What Is The Role Of Federal Assistance For Vocational Education?

Office of Education
Department of Health, Education, and Welfare

BY THE COMPTROLLER GENERAL OF THE UNITED STATES

MWD-75-31

DEC. 31, 1974
To the President of the Senate and the Speaker of the House of Representatives

This is our report on the role of Federal assistance for vocational education. The program discussed in the report is administered by the Office of Education, Department of Health, Education, and Welfare.

We made our review pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67).

We are sending copies of this report to the Director, Office of Management and Budget, the Secretary of Health, Education, and Welfare, the Secretary of Labor, and the Secretary of Defense.

[Signature]

Comptroller General of the United States
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</tr>
</thead>
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<tr>
<td>BLS</td>
<td>Bureau of Labor Statistics</td>
</tr>
<tr>
<td>BOAE</td>
<td>Bureau of Occupational and Adult Education</td>
</tr>
<tr>
<td>CETA</td>
<td>Comprehensive Employment and Training Act</td>
</tr>
<tr>
<td>DOD</td>
<td>Department of Defense</td>
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<td>DOL</td>
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<td>GAO</td>
<td>General Accounting Office</td>
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<td>HEW</td>
<td>Department of Health, Education, and Welfare</td>
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<td>LEA</td>
<td>Local education agency</td>
</tr>
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<td>MDTA</td>
<td>Manpower Development and Training Act</td>
</tr>
<tr>
<td>NIE</td>
<td>National Institute of Education</td>
</tr>
<tr>
<td>OE</td>
<td>Office of Education</td>
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<td>SEA</td>
<td>State education agency</td>
</tr>
<tr>
<td>VEA</td>
<td>Vocational Education Act</td>
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</table>
WHAT IS THE ROLE OF FEDERAL ASSISTANCE FOR VOCATIONAL EDUCATION?
Office of Education
Department of Health, Education, and Welfare

DIGEST

WHY THE REVIEW WAS MADE

GAO reviewed the operation of vocational education programs--designed to insure that, ultimately, persons of all ages in all communities have ready access to vocational training or retraining which is realistic in the light of actual or anticipated employment opportunities--because

--the Congress is considering changes in vocational education legislation,
--over $3 billion of Federal funds have been expended since enactment of the Vocational Education Act in 1963,
--projections of the national economy indicate increased demand for vocationally skilled manpower, and
--large numbers of youth leave school without skills needed for employment, and many subsequently are unemployed.

GAO conducted its review in seven States--California, Kentucky, Minnesota, Ohio, Pennsylvania, Texas, and Washington--These States spent $146 million in fiscal year 1973, or 30 percent of the total $482 million of all Vocational Education Act funds spent that year. In States and localities where the policies, processes, and practices are not similar to those discussed in this report, GAO findings and conclusions may not be applicable and therefore should not be interpreted as necessarily being typical of vocational education activities in all locations.

FINDINGS AND CONCLUSIONS

Office of Education (OE) statistics show that in the decade since enactment of the Vocational Education Act, State and local support for vocational education has increased, the number of persons enrolled in vocational education has grown, and vocational opportunities have been expanded for the disadvantaged and handicapped.

OE officials, State directors of vocational education, and the National Advisory Council on Vocational Education told GAO they attribute this progress in large part to Federal assistance provided under the act.

Role of Federal funds (See pp 8 to 21)

The Vocational Education Act authorized Federal assistance for vocational training to States primarily for distribution to local education agencies. These funds were intended to encourage State and local governments to...
--increase their funding,

--accord high priority to persons with special needs,

--provide programs geared to real and emerging job opportunities, and

--increase the number of participants

The use of Federal funds has not been adequately evaluated at Federal, State, or local levels. It has not provided adequate guidance to help ensure that the purposes envisioned by the Congress would be accomplished.

Federal funds often have been used to provide basic support for traditional local programs rather than to achieve the purposes itemized above.

GAO reviewed the role the Federal dollar has played and found that

--Although in most States the major portion of Federal assistance is directed to the local level, large amounts of Federal funds have been retained at the State level for administrative purposes. State directors of vocational education told us that there was strong leadership at the State level because Federal funds have been available for this purpose and that such leadership would not be possible in many States without Federal funds being available for State administrative salaries.

--Although State and local governments have increased their funding for vocational programs, maintaining a nationwide average since 1970 of about $5 for every Federal dollar, in some States the ratio of State and local support to Federal support has declined. State directors of vocational education advised GAO that economic factors at the State and local level have made it more difficult to maintain their ratio of State and local dollars to Federal dollars.

--Although expanded vocational opportunities have been made available for the disadvantaged and handicapped, persons with special needs have not been given a high priority. State vocational officials said that it was more difficult to acquire State and local funds for particular population groups.

--Although participation in vocational programs has grown in the last decade, increased funding has not necessarily resulted in proportionately increased enrollment. State directors of vocational education stated that some programs are more costly today than they were in the past and that in other instances decisions have been made to use new Federal funds for constructing facilities and improving program quality, which would not necessarily result in increased enrollments.

Planning for use of funds (See pp 22 to 36)

Greater attention to systematic, coordinated, comprehensive planning at national, State, and local levels would improve the use of Federal funds and better insure that vocational education is provided in a manner that best serves student and community needs. We noted that

--State and local plans reflect compliance rather than planning,
--systematic assessment of community and individual needs does not take place.

--organizational patterns at all levels fragment responsibility and result in independent and isolated planning for vocational education.

--advisory council limitations lessen impact on improvement in the planning of programs to meet current and anticipated manpower needs, and

--data that would be helpful in planning is unavailable, inadequate, or unutilized

Distribution of funds (See pp 37 to 46)

Federal funds have been distributed by the States reviewed in a variety of ways, many of which do not necessarily result in funds being targeted to geographical areas of need or providing for the programmatic initiatives called for by the law. Some major practices noted were

--making funds available to all local education agencies within a State, rather than concentrating funds in selected agencies with high needs,

--making funds available to local agencies without adequately identifying the relative need for the program, and

--making funds available without considering ability of local agencies to provide their own resources.

Use of training resources (See pp 47 to 67)

States and local agencies have not always considered the range of existing training resources which could provide expanded training options to a larger number of people.

In many instances, secondary schools, community colleges, and area vocational-technical institutes could have made better use of their own facilities and explored opportunities to share each other's resources and those of federally-supported manpower programs, military installations, proprietary schools, or employer sites.

Factors which have limited the use of community-based training resources were that

--schools prefer to use the facilities they control,

--training resources have not been inventoried,

--costs have not been analyzed on a comparative basis,

--program scheduling has not been flexible,

--transportation often has not been provided,

--construction of new school facilities has been favored, and

--public and private sources of equipment and supplies have not been fully explored.

Relating training to employment (See pp 96 to 100)

Changing manpower requirements need to be better addressed in many secondary and postsecondary occupational programs supported by Federal funds. Students often are enrolled in traditional courses and are not always able to find employment in
fields for which they have been trained.

Factors which affected the relevancy of existing vocational programs were

-- labor market demand and supply have been neither fully nor realistically assessed,

-- work experience often has not been an integral component of the vocational curriculum,

-- occupational guidance has not received adequate attention,

-- responsibility for job placement assistance has not been routinely assumed by schools, and

-- follow-up on graduates and employers has been marginal or non-existent.

GAO also noted that barriers, such as age, sex, and entrance requirements, have restricted access to training and employment.

**RECOMMENDATIONS**

To provide sound expansion of vocational opportunities and to increase program effectiveness, GAO is recommending that the Secretary of Health, Education, and Welfare take specific actions to improve present practices in planning programs, distributing funds, using resources, and relating training to employment (See pp 20, 35, to 97).

**AGENCY ACTIONS AND UNRESOLVED ISSUES**

HEW generally concurred with GAO's recommendations and described actions taken or planned to implement them. Appendix V contains a complete text of HEW's comments.

HEW did not entirely agree with GAO's interpretation of the catalytic role intended for Federal assistance. These differing interpretations are discussed in chapter 2.

**MATTERS FOR CONSIDERATION BY THE CONGRESS**

This report calls attention to specific areas of administration and operation of the Vocational Education Act that can be strengthened at the Federal, State, and local levels to help insure that vocational programs achieve maximum impact. It suggests that the Congress consider amending the act by

-- setting a limit, as provided in other Federal education legislation, on the amount of Federal funds that can be retained at the State level so that more funds can be made available for direct services to program participants at the local level;

-- requiring States to use a portion of whatever Federal funds are retained at the State level to improve the planning process;

-- requiring that Federal funds be used primarily to develop and improve programs and extend vocational opportunities by limiting the amount of Federal funds that can be used to maintain existing activities;

-- adopting one or several options with regard to providing programs and services for the disadvantaged and handicapped if the Congress believes these two groups should receive priority attention in the utilization of Federal funds. Two of the options available are...
a) Requiring States to match Federal set-asides for disadvantaged and handicapped at the same level they are required to match regular part B funds (50-50), thereby insuring State and local involvement in and commitment to these efforts.

b) Increasing the percentage of the set-asides for the special need categories.

--Requiring the Secretaries of HEW and the Department of Labor to establish a process for planning which would relate vocational education to the State Postsecondary Commissions authorized by the Education Amendments of 1972 and the Comprehensive Employment and Training Act of 1973 to insure that education and manpower efforts will be synchronized for students at all levels—secondary, postsecondary and adult.

--Establishing a set-aside requirement for cooperative arrangements to expand vocational offerings and strengthen programs through use of other public training facilities or nonpublic training resources (e.g., movement of secondary students to postsecondary facilities).

--Establishing as a legislative policy that Federal funds will not be used for construction except in instances in which there is adequate justification that additional facilities are needed after thorough consideration of alternatives.

--Requiring that Federal vocational funds directed to local education agencies for programs be used for those skill areas for which existing or anticipated job opportunities, whether local, regional, or national, can be demonstrated.

--Requiring that work experience be an integral part of part B programs to the extent feasible.

--Requiring that schools take responsibility for job placement assistance and followup in Federally supported vocational education programs.

The report also suggests that the Congress consider:

--Reducing the impact of several barriers which inhibit persons from participating in vocational education (See p. 90).

--Amending the Federal Property and Administrative Services Act to provide for eligibility of recipients of Federal vocational funds to acquire Federal excess property.
CHAPTER 1

INTRODUCTION

For an increasing number of people, acquiring occupational skills is essential in modern society. The Nation's changing, increasingly technological environment requires a work force trained to a higher degree than in the past. Despite the large outlay of public funds for education—Federal, State, and local—amounting to 8 percent of America's gross national product, millions of youth, on leaving school, find themselves lacking skills needed for employment.

The primary goal of vocational education is to prepare persons at the secondary and postsecondary level for employment in about 80 percent of America's occupations which require technical skills but not a 4-year college degree. Programs of vocational education conducted by public education agencies with Federal support are one of an array of delivery systems providing occupational training. In fiscal year 1973, these agencies' expenditures totaled $3 billion, of which $482 million was Federal.

Federally assisted vocational education takes place, for the most part, in a variety of public educational institutions, although the law provides for cooperative arrangements with other public or private organizations involved with vocational training.

--Secondary programs are carried out in regular high schools, vocational high schools, and area vocational schools.

--Postsecondary programs are offered in community and junior colleges, 4-year colleges and branches, and vocational-technical schools, institutes, and centers.

--Adult programs, whose participants are not enrolled on a full-time basis, take place in any of the above facilities.

In 1972 we issued a report about vocational education at the secondary school level on the basis of a review of programs in four States. It concluded that all who need vocational education were not receiving it, funds allocated for students with special needs were not properly expended, and evaluation of the program suffered from a lack of management information. This report focuses on selected aspects of secondary and postsecondary vocational education in seven States visited during the 1973-74 school year and discusses some underlying factors that inhibit attainment of objectives.

FEDERAL INVOLVEMENT

With passage of the Smith-Hughes Act in 1917 (20 U.S.C. 11), the Congress began to encourage the Nation's schools to include preparing students for earning a living as an integral part of their mission. Federal assistance was provided primarily for vocational agriculture and home economics, activities pursued at the time by a large number of the Nation's adults. The George-Barden Act (20 U.S.C. 151 note), which followed three decades later, enlarged the number of occupational categories for training and increased authorization levels.

The turning point for new directions and increased Federal funding for occupational education arrived with the enactment of the Vocational Education Act (VEA) of 1963 (20 U.S.C. 1241). Vocational education was to be redirected from training in selected occupational categories to preparing all groups of the community for their place in the world of work. Also, vocational education was to become responsive to the urgent needs of persons with special difficulties preventing them from succeeding in a regular vocational program.

The Vocational Education Amendments of 1968 (20 U.S.C. 1241 et seq.) stressed the need for adapting training to the changing needs of the labor market. The amendments mandated specific criteria for distributing funds and requirements for planning and evaluation which each State was to meet to obtain Federal funds. Funds were earmarked to guarantee that certain groups—postsecondary, disadvantaged, and handicapped—would receive opportunities for training.

VEA, as amended, has provided the major thrust of Federal support for vocational education. Federal funds totaling about $3 billion have been spent for VEA programs in the last decade, beginning with $55 million in fiscal year 1964 and rising to $482 million in fiscal year 1973. During the same period, State and local expenditures for vocational education amounted to $12 billion, increasing from $227 million in fiscal year 1964 to $2.5 billion in fiscal year 1973.

PURPOSE OF FEDERAL ASSISTANCE

The legislative history and the act indicate that Federal assistance should serve as a catalyst to induce State education agencies (SEAs) and local education agencies (LEAs) to align priorities, programs, and expenditures more closely to community and individual needs. The Congress has given special emphasis to increasing opportunities for persons who experience difficulty in regular programs. Provisions for occupational programs authorized under title X of the Educational Amendments of 1972 (Public Law 92-318) reiterated congressional concern that Federal funds act as leverage to bring about comprehensive, coordinated planning and delivery of occupational education.
The Congress declared that VEA's purpose was to insure

"** that persons of all ages in all communities ** will have ready access to vocational training or retraining which is of high quality, which is realistic in the light of actual or anticipated opportunities for gainful employment, and which is suited to their needs, interests, and ability to benefit from such training"

Specific groups for whom vocational education is intended under VEA are those

--in high school,
--who have completed or discontinued their formal education and are preparing to enter the labor market,
--who have already entered the labor market but need to upgrade their skills or learn new ones,
--with special educational handicaps, and
--in postsecondary schools

Nine specific parts are included in VEA, most directing attention to aspects of vocational education aimed at achieving the act's ultimate objective Part B, which accounts for 80 percent of total VEA expenditures, authorizes grants to States that they can use to provide vocational education for persons described above Our review focused primarily on State programs supported under part B.

**ADMINISTRATION OF VEA**

The Office of Education (OE), Department of Health, Education, and Welfare (HEW), is responsible for implementing VEA Within OE, the Bureau of Occupational and Adult Education (BOAE) provides the administrative support for VEA-funded programs A National Advisory Council and State advisory councils on vocational education act in an oversight capacity and are responsible for evaluating vocational programs and providing assistance in development of vocational education plans

The Federal formula for annual allotment of VEA funds to States is based on age distribution and per capita income in the State Age groups specified by the formula as needing vocational education are accorded varying emphasis 15-19 (50 percent), 20-24 (20 percent), 25-65 (15 percent), 15-65 (5 percent) To be eligible for Federal funds, States must (1) match Federal part B funds on a dollar for dollar basis and (2) submit a State plan each year to OE which meets the requirements of the act and HEW's regulations and guidelines These plans are reviewed primarily at the HEW regional office level, and are approved by the Commissioner of Education

At the State level, the responsibility for administering vocational education supported under VEA is delegated to one agency, generally the SEA However, in most States the responsibility for

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1The remaining portion is allocated for research and training
providing vocational education is shared by more than one State agency, because separate agencies administer secondary and postsecondary programs.

At the local level usually separate administrative entities for secondary and postsecondary education develop and conduct vocational education programs. To be eligible for Federal support they must submit an application to the State which satisfies VEA criteria. The level of VEA funding they receive is contingent upon State distribution practices and other State procedures. Some States also provide programs through regional or areawide vocational-technical schools and in some cases operate their own facilities.

CURRENT STATUS

OE statistics for fiscal year 1973 indicate that 7.4 million were enrolled in vocational programs at the secondary level. Assuming secondary students fall between 15-19, the age bracket used by the law for national allocation of VEA funds, 38 percent of the American population in that age group were enrolled. Similarly, 1.3 million were enrolled at the postsecondary level, equivalent to 8 percent of those 20-24 years of age. Enrollment and expenditures were highest at the secondary level as shown below, although the proportion varied among States.

Vocational Education Enrollment and Expenditures, By Level, FY 1973

<table>
<thead>
<tr>
<th>Level</th>
<th>1973 enrollment</th>
<th>1973 expenditures (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent of total</td>
</tr>
<tr>
<td>Secondary</td>
<td>7,353,962</td>
<td>61</td>
</tr>
<tr>
<td>Postsecondary</td>
<td>1,349,731</td>
<td>11</td>
</tr>
<tr>
<td>Adult</td>
<td>3,368,752</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>12,072,445</td>
<td>100</td>
</tr>
</tbody>
</table>

Of the total enrollment, 1.6 million students or 13 percent were disadvantaged and about 228,000 students or 2 percent were handicapped. Of total expenditures for all vocational students, those for the disadvantaged amounted to 10 percent and those for the handicapped to 3 percent. Federal funds represented 36 percent of expenditures for the disadvantaged and 47 percent of those for the handicapped.

Enrollments

The range of course offerings available to students enrolled in vocational education varied considerably depending upon geographic location and type of delivery system. According to OE statistics,
organized in eight broad program categories, student enrollment in fiscal year 1973 at each level was apportioned among programs as follows

### Percent of Vocational Enrollments, By Program And Level, FY 1973

<table>
<thead>
<tr>
<th>Program category</th>
<th>Secondary</th>
<th>Postsecondary</th>
<th>Adult</th>
<th>All levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>8</td>
<td>3</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Distributive (sales)</td>
<td>4</td>
<td>8</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Health</td>
<td>1</td>
<td>14</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Home economics (not for wages)</td>
<td>33</td>
<td>2</td>
<td>19</td>
<td>26</td>
</tr>
<tr>
<td>Home economics (gainful)</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Office</td>
<td>21</td>
<td>28</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Technical</td>
<td>1</td>
<td>15</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Trade and Industry</td>
<td>15</td>
<td>25</td>
<td>36</td>
<td>22</td>
</tr>
<tr>
<td>Other (note a)</td>
<td>14</td>
<td>3</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Total (note b)</td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*a* Group guidance, remedial and special programs  
*b* Detail may not add up to 100 percent due to rounding.

### Expenditures

OE reported total Federal, State, and local vocational education expenditures for fiscal year 1973 in 10 categories. Instructional salaries accounted for 63 percent and other instructional costs, including equipment, for 18 percent. Administration and supervision amounted to 8 percent and construction of area vocational schools amounted to 6 percent. Vocational guidance received 3 percent and teacher education 1 percent. Research, curriculum development, and work-study together counted for about 1 percent.

To describe vocational expenditures under part B, OE used another set of categories, as delineated in the following table. In addition to total expenditures by amount and percent of total, the same information is given for Federal funds and State and local funds.
Expenditures for Vocational Education, VEA Part B, By Purpose and Source

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Federal</th>
<th></th>
<th>State and local</th>
<th></th>
<th>Total</th>
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<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>Percent</td>
<td>Amount</td>
<td>Percent</td>
<td>Amount</td>
<td>Percent</td>
</tr>
<tr>
<td>Secondary</td>
<td>$127</td>
<td>33</td>
<td>$1,169</td>
<td>52</td>
<td>$1,296</td>
<td>49</td>
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<tr>
<td>Postsecondary</td>
<td>91</td>
<td>24</td>
<td>619</td>
<td>27</td>
<td>710</td>
<td>27</td>
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<tr>
<td>Adult</td>
<td>19</td>
<td>5</td>
<td>123</td>
<td>5</td>
<td>142</td>
<td>5</td>
</tr>
<tr>
<td>Disadvantaged</td>
<td>66</td>
<td>17</td>
<td>144</td>
<td>6</td>
<td>210</td>
<td>8</td>
</tr>
<tr>
<td>Handicapped</td>
<td>43</td>
<td>11</td>
<td>47</td>
<td>2</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>Construction</td>
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<td>9</td>
<td>160</td>
<td>7</td>
<td>195</td>
<td>7</td>
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<tr>
<td>Ancillary services</td>
<td>(63)</td>
<td>(16)</td>
<td>(143)</td>
<td>(6)</td>
<td>(206)</td>
<td>(8)</td>
</tr>
<tr>
<td>(note b)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guidance and</td>
<td>(12)</td>
<td>(3)</td>
<td>(73)</td>
<td>(3)</td>
<td>(85)</td>
<td>(3)</td>
</tr>
<tr>
<td>counseling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contracted instruction</td>
<td>(1)</td>
<td>(0)</td>
<td>(2)</td>
<td>(0)</td>
<td>(4)</td>
<td>(0)</td>
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<tr>
<td>Total (note c)</td>
<td>$388</td>
<td>100</td>
<td>$2,277</td>
<td>100</td>
<td>$2,664</td>
<td>100</td>
</tr>
</tbody>
</table>

a. Amounts in parentheses also are included, for the most part, in amounts expended by level or target group, but see note c below.

b. Primarily administrative costs but includes research, curriculum development, and teacher training.

c. Variances between details and totals are attributed by OE to inability of several States to allocate ancillary services by level.
SCOPE OF REVIEW

Our review was made primarily at HEW headquarters, Washington, D.C., HEW regional offices in Chicago, Dallas, Philadelphia, San Francisco, Seattle, and State and local levels in California, Kentucky, Minnesota, Ohio, Pennsylvania, Texas, and Washington. We examined applicable legislation and its history, regulations, OE program policies and directives, State plans, local applications, reports, and other pertinent documents. National calculations are based, in most cases, on OE statistics from the 50 States and the District of Columbia.

We also discussed program activities with education personnel at these various levels and visited ongoing training programs at high schools, community colleges, vocational-technical institutes, manpower skills centers, military installations, and employer sites. In addition, we consulted with representatives of vocational education advisory committees, business, industry, labor, proprietary schools, and Department of Labor (DOL) and Defense (DOD), to obtain their assessment of vocational education and determine the extent of their participation in planning and evaluation of vocational programs.

We chose the aforementioned States as representatives of various programs and services provided by vocational education, together they accounted for 30 percent of Federal vocational expenditures in fiscal year 1973. Factors taken into consideration for State and local selection were level of vocational funding, types of institutions and program activities, population size and mix, geographic location, and type of economic base. We believe that problems experienced in these States and communities are shared by many, and that the solutions implemented by some may be applicable to others. However, in States and localities where the policies, processes, and practices are not similar to those discussed in this report, our findings and conclusions may not be applicable and therefore should not be interpreted as necessarily being typical of vocational education activities in all locations.

At the conclusion of our review, in addition to obtaining comments from HEW, we met with six of the seven State directors of vocational education (one was unable to attend) to obtain their views on the issues discussed in the report. We also discussed these issues with several members of the National Advisory Council on Vocational Education. All these views were considered in the final report.
CHAPTER 2

WHAT ROLE DOES THE FEDERAL DOLLAR PLAY?

Federal assistance for vocational education is intended as a catalyst to encourage State and local governments to increase their funding, accord high priority to those individuals with special needs, provide programs geared to real and emerging job opportunities, and increase the number of participants in vocational education.

OE statistics show that in the decade since VEA's enactment State and local support for vocational education has increased, the number of persons enrolled in vocational education has grown, and vocational opportunities have been expanded for the disadvantaged and handicapped. OE officials, State directors of vocational education, and the National Advisory Council on Vocational Education told us they attribute this progress in large part to Federal assistance provided under VEA.

Generally, however, OE has not adequately evaluated how Federal funds have been used by SEAs and LEAs. As a consequence, Federal funds in many cases have been used to provide support for existing programs rather than being targeted to achieve necessary changes in direction and scope of vocational programs.

We reviewed the role the Federal dollar has played and found that:

--Although in most States the major portion of Federal assistance was directed to the local level, large amounts of Federal funds have been retained at the State level for administrative purposes. State directors of vocational education told us that there was strong leadership at the State level because Federal funds have been available for this purpose and that such leadership would not be possible in many States without Federal funds being available for State administrative salaries.

--Although State and local governments have increased their funding for vocational programs, maintaining a nationwide average since 1970 of about five dollars for every Federal dollar, in some States the ratio of State and local support to Federal support has declined. State directors of vocational education advised us that economic factors at the State and local level have made it more difficult to maintain their ratio of State and local dollars to Federal dollars.

--Although expanded vocational opportunities have been made available for the disadvantaged and handicapped, persons with special needs have not been given as high a priority with State and local support as with Federal support. State vocational officials told us that it is more difficult to acquire State and local funds for particular population groups.
Although participation in vocational programs has grown in the last decade, increased funding has not necessarily resulted in proportionately increased enrollment. State directors of vocational education advised us that some programs are more costly today than they were in the past and that in other instances decisions have been made to use new Federal funds for constructing facilities and improving program quality, which would not necessarily result in increased enrollments.

VEA FUNDS DO NOT NECESSARILY PLAY CATALYTIC ROLE

VEA's stated purpose and particular assurances required by the act indicate that the Congress intended Federal dollars to be used as seed money to stimulate State efforts so that more people would receive occupational preparation to meet national manpower needs. Federal funds then would be available at the local level to extend, develop, and improve vocational opportunities. However, VEA also permits States to use Federal funds to maintain existing vocational programs.

VEA requires State assurance that Federal funds will be used to supplement, and to the extent practical, increase the amount of State and local funds that would be available for vocational programs in the absence of Federal funds. The act also requires State plans to include policies which take into account whether or not projects will increase the State and local contribution.

States are required, particularly in distribution of Federal funds from the State to local level, to direct special attention to the needs of persons whose physical, academic, socioeconomic, or other problems might otherwise prevent them from receiving the benefits of vocational training.

Federal vocational education funds, however, generally have not been distributed for projects identified as most successful in achieving catalytic effect. In many instances Federal funds have been used to maintain existing activities year after year rather than primarily to initiate new program options. State directors of vocational education told us they believe a balance in the use of Federal funds between maintenance of existing programs and development of new programs contributes to greater stability and continuity in vocational education.

In some States, Federal funds have been comingled with State funds, making it very difficult to determine how Federal funds have been used. For instance:

One State we visited adopted a resolution providing for the allocation of Federal vocational funds in fiscal year 1974 on a restricted basis, because there was a high potential that Federal funds might be used to supplant State and local funds when Federal funds were comingled and considered as unrestricted local funds.
Large amounts of Federal funds retained at State level

Generally, legislative provisions for Federal education programs limit the amount which can be used by the State for administrative purposes to 5 percent or less. VEA does not stipulate any such limitation. In most States we visited a large amount of part B funds has been retained at the State level for administration and other activities rather than being distributed to LEAs for direct support of vocational programs. Federal part B funds have been used to sustain the bulk of State administrative overhead related to vocational education. For example:

--An analysis of one State Department of Education's administrative expenditures for vocational education showed that 92 percent were federally funded under part B in fiscal year 1972. The State director of vocational education told us that the policy was to use Federal dollars rather than State dollars for administrative purposes.

The amount of Federal part B funds budgeted by this State for administration in relation to the total funds available increased steadily to 16 percent in fiscal year 1973 ($4.9 million). In addition, other Federal part B funds were retained at the State level for administering vocational education in county offices and for supporting projects initiated at the State level which reportedly were designed to serve statewide and program-wide needs in vocational education.

About 22 percent of the total part B allotment in fiscal year 1973 was budgeted to be retained at the State level, an increase of over $2.5 million from that budgeted in fiscal year 1970. These funds generally did not go for the direct provision of vocational programs at the local level, nor were they necessarily allocated to meet specific special needs of a local area.

The State advisory council on vocational education questioned to whom the State's educational leadership was accountable—the Federal government or the people of the State. In 1974 it recommended that the next budget request to the State legislature include funds for administering vocational education, and that the amount of State funds should be increased yearly until State revenues totally supported administrative services. In its Fourth Annual Report the State advisory council stated:

"Since 1969, when $800,000 of State support for administration was removed from the State Department of Education's annual budget, the Department's vocational education staff has been funded exclusively by federal Vocational Education Act funds. Unfortunately, this situation (total support by Federal dollars) is true of all but a few positions in the entire State Department of Education." (underscoring supplied)
The Assistant Commissioner for Vocational Education in another State where Federal part B subsidy of the State's administrative expenditures for vocational education increased from 81 percent in fiscal year 1972 to 89 percent in fiscal year 1973, told us that to eliminate repeated requests for State funds and to avoid conflicts with the State legislature, his agency paid the bulk of the State vocational administrative costs with Federal funds because these funds did not entail rigorous managerial review and accountability.

In a third State we visited, 22 percent of the part B funds spent in fiscal year 1973 was used at the State level to support administration and other activities. According to data provided by the State, 77 percent of the part B funds used at the State level was spent for administration. (In fiscal year 1974, 24 percent was budgeted for administration and other activities.) The largest portion of these funds subsidized the operation of a coordinating council which had no direct control over much of the State and local funds for vocational education (see diagram in app. 1).

OE officials told us that existing reporting procedures do not show specifically the amount of Federal funds retained at the State level.

The National Advisory Council on Vocational Education and State directors of vocational education told us that there was strong leadership at the State level because Federal funds have been available for this purpose. They said that such leadership would not be possible in many States without Federal funds being available for State administrative salaries, because of restraints imposed by budget officials and legislatures. We did not assess to what extent particular program activities at the local level resulted from the use of Federal part B funds at the State level.

Proportion of Federal funds expended for administrative type activities has been increasing.

Nationwide, the proportion of Federal part B funds spent for administrative-type activities has been growing at a greater rate than the proportionate increase in Federal funding, according to OE statistics. Although total Federal funds available to States have increased each year, the administrative costs charged to grant funds should not necessarily increase in proportion to part B expenditures.

Analysis of expenditures reported to OE by the States for ancillary services shows that the proportion of Federal part B funds used for ancillary services has risen steadily to 16 percent or $63 million in fiscal year 1973. OE estimates that the major portion of the ancillary service charges reported by the States can be attributed to administrative costs. While total Federal part B expenditures increased 46 percent
from fiscal year 1970 to fiscal year 1973, Federal part B expenditures for ancillary services increased 124 percent. The comparative increase is shown in the table below.

### Increase in Use of Federal Part B Funds For Ancillary Services
Relative to Increase in Total Federal Part B Expenditures (note a)

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>Federal part B total expenditures (millions)</th>
<th>Percent increase over prior year</th>
<th>Federal part B expenditures for ancillary services (millions)</th>
<th>Percent increase over prior year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>$266</td>
<td>--</td>
<td>$28</td>
<td>--</td>
</tr>
<tr>
<td>1971</td>
<td>317</td>
<td>19</td>
<td>40</td>
<td>43</td>
</tr>
<tr>
<td>1972</td>
<td>370</td>
<td>17</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>1973</td>
<td>388</td>
<td>5</td>
<td>63</td>
<td>26</td>
</tr>
</tbody>
</table>

*aAncillary services are primarily (85 percent in fiscal year 1973) administration (including supervision and evaluation), but also include teacher training, curriculum development, and research.

One-third of the States in fiscal year 1973 each spent over $1 million of Federal part B funds for ancillary services, only six States restricted this use to 5 percent or less, as shown in the table below.

### VEA Part B Funds Expended for Ancillary Services, FY 1973

<table>
<thead>
<tr>
<th>Percent of funds</th>
<th>Number of States</th>
<th>Amount of funds (millions)</th>
<th>Number of States</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 or more</td>
<td>6</td>
<td>$3 or more</td>
<td>5</td>
</tr>
<tr>
<td>21 to 25</td>
<td>9</td>
<td>1 to 29</td>
<td>12</td>
</tr>
<tr>
<td>16 to 20</td>
<td>11</td>
<td>5 to 9</td>
<td>13</td>
</tr>
<tr>
<td>11 to 15</td>
<td>12</td>
<td>2 to 4</td>
<td>14</td>
</tr>
<tr>
<td>6 to 10</td>
<td>7</td>
<td>1 or less</td>
<td>7</td>
</tr>
<tr>
<td>5 or less</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The largest amount of part B funds spent in this manner by any State was $7 3 million, which amounted to about 25 percent of its Federal part B expenditures. At the other end of the spectrum, one State reportedly did not use any Federal funds to administer its vocational program. At least one State, that OE reports had spent only 3 percent of its Federal part B funds for ancillary services in fiscal year 1973, actually spent much more.

Records kept by one State we visited showed that the actual amount of Federal part B funds spent in fiscal year 1973 for administrative costs at the State level was $1 2 million. OE's annual statistical report, on the other hand, shows that Federal part B funds for all ancillary costs, including administration, totaled only
about $240,600 According to State figures, 17 percent of its $7 million Federal part B funds were spent for administrative costs, according to OE figures, the amount was 3 percent or less When questioned about this discrepancy, the responsible State official agreed that the figure reported to OE as the Federal portion of ancillary costs was understated by more than $1 million, but could not account for the error.

Existing OE reporting categories do not show the amount of Federal, State, and local expenditures for such categories as administration, teacher education, curriculum development, or research and demonstration Instead, OE reports only show total expenditures, making it impossible to identify what proportion of the total expenditure in each category is Federal Further, OE reports do not show whether these expenditures were made at the State level or at the local level

Proportion of Federal support for administration has exceeded Federal share of State program

The percent of administrative and related costs charged to part B has far exceeded the proportion of Federal funding in the total State program Nationally, Federal funds in fiscal year 1973 represented an average of 16 percent of the States' total vocational program, although this proportion varied widely among States According to data reported by OE, Federal funds used for administrative and related costs averaged 31 percent of the total of all funds spent by States for these costs The Federal portion of such costs ranged from zero to 77 percent Three of the States in the "above 65 percent" category noted below were among the 10 States receiving the largest amount of Federal vocational funding

<table>
<thead>
<tr>
<th>Percent</th>
<th>Number of States</th>
</tr>
</thead>
<tbody>
<tr>
<td>65 or above</td>
<td>7</td>
</tr>
<tr>
<td>50 to 64</td>
<td>7</td>
</tr>
<tr>
<td>40 to 49</td>
<td>7</td>
</tr>
<tr>
<td>25 to 39</td>
<td>9</td>
</tr>
<tr>
<td>16 to 24</td>
<td>11</td>
</tr>
<tr>
<td>15 or below</td>
<td>10</td>
</tr>
</tbody>
</table>

OE officials, pointing out that ancillary services are one of eight purposes for which States can spend Federal part B funds, said that each State determines what portion it will allocate for this purpose State directors of vocational education told us that such flexibility in the use of Federal funds is important to their operation
Ratio of State and local support
to Federal part B support

Nationwide, State and local dollars directed to vocational ed-
ucation have increased. The national ratio of approximately five State
and local dollars for every Federal dollar has been maintained since
fiscal year 1970, indicating that State and local governments have
recognized the need for expanding vocational education opportunities.
To the extent that States are able to sustain such a ratio of State and
local support to Federal support, the ultimate objective of the act—
providing vocational training for all who need it—stands a better
chance of being met.

Some States, however, have found it increasingly difficult to main-
tain or increase their ratio of State and local support for every Fed-
eral dollar. Our analysis of OE statistics showed that in some States
the ratio of State and local support under part B has been declining.
In fiscal year 1973, one-third of the States (17) spent fewer State and
local dollars for every Federal dollar than they did in fiscal year 1970
(See app II). In contrast, only one State in fiscal year 1970 had ex-
pended fewer State and local dollars for every Federal VEA dollar than
it had in fiscal year 1965. From fiscal year 1972 to fiscal year 1973,
States with a declining State and local to Federal funding ratio num-
bered 18. Included were 3 States which ranked among the top 10 States
receiving Federal vocational funds. This downward trend may indicate
that a plateau has been reached as far as the salutory effect of the
Federal dollar in enticing State and local dollars.

Although we did not analyze the reasons for this declining ratio,
the National Advisory Council on Vocational Education and State directors
of vocational education advised us that economic factors at the State
and local level, such as budget constraints and decreased outlays for
construction, have made it more difficult for States to maintain their
ratio of State and local dollars to Federal dollars.

OE officials said they do not question the State and local funding
levels as long as States do not drop below the statutory requirement of
one State and local dollar for every Federal dollar. They advised us
that they have not interpreted this requirement to mean that every new
Federal dollar has to be matched with a new State or local dollar.
Several State directors of vocational education told us that all State
and local expenditures for vocational education are not reported to OE
because additional moneys are not needed for Federal matching purposes.
They suggested that OE statistics, therefore, did not necessarily re-
fect total State effort. The OE official responsible for data collec-
tion, however, said he would discount the claim that all expenditures
were not reported to OE.
Persons with special needs have not been given a high priority.

VEA requires that particular consideration be given to the vocational education needs of handicapped persons and those with academic, socioeconomic, or other problems that prevent them from succeeding in the regular vocational program (the latter generally are referred to as "disadvantaged"). The 1968 amendments provide that States use at least 15 percent of their annual Federal Part B allotment for programs serving the disadvantaged and 10 percent for programs serving the handicapped. We analyzed the amount of expenditures for the disadvantaged and the handicapped in relation to total expenditures for each fiscal year from 1970 through 1973. As shown in the following table, many States have not spent a substantial portion of their Part B funds for persons with special needs.

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Disadvantaged</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 15 percent</td>
<td>21</td>
<td>15</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>15 to 16 percent</td>
<td>12</td>
<td>10</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>25</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td><strong>Handicapped</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 10 percent</td>
<td>31</td>
<td>13</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td>10 to 11 percent</td>
<td>15</td>
<td>20</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
<td>33</td>
<td>32</td>
<td>30</td>
</tr>
</tbody>
</table>

Since fiscal year 1970 States have been allowed by legislation (20 U.S.C. 1226), often referred to as the Tydings Amendment, to spend any fiscal year allotment over a 2-year period. As a result, annually about half of the States spend less than, or only about, 15 percent for the disadvantaged, and more than half of the States annually spend less than, or only about, 10 percent for the handicapped. In fiscal year 1973, individual State expenditures under Part B for the disadvantaged ranged from 10 percent of the Federal funds to 30 percent and averaged 17 percent (See app III). Expenditures for the handicapped under Part B ranged from 8 percent of the Federal funds to 17 percent in fiscal year 1973, with an average of 11 percent (See app III A). Because of the carryover provision, this does not necessarily mean that the States whose expenditures were less than 15 percent for the disadvantaged and 10 percent for the handicapped were not in conformity with the law.

Discussions with OE officials and State directors of vocational education concerning the vacillating level of expenditure for the disadvantaged and handicapped suggested that it was difficult to develop programs which would effectively deal with the problems of the
disadvantaged and handicapped A correlative problem may be that the funds are spread so thin, as discussed in chapter 4, that it might be impossible to initiate vocational services adequate for these special needs.

OE officials told us that because States continue to overmatch overall Federal vocational funds, they have no legal basis for requiring States to match expenditures for the disadvantaged and handicapped. State officials advised us that it is more difficult to acquire State and local funds for particular population groups and that without Federal set-asides for the disadvantaged and handicapped their programs addressing these special needs would be curtailed. Consequently, no State over a 4-year period has supported efforts for the disadvantaged and handicapped to the same extent as its overall part B program.

According to OE statistics, the nationwide average ratio of State and local funding to Federal funding for all part B programs in fiscal year 1973 was $5.93 to $1.00. Yet the ratio for programs serving the disadvantaged was only $2.19 to $1.00 and for the handicapped only $1.10 to $1.00. In fiscal year 1973, 23 States spent fewer State and local dollars for every Federal dollar for the disadvantaged than they had in fiscal year 1970 (see app II A), for the handicapped the number was 19 States (see app II B). Some States, over a 3-year period, have spent no State or local funds for the disadvantaged or handicapped but continued to receive Federal assistance for such programs. In other States, State and local funding has been withdrawn as Federal funding has increased. For example.

In a State which has received a large amount of Federal vocational support, the ratio of State and local funds to Federal funds for part B handicapped programs declined from $3.36 in fiscal year 1970 to $3.4 in fiscal year 1973. During the same period total Federal vocational support increased from $25 million to $38 million, and Federal support for the handicapped under part B increased from $2.4 million to $3.1 million. In this State handicapped enrollments in vocational education decreased more than 65 percent from fiscal year 1971 to fiscal year 1973, while Federal expenditures increased over 29 percent. In contrast, State and local expenditures dropped 63 percent.

A 1973 study financed by HEW reported that current resources directed to individuals requiring special services were clearly insufficient. According to this study, large unmet needs exist, and inadequacy of resources (dollars, personnel, facilities) was the problem most often cited. Our 1974 review of education programs for the handicapped found that relatively few handicapped individuals were participating in vocational education programs.

1"Federal Programs for Education of the Handicapped Issues and Problems," (B-164031(1), Dec 5, 1974)
Increased funding has not necessarily resulted in increased enrollment

A major purpose of Federal support has been to expand availability of vocational education programs so that an increasing number of persons might receive skill training. OE statistics show that the number of students enrolled has increased 163 percent, from 4.6 million in fiscal year 1964 to 12.1 million in fiscal year 1973.

Increased funding for vocational programs has not necessarily resulted in proportionately increased enrollments. During the period cited above, total Federal vocational expenditures rose 776 percent from $55 million in fiscal year 1964 to $482 million in fiscal year 1973—an increase of 532 percent in 1964 dollars. State and local vocational expenditures rose 818 percent from $278 million to $2,551 million—an increase of 562 percent in 1964 dollars.

The relationship between expenditure and enrollment growth has varied among States. In some States enrollment has increased steadily as funding has risen, but in others there has not been a proportionate increase in enrollment. For instance, according to OE statistics:

In one State we visited the Federal expenditure increased 1,188 percent from $2.6 million in fiscal year 1964 to $33.5 million in fiscal year 1973—an increase of 829 percent in 1964 dollars. Enrollment increased 61 percent during this same period from about 441,000 to 711,000.

State directors of vocational education advised us that some programs are more costly today than they were in the past, and that in other instances decisions have been made to use new funds to improve program quality which would not necessarily result in increased enrollments. They also noted that teacher salaries have been increasing and that the price tag is higher for programs serving persons with special needs. OE officials told us that the cost of constructing facilities also increased the cost per student. We did not do a comprehensive analysis to determine the extent to which these factors account for the disparity between funding increases and enrollment growth.

Disadvantaged and handicapped

Provision of vocational education to meet the special needs of the disadvantaged and handicapped has been a VEA priority. The National Advisory Council on Vocational Education, summarizing 1973 State Advisory Council reports, stated:

"While recognizing that more disadvantaged and handicapped students were currently enrolled in vocational programs than at any time in the past, the Councils expressed concern about the still very small..."
percentage of these students being served in terms of the numbers needing vocational education. Of all the problems, this seems to be the one on which least progress had been made in terms of need and potential."

OE statistics show that the proportion of disadvantaged and handicapped enrollment declined relative to total enrollments from fiscal year 1971 to fiscal year 1973. During the same period, the Federal portion of expenditures for disadvantaged and handicapped increased relative to total expenditure growth. From fiscal year 1972 to fiscal year 1973, enrollment of the disadvantaged declined in 13 States and of the handicapped in 15 States, despite increased expenditures.

OE officials advised us that these declining enrollments reflected improved procedures for classifying students. (Our 1972 report on vocational education, cited in chapter 1, concluded that regular vocational programs were being classified as disadvantaged programs because students from low-income families were enrolled.) We did not make an analysis to determine whether classification procedures accounted for declining enrollments.

**OE Monitoring Has Been Inadequate**

OE officials told us there is little analysis of the way States spend Federal funds, and that OE does not know what the impact of Federal vocational funding actually has been. They said that States have treated Federal funds as another source of general revenue, and have used these funds primarily to maintain existing programs.

A series of studies to assess vocational impact were completed in 1972 under OE contract. The contract monitor in OE's Office of Planning, Budgeting, and Evaluation told us these studies developed some useful information about discrepancies between the act's intent and actual implementation practices. According to BOAE officials, however, this expenditure of almost $1 million for the studies did not yield reports sufficiently reliable for consideration.

We were told that review of State plans, which takes place primarily at the regional level, is addressed to the future and does not assess State performance versus prior plans. OE regional officials told us that this review consists of verifying that State plans contain statements of assurance required by VEA, and that State plans have not been reviewed from the point of view of whether Federal funds are directed toward producing a catalytic effect.

Neither OE nor the States we visited had determined what strategies and types of projects would produce the desired result of maximizing effectiveness of federally assisted programs. State officials told us they had not received guidance from OE pertaining to use of Federal funds to achieve this effect. OE regulations do not specify what portion
of Federal funds is to be used for extending, improving, and developing vocational programs and what portion is to be used for maintaining existing activities.

In late 1972 BOAE initiated a program review approach through which it could monitor State vocational activities. Since that time teams of 5 persons—usually 3 from OE headquarters and 2 from the respective regional office—have made week-long visits to 13 States which had extended an invitation. These States together accounted for 30 percent of total Federal vocational spending in fiscal year 1973. OE reports of these visits have made recommendations for improving State programs, but generally have not addressed the role of Federal dollars.

BOAE officials told us that subsequent phases of this monitoring process—particularly technical assistance and followup with respect to State action on OE recommendations—have not been implemented. They said that even the initial visit to States by a team with diversified BOAE representation has been curtailed, primarily because of HEW's regionalization policy which has transferred monitoring functions from the central office to regional offices. They also cited travel restrictions and personnel ceilings as factors limiting BOAE's capability to carry out this responsibility. In early fiscal year 1975 there were 32 people at headquarters and 33 in regional offices assigned to vocational education.

CONCLUSIONS

Although the amount of State and local funding has increased and the numbers of persons receiving vocational education have grown, Federal assistance for vocational education has not fully achieved the catalytic effect envisioned by the Congress. OE has not identified ways in which this effect can be achieved and maximized, and lacking this information cannot provide adequate guidance to States to bring about more effective use of Federal funds. As a result, a large amount of Federal funds has been retained at the State level, and funds available at the local level in many instances have been used for existing activities rather than primarily to support new program initiatives.

OE has not held States accountable for performance against criteria which emphasize the role of Federal funds as change agent, and therefore cannot insure that informed judgments will be made as to where and how funds should be targeted. Without continuous surveillance in this regard, there is little assurance that the leverage of Federal aid will be maximized.

Although OE officials and State directors of vocational education have stressed that maintenance of ongoing programs is an acceptable use of Federal funds, the heavy emphasis which States have placed on maintaining existing programs has been detrimental to developing new initiatives which we believe the Congress also intended.
RECOMMENDATION TO THE SECRETARY OF HEW

The Secretary of HEW should

--Identify and accumulate data about strategies for providing vocational education that are catalytic and offer the greatest payoff and review the use of Federal funds to ensure that they serve the catalytic role intended by the Congress

AGENCY COMMENTS AND GAO EVALUATION

HEW stated that its current procedures give assurance that Federal funds are used as a catalyst, and only partially concurred with the recommendation (See app v)

HEW stated it would develop procedures for identifying, accumulating, and disseminating information about strategies which provide vocational education programs that are catalytic and offer the greatest payoff

HEW interpreted "greatest payoff" as meaning most cost effective. We believe VEA envisioned greatest payoff in terms of maximizing program impact through expenditure of Federal funds. Specifically, we mean greatest payoff in terms of (1) initiating new programs which would in turn be supported by State and local funds, resulting in increased State support for vocational education, (2) meeting changing national needs for skilled manpower, (3) increasing enrollments in vocational programs, and (4) providing more training options for individuals—particularly persons with special needs

We believe decisions about vocational programs should be made first on the basis of community and individual needs, and then on the basis of which mix of training resources can best provide that service. Cost becomes a consideration in determining which alternative training approach to use. Although it may be most cost effective to continue offering the same programs year after year, in our opinion that practice does not offer the greatest payoff when it does not address the most urgent individual and community priorities for skilled manpower

RECOMMENDATIONS TO THE CONGRESS

The Congress, in its deliberations on VEA, should consider

--Setting a limit on the amount of Federal funds that can be retained at the State level, as provided in other Federal education legislation, so that these funds can be made available for direct services to program participants at the local level

--Requiring States to use a portion of whatever Federal funds are retained at the State level to improve the planning process (see chapter 3)
—Requiring that Federal funds be used primarily to develop and improve programs and extend vocational opportunities by limiting the amount of Federal funds that can be used to maintain existing activities

—Adopting one or several options with regard to providing programs and services for the disadvantaged and handicapped, if the Congress believes these two groups should receive priority attention in the utilization of Federal funds. Two of these options are:

a) Requiring States to match Federal set-asides for disadvantaged and handicapped at the same level they are required to match regular part B funds (50-50), thereby insuring State and local involvement in and commitment to these efforts.

b) Increasing the percentage of the set-asides for the special need categories.
CHAPTER 3

HOW IS VOCATIONAL EDUCATION PLANNED?

Achievement of VEA objectives depends, to a large extent, on systematic, coordinated, and comprehensive planning at national, State, and local levels for the delivery of vocational education. Our review in seven States indicated that the actual planning process could be improved. We noted:

--Plans at State and local levels are prepared primarily to comply with Federal requirements, and are not used to provide direction to programs or to measure program impact.

--Needs of potential students and communities served by vocational education are not assessed on a systematic, ongoing basis.

--Organizational patterns at all levels fragment responsibility for vocational education and result in independent and isolated planning.

--Advisory council limitations lessen impact on improvement in the planning of programs to meet current and anticipated manpower needs.

--Data that would be helpful in planning is unavailable, inadequate, or unused.

Improved planning would better ensure that VEA funds are

--used in ways which have greatest payoff in maximizing program effectiveness (ch 2),

--directed toward comprehensive provision of services with minimum duplication and gaps (ch 3),

--distributed to areas of high need (ch 4),

--achieving optimal use of training resources (ch 5), and

--providing training that relates to job opportunities (ch 6).

STATE AND LOCAL PLANS REFLECT COMPLIANCE RATHER THAN PLANNING

VEA requires States to prepare a State plan, both long-range and annual, geared to meet the needs of potential students and geographic
areas. The act authorized use of part B funds for development of this plan. OE is required to review the State plan, and before approving it, to be satisfied that its provisions will be carried out in actual practice. States, in turn, must make specific assurances that LEA applications for Federal funds have met VEA requirements.

A 1974 National Advisory Council on Vocational Education summary of questionnaire responses from 46 State advisory councils on vocational education reported that the State planning process, by concentrating on meeting the literal requirements of the law, failed to fulfill its spirit. Both National and State Advisory Councils on Vocational Education have taken a position that State plans are prepared only for compliance with OE requirements in order to receive Federal funding. States do not use these plans for operational purposes and they do not measure progress against what is described in the plan.

State representatives said the State plan format and data required by OE do not constitute an effective tool for guiding performance. At least two States had instituted a separate planning system of their own, because they felt the data required by OE provided an inadequate mechanism for achieving comprehensive coordinated planning. LEAs queried about the State plan were unaware of it and had not contributed to its development.

OE officials in 10 regional offices are responsible for actual review of State plans. Regional officials told us they generally look upon their role as one of providing technical assistance and advice to States in developing their programs and assuring themselves that State plans contain all required provisions. They advised us that they place considerable reliance on State officials to develop, monitor, and evaluate their own programs and procedures, and to provide accurate and reliable feedback to OE. State plans seldom have been returned for substantive revision, and no State's funding has ever been withheld or terminated. According to OE regional vocational education officials, staffing limitations have kept them from independently verifying data provided or performing anything more than a superficial review of the provisions in the State plan.

State vocational education administrators told us they relied on LEA officials to determine local needs, establish local priorities, and plan and conduct their own programs. State officials said they performed little verification of the data submitted by LEAs and consequently were unable to insure that VEA objectives were being fulfilled at the local level. We noted that a 1971 report of the National Advisory Council on Vocational Education recommended categorical Federal funding for planning activities, emphasizing that such activities would be neglected at the State level unless supported by the Federal government and would be neglected at the local level unless supported by the State.
SYSTEMATIC ONGOING ASSESSMENT
OF NEEDS DOES NOT TAKE PLACE

VEA states that planning for vocational education should adequately consider the relative needs of potential students and the geographic areas to be served so that vocational education can be responsive to those needs. In reality, however, systematic ongoing assessment of national, State, and local needs has not taken place. The American Vocational Association, with 55,000 members—the largest professional organization for vocational educators—called attention to this deficiency by addressing its number one resolution for 1974 to "needs assessment and comprehensive planning."

OE officials told us OE has had no mechanism by which to identify needs on a national basis and has not attempted to set priorities for vocational education. OE officials said that no policy has existed to develop measurable objectives against which to assess progress and little guidance has been given to States to assist them in doing so. They advised us they have viewed VEA as a program which allows States to spend funds at their discretion, within the broad requirements of the act.

At the State level Federal funds are divided between secondary, postsecondary, and adult programs. The amount for each level generally has been determined by past practices and the particular influence of respective agencies. Relative need of population groups often has not been considered, nor has the relative need of respective communities. The House Committee on Education and Labor has expressed concern that sufficient resources be directed to areas of population concentration. We noted the following:

Nationwide, according to OE statistics, only 51 percent of Federal funds used for vocational education in fiscal year 1973 were directed to metropolitan areas where 69 percent of the nation's population resided in 1970 according to the 1970 Census. In one State we visited only 29 percent of Federal vocational funds were directed to metropolitan areas where 66 percent of the State's population resided.

The chairman of a State advisory council on vocational education in one State we visited told a congressional committee in July 1974 that "needs assessment is not performed in the State to determine the nature and extent of individual and community requirements for vocational education. State plans are developed around the amount of funds expected to be available, rather than on the basis of relative need. The failure to assess needs can be attributed to inadequate guidance from OE—particularly the regional office."
State vocational officials told us they rely on local vocational officials to determine local needs and establish local priorities. We observed that the organizational structure of vocational education at the State level often did not lend itself to assisting local communities in assessing their total needs. An array of specialists in traditional program categories (e.g., agriculture) was engaged in fragmented, specialized planning, which did not necessarily result in identification and prioritization of highest needs.

Local vocational officials informed us that they do not regularly survey their communities to determine the nature and extent of need for vocational education. They said their contacts with the business community were informal and infrequent—usually occurring when a school had to justify starting a particular course. An official of the largest employer in one metropolitan area told us that company had never been contacted by the city's schools in planning vocational education programs.

School officials told us that because of student demand for vocational training, they concentrated on providing programs for those who enrolled in vocational education, and did not make special provision to recruit those in other school programs or those who may have left school before acquiring sufficient skills for gainful employment. Community colleges and other postsecondary institutions in the States we visited usually imposed a minimum age requirement which in effect could preclude the dropout from enrolling. Congressional committees have called attention to this lack of attention to the needs of dropouts, which results in a lack of public training opportunities for this age group.

**MULTIPLE JURISDICTIONS OPERATE IN VIRTUAL ISOLATION**

Because vocational programs may be funded by Federal, State, and local sources, and different agencies may be responsible for administering separate funds, it is critically important that coordinated planning take place to insure comprehensive provision of services and effective use of funds. VEA requires that vocational programs be developed in consultation with representatives of the educational and training resources available to the area to be served. It also provides for cooperative arrangements with other agencies, organizations, and institutions concerned with manpower needs and job opportunities.

However, we observed minimal coordination in actuality at national, State, or local levels between organizational entities providing vocational services, and even less cooperative effort. Without such collaboration, there is little opportunity to improve the use of Federal funds or to insure that student and community needs are being met.
National level

Within HEW responsibility for administering programs related to occupational training is organizationally fragmented. Although the Education Amendments of 1972 charged the Secretary to "promote and encourage the coordination" of such programs administered within HEW and by other Federal agencies, there is little evidence that this has been achieved or that substantial progress has been made. We were told that HEW has not exercised leadership about cooperative action, and thus each organizational entity has continued to pursue its own effort, forfeiting advantages of joint planning and risking duplication and gaps.

Within OE through the years, vocational education has been characterized by a kind of insulated existence. The National Advisory Council on Vocational Education reported that this has resulted from the "second class" status of vocational education as reflected in traditional attitudes of universities and State agencies. Even congressional action in 1972 to place occupational education on an equal organizational footing with academic education has had limited impact on improving the quality of interaction between programs. For example,

OE's Deputy Commissioner for School Systems told us that OE-supported efforts in elementary and secondary education were not being encouraged to include understanding of and exposure to the world of work. He explained that Bureau of School Systems personnel feared the image of these programs would suffer if they were linked with concepts associated with vocational education.

The Bureau of Postsecondary Education, which administers the State Postsecondary Commissions authorized under the Education Amendments of 1972 to orchestrate funding for postsecondary education, has not insured that the composition of these commissions will be representative of all postsecondary interests. When OE finally activated these commissions in 1974, it decided not to issue regulations and has relied instead on interpretations by respective governors. We were told by vocational officials that these actions have failed to guarantee reasonable attention to the needs for vocational education.

Skills centers, operated for over a decade in the nation's major cities under the Manpower Development and Training Act (MDTA), 42 U.S.C. 2571-2628, have, according to an OE-contracted evaluation of that program, netted valuable lessons and ideas for improving occupational training—particularly for disadvantaged adults. Such practices have included flexible scheduling ("open-entry," "open-exit"), individualized instruction, and basic communication and computational skills related to occupational training needs. We were
told by OE officials and officials of other organizations involved in vocational education that lack of coordinated planning within BOAE has inhibited the use of these approaches to improve the delivery of vocational education.

The National Institute of Education (NIE) also supports projects in vocational education. When the Education Amendments of 1972 transferred the research function to NIE, authority was retained in OE for research and demonstration under VEA. Consequently, there is some overlap in missions, and lack of cooperative planning could result in duplication. For instance, NIE has contracted for studies related to manpower data without consulting with OE and without the knowledge that this area had been designated an OE research priority.

Other major programs geared toward preparing persons for employment—particularly for occupations in health, rehabilitation, community and welfare services—are administered by other agencies in HEW and no mechanism exists by which these programs plan cooperatively with BOAE.

Not only has there been a lack of coordination between related programs in HEW and OE, but there also has been little communication with other Federal agencies providing services related to vocational training. We were told by DOL officials, for instance, that there has been little attempt to synchronize OE vocational programs with DOL manpower efforts. At the regional level neither DOL nor HEW manpower officials reviewed or signed off on State vocational plans.

State level

Separate State agencies or divisions usually administer secondary, postsecondary, and adult education. In the States we visited, the preparation of the State vocational education plan gave little consideration to the overall delivery system for occupational preparation within the State. Instead, the development of the State plan was focused almost exclusively on vocational education activities directly controlled by the agencies administering VEA funds. We were told by school officials that lack of interaction and linkage between secondary and postsecondary jurisdictions was a fundamental obstacle to comprehensive coordinated planning of vocational education programs.

A single State agency, normally the one responsible only for secondary programs, generally prepared the State plan required by OE. This agency served as the conduit for part B funds, and OE transactions tended to be concentrated with that agency. OE had no assurance that coordinated planning actually had taken place in developing the plan, because OE's review of State plans did not include discussion with representatives of agencies other than that agency preparing the State plan.
We were told by some State program administrators that they had not participated in developing the required plan except to provide statistical information, such as number of students enrolled and dollars spent. This was particularly the case among postsecondary administrators. In some instances the objectives for which Federal funds were being used by one State agency were not the same as those listed in the State plan. In other cases little attempt had been made to integrate the separate organizational objectives for secondary, postsecondary, and adult activities to provide overall direction of effort. For example, the State advisory council in one State we visited had said:

"** the plan as it is presently written provides a poor foundation for the comprehensive state-wide planning process needed for improving and expanding vocational education as part of the total educational system **"

"** the 1973-74 ** State plan ** does not contain articulated or representative statewide priorities, goals, and objectives "

Division of responsibility for vocational training permitted both secondary and postsecondary sectors to plan and operate independently, with the community college sector usually providing only minimal input to the State plan submitted to OE. A HEW-funded management consultant study in one State reported that the program data used by the secondary and technical schools and community colleges differed significantly, causing considerable difficulty in consolidating information for program planning and evaluation.

We also were told by regional and State officials that the State manpower agency did not assist in preparing the State vocational plan, nor did it review that plan. Neither jurisdiction—vocational education or manpower—elicited comments from the other, although they both were providing training services for clientele in the same labor market area.

A July 1974 memorandum of agreement between DOL and HEW concerning the roles and responsibilities of HEW under the Comprehensive Employment and Training Act (CETA), Public Law 93-230, provided that HEW's regional offices will review and comment on prime sponsor plans. The functional statement delineating agency roles provided for regional level review of State agency plans in light of CETA prime sponsor plans. Questioned in fall 1974 about implications of CETA for vocational education, OE officials told us this relationship required clarification. They pointed out that CETA is administered by a different jurisdiction in HEW, and that limitations on comment time and staffing at the regional level precluded meaningful review of plans.

OE's Deputy Commissioner for Occupational and Adult Education told us that the Office of Management and Budget requires a statewide plan—
ing and development clearinghouse in each Governor's office to serve as a coordinating mechanism. Another BOAE official told us that implementation of this coordination effort, provided for under the Intergovernmental Cooperation Act (42 U.S.C. 4201), has varied widely from State to State. He said that requiring this unit's signoff on State plans for vocational education has had an impact in some States. We did not analyze the extent to which coordination among State agencies has been assisted through this device.

The lack of coordination between public agencies is compounded by the minimum consideration given to nonpublic training sources. Although VEA has required that the nonpublic sector be taken into account because it is so heavily involved in occupational training, OE officials told us they have not insisted that States and LEAs consider the ongoing or projected efforts of these sources before funding with VEA funds.

Local level

Comprehensive, coordinated planning, though most essential at the local level, often was absent. Organizational patterns fragmented responsibility for vocational education, resulting in independent and isolated planning. The following illustrate the problem:

-- School district officials in one city we visited told us that the district maintained little formalized communication with the other 32 school districts and 6 community colleges in that metropolitan area. We were told there was no working mechanism to coordinate vocational programs or use of training resources among these districts.

-- In one State each community college district planned its own programs, and there was no statewide system to assure that Federal VEA funds would not be used to support over-training.

Such planning in isolation can result in a large number of people being trained for specific jobs for which labor market demand has declined.

We did note that in a few instances some attempt had been made to reduce fragmented and isolated planning of vocational education.

-- In two States some school districts had organized into joint vocational districts to provide a larger range of course options to secondary students by better using their resources.

-- In one State each community college was required to advise other community colleges and obtain State approval before initiating a new course so that unnecessary program duplication might be avoided.
Although VEA requires that local plans be related to the appropriate comprehensive area manpower plan, in the States we visited there was little evidence that this was taken into consideration in developing or approving local vocational education plans. In fact, the need for coordination was more often recognized by manpower officials than by vocational educators. For instance, the director of a bicoounty manpower consortium in one State told us:

"It is pure folly to plan manpower programs without taking other educational systems into account. Both manpower and vocational education programs are rationalized around the same statistics and neither coordinate with each other."

**ADVISORY COUNCIL EVALUATIONS ARE LIMITED**

An independent system of national and State advisory councils was made part of VEA in 1968 to perform an oversight role. These councils have participated, in varying degrees, in evaluating vocational education programs, but have not served in any primary capacity in planning for the comprehensive provision of vocational education services.

The National Advisory Council has acted in an advocacy role, particularly through publication of a series of reports addressing improvements needed in administration and delivery of vocational education. According to the executive director, the Council has experienced only limited success in convincing OE to take action on its recommendations.

State advisory councils, financed at about $3 million annually, were to be comprised of persons representative of or familiar with needs for vocational education. OE statistics show that not all State councils have been fully representative. Generally, educators have predominated. In 1974 labor and management representatives accounted for 16 percent of the membership and the general public for 19 percent. Students, who in the same year made up less than 2 percent, were included in membership in only 14 States and the District of Columbia.

In the States we visited, State councils were aware of and had reported on, many significant problems in vocational education. However, most were not satisfied with the degree of attention State agencies were giving to solution of these problems. OE's Deputy Commissioner for Occupational and Adult Education, when he addressed a national gathering of State council representatives in 1972, characterized their evaluations as "imprecise, unscientific, invalid, and lacking a necessary amount of rigor."

Although State councils are responsible under VEA for advising on development and administration of the State plan, in most States they had not been integrated into the planning process. Rather, their role has
been limited to reviewing the plan after it has been developed by the State agency responsible. The National Advisory Council's summary of 1974 questionnaire responses from State councils indicated that these Councils believe they should be involved earlier and more significantly in the planning process.

**Local advisory committees**

Local communities have been encouraged to make use of advisory committees in planning vocational education programs, but neither OE nor State agencies have provided the necessary guidance to LEAs regarding the appropriate role and function for advisory committees.

We were told by an OE official that local advisory committees are established as a result of State law, school district policy, individual school action, or initiative on the part of teachers. In the communities we visited, the degree of involvement and the effectiveness of advisory groups varied greatly, as summarized below.

Appointment to advisory committees generally was based on individual teacher invitation, and membership did not necessarily reflect a balance of employers. Committee functions depended primarily upon the role of the committee perceived by the educational agency or instructor. Committee meetings, usually infrequent, resulted most often from teacher initiative. Each committee primarily acted in an advisory capacity to only one program or subject area in a particular school. Frequently schools offering the same courses each had their own advisory committee, and they were not necessarily in communication.

Generally there was no overall local advisory committee to reconcile conflicting or competing interests between program areas and educational levels. For instance:

In one State we visited the legislative analyst had reported that many district advisory committees were merely paper committees that rarely met to advise school districts on vocational programs. The report concluded that "A larger planning base * * * would be more economical and bring together greater planning resources while still allowing for 'local' influence in plan development."

Because of committee inadequacies, employer needs have not necessarily received consideration in decisionmaking about vocational education. Too heavy a reliance on inadequately organized and functioning committees to furnish information about manpower requirements has in some instances resulted in LEAs continuing to provide programs for which there was insufficient community need. For example.
We were told that a community college operated a photography program that had not placed a graduate in a full-time position for 2 years. Members of the local advisory committee advised us that they were unaware of any job opportunities in the community for graduates of this course, yet they had not recommended to the college that the program be reduced or terminated. The chairman of the college's graphic arts division, in which the photography program was located, told us the program should be ongoing because it was the best photography program available in a multi-State area.

We did observe an instance in which an effective method had been developed to obtain, enhance, and coordinate the work of advisory committees.

In one city over 300 persons representing business and labor served as members of advisory committees to 27 different course areas which enrolled about 2,900 students in one of the school district's high school facilities. To marshall support of the city's employers, the school district had contracted with the Chamber of Commerce. The person enlisted by the Chamber, a management specialist from a major company with contacts throughout the business community, acted as liaison between the committees and the school district.

The committee coordinator told us that most committees met at least once a month, some more frequently. He said they participated in job market analysis, helped formulate curriculum, identified sources of equipment and supplies, developed work experience opportunities for students, and assisted in placement of graduates. He noted that the other 22 high schools in the district did not have such advisory committees.

**DATA FOR EVALUATION IS INADEQUATE OR UNUSED**

In addition to the evaluation responsibilities assigned to National and State advisory councils on vocational education, VEA funds are available to SEAs and LEAs for periodic evaluation of their own programs.

An OE official told us that ideally the evaluation process for vocational education should provide data needed for planning, showing how resources should be distributed, what type of training should be offered, and which training strategies should be used. He advised us that evaluation data should indicate whether programs are helping reach the desired goals and objectives, that otherwise agencies have no means of measuring their progress.

OE regional officials told us there was little or no evaluation of State programs as they actually operated and that OE therefore had little
assurance that policies and procedures delineated in OE-approved State plans were carried out.

The States we visited had some form of State evaluation of vocational programs, but it generally was not systematic. For example,

Officials in one State advised us that the total vocational program was reviewed in only 5 or 6 of the 227 districts offering programs in fiscal year 1973. Some other evaluations were made, but we were told these were limited to specific areas, e.g., agriculture or home economics, rather than an assessment of the entire district program. Officials said they reviewed special programs if there were suspected problems or if they happened to be traveling in the vicinity.

Inadequate data

The Congress has observed repeatedly that information about vocational education is inadequate for the purpose of formulating public policy and ascertaining whether current programs are working effectively. In our 1972 report on vocational education, we described problems associated with incomplete and inaccurate data and recommended steps for HEW to take to improve management information systems. Yet, many of these problems still persist.

States administering programs authorized under VEA generally gather only that quantitative information required by OE—statewide expenditures and numbers of persons enrolled by level (secondary, post-secondary, adult) and instructional category (agriculture, health, etc). Data collected to satisfy OE requirements do not contain information on extent and type of need for vocational education on the part of individuals served or potential participants, nature and level of actual instructional programs, costs of specific programs, or results of programs in any terms other than initial placement. For instance, OE has no system, such as one using sampling technique, for determining the extent to which State and local efforts actually had impacted on the handicapped, the disadvantaged, or those in economically depressed areas.

Although State directors of vocational education have sought OE leadership with regard to developing information necessary for planning and evaluating vocational education, OE has done little to focus or coordinate efforts of individual States or agencies. As a result, duplication of effort has occurred and comparability of data still is lacking. Costly independent systems have been planned and developed for example.

In one State we visited, the SEA had developed a management information system solely for collecting and reporting data concerning
vocational education. In operation since 1970, this system provided all participating institutions with information relating their performance to basic objectives, such as growth in enrollment and curriculum offerings, increased job placement, and reduced cost. Reportedly, the annual operating cost is about $.5 million. A State official indicated that this system could be used as a basic model by other States.

Underused data

Not only is there an absence or inadequacy of data, but there is a problem of not using the data that is available. We observed that even when data had been collected and compiled, it generally was not used at the national, regional, State, or local level for evaluating or improving vocational programs. For example

--Annual statistical reports submitted by States to OE demonstrate wide variances between such ratios as enrollment to expenditure, enrollment to completion, and completion to placement in the field for which trained. Yet OE has taken little action to analyze these situations to find out whether some corrective actions might be necessary.

--Several State plans we reviewed contained provisions for training persons in occupational categories which, according to manpower projections in the state plan, did not show sufficient job openings. OE regional officials told us that oversupply in some areas and undersupply in others was not sufficient to question a State plan.

--One State we visited had instituted a questionnaire followup system which obtained feedback at a high response rate from graduates of postsecondary vocational programs and their employers. The follow-up process was contracted to a university, but local and State vocational officials did not use this information to improve their programs. Our perusal of student responses suggested that data was pertinent to provisions in the State plan, because it related to particular occupational categories for which overtraining was apparent.

CONCLUSION

Planning of vocational programs should be improved at national, State, and local level. Greater attention to systematic, coordinated, and comprehensive planning would improve the use of Federal funds and better insure that vocational education is provided in a manner that best serves student and community needs.
RECOMMENDATIONS TO THE SECRETARY OF HEW

The Secretary of HEW should

--Develop with States an improved approach to planning which will better meet State needs as well as provide information necessary to monitor and evaluate adequately Federal program expenditures

--Expand management evaluations of State and local vocational education programs supported by Federal funds

--Expand efforts to enforce the requirement that all LEAs and SEAs, in planning vocational programs, identify the needs of public and private business, industry, labor, and students and that those needs be considered the primary basis for decisionmaking about provision of vocational services supported by VEA

--Expand efforts to have SEAs and LEAs establish working partnerships among all institutions providing occupational training at all levels—secondary, postsecondary, adult

--Increase efforts in the development of vocational information systems that will provide data for comparative analysis, and continuously review use of that data to improve vocational programs

--Clarify the roles of various organizational entities within HEW involved in occupational training and implement some mechanism by which these jurisdictions can engage in coordinated, comprehensive planning

AGENCY COMMENTS AND GAO EVALUATION

HEW concurred with our recommendations and stated it had taken or planned to take the following actions to implement them (See app V)

HEW will

--Propose legislation which emphasizes the continued need for improved long-range planning

--Attempt to expand its management evaluation at State and local levels. HEW emphasized, however, that the law places responsibility for evaluation on the National Advisory Council on Vocational Education, the State Advisory Councils, and State Boards of Vocational Education. Although we recognize that these groups do have mandated evaluation roles, the law also places responsibility on the Commissioner of Education as the administering authority. We believe that OE needs to conduct management evaluations periodically at State and local levels to assess
the effectiveness of States' evaluation processes and to in-
sure that programs are implemented in accordance with the law's
intent. It is our opinion that technical assistance visits by
regional office representatives to States at State invitation
cannot sufficiently discharge this responsibility. Such visits
may be helpful in assisting States to carry out recommendations
resulting from management evaluations. But we believe OE head-
quar ters personnel need to be conversant with problems and
progress in all States so that they can fulfill their plan-
ning and policy responsibilities. Conversely, national per-
spective best can be brought to bear on State programs through
persons who have direct familiarity with the broader scene. Both
headquarters and regional personnel, therefore, should be mem-
ers of management evaluation teams.

--Assist States, through regularly scheduled meetings and work-
shops, to strengthen and improve comprehensive State and
local planning.

--Encourage SEAs to assist LEAs in developing working partner-
ships among local institutions which provide occupational
training.

--Provide leadership for improved reporting through its annual
training sessions for regional and State personnel responsible
for reporting. It also will address, through a research priority
area entitled "Administration of Vocational Education at the
State Level," the development of vocational information systems
that will provide data susceptible of comparative analysis.
While these efforts should result in better information sys-
tems, we believe HFW should take steps to insure that data
already available actually will be used to improve vocational
programs.

--Institute an intradepartmental coordinating council on occupa-
tional education, presided over by the Assistant Secretary for
Education, which will meet monthly to discuss mutual interests.

RECOMMENDATION TO THE CONGRESS

In its deliberations about VEA, the Congress should consider

--Requiring the Secretaries of HEW and DOL to establish a process
for planning which would relate vocational education to the
State Postsecondary Commissions authorized by the Education
Amendments of 1972 and CETA to insure that education and manpower
efforts will be synchronized for students at all levels—secondary, postsecondary, adult.
CHAPTER 4

HOW ARE FEDERAL VOCATIONAL EDUCATIONAL FUNDS DISTRIBUTED?

Although Federal vocational education funds are not distributed to States on the basis of identified need, VEA requires that States adhere to specific criteria in distributing part B funds to insure that the most pressing needs for vocational education will be addressed within respective States.

States have received inadequate guidance from OE on the policies and procedures to follow in allocating funds to LEAs to maximize program effectiveness. As a result, Federal funds have been distributed by the States in a variety of ways, many of which do not necessarily result in the funds being targeted to areas of highest need or to areas maximizing program impact. Some major practices noted were:

--Making funds available to all LEAs within the State, rather than concentrating funds in selected LEAs with high needs

--Making funds available to LEAs without adequately identifying the relative need in the LEA for the program

--Making funds available without considering ability of LEAs to provide their own resources

VEA SPECIFIES CRITERIA FOR DISTRIBUTION OF PART B FUNDS

The Congress provided in VEA that any State wanting to receive Federal funds must describe in detail in its State plan the policies and procedures by which the State will distribute funds among LEAs. To insure that Federal money would go to areas of high need, the Congress required that States give due consideration to four basic criteria when considering the relative needs of LEAs for Federal vocational education funds. OE's regulations reiterate those criteria, as follows:

1. Manpower needs and job opportunities

   --Current manpower needs and job opportunities
   --Projected manpower needs and job opportunities
   --New and emerging manpower needs and job opportunities at local, State, and national levels
2 Differences in vocational education needs

--Persons in high school
--Persons who have completed or left high school and who are available for study in preparation for entering the labor market
--Persons who have already entered the labor market and who need training or retraining to achieve stability or advancement in employment
--Disadvantaged persons
--Handicapped persons
--Additional financial burdens of LEAs caused by the necessity of providing students with special education programs and services

3 Relative ability to provide resources

--Wealth of areas or communities served by LEAs within the State in relation to number of students each is educating
--Per capita income of areas served by LEAs within the State
--Areas designated as economically depressed or high unemployment shall be given priority

4 Relative costs of programs, services, and activities

--Differences in cost to LEAs of materials and services due to variations in price and wage levels or other economic conditions existing in areas served
--Differences in excess costs to LEAs due to need for supplying special services not usually part of cost of education provided by other LEAs in the State

STATE DISTRIBUTION PRACTICES

OE regulations state that no funds made available to States shall be allocated to LEAs by any method or practice which fails to take into consideration the four basic criteria. However, there is no guidance with respect to the relative importance of these criteria. For instance, there is no indication that consideration of manpower needs and job opportunities might be more critical than consideration of the other criteria. The regulations merely provide that the State plans include a description of how the States weigh these criteria in distributing part B funds.

OE regional officials said they received little guidance or direction from headquarters, and that OE guidance has not been specifically directed to assist States in developing methods and procedures for distributing resources to meet State needs, instead, OE has tended to look upon this
area as a State responsibility. We were told that OE assistance to States generally had been limited to helping States develop State plans to comply with statutory requirements.

Although charged with the responsibility, regional officials generally do not perform a detailed review of the State's program and procedures to ensure that they reflect the intent of VEA. Reports of State advisory councils on vocational education also have generally not evaluated the fund distribution practices.

In the absence of specific guidance from OE on policies and procedures to follow in allocating part B funds for maximizing program effectiveness, States have established their own criteria and methods for distributing funds. Each of the seven State plans we reviewed included assurances that Federal part B funds would be distributed in accordance with the four basic criteria. However, these States varied considerably in their interpretation of the criteria and the relative weight assigned.

After allocating an amount for retention at the State level—primarily for administrative costs, as described in chapter 2—Federal part B funds generally were made available by the State to LEAs through one of several methods. Distribution methods ran the gamut from complicated mathematical formulas and weighted procedures to competitive project selection and administrative discretion.

For the most part, the distribution process provided little assurance that Federal funds were targeted to areas of highest need or to areas maximizing program impact. In some instances only one of the four VEA criteria was considered in the actual distribution of funds. Generally, inadequate or no consideration was given to manpower needs and job opportunities. Discussed below are some of the practices followed in the distribution of specific funds.

Funds are distributed to all LEAs rather than concentrating funds in selected LEAs with high needs.

VEA requires that, in distributing funds, due consideration be given to relative needs in geographic areas of the State. In all States we visited, however, a large portion of part B funds was distributed widely among LEAs rather than concentrating funds in selected LEAs with high needs. This has resulted in funds being spread so thin that there was little funding available to have an impact or in some cases even to initiate any activity. In addition, insufficient priority has been given to LEAs with high needs. Some examples follow.
--In one State we were told by the State director of vocational education that the system for distributing funds to all LEAs sometimes resulted in LEAs not having enough handicapped and disadvantaged money to support special programs and therefore the districts returned their set-aside funds. From fiscal year 1971 through fiscal year 1973, $558,000 in set-aside funds were returned. Nineteen percent of the secondary school districts in this State released and returned their handicapped funds in fiscal year 1973—an increase over the previous year. The average amount returned was $770.

--In another State we visited some school district officials had considered the Federal funds they were allocated insignificant and found it difficult to augment the Federal moneys with sufficient local funds to conduct meaningful or comprehensive programs. Acting to remedy the situation, some school districts organized into area planning units so that the area units could receive the combined funding for the participating districts.

--In a third State, LEAs received Federal funds through a formula which reimbursed them for certain expenditures, and each LEA's reimbursement was based on the priority assigned to that LEA. The difference in reimbursement rate between the LEAs assigned a high priority and those assigned a low priority was small in most reimbursement categories. State officials explained that it was their practice to maintain the level of funding of LEAs before the Vocational Education Amendments of 1968, and that there was not enough Federal money to permit a greater difference between reimbursement rates. In fiscal year 1972, 618 of the State's 620 school districts received part B funds.

--In another State reimbursement rates for specific expenditures varied little and did not appear to be closely related to school district relative need. In the county we visited the reimbursement rate for equipment purchases and adult programs was uniform for almost all districts, even though the assessed valuation for each student in average daily attendance varied widely between districts. The wealthiest district in the county, with an assessed valuation of $14,037 for each student, and the poorest district, with an assessed valuation of $4,338 for each student, both were reimbursed at the same rate.

State directors of vocational education told us that they viewed the legislation in its broadest sense—providing vocational training in all communities. They said they believed VEA intended that Federal funds be widely distributed throughout the State, rather than concentrated to meet needs in particular areas.
Distributing funds on the basis of student enrollment

Some of the States we visited allocated all or part of their Federal part B funds solely on the basis of student enrollment. For example:

--One State distributed 100 percent of its part B funds in fiscal year 1973 for regular postsecondary programs on the basis of enrollment. The four criteria mandated in VEA were not specifically taken into account. We were told by the vocational education program director for the State community colleges that the criteria established in the Vocational Education Amendments of 1968 had not altered the allocation process.

--In another State where the formula for allocating part B funds both to LEAs and community colleges was based primarily on the district's total enrollment, every district was entitled to Federal funds. A State community college administrator told us the factor of program growth was not in the formula, and that as a result, those districts increasing their academic enrollments would be allocated more vocational funds even though they may have had limited vocational program growth.

Program reviews conducted by OE headquarters and regional officials in 1973 and 1974 indicated that this State's allocation system based primarily on student enrollment did not provide adequate incentive for LEAs to improve and expand vocational programs. A regional OE administrator told us that the formula in this State did not reflect VEA's catalytic intent, and the State director of vocational education said the State had no assurance that LEAs were using funds for this purpose. Regional and State officials said districts were using funds as basic support for their existing vocational programs.

Funds are distributed to LEAs without adequately identifying relative needs among LEAs.

Contrary to VEA criteria, distribution of part B funds in the States we visited in most instances was not based on the identified needs of one district in relation to the needs of other districts for specific vocational education programs. For example:

Under the formula used by one State for allocating regular part B funds to secondary schools, heaviest emphasis was placed on types of vocational staffing in a district with little emphasis on need. Regardless of the district's particular need, less than 30 percent of its potential allocation was based on this factor.
In fact, all districts were considered equal. Consequently, secondary school districts with high needs could receive less Federal funds than districts with low needs which had placed heavy emphasis on staffing.

Distributing disadvantaged and handicapped funds without identifying need

VEA and OE regulations require that States, in distributing part B funds, give consideration to the relative vocational education needs of all population groups within the State, particularly disadvantaged and handicapped persons. However, most States we visited had not adequately identified and considered the relative need for special services for disadvantaged and handicapped students.

--In one State the distribution system, based primarily on LEA enrollment, gave no consideration to characteristics of the population in a school district or to a district's need for disadvantaged and handicapped programs relative to the need in other school districts. Instead, each LEA was directed to spend 15 percent of its total part B entitlement for disadvantaged and 10 percent for handicapped. Consequently, a district considered wealthy was entitled to disadvantaged and handicapped funds even though the need for these funds, according to a responsible State education official, was not as great as the needs in other less wealthy communities.

In a 1973 program review of that State, OE regional officials expressed concern about allocation of handicapped and disadvantaged funds on the basis of such an entitlement system and suggested to the State that allocation on a project basis would better use those funds in providing special services. At the time of our review, however, the State still had taken no action to alter its basis for distribution of these funds.

--In another State the distribution formula for disadvantaged and handicapped moneys specified in the State plan was not being followed. Funds were distributed to area planning units on the basis of the merit of individual project applications even though the State plan said moneys would be distributed according to relative need. A specific area planning unit's needs in relation to the needs of other planning units throughout the State were not determined. Consequently, the State had no assurance that part B funds for the disadvantaged and handicapped were concentrated in LEAs with highest needs.
--In a third State, the State plan considered handicapped persons equally distributed among the population, although an official of OE's Bureau of Education for the Handicapped said that such an assumption is invalid. No specific consideration was given, therefore, to the number of handicapped in a district in the mathematical formula used for allocating Federal funds.

**Distributing funds to existing projects without regard to areas with no projects**

Some States have distributed part B funds on the basis of approved existing vocational education projects, thereby bypassing those LEAs which needed Federal vocational education funds but had no approved projects. For example,

--In one State we visited, the formula used for distributing funds to secondary schools awarded points to those districts with vocational programs for handicapped and disadvantaged persons but did not consider districts without such programs. In distributing regular part B funds for secondary programs this State also assigned the greatest weight to existing programs and services.

--In another State, many LEAs did not have enough State-approved vocational programs to claim funds to which they were entitled under the distribution formula in the State plan. Therefore, the actual expenditure of Federal part B funds in these LEAs differed significantly from the formula allocation. For example, an eight-county rural area located in the poorest region in the State, in terms of both per capita income and taxable wealth for each student, actually received substantially less part B funds than it was entitled to receive under the distribution formula. At the same time, many LEAs located in more affluent areas of the State received more Federal part B funds for their vocational education programs than they were entitled to. State officials told us that making successful application for funding depended to a large extent on local initiative, but that the State was attempting to provide technical assistance.

**Funds are distributed without considering relative ability of LEAs to provide their own resources**

VEA requires that States, in distributing Federal funds, give due consideration to the relative ability of LEAs to provide the resources necessary to meet their vocational education needs. Consideration of this criteria is very important if LEAs with the greatest financial needs are to be identified and Federal funds distributed accordingly.
In one State we visited, the relative ability of LEAs to provide resources was not a factor considered in the formula for distribution of Federal funds. Several States did not adequately consider this criteria. For example:

---One State used several questionable factors, such as "market valuation per school enrollee" and "effective buying income per household" to measure the relative ability to provide resources. "Market valuation per school enrollee," however, did not recognize variances in property assessments between counties within the State, and "effective buying income per household" was based on countywide statistics, resulting in two or more LEAs within the same county receiving equal consideration even though the effective buying income per household might be significantly different. The factor for economically depressed areas applied equally to LEAs located within the Appalachian area, but it did not apply to those located outside this area. Thus, a relatively wealthy school district located in the Appalachian area received more favorable consideration than did a school district located in an economically depressed area outside of Appalachia.

---In a second State, the ratio of the amount of State funds allotted to an LEA to total State funds allotted to all LEAs was used as the measure of relative ability of LEAs to provide resources. This ratio did not fully recognize large differences in taxable wealth among LEAs throughout the State, which ranged from a high of about $104,000 for each student to a low of about $9,000 for each student. Distribution of Federal funds on such a basis did not insure that the greater need of poorer districts would be taken into account.

---A third State merged most of its Federal vocational funds with its basic State aid formula, which has been the subject of several court suits because of the alleged discriminatory effect on minorities, the poor, and low-wealth school districts. One factor used in distribution of State funds to secondary schools was assessed property valuations, determined by using market values of property. We were told that market values were not uniformly derived, and that assessed valuations were based on nonuniform percentages and nonuniform tax rates.

Distributing funds on reimbursement basis presents difficulties for LEAs with scarce cash resources.

Most States we reviewed followed the practice of distributing Federal funds by reimbursing LEAs for vocational education costs already incurred.
OE said this was general practice nationwide, although some other Federal education programs were operated on a current-funding basis. Reimbursement practices could preclude LEAs with scarce cash resources from participation. For example:

In one State we visited, LEAs were not reimbursed for certain vocational education expenses until several months after the close of the school year. Therefore, LEAs had to provide their own funds to pay for vocational education program costs as they were incurred. School officials in that State said this reimbursement policy caused cash-flow problems and required districts to borrow funds to operate programs.

OE said the delayed reimbursement practice by States may have (1) discouraged some LEAs with scarce cash resources from providing vocational education programs, (2) limited offerings to less expensive courses, or (3) restricted the number of participants. OE officials in finance management indicated that their efforts to assist selected States in making their finance systems more responsive to local needs has met with mixed results.

State directors complained that part of their problem in getting funds to LEAs was caused by late appropriations and OE delays in providing allocation information. OE officials advised us, however, that lack of specificity about Federal funds in any fiscal year should not constitute a real problem for States because (1) the level of Federal appropriations for vocational education has never decreased, (2) under continuing resolutions States can spend at the same level as the previous fiscal year, (3) States can use their unexpended funds from the previous fiscal year, and (4) States can spend State and local matching funds first.

CONCLUSIONS

Procedures by which States have distributed Federal part B funds could be improved to better insure that these funds actually are targeted to areas of highest need. Adequate consideration has not been given to the law's criteria for fund distribution. Funds have not necessarily been allocated on the basis of manpower needs and job opportunities, differences in vocational education needs, relative ability to provide resources, or relative costs of programs (see ch. 3), but generally have been made available to all LEAs.

OE has not provided States adequate guidance concerning procedures for distributing funds, nor has OE routinely monitored State distribution practices. OE has tended to accept statements of assurance in State plans that States will distribute funds according to VEA's criteria. As a
result, OE has little or no assurance that funds provided to States actually are targeted to areas of highest need or to areas maximizing program impact.

RECOMMENDATIONS TO THE SECRETARY OF HEW

The Secretary of HEW should

--Analyze actual State practices in distribution of Federal funds to determine consistency with the law's criteria

--Improve technical assistance to States to help them in identifying, developing, and applying appropriate data which will adequately consider each criteria in the law

--Perform follow-up reviews to insure that States improve their distribution procedures so that Federal funds can be better targeted to meet needs defined in the law

AGENCY COMMENTS AND GAO EVALUATION

HEW generally concurred with our recommendations and stated it had taken or planned to take actions to implement them (See app V)

HEW will

--Establish procedures for coordinating OE regional program officers' reviews of fund distribution practices with the HEW Audit Agency to determine the States' effectiveness in actually meeting the varying needs of LEAs. Although HEW stated that the procedures described in State Plans currently are reviewed to insure that Federal funds are to be distributed in accordance with the criteria in the law, our report demonstrates that the present review does not adequately address this area

--Expand the guidance provided to the States to help them better identify, develop, and apply data pertinent to each of the law's criteria governing distribution of funds, and, if staff resources permit, work with the regional offices to enhance their capability to assist States

--Direct regional offices to provide technical assistance and perform followup reviews in the States to assist them in improving their distribution procedures
CHAPTER 5

HOW ARE TRAINING RESOURCES USED?

To effectively respond to the steadily increasing need for vocational training, maximum consideration must be given to the use of all available training resources in the community. Although we observed several instances in which local officials had expanded the range of vocational offerings by using a variety of community-based facilities, in the States we visited vocational education authorities often had not made full use of existing resources. Frequently they had not explored possibilities of using either other public school facilities, federally funded manpower skills centers, military installations, proprietary schools, or employer sites to expand or strengthen vocational program offerings. Several factors accounted for underuse or nonuse:

--In planning programs school officials frequently have considered only those facilities under their own control.

--Training resources have not been inventoried to determine what was available.

--Costs of training have not been adequately determined so that the most cost-effective delivery system could be adopted.

--Delivery of training has been restricted to traditional course, time, and facility usage patterns.

--Construction of new school facilities has been favored.

--Transportation has not been provided as a means of linking students with training available in a variety of facilities.

--Equipment and supplies often have not been acquired from government sources or solicited from private sources.

Improved use of available training resources would contribute to assuring that:

--The Nation's need for skilled manpower would be met.

--More persons who need training would be able to participate.

--More types of training options would be available.

--Duplication and gaps in the types of training offered would be avoided.

--Training would not be more costly than it should be.
VEA SUPPORTS MAXIMUM USE OF TRAINING RESOURCES IN THE COMMUNITY

The Congress, in enacting VEA, recognized the need for expanding vocational education capability. In view of existing Federal budget constraints, achievement of the goal—ready access to appropriate vocational training or retraining for persons of all ages in all communities—requires that adequate consideration and use be made of the many training resources (facilities, equipment, personnel) already in place throughout the Nation. The act specifically provides for:

"* * * cooperative arrangements with other agencies, organizations, and institutions concerned with manpower needs and job opportunities, such as institutions of higher education, and model city, business, labor, and community action organizations "

"* * * arrangements with private vocational training institutions where such private institutions can make a significant contribution to attaining the objectives of the State plan, and can provide substantially equivalent training at a lesser cost, or can provide equipment or services not available in public institutions * * *"

In recent years, competition for available funds—and the unlikelihood of significantly additional funding—have made all the more imperative full-scale cooperative efforts on the part of those charged with training. VEA stipulates that applications for Federal funds from LEAs are to be "* * * developed in consultation with representatives of the educational and training resources available in the area to be served * * *" States are required to follow policies and procedures to assure that LEA applications do, in fact, reflect implementation of these provisions.

FACTORS LIMITING USE OF EXISTING RESOURCES

Despite the fact that State plans are to include a statement assuring that LEA applications for Federal funds take into account the range of training resources available in their respective communities, neither OE nor the States had verified the extent of actual involvement of sources outside the respective public school systems. Further, the States we visited had not provided LEAs with the necessary criteria for improving vocational training opportunities through greater use of resources controlled by others. There was no assurance that programs described in LEA applications would result in the most cost-effective training.

Frequently no consideration had been given at the State or local level to shared use of public training facilities—secondary schools, community colleges, vocational-technical schools—or to cooperative arrangements with other agencies, organizations, and institutions despite
numerous indications that more vocational programs could have been
offered and that vocational education could have been delivered more
economically and efficiently through better use. We were told repeatedly
that no procedures had been established to develop relationships with
other entities offering vocational training, either governmental or
private, to address joint use.

Following are illustrