developed in concert with skill standards being set at the national level.

The Department will work to expand Job Information Centers in each Job Service Office to include labor market information, apprenticeship and technical training opportunities, career exploration and job seeking materials for students and high school graduates. MSDE and DEED will work together to promote VISIONS, Maryland's Career Information Delivery System and to develop further linkages between schools and job services, including the one-stop shop concept. DEED will also be designing and implementing a specific job bank option that will allow employers to screen student applications.

The Maryland Higher Education Commission will assist in the coordination and development of an integrated seamless delivery system of services, facilitating the connection among secondary, postsecondary education and employment. Among the specific activities are: assist the continued establishment of articulation agreements between secondary and post-secondary programs; facilitate increased coordination and collaboration between post-secondary advisory groups with local school systems/Private Industry Council/Service Delivery Area integrated planning groups; participate as partners in the design and implementation of distance learning programs and technology to support school to work initiatives where appropriate; continue and expand the development and utilization of internship/worksite activities at the postsecondary level; work with post-secondary institutions to initiate development of credentialing activities; and participate in the phases outlined in "Career Connections Organizing Principles," to ensure a smooth transition to work, community college (credit and short term training through Continuing Education), or a baccalaureate program upon graduation.
State partners will collaborate on the design of a statewide approach to capacity-building. The state will address the needs of teachers, counselors, and worksite supervisors as they work with students in new ways.

**Outcomes of the Program**

One of the first steps to launch Career Connections is to gain the active involvement of employers. This will be achieved through the establishment of local Career Connections teams. A minimum local team would consist of representatives from:

- **Business and Industry**, to include Private Industry Councils, Chambers of Commerce, Regional Technology Councils, and Local Advisory Councils.

- **Labor**, to include representatives from a cross section of occupational clusters.

- **Education**, to include Local School Systems, Community Colleges, Four-year Institutions, Student Organizations, and Parent-Teacher Associations.

- **Human Resources Agencies**, to include Job Services, Service Delivery Area Administrators, Rehabilitation Services, and Social Services.

The initial responsibility of a local Career Connections team will be to develop a plan for a school-to-work transition system. The Private Industry Council will be responsible for the initial convening of representatives from the above-mentioned groups. It is required that Private Industry Councils enlist the cooperation of other relevant business, industry, and labor groups. These groups will form a partnership with education.

Representatives from these groups were invited to a statewide conference that was held in January, 1994. At the conference, state agency partners shared information about Career Connections and worked with assembled local teams to provide the necessary technical assistance needed to develop plans for systemic change.

The plans that the local Career Connections teams developed built on existing business-education partnerships, such as Tech Prep and Cooperative Education programs as well as incorporated new ones. Each local team will develop a plan for a Career Connections system that will:

1. Create a locally shared vision for School-to-Work Transition;
2. Identify barriers to the achievement of the vision;
3. Establish strategies to overcome the barriers;
4. Map a process that incorporates the four organizing principles of Career Connection;

5. Develop views and/or expand existing connections activities;

6. Support and link with other school improvement initiatives;

7. Coordinate with resources and assistance available from state agencies;

8. Design an evaluation that identifies expected outcomes and benchmarks;

9. Create an implementation plan that incorporates:
   a. Employer involvement in defining occupational clusters and establishing academic, work related, and life skills outcomes;
   b. Employer/educator partnerships to identify appropriate workplace learning opportunities;
   c. Capacity-building activities for needs of teachers, counselors, and worksite personnel, to ensure that meaningful change takes place; and
   d. A lifelong learning career development system.

Throughout the process of creating Career Connections, the state will provide leadership and technical assistance, as well as incentives in the form of planning grants and pilot implementation initiatives.

In the implementation of Career Connections, each collaborator will need to play an active role in building an effective system. The responsibilities to be fulfilled by each collaborator will be an important part of each local plan. Some of the roles of the major players include:

**Employers**

In many communities, there are already core groups of employers who actively participate in and support their local school system, especially in industries traditionally served by vocational education. Career Connections will encourage more active support of the business community across a broad range of industries on a continuing basis. Employers must join with educators to create a complete and effective transition system. Specifically, employers will be called upon to:

1. Define core academic and occupational skill competencies;
2. Establish skill standards for training;
3. Provide learning rich work experience opportunities that are consistent with the course of instruction;
4. Offer feedback on the adequacy of training when applied in the workplace;
5. Serve as mentors;
6. Participate in curriculum design.

Educators

Secondary and postsecondary educators will be asked to reevaluate their curricula to focus instruction on career applications and a transition system that effectively links students with work and/or further schooling. In doing so they will be encouraged to aggressively facilitate employer involvement in defining occupational clusters, determining core academic and occupational competencies, and establishing skill standards. They will also work with employers to identify work-place learning opportunities that are consistent with coursework and provide guidance and support to employers in supervising students on the job to provide a productive work experience. In the classroom they will be asked to build reflection time on skills required in the workplace into the classroom schedule. Throughout they will inform and support parents in guiding the student through career development and school-to-work programs.

Students

As students and as employees, they will be expected to assume specific responsibilities. During the 9th grade, students will begin actively exploring careers so that by the 11th grade they have selected a career major. They will participate not only in the academic coursework to meet the standards established under the Goals 2000, but they will also participate in occupational coursework. During work assignments they will be expected to perform as responsible employees and if paid, earn their wage.

Parents

The most important role model for any child will always be the parents. In this system, critical responsibilities for parents include: guidance in choosing an appropriate career major, support of both school-based and work-based learning, and continued encouragement as the student progresses.
**Exemplary Programs**

The Anne Arundel County STWO initiative focuses on change spearheaded by School Community Site-Based Teams and High School Core Teams established for each elementary, middle, and high school "feeder cluster" within the school system. The teams are charged with restructuring school organization, designing new career majors and implementing school-to-work program components. Linked together, the feeder clusters form the basis of a comprehensive local School-to-Work system. Overall the effort will be directed by a County Partnership School-to-Work Team.

The Susquehanna Region (i.e. Harford and Cecil Counties) Pilot Implementation Initiative concentrates on the development of the work-based learning component and connecting activities for current Tech Prep programs in manufacturing, information technologies, and life sciences - the State-targeted industry cluster areas. Emphasis is on the recruitment and training of employers, the implementation of workplace mentoring, and the assessment of student performance at the worksite using national and state occupational skill standards established for each industry cluster area. Implementation will begin with Manufacturing which will serve as the model for the design and implementation of the work-based learning components in information technologies and the life sciences.
SECTION III

Consumer and Homemaking Accomplishments
SECTION III - CONSUMER AND HOMEMAKING ACCOMPLISHMENTS

135,306  Number of students served.

Overall State Plan

Consumer and Homemaking funds in Maryland are provided for the purpose of conducting instructional programs, services and activities that prepare youth and adults for the occupation of homemaking. This includes instruction in the areas of food and nutrition, individual and family health, consumer education, family living and parenthood education, child development and guidance, housing and home management (including resource management), and clothing and textiles.

Funds are provided through formula to approved local education agencies and by special project grant awards with an emphasis on one or more of the following: conducting programs in economically depressed areas; encouraging participation of traditionally underserved populations; encouraging the elimination of sex bias and sex stereotyping; improving, expanding and updating programs including staff development for professionals directing those programs; addressing priorities and emerging concerns at the local, state and national levels.

Objectives

The objectives of Consumer and Homemaking Education and the use of these funds under the Carl D. Perkins Act are as follows:

1. Provide funds to improve, expand and update programs.

2. Provide professional development activities for both supervisors and teachers to reach objective one.

3. Provide competitive community outreach grants for designing and implementing home economics programs which target traditionally underserved or special populations, such as teen parents.

4. Develop resource teachers who will implement proactive strategies for addressing futuristic concerns such as using instructional strategies deemed important for student learning outcomes.

5. Identify and develop the skills necessary for home economics teachers to be effective leaders and team members for site-based school improvement activities.
6. Provide opportunities for the exploration, cooperative learning, curriculum planning and true integration of academic concepts within home economics programs.

7. Provide supervisors of home economics programs the opportunity to position the profession addressing the changing educational needs of the 21st century.

8. Provide self-enrichment activities for home economics teachers in the organization and operation of Future Homemakers of America (FHA) chapters.

**Outcomes of the Program**

The following are examples of outcomes in Consumer and Homemaking Programs:

1. updating of curricula through curriculum writing workshops; professional development on Dimensions of Learning strategies and purchases of new and updated materials of instruction, including technological equipment;

2. participation in professional development activities;

3. development of community awareness of home economics programs focusing on teen parents, tech prep and career completers by developing brochures and increased enrollment in home economics programs;

4. participation of students in state competitions (i.e., state fair) which lead to gainful employment in related areas;

5. development of integrated curriculum between science and home economics at the senior high school level through Nutrition Science courses;

6. development of integrated curriculum among science, mathematics, social studies and language arts at the middle school level through home economics courses;

7. designing experiences to strengthen student performance on the MSPAP through teacher professional development seminars;

8. development of learner outcomes for home economics programs;

9. administering the required student service learning through home economics classes in various local education agencies;

10. increasing special populations students' ability to apply knowledge gained in home economics classes to real life;
providing staff development on the Learning Styles Assessment Program that links with Guidance and Vocational Support Services.

Outcomes in Programs and Support Services in Depressed Areas

There are 25,638 students participating in Consumer and Homemaking Programs who are located in depressed areas. These students have participated in Consumer and Homemaking Programs as well as special projects which support teen parenting projects, pregnancy prevention programs, integration of academic concepts in home economics programs and Future Homemakers of America.

The following activities have addressed the needs and concerns of students in depressed areas:

1. Field trips to areas which showcased the skills needed for entrepreneurship and employability in the designing, manufacturing and marketing of apparel.

2. Workshops in which participants (home economics teachers) received content update and practical techniques to integrate science concepts into home economics nutrition courses.

3. Projects which enabled pregnant and parenting teens to remain in school, get promoted to the next grade or graduate, and provide an array of educational and support services to increase parenting and independent living skills.

Achievements in Programs and Support Services in Non-Depressed Areas

The number of students enrolled in Consumer and Homemaking Programs in non-depressed areas is 109,668. Students in these programs participate in activities which address similar issues and concerns as those of depressed areas. Some activities include:

1. Participation in FHA activities which enhance leadership skills and feelings of self worth.

2. Assisting students in meeting the demands of a complex society, preparing students for the world of work and providing in-depth multicultural outreach through pilot programs in Living With Biotechnology, and Food Trends and Technology; Implementing the Student Service Learning requirement through middle school home economics programs; learning how to tap the strengths of various cultures when guiding children and developing parenting skills (seventy-five students in one school district were awarded certificates for articulated credit in early childhood education from the local community college); and furnishing
and decorating an Interior Design Student Showcase House in which students experience meaningful use of classroom knowledge to make decisions and solve problems and explore commercial aspects of this career field.

3. Revision of curriculum to reflect the changing society, technological advances and true integration of academic concepts into home economics programs. In addition to Nutrition Science, a middle school curriculum in one school district was designed with an academic partner.

4. Forging partnerships with community organizations which financially support the funding of an on-site child care center enabling at-risk youth to remain in school, acquire employment skills and graduate from high school.

**Achievements in State Leadership**

Through special funding, professional development activities are planned for supervisors and teachers. Some accomplishments included:

1. Initiation of the "Cultivating the Seeds of Change" project in which selected teachers participated in an in-depth evaluation and refocusing of home economics curricula in Maryland.

2. Development of innovative and "cutting edge" curricula by the participants of the above mentioned project.

3. Development of lessons framed around the Dimensions of Learning and other instructional strategies which enhance learner outcomes and incorporate technology to improve technological literacy.

4. Integration of the concepts of academic subjects into home economics programs.

5. Formulation of a partnership among specialists in other MSDE divisions who support the mission of home economics both with technical assistance and expertise as well as underwriting the cost of materials of instruction.

6. Increased communication to supervisors, networking with other state agencies, submission and publication of articles showcasing the changing emphasis in home economics in Maryland, and presentation of workshops at national meetings to further enhance Maryland's leadership role in home economics.

7. Development of learner outcomes for home economics programs and validation of them through the appropriate channels.
8. Appointment of a project director, establishment of a time line and activities for the development of an Instructional Framework for home economics.

**Exemplary Programs**

1. **Nutrition Science - Seventeen teachers, representing seven different school districts participated in the Nutrition Science Institute.** Each teacher was part of a team comprised of a home economics teacher and a science teacher. The week-long institute allowed teachers to earn three graduate credits by incorporating updated nutrition content, participating in laboratory procedures, increasing their knowledge of personality traits and their effect on teambuilding, Internet, observing current research being conducted in the field of nutrition, receiving information on the Dimensions of Learning and developing exemplary lessons in nutrition science. This program was a collaborative effort among several divisions within MSDE.

2. **T.E.A.M. (Together Everyone Achieves More): An Interdisciplinary Approach to Education - The home economics department in a middle school in Prince George's County accepted the challenge of implementing its School Planning and Management Team's (SPMT) objective of integrating separate disciplines into school interdisciplinary projects.** They did this by incorporating the Dimensions of Learning Principles into school instruction and developed lessons that would give students practice in MSPAP prototype activities. By infusing home economics outcomes into the interdisciplinary projects, the students participated in: community service projects; intergenerational activities; multicultural awareness; social skills development; career awareness; and changing technology and its impact on family/society. Using the MSPAP format ensured student participation in cooperative learning, higher level thinking and encouraged a greater degree of independence.

3. **Articulation/Research Project - Students enrolled in the Child Development II program at a science and technology senior high school in Prince George's County can fulfill their requirements for the science and technology program while conducting a research project during their child development internship.** After successful completion of child development courses, a research project related to child development and submission of a portfolio, students can, after two years, articulate up to 12 credits in child development at the community college.
SECTION IV

Community-Based Organizations
SECTION IV - COMMUNITY BASED ORGANIZATIONS (CBOs)

333 Number of students served by CBOs.

Overall State Plan

The state plan for career and technology education provided funding for seven joint projects conducted by community-based organizations and local education agencies or community colleges. The state required applicants to jointly develop and prepare a project and to agree on a division of responsibility. The Division of Career Technology and Adult Learning assigned a staff specialist to provide state leadership, to monitor achievement of objectives, and to provide technical assistance and staff development activities.

Objectives

The major goal of the CBO projects is to provide access to career and technology education or employment to youths ages 16-21.

Program Administration (state/local organization)

The CBO projects are administered jointly by the community-based organization and the local education agency or community college. Staff responsible for the project are generally employees of the CBO.

Outcomes of the Program

Outcomes of the CBO projects for FY 1994 include:

1. 132 were placed in training following their CBO experience.
2. 194 completed their CBO program.
3. 9 received a GED or external diploma.
4. 59 received job placement services.

Exemplary Programs

The partnership between the Living Classrooms Foundation and Baltimore City Public Schools is an exemplary Community-based Organization project. Thirty students from five Baltimore City high schools came to the Foundation-operated Maritime Institute one day each week to participate in the Achievement program. Students spent time on the shop floor working on projects, learned how to pilot small boats, went on field trips designed to emphasize both careers and cultural enrichment, and attended a graduation ceremony celebrating their accomplishments.
Carpentry skills were developed through several work projects. Students built a traditional half hull model, and worked on the restoration of a life boat from the World War II Liberty Ship John Brown. As part of the process, students learned blueprint reading, measuring, planing, sanding, varnishing, and painting. Students' attitudes, behavior and progress were evaluated daily. As a final project, students built twenty half-models. They formed a company, determined how to split profits based on attendance, and altered the building to accommodate mass production. This project has demonstrated that hands-on, applied instruction is a valuable method to attract, train, and retain at-risk urban youth.

Names and Addresses of CBOs Participating With Eligible Recipients

Anne Arundel Community College
Planning Action Committees of
Anne Arundel, Inc.
P. O. Box 6681
Annapolis, MD 21401

Baltimore City Public Schools
The Living Classrooms Foundation
The Lighthouse at Pier Five
717 Eastern Avenue
Baltimore, MD 21202

Baltimore County Public Schools
Maryland New Directions, Inc.
2220 N. Charles Street
Baltimore, MD 21218

Calvert County
Southern MD Tri-County
Community Action Council
P. O. Box 280
Hughesville, MD 20637

Hagerstown Junior College
Citizens Assisting and Sheltering the Abused
(CASA, Inc.)
751 Robinwood Drive
Hagerstown, MD 21740

Harford Community College
Open Doors
432B South Main Street
Bel Air, MD 21014

Prince George's County Public Schools
Prince George's Chamber of Commerce
14201 School Lane
Upper Marlboro, MD 20772
Types of Services Provided by CBOs

1. Anne Arundel Community College/Planning Action Committees of Anne Arundel, Inc.
   - career, academic and personal counseling
   - career planning
   - comprehensive support services

2. Baltimore City Public Schools/The Living Classrooms Foundation
   - hands-on experience in carpentry
   - work attitudes
   - academic support and enrichment

3. Baltimore County Public Schools/Maryland New Directions, Inc.
   - career exploration
   - support services

4. Calvert County/Southern Maryland Tri-County Community Action Council:
   - career information
   - vocational assessment
   - career exploration
   - job placement assistance

5. Harford Community College/Open Doors:
   - adolescent parent program
   - career information
   - dropout prevention activities
   - parenting skills
   - vocational assessment
   - job placement assistance

6. Prince George's County/Prince George's Chamber of Commerce:
   - Community-based career exploration for students of an alternative high school, which allows them to earn high school credits while learning about careers and the world of work.
7. Hagerstown Junior College/CASA:

- career and personal counseling
- tuition support for attendance at the community college
- career planning
- basic skills remediation
SECTION V - TECH PREP

15,127 Number of students (secondary and postsecondary) served by Tech Prep as a linkage program.

Major Accomplishments in the Planning Year of Tech Prep Consortia

State

The tech prep specialist and regional coordinators continued to provide leadership and technical assistance to the sixteen consortia of local school systems and community colleges for the tech prep initiative. They attended local planning committee meetings, provided resources, and served as a source of communication between the local and state levels.

A Request for Grant document was prepared and planning/implementation grants were awarded to the sixteen local consortia. Supplemental grant awards were issued on a competitive basis to several local consortia during the year.

Maryland continued its membership in the National Tech Prep Network and sent representatives to both conferences held in FY 1994. In addition, state representatives and local consortia members provided committee support and conference presentations for the national conference held in Baltimore in April 1994.

The tech prep specialist supports the Maryland Tech Prep Network by providing resources, updating tech prep information, and sharing exemplary practices.

Consortia

In Maryland's sixteen consortia, tech prep continues to serve as a major strategy for education reform as it focuses on the transition from school to work. Consortia have been developing coherent sequences of courses that combine rigorous academics and a strong technical core. Staff development has focused on blended instruction and applied techniques. Development of career development systems has been recognized as a critical component for the successful implementation of tech prep and continues to be an emphasis in grant action plans.

Allegany Community College/Allegany County

The focus of the Allegany Consortium was the revision of course sequences and curricula. Staff development has emphasized learning styles and blended instruction.
Anne Arundel Community College/Anne Arundel County

Many staff development opportunities were provided addressing topics related to the new Academy of Finance and chef apprenticeship programs as well as applied academics and blended instruction. New pilot courses in nutrition science and technology education/language arts were very successful.

Baltimore City Community College/Baltimore City

Programs of study and curricula were developed for these programs: biotechnology, business technology, child care/early childhood education, and electronics technology. Staff development activities focused on biotechnology and applied academics.

Baltimore County/Essex Community College, Catonsville Community College, Dundalk Community College

A new allied health curriculum was implemented and program improvements were made in ten occupational areas. Equipment was purchased to update facilities, and curriculum revision was completed based on the DACUM process. A new environmental technology program has been established at the Western School of Technology.

Carroll Community College/Carroll County

Pathways to Careers program of studies booklets were completed and distributed with brochures explaining how to use the materials to develop/revise career plans. Principles of Technology was successfully piloted and applied mathematics materials were integrated in appropriate mathematics courses.

Cecil Community College/Cecil County

The following programs have been added: allied health, computer assisted drafting and design, automotive technology, and agri-business technology. Workshops which focused on the career development model and curriculum revision were emphasized. A new course for eighth-graders taught by business leaders, "Choices," has been implemented.

Charles County Community College/Calvert County, Charles County, St. Mary's County

The implementation of "Teaching Tomorrow's Workforce" a two-week training program utilizing business partnerships to enhance work-based learning, was very successful. Activities related to its role as a Demonstration Project continued. Blended instruction was emphasized by developing integrated lessons and piloting new courses, such as Language Links. New technology labs and programs in paralegal studies and information
services technology have been added. A database management system is being used in Charles and Calvert Counties.

**Chesapeake College/Caroline County, Dorchester County, Kent County, Queen Anne's County, Talbot County**

The primary focus of the consortium activities has been to develop strategies for curriculum integration and applied techniques. The "Reading for Learning" satellite-delivered course, summer workshops on blended instruction, and class visitations among math and career technology education teachers were conducted. An extensive handbook for articulation agreements was also developed.

**Frederick Community College/Frederick County**

On-going staff development is provided to promote blended instruction, use of applied techniques, and career counseling. A summer institute for the Integration of Academic and Technical Education occurred for several high schools and their feeder schools.

**Garrett Community College/Garrett County**

The development of course sequences for four career clusters has been the focus of the Consortium's plan. Staff development for applied academics has continued, including the development of curricula for applied courses in language arts and science.

**Hagerstown Junior College/Hagerstown Business College/Washington County**

Special grant monies were directed to activities which provided business with the opportunity to impact curriculum reform. These activities included four Tech Scans (printing and graphics technology, marketing, accounting, engineering/manufacturing), three TRU-DACUMs (junior accountant, care provider, graphics/printing personnel), a planning charette, three focus groups, and several faculty internships. Significant progress has been made in implementing a career development system and in providing blended instruction in chemistry, mathematics, and communication.

**Harford Community College/Harford County**

Electronics technology and health occupations programs were started while work continued on developing curriculum/degree plans for automotive engineering technology and computer aided design/drafting. A Tech Prep Management System was established and is compatible with V-Tecs. A special integration team was formed to work on blended instruction and develop a plan for senior projects. Faculty and students were involved in successful business visitations.
Howard Community College/Howard County

Curricula were revised and enhanced with integrated lessons in these areas: computer aided drafting/design, allied health, commercial art, and early childhood development. A new medical secretarial program has been created.

Montgomery College/Montgomery County

Workshops have been held to encourage connections between the secondary and postsecondary teachers in the areas of mathematics and science. The first Tech Prep Summer Camp for eighth- and ninth-graders was held; participants were introduced to several technical areas through intensive hands-on experiences offered at all three Montgomery College campuses. The second annual Technology Challenge for science/math & career and technology students was held.

Prince George's Community College/Prince George's County

Workshops were conducted that focused on the Tech Prep initiative, integration of academics, and learning styles. "Valuing Diversity in the Early Childhood Program" was a successful professional development activity for over 400 tech prep students and practitioners in the early childhood field. Articulation agreements were completed for business data processing/computer information systems and marketing.

Wor-Wic Community College/Somerset County, Wicomico County, Worcester County

Staff development workshops have focused on applied academics and blended instruction. The implementation of applied courses in mathematics, science, and communications has been completed.

Tech Prep Planned Services for Special Populations

Most consortia have included representatives on steering/planning committees from areas which provide direct services to special populations. To assist students to meet more rigorous standards, supplementary assistance, peer tutoring and mediation, vocational assessment, special recruitment efforts, and/or curriculum modifications have been provided. Maryland's Sex Equity Coordinator continues to provide information and resources through local presentations and regional conferences. The state tech prep specialist and regional coordinators recognize that local consortia continue to need assistance in designing and implementing additional support services and will plan statewide staff development activities in these areas.
Examples of Impact of Tech Prep Professional Activities

State

Professional development activities conducted by the state tech prep specialist and regional coordinators provide technical assistance appropriate for the needs of the local consortia. It often assists local planning and implementation efforts by providing current information. Applied academics summer institutes prepare teachers to use applied techniques and an integrated approach in their instructional programs.

Consortia

Professional development activities conducted by local tech prep consortia brought together secondary and postsecondary educators, and business and community representatives. Collaborative efforts helped to produce coherent, rigorous course sequences, revised curricula, and new education/business partnerships.

Planned Preparatory Services

State

In order to prepare students to enter tech prep programs, special attention needs to be given to academic skills in mathematics, science, and communications; career development; and four or six year educational plans for students. The FY 1995 Request for Proposal (RFP) for tech prep requires all consortia to have or develop a career development system for use with students, K-adult. Proposals should also include staff development which provides training for secondary and postsecondary teachers in blended instruction and applied techniques to assist students in academic and technical courses requiring more rigorous content. In addition, all Maryland students must complete a four-year plan of studies and develop a career folder.

Consortia

Most local consortia make presentations on tech prep to middle school students as they prepare their career plans and choose high school courses. Consortia have also developed special tech prep materials to use as recruitment devices for students as well as serving as valuable informational resources for educators, parents, and community representatives.
Exemplary Programs

Since most consortia are still in the early stages of planning and implementation, specific examples of outstanding programs are unavailable at this time. Highlights of specific program components were provided in a previous section. The Southern Maryland Consortium continues to disseminate information through a U.S. Department of Education Demonstration grant.
SECTION VI

Performance Measures and Standards
SECTION VI - PERFORMANCE STANDARDS AND MEASURES

Description of Activities Conducted

The Maryland State Department of Education has always been cognizant of the need to provide a comprehensive career and technology education system that is state-of-the-art and responsive to the needs of a rapidly changing and evolving labor market. To satisfy the need adequately, it was imperative that the standards of existing career and technology education programs be continually monitored for workforce needs, quality of programs and programmatic changes and modifications.

To address the need, the state implemented a system of Performance Standards and Measures for monitoring local improvement efforts and for providing technical assistance to local programs.

The objective of the system of Performance Standards and Measures was to determine the effectiveness of career and technology education programs for program improvement and federal, state and local accountability.

To develop performance standards and measures for career and technology education programs, a Committee of Practitioners, based on the criteria for membership as set forth in the Perkins Act was appointed in FY 1992. The work of this committee extended into FY 1993. The measures and standards developed by this committee were presented to the Maryland State Board of Education in July 1992. Public hearings on proposed standards and measures were conducted in September 1992. In October 1992, the recommended standards and measures were approved by the Maryland State Board of Education. (See Appendices VI. A and VI. B)

The Division of Career Technology and Adult Learning of the Maryland State Department of Education convened a committee of local career and technology educators from the secondary and postsecondary level for the purpose of planning, developing and implementing a process for articulating the statewide system of performance standards and core measures for secondary and postsecondary. The committee met seven times between June 1, 1991 and October 30, 1992 to complete this task. The format for reporting the data was determined at the October 30, 1992 meeting.

As a direct result of these formal meetings and other correspondence both written and verbal, significant linkages were established among the Division of Career Technology, the Maryland Higher Education Commission and Maryland School Performance, Product and Service Development Office of the Maryland State Department of Education. Maryland's articulation of the statewide system of performance standards and core measures for secondary and postsecondary reflects the existing report card format currently utilized by the Maryland School Performance Program. An example of the report card is enclosed in this document. (Appendix VI. C)
Description of Process and Accomplishments

Secondary

It was the responsibility of the State Department of Education, in consultation with the Committee of Practitioners, to develop the standards and measures. It was the responsibility of each local system which receives Perkins Funds to collect appropriate data that measures program effectiveness and apply the standards to all career and technology programs within their system.

If any program did not meet the standards set forth, the local system, in consultation with parents, businesses and industry, teachers and students, had to develop and implement a local improvement plan. If the standards are not met one year after the implementation of the improvement plan, the local system will work jointly with the State Department of Education to develop a plan. The plan should be integrated with the program improvement plans developed by the school in conjunction with the Maryland School Performance Report.

In addressing the intent of Congress, that each State develop standards and measures to assess a subrecipient's ability to provide quality occupational programs at the secondary level, as well as, addressing the Commission on Vocational-Technical Education's vision of an integrated Maryland education system, the Division merged its system of standards and measures within the Maryland School Performance Program (MSPP). The MSPP was founded on three fundamental premises:

1. All children can learn.
2. All children have the right to attend schools in which they can progress and learn.
3. All children shall have a real opportunity to learn equally rigorous content.

Furthermore, the MSPP provides each student the opportunity to graduate from our public schools with increased information and skills to:

1. Participate in a world economy and job market that is more competitive than ever.
2. Function as a responsible citizen in a democratic society.
3. Achieve a personally satisfying and fulfilling life.
The public demands that schools, school systems, and the State be accountable for high levels of measurable education results. In response, the Maryland School Performance Program has developed a comprehensive accountability system based on results, excellence, and equity for all students. The system focuses on:

1. Determining those student performances for which schools should be held responsible.
2. Creating a State and local system for gathering data and making judgments on the identified student performances.
3. Verifying the data with local school systems.
4. Setting the standards against which school performance will be judged.
5. Developing and implementing school improvement plans based on the data.

Working within the rubric of MSPP, the Division of Career Technology and Adult Learning (DCTAL) implemented the following MSPP student variables to assess the effectiveness of DCTAL programs:

3. High School Program Completion.
4. Grade 12 Decisions: Relationship between preparation and decisions.
5. Dropouts: Grade 11 and 12.
6. Percent Average Daily Attendance: Grade 11 and 12.

In addition to the MSPP school level variables, the Division of Career Technology and Adult Learning included the following three outcome variables:

1. Written Program Skill Competency and Performance Tests. Individualized Competency Certificates or Employability Profiles will be used in the interim.
2. Documented employment and education within one year of graduation.
3. Documented employer satisfaction and educational success.

The DCTAL will work with School Performance Program Staff in the forthcoming school years to review options to be piloted. The intention is to integrate the Carl D. Perkins standards and measures requirements within the overall Maryland School Performance Program.

Postsecondary

In addressing the intent of Congress, that each State develop measures and standards to assess a subrecipient's ability to provide quality occupational programs at the postsecondary level, Maryland has developed program measures and standards consistent with the program data monitoring (PDM) system. This system, under development over a fourteen year period, reflects the conclusions regarding the mission of community colleges contained within the Blueprint for Quality publication.

1. All students need a general education, the knowledge deemed necessary for a person to function in a complex world.

2. Community colleges must protect the integrity of the transfer program to maintain their image and status as institutions of higher education and to provide a door to higher education that otherwise would be denied to many.

3. Community colleges should work to overcome the artificial barriers that exist between arts and sciences and the technical/career programs and should seek ways to integrate liberal studies into all parts of the curriculum.

4. In technical and career programs, community colleges need to provide general skills for job entry. Also, local colleges are encouraged to cooperate with local public schools to develop two-plus-two programs.

5. Continuing education (noncredit coursework) should be guided by responsiveness to the community and by the collegiate values that reflect the institution's role and image in higher education.

Given the need for accountability, the PDM system provides for the evaluation of the quality of occupational programs using identified procedures. The PDM system has provided information regarding enrollments, awards, student follow-up status, projected job openings as well as discipline credit hour costs. Over a ten year period (1978-1988) 104 programs were discontinued based upon PDM evaluation. Additional variables will be introduced into the PDM system for accountability under the statewide postsecondary measures and performance standards.
1. Enrollment
2. Awards (degrees and certificates), licensure, and certification
3. Documented employment or continuing education
4. Documented completer satisfaction or educational achievement
5. Documented employer satisfaction

**Coordinated Procedures**

**Secondary**

1. The Maryland State Department of Education coordinated data collection among all school systems, assembled the data in a report card format and met with the school systems individually to interpret, evaluate and analyze the results.

2. A Data Center was operated in FY 1994 by the Maryland State Department of Education, Division of Career Technology and Adult Learning for the purpose of gathering the data for the performance standards and measures system.

3. In FY 1995, data collection for the performance standards and measures will be integrated into the Maryland State Department of Education, Division of Planning, Results and Information Management.

4. Maryland State Department of Education personnel met with representatives from the local school systems to help develop strategies to strengthen low performance areas as indicated by the results of the performance standards and measures system. Efforts were made to integrate the process with the school program improvement plan.

5. Based on input from the local systems, the Maryland State Department of Education will evaluate the effectiveness and usefulness of the currently approved performance standards and measures. The data collection procedures and reporting system will also be evaluated and changes will be made if necessary.

6. The Committee of Practitioners will be reconvened if input from the school systems indicate a need for change.
Postsecondary

The Maryland State Department of Education worked cooperatively with the Maryland Higher Education Commission to gather and to report data as it related to performance standards and measures for post secondary education. Specifically, the Maryland Higher Education Commission:

1. Operated the Program Data Monitoring System
2. Analyzed the data collected
3. Identified career and technology programs that need improvement and requested that community colleges:
   a. Revise the program
   b. Delete the program
   c. Continue the program
4. Produced the Student Outcome Achievement Report (SOAR) - a report on the success of secondary career and technology education completers who attend Maryland colleges.

Outcomes of the Program

Secondary

Twenty-four local school systems collected data for the Performance Standard and Measures system. This information was reported back in report card form and the data was utilized to evaluate programs and provide information for program improvement initiatives. These program improvement initiatives were linked to the school program improvement plan to form a linkage with the Maryland School Performance Program.

Postsecondary

Eighteen community colleges utilized the data generated by the Program Data Monitoring System (PDM) and Standard Outcome Achievement Report to improve the quality and scope of post-secondary career and technology education programs.
Committee of Practitioners

The Committee of Practitioners worked over a 15 month period to develop and agree upon performance standards and core measures for secondary and postsecondary levels that were consistent with the goals and objectives of currently operational career and technology programs. At present, no modifications have been made to the approved measures and standards. If difficulties or concerns arise, the Committee of Practitioners will be reconvened to consider changes or modifications.

During the Spring semester of 1994, the performance standards and measures reports were distributed to the local school systems and analyzed for compliance. Plans are currently being made to convene a committee of educators to evaluate and if necessary recommend modifications to the Committee of Practitioners.
SECTION VII

Enrollment
Tables
### Secondary Enrollment

**State:** Maryland  
**Period Report Covers:** 7/1/93 - 6/30/94  
**Name:** Department of Education  
**Ph:** (410) 767-0164

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<th>TOTAL</th>
<th>REG. VO-TE-ED</th>
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<th>LEP</th>
<th>DIS-ABLED</th>
<th>CORR¹</th>
<th>SP/DH² /SPW</th>
<th>SEXEQ (NON-TRAD)</th>
<th>ADULT</th>
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**GRAND TOTAL**  
| 201,570 | 94,213 | 107,357 | 192,900 | (5,268) | (635) | (2,767) | (671) | (2,922) | (448) | 16,877 |

1. Not applicable at the secondary level.  
2. Data not available by program area.
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1. Data not available by program area.  2. Reflects total community college completer figure and a summary of corrections completer data.
### UNDUPPLICATED ONLY

| OCC PROGRAM AREA       | TOT ENR | TOTAL | LINKAGE¹ | PLACEMENT¹ | CURRENT
|------------------------|---------|-------|----------|------------|---------
|                        | MALE    | FEMALE| TECH PREP| CO-OP      | APRPR   |
|                        |         |       |          | WK-STDY    | CONT ED |
|                        |         |       |          | EMPLOYED   | R’LTC   |
|                        |         |       |          |            | OTHER   |
|                        |         |       |          |            | MIL     |
|                        |         |       |          |            | OTHER   |
| AGRICULTURE            |         |       |          |            |         |
| MARKETING              |         |       |          |            |         |
| TECHNICAL              |         |       |          |            |         |
| CONSUMER & HOMEMAKING ED |       |       |          |            |         |
| OCC HOME EC            |         |       |          |            |         |
| TRADE & INDUSTRY       |         |       |          |            |         |
| HEALTH                 |         |       |          |            |         |
| BUSINESS               |         |       |          |            |         |
| TECHNOLOGY EDUCATION   |         |       |          |            |         |

**GRAND TOTAL**

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<td><strong>96</strong></td>
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**TOTAL**

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- **97 (2,950)**

1. Data not collected by this agency.
ADDITIONAL NOTES ON ENROLLMENT DATA

Placement Data - Secondary

Placement data are the results of a post graduation follow-up survey of 1993 graduates in 14 of Maryland's 24 school systems. Not all graduates responded to the post graduation survey.

Placement data are not available for consumer and homemaking education and technology education/industrial arts.

Placement Data - Postsecondary

Placement data at the postsecondary level are not collected by this agency.

Consumer and Homemaking Education - Secondary

The enrollment figure for consumer and homemaking education represents the total count of all students served in those programs in nine, 12, 18 and 36 week terms. This is the third year that total enrollment counts in consumer and homemaking education were available for the nine and 12 week terms.

Current Teachers - Secondary and Postsecondary

At both the secondary and postsecondary levels, current teacher counts contain duplicates because teachers in the adult and non-credit postsecondary occupational programs teach in more than one program area.
Maryland State Department of Education

Division of Career and Technology Education

Secondary

Measures and Performance Standards

October, 1992
Introduction

Measures and Performance Standards

The Carl D. Perkins Vocational and Applied Technology Act of 1990 requires that "each State board receiving funds under this Act shall develop and implement a statewide system of core standards and measures of performance for secondary and postsecondary vocational education programs". It also requires the appointment of a Committee of Practitioners who were to review these standards and measures and make recommendations for their approval to the State Board.

To comply with this requirement the Maryland State Department of Education planned a series of activities. The first was to appoint a Committee of Practitioners based on the criteria for membership as set forth in the Act. A list of members is included with this document. This committee met twice to review and approve the measures and standards as developed by the measures and performance standards committees.

Two working committees were formed to develop the required measures and standards for secondary and postsecondary level programs. The names of the secondary committee members is attached. This committee met monthly from July, 1991 through January, 1992 in order to develop the measures and standards. On February 19, 1992 the Committee of Practitioners reviewed and approved the measures and performance standards for Maryland.

The secondary measures and performance standards committee continues to meet to develop a skill competency assessment system. The committee also agreed to work on revisions to the DCTE program evaluation process.
# Table of Contents

<table>
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<tr>
<th>Section</th>
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<tbody>
<tr>
<td>Introduction</td>
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<td>Integration with MSPP</td>
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Integration with MSPP

In addressing the intent of Congress, that each State develop standards and measures to assess a subrecipient’s ability to provide quality occupation programs at the secondary level, as well as, addressing the Commission on Vocational-Technical Education’s vision of an integrated Maryland education system, the Division merged its system of standards and measures within the Maryland School Performance program (MSPP). The MSPP was founded on three fundamental premises:

- All children can learn.
- All children have the right to attend schools in which they can progress and learn.
- All children shall have a real opportunity to learn equally rigorous content.

Furthermore, the MSPP provides each student the opportunity to graduate from our public schools with increased information and skills to:

- Participate in a world economy and job market that is more competitive than ever.
- Function as a responsible citizen in a democratic society.
- Achieve a personally satisfying and fulfilling life.

The public demands that schools, school systems, and the State be accountable for high levels of education and measurable results. In response, the Maryland School Performance Program has developed a comprehensive accountability system based on results and incorporating excellence and equity for each student. The system focuses on:

- Determining those student performances for which schools should be held responsible.
- Creating a State and local system for gathering data and making judgements on the identified student performances.
- Verifying the data with local school system.
- Setting the standards against which school performance will be judged.
- Developing and implementing school improvement plans based on the data.
Working within the rubric of MSPP the Division of Career and Technology Education (DCTE) will implement the following MSPP student variables to assess the effectiveness of CTE programs:

- Maryland Functional Tests: Grade 11 status.
- Maryland School Performance Assessment Program: Grade 11 achievement.
- High School Program Completion.
- Grade 12 Decisions: Relationship Between Preparation and Decisions.
- Dropouts: Grade 11 and 12.
- Percent Average Daily Attendance: Grade 11 and 12.

In addition to the MSPP school level variables, the Division of Career and Technology Education will include the following three outcome variables:

- Written Program Skill Competency and Performance Tests. Individualized Competency Certificates or Employability Profiles will be used in the interim.
- Documented Employment and Education within one year of graduation.
- Documented Employer Satisfaction and Educational Success.

The DCTE will work with School Performance Program staff in the forthcoming school year to review options to be piloted. The intention is to integrate the Carl D. Perkins standards and measures requirements within the overall Maryland School Performance Program.

The pages which follow define each of the nine standards and measures. The first three are specific to Career and Technology Education while the remaining six are augmentations of current MSPP variables.
SECONDARY EDUCATION

DOMAIN: Skill Competency Attainment

Variable: Written Skill Competency and Performance Tests or Individualized Competency Certificates or Employability Profiles

Data Elements: Number of students and the percentage attaining required competencies

or

Number of students and the percentage meeting minimum competency levels on employability profiles or competency certificates

Standard: Not determined. However, in FY92 each LEA will assess each completer using either a local employability profile or the State profile. Beginning in FY93 pilot a statewide skill competency test in each LEA. By FY98, statewide skill competency assessment will be conducted for all occupational programs.

DOMAIN: Post-Secondary Status

Variable: Documented Employment and Education

Data Elements: The number of graduates and the percentage who are:

1. Employed
2. Continuing their Education

Standard: To be Satisfactory, within one year of graduation the percentage of employed and/or continuing education students will be equal to the employment rate of the LEA service area.

To be Excellent, the above rate will be one percent greater than the LEA service area employment rate.
DOMAIN: Post-Secondary Performance

Variable: Documented Employer Satisfaction or Educational Success

Data Elements: Number and percentage of employers rating graduate, employees as meeting minimum employment standards

Number and percentage of graduates enrolled in a 2 or 4 year Maryland college who are in good standing

Standard: Employer satisfaction--to be Satisfactory, based upon employer follow-up survey, the reporting employers indicate that at least 92 percent of the employed completers meet or exceed minimum job requirements.

Educational satisfaction--to be Satisfactory, those students continuously enrolled in a Maryland public postsecondary institution one year after graduation, \( X \) percentage will be considered in "Good Standing." Because there is no data (regarding "good standing") at this time, the data will be collected for one year prior to establishing a standard.
DOMAIN: ASSESSED STUDENT KNOWLEDGE

VARIABLE: MARYLAND FUNCTIONAL TESTS: GRADE 11 STATUS


Data Elements:
1. The number and percentage of 11th graders who have passed each of the Tests -- mathematics, reading, writing, and citizenship -- by the end of the school year.
2. The number and percentage of 11th graders who have passed all four Tests by the end of the school year.
3. The number of 11th graders exempted from taking each of the Tests.
4. The number of 11th graders refusing to take each of the Tests.

Definition: Data values are based on current grade 11 membership group included in the June Net Roll. Data reported should consist of:

A. The number of students who have passed each of the four Tests in reading, mathematics, writing, and citizenship.

B. The number of students who have passed all four Tests.

C. Percentages are computed by dividing each of the counts in 1 and 2 by the number of students taking each of the Tests.

Quality Assurance: Data values should match the test processing and scoring outcomes for each Test. It is the local school system's responsibility to reconcile its results by August 15 of the report year.

Timeline: Data should be submitted to the Research, Evaluation, and Statistical Services Branch of the OMIS, MSDE, before August 15 of the reporting year.
| VARIABLE: MARYLAND SCHOOL PERFORMANCE ASSESSMENT PROGRAM |
| Data Elements: |
| 1. The number and percentage of students in grades 3, 5, 8, and 11 achieving satisfactory performance levels on each of the criterion-referenced tests -- mathematics, reading, writing/language usage, social studies, and science. |
| 2. The number and percentage of students in grades 3, 5, 8, and 11 achieving excellent performance levels on each of the criterion-referenced tests -- mathematics, reading, writing/language usage, social studies, and science. |
| Definition: The procedures for scoring and reporting the criterion-referenced assessments have yet to be finalized. The denominator terms are the total number of students attempting each test at each grade level. |
| Quality Assurance: Data values should be consistent with current cumulative information on attendance; i.e. the number of students taking each test plus the number absent and exempted should equal the grade appropriate membership on the day the test was administered. |
| Timeline: Publication is anticipated in November 1993 report. |
DOMAIN: OTHER ASPECTS OF STUDENT ATTAINMENT

VARIABLE: HIGH SCHOOL PROGRAM COMPLETION


Data Elements:
1. The number and percentage of graduates who have completed course requirements that would qualify them for admission to the University of Maryland System.

2. The number and percentage of graduates who have completed an approved Career and Technology Education program.

3. The number and percentage of graduates who have met both of the above requirements. This is a subgroup of groups 1 and 2 above.

Definition:
A. Course requirements for the freshmen admissions standards are set forth by the Board of Regents of the University of Maryland System. Ensuring the acceptability of each local system's courses by the University of Maryland System is the responsibility of the individual school systems.

B. A list of approved Career and Technology Education programs is available from the Division of Career and Technology Education, MSDE, which is the approving agency.

C. Students meeting the requirements in 3 should not be counted in 1 or 2.

Quality Assurance:
Counts should be consistent with the number of graduates as reported in the Summary of Enrollment, Attendance and Promotions Report.

Timeline: August 15 -- Data should be submitted to the Research, Evaluation, and Statistical Services Branch of the OMIS, MSDE.
DOMAIN: POST-SECONDARY DECISIONS

VARIABLE: GRADE 12 DECISIONS: RELATIONSHIP BETWEEN PREPARATION AND DECISIONS


Data Elements: The student's documented decision to:

1. Attend a four year college
2. Attend a two year college
3. Attend a specialized school or pursue specialized training
4. Enter employment (related to high school program)
5. Enter employment (unrelated to high school program)
6. Enter the military
7. Other.

The student's high school program was:

1. College preparatory
2. Career and Technology education
3. Both College preparatory and Career and Technology education
4. Other (course of study, not included in 1,2 or 3).
Grade 12 Decisions is the relationship between the student's preparation and post-secondary decision. The number of students within each cell must be indicated to generate a non-duplicated count of graduates. The percentages are based on the June Net Roll for graduates. Each graduate must be classified in one cell of the following matrix:

<table>
<thead>
<tr>
<th>Decision</th>
<th>College Preparatory</th>
<th>Career and Technology Education Program</th>
<th>Both College Preparatory &amp; Career and Technology Education Program</th>
<th>Other</th>
<th>Total (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attend 4 year college</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N (% )</td>
</tr>
<tr>
<td>Attend 2 year college</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N (% )</td>
</tr>
<tr>
<td>Attend special school/training school</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N (% )</td>
</tr>
<tr>
<td>Enter employment (related to high school program)</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N (% )</td>
</tr>
<tr>
<td>Enter employment (unrelated to high school program)</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N (% )</td>
</tr>
<tr>
<td>Enter the military</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N (% )</td>
</tr>
<tr>
<td>Other</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N (% )</td>
</tr>
<tr>
<td>Total (Percent)</td>
<td>N ( % )</td>
<td>N ( % )</td>
<td>N ( % )</td>
<td>N ( % )</td>
<td>N ( % )</td>
</tr>
</tbody>
</table>

Note: N = number of students; percentages based on number of graduates.
Definitions: Pre-graduation plans data will be collected annually by the Division of Career and Technology Education, MSDE using the High School Graduate Follow-up Questionnaire. All graduating seniors will indicate their post graduation decisions within 30 days of anticipated graduation.

Decisions:
College is defined as the student's decision to attend any public or non-public post-secondary institution providing a two- or four-year course of study resulting in the conferring of a degree upon successful completion of the program or course of study.

Specialized school/training is defined as the student's decision to attend any public or non-public institution providing further training resulting in credentials or diploma upon successful completion of the program or course of study.

Employment Related to Program is defined as work in the area of the student's high school program.

Employment Unrelated to Program is defined as work in an area other than the student's high school program.

Military is defined as enlistment into a branch of the United States Armed Services.

Other is defined as the students' decision to have plans following high school graduation other than the above options.

Preparation:
College Preparatory is any course of study that is designed to prepare students to enter a four year degree granting college.

Career and Technology Education is any course of study that is designed to prepare students for entry into a skilled occupation as defined by the Career and Technology Education Division, MSDE.

Both is any course of study that meets both of the above requirements.

Other is defined as any course of study not included above.

Quality Assurance:
Data counts should match the June Net Roll of graduates.

Timeline:
July 1 – Data should be submitted to the Division of Career and Technology Education, MSDE.

Recommendation: It is highly recommended that local school systems add to their local data-based areas a follow-up survey to verify graduate decisions.
DOMAIN: STUDENT PARTICIPATION

VARIABLE: DROPOUTS


Data Element: The number and percentage of students dropping out of school in grades 9 through 12 in a single year.

Definition: Dropouts are the number of students in grades 9 through 12 who withdraw from school before graduation or before completing a Maryland approved educational program. Included are students withdrawing either before or after the age of compulsory attendance. The year is defined as July through June and should include students dropping out over the summer. Students dropping out of evening high school and other alternative programs should be included.

Dropout: A student who leaves school for any reason except death, before graduation or completion of a Maryland approved educational program, and is not known to enroll in another school or state-approved program during the current school year (codes W30-71 excluding W43).

The dropout rate is calculated by dividing the number of dropouts by the total number of students: grades 9 - 12 served by the school. The rate is computed as follows:

<table>
<thead>
<tr>
<th>School System</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer 1988</td>
<td></td>
</tr>
<tr>
<td>Transfers Out of LEA</td>
<td>5,576</td>
</tr>
<tr>
<td>W-43 (deaths)</td>
<td>14</td>
</tr>
<tr>
<td>Dropouts</td>
<td>1,557</td>
</tr>
<tr>
<td>Sept 1988 to June 1989</td>
<td></td>
</tr>
<tr>
<td>Transfers Out of LEA</td>
<td>6,211</td>
</tr>
<tr>
<td>W-43 (deaths)</td>
<td>71</td>
</tr>
<tr>
<td>Dropouts</td>
<td>13,645</td>
</tr>
<tr>
<td>June Net Roll (1989)</td>
<td>185,916</td>
</tr>
<tr>
<td>Total Students Served</td>
<td>212,990</td>
</tr>
</tbody>
</table>

Dropout Rate = Dropouts/Total Students Served
7.1% = ((1,557 + 13,645)/212,990)×100.
DOMAIN: STUDENT PARTICIPATION

VARIABLE: DROPOUTS continued

<table>
<thead>
<tr>
<th>School Building</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Session</td>
<td></td>
</tr>
<tr>
<td>Summer 1988</td>
<td></td>
</tr>
<tr>
<td>Transfers Out of School</td>
<td>425</td>
</tr>
<tr>
<td>W-43 (deaths)</td>
<td>2</td>
</tr>
<tr>
<td>Dropouts</td>
<td>15</td>
</tr>
<tr>
<td>Sept 1988 to June 1989</td>
<td></td>
</tr>
<tr>
<td>Transfers Out of School</td>
<td>1,245</td>
</tr>
<tr>
<td>W-43 (deaths)</td>
<td>3</td>
</tr>
<tr>
<td>Dropouts</td>
<td>84</td>
</tr>
<tr>
<td>June Net Roll (1989)</td>
<td>2,233</td>
</tr>
<tr>
<td>Total Students Served</td>
<td>4,007</td>
</tr>
</tbody>
</table>

Dropout Rate = Dropouts/Total Students Served
\[2.5\% = \frac{(15 + 84)}{4,007} \times 100.\]

Note: The 1990 revision of the Maryland Student Records System Manual includes two re-entry codes (N-06 & N-07) designed to capture the number of students re-entering school after dropping out during the September to June school year. The re-entries should be deducted from the September to June Dropout count and Total Students Served. These students have re-entered school and they should not be counted as dropouts. Since these students are still in school at the end of the school year, they will be counted in the June Net Roll. However, they also were counted as dropouts when they first left school and included in Total Students Served. Therefore, the re-entries, N-06 and N-07, have been counted twice in Total Students Served and must be deducted from the total.

Quality Assurance:
Data values should match tabulated outcomes on the Summary of Enrollment, Attendance, and Promotions report.

Timeline: August 15 – data for the Summary of Enrollment, Attendance, and Promotions report should be submitted to the Research, Evaluation, and Statistical Services Branch of the OMA, MSDE.
VARIABLE: PERCENT AVERAGE DAILY ATTENDANCE


Data Elements:
1. The percent average daily attendance of students, including ungraded special education students under age 12, attending school in all grades 1 through 6, regardless of school type. Summer school is excluded.

2. The percent average daily attendance of students in grades 7 through 12, including ungraded special education students age 12 and over. Summer school is excluded.

Definition: The average daily attendance for a given year is based on the aggregate number of enrolled students who are present in school each day of the September to June school year. The percent average daily attendance is determined by dividing the aggregate number of students in attendance by the aggregate number of students in membership for the September to June school year.

For reporting purposes attendance and absence are counted in 1/2 day units. A student is counted as present for 1/2 day if in attendance any part of the school day. A student is counted as absent for 1/2 day if absent any part of the school day. Students in attendance for more than half a day are counted as present for a full day. Students absent for more than half a day are counted as absent for a full day. The following definitions are the minimum standards for attendance as defined by the State Board of Education. Local Boards of Education may set more stringent standards.

Attendance: A student may be counted present only if actually at school or present at another place at a school activity which is sponsored by the school and is personally supervised by a member or members of the school staff. This may include authorized independent study, work-study programs, field trips, athletic events, contests, music festivals, student conventions, instruction for home bound students, and similar activities when officially authorized under policies of the local school board. It does not include "making up" school work at home, or activities supervised or sponsored by private groups or individuals.

Absence: Excused (lawful) and unexcused (unlawful) absences are both counted as an absence.

Percent average daily attendance is computed by MSDE from data submitted in the Summary of Enrollment, Attendance, and Promotions data collection.

Quality Assurance: Data should match the percent average daily attendance as reviewed by MSDE.

Timeline: August 15 -- Data for the Summary of Enrollment, Attendance, and Promotions report should be submitted to the Research, Evaluation, and Statistical Services Branch of the OMIS, MSDE.
VARIABLE: STUDENTS ABSENT FEWER THAN 5 DAYS


Data Element: The number and percentage of students absent from school fewer than five days during the September to June school year. Summer school attendance is excluded.

Definition: The number of students absent from school fewer than 5 days; i.e. 4.5 or fewer days, in a given September to June school year are to be reported. Absence is defined on page 12.

Quality Assurance: Data values should be consistent with current cumulative information on attendance.

Timeline: August 15 — Data should be submitted to the Research, Evaluation, and Statistical Services Branch of OMIS, MSDE.

VARIABLE: STUDENTS ABSENT MORE THAN 20 DAYS


Data Element: The number and percentage of students absent from school more than twenty days during the September to June school year. Summer school attendance is excluded.

Definition: The number of students absent from school more than 20 days; i.e. 20.5 or more days, in a given September to June school year are to be reported. Absence is defined on page 12.

Quality Assurance: Data values should be consistent with current cumulative information on attendance.

Timeline: August 15 — Data should be submitted to the Research, Evaluation, and Statistical Services Branch of OMIS, MSDE.
State Committee of Practitioners for Career and Technology Education

Mr. Gustav Biedermann
Vice Principal
Eastern Technical High School
Teachers Assoc. of Baltimore County

Mr. J. Kenneth Bittinger
Supervisor of Vocational Education
Garrett County Board of Education

Mr. Harry Church
Curriculum Supervisor
Dorchester County Board of Education

Mr. Robert Corrigan
Acting Director of Personnel
New Community College of Baltimore

Mrs. Delores C. Datcher
Supervisor of Vocational Education
Calvert County Board of Education

Dr. Thomas L. Erekson
Chairman, Department of Industrial Technology & Occupational Education
University of Maryland, College Park

Mrs. Nancy Gist
President, Board of Education
Anne Arundel County Public Schools

Ms. Victoria Kornick
MCPT Vo-Tech/Career Education
MCPT, Inc.

Ms. Kerri Lawler-Davis
Vocational Education Planner
Maryland School for the Deaf

Mr. Edward Lehman
Second Vice Chair, Board of Trustees
Montgomery College

Dr. Elizabeth A. Mathias
Dean, Technical & Career Education
Anne Arundel Community College

Dr. Thomas Miller
Director, Vocational Education
Anne Arundel County Public Schools

Mr. Dwight Waters
Agriculture Teacher
Worcester County Career and Technology Center

Mr. Steven Wilson
Performance-Based Assessment Teacher
Frederick County Public Schools

Ms. Elizabeth Hammett
President, Phi Beta Lambda
Secondary
Measures and Performance Standards Committee

Mr. David Stevens
Director
Regional Employment Dynamics Ctr.
Robert G. Merrick School of Business

Dr. Raymond Wasdyke
Consultant

Dr. Thomas Oyster
Principal
Career Studies Center
Washington County

Ms. Delores Datcher
Supervisor of Adult and Vocational Education
Calvert County Public Schools

Mr. Ray Ogden
Director of Curriculum & Instruction
Prince George’s County Public Schools

Dr. Rose Mary Bengel
Chief, Research & Development Section
MSDE/DCTE

Dr. Leo E. Lezzer
Chief, Management Information & Accountability Section
MSDE/DCTE

Mr. Gary Moore
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Dr. Thomas Miller
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Dr. Karl E. Gettle
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Baltimore County Public Schools

Ms. Carolyn Graham
Guidance Supervisor
Charles County Public Schools

Mr. Clarence Clawson
Department of Technology and Vocational Education
Baltimore County Public Schools

Ms. Doris Sharkey
Specialist, Curriculum Management System
MSDE/DCTE

Ms. Judy K. Loar
Specialist, Program Evaluation
MSDE/DCTE
Maryland State Department of Education

Division of Career and Technology Education

Postsecondary Measures and Performance Standards

October, 1992
Introduction

Measures and Performance Standards

The Carl D. Perkins Vocational and Applied Technology Act of 1990 requires that "each State board receiving funds under this Act shall develop and implement a statewide system of core standards and measures of performance for secondary and postsecondary vocational education programs". It also requires the appointment of a Committee of Practitioners who were to review these standards and measures and make recommendations for their approval to the State Board.

To comply with this requirement the Maryland State Department of Education planned a series of activities. The first was to appoint a Committee of Practitioners based on the criteria for membership as set forth in the Act. A list of members is included with this document. This committee met twice to review and approve the measures and standards as developed by the measures and performance standards committees.

Two working committees were formed to develop the required measures and standards for secondary and postsecondary level programs. The names of the postsecondary committee members is attached. These committees met monthly from July, 1991 through January, 1992 in order to develop the measures and standards. On February 19, 1992 the Committee of Practitioners reviewed and approved the measures and performance standards for Maryland.

The Maryland Higher Education Commission (MHEC) has agreed to integrate the postsecondary measures and performance standards into the Program Data Monitoring (PDM) system.
Integration with the Program Data Monitoring System (PDM)

In addressing the intent of congress, that each State develop measures and standards to assess a subrecipient’s ability to provide quality occupational programs at the post-secondary level, Maryland has developed program measures and standards consistent with the program data monitoring (PDM) system. This system, under development over a fourteen year period, reflects the conclusions regarding the mission of community colleges contained within the Blueprint for Quality publication.

* All students need a general education, the knowledge deemed necessary for a person to function in a complex world.

* Community colleges must protect the integrity of the transfer program to maintain their image and status as institutions of higher education and to provide a door to higher education that otherwise would be denied to many.

* Community colleges should work to overcome the artificial barriers that exist between arts and sciences and the technical/career programs and should seek ways to integrate liberal studies into all parts of the curriculum.

* In technical and career programs, community colleges need to provide general skills that can be transferred as jobs change as well as specific skills for job entry. Also, local colleges are encouraged to cooperate with local public schools to develop two-plus-two programs.

* Continuing education (noncredit coursework) should be guided by responsiveness to the community and by the collegiate values that reflect the institution’s role and image in higher education.

Given the need for accountability, the PDM system provides for the evaluation of the quality of occupational programs using identified procedures. The PDM system has provided information regarding enrollments, awards, student follow-up status, projected job openings as well as discipline credit hour costs. Over a ten year period (1978-1988) 104 programs were discontinued based upon PDM evaluation.
MEASURES AND PERFORMANCE STANDARDS
COMMUNITY COLLEGE

DOMAIN: Program status
Variable: Enrollment
Data Element: Number of students and the percentage enrolled over the past two years
Standards: Enrollment has not decreased by more than 10% since previous year

and

Enrollment has not decreased by more than 10 students since previous year
DOMAIN: Completer Status

Variable: Documented Employment or Continuing Education

Data Elements: The number and percentage of completers who are:

1. Employed
2. Attending a 4 year college

Standard: Within one year of completion of a certificate or degree program the percentage of completers who are employed, in military service, have transferred to a four year college program, or are not actively seeking employment will be equal to the employment rate of the county or local statistical area. (In cases where the community college serves more than one county, an average of the employment rates of the counties involved will be used.)

and

85% of the program completers, who are employed, are employed in related jobs.

Note: Completer status will be assessed every other year.
Domain: Employer Satisfaction
Variable: Documented Employer Satisfaction
Data Element: The number and percentage of employers rating employees as meeting standards

Standard: Based on a statewide survey of employers every other year:

- 90% of employers surveyed rate completer technical preparation for employment as satisfactory or better

- 90% of employers surveyed rate completer academic skills (reading, writing, comprehension, math) preparation as satisfactory or better
Postsecondary Measures and Performance Standards Committee

Dr. Elizabeth A. Mathias
Dean of Technical & Career Education
Anne Arundel Community College

Dr. Jean Hunter
Executive Director
Maryland State Board for Community Colleges

Dr. John W. Walstrum
Chair, Technical Studies Division
Catonsville Community College

Ms. Laurie Tripp
Assistant Director, Planning & Research
Anne Arundel Community College

Mr. Tom Endrusick
State Board for Community Colleges

Dr. Leo E. Lezzer
Chief, Management Information & Accountability Section
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Ronald Leatherbarrow
Associate Dean
English and Humanities
Anne Arundel Community College

Dr. K. Rajasekhara
Director of Institutional Research
Dundalk Community College

Dr. Peggy Bartow
Associate Director
SCoVE

Ms. Andrea Smith
Dean, Career & Technical Education
Charles County Community College

Dr. Joseph P. De Santis
Specialist, Postsecondary & Adult Education
MSDE/DCTE

Ms. Judy K. Loar
Specialist, Program Evaluation
MSDE/DCTE
## CAREER AND TECHNOLOGY EDUCATION
### STUDENT PERFORMANCE
#### POST-SECONDARY PERFORMANCE
##### EMPLOYER SATISFACTION

<table>
<thead>
<tr>
<th>Workplace Readiness Skills</th>
<th>Standard %</th>
<th>Number of Responding</th>
<th>FY 1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrates entry level skills</td>
<td>EX 94</td>
<td>SAT 92</td>
<td></td>
</tr>
<tr>
<td>Ability to learn new job skills</td>
<td>EX 94</td>
<td>SAT 92</td>
<td></td>
</tr>
<tr>
<td>Exhibits positive work habits</td>
<td>EX 94</td>
<td>SAT 92</td>
<td></td>
</tr>
</tbody>
</table>

#### EDUCATIONAL SUCCESS

<table>
<thead>
<tr>
<th>College Status</th>
<th>Standard %</th>
<th>Number Enrolled</th>
<th>FY 1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative GPA</td>
<td>EX 99</td>
<td>SAT 97</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MD Functional Tests (Grade 11 status)</th>
<th>Standard %</th>
<th>1992 %</th>
<th>1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>EX 99</td>
<td>SAT 97</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>EX 99</td>
<td>SAT 97</td>
<td></td>
</tr>
<tr>
<td>Writing</td>
<td>EX 99</td>
<td>SAT 97</td>
<td></td>
</tr>
<tr>
<td>Citizenship</td>
<td>EX 99</td>
<td>SAT 97</td>
<td></td>
</tr>
<tr>
<td>Passed all tests</td>
<td>EX 96</td>
<td>SAT 90</td>
<td></td>
</tr>
</tbody>
</table>

##### POST-SECONDARY STATUS

<table>
<thead>
<tr>
<th>Postsecondary Status</th>
<th>Standard %</th>
<th>FY 1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pos Status</td>
<td>EX 97</td>
<td>SAT 90</td>
</tr>
</tbody>
</table>

#### STUDENT PARTICIPATION

<table>
<thead>
<tr>
<th>Attendance Rate (Yearly)</th>
<th>Standard %</th>
<th>1991 Percent</th>
<th>1992 Percent</th>
<th>FY 1993 Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades 11 - 12</td>
<td>EX 96</td>
<td>SAT 94</td>
<td>*</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dropout Rate (Yearly)</th>
<th>Standard %</th>
<th>1991 %</th>
<th>1992 %</th>
<th>FY 1993 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades 11 - 12</td>
<td>EX 1.25</td>
<td>SAT 3.0</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

#### POST-SECONDARY DECISIONS

<table>
<thead>
<tr>
<th>Grade 12 Documented Decisions To:</th>
<th>1992</th>
<th>1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attend a four year college</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attend a two year college</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialized school/specialized training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment (related to program)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment (unrelated to program)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enter the military</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enter full-time employment/school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enter part-time employment/school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other and no response</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### High School Program Completion

<table>
<thead>
<tr>
<th>Unv. of MD System Requirements</th>
<th>1992 Percent Completed</th>
<th>1993 Percent Completed</th>
<th>Number Completed</th>
<th>Percent Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved Occupational Program Req.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>BOTH - University &amp; Occupational Req.</td>
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Key: EX = Excellent, SAT = Satisfactory, % = Percent, * = Data Not Available

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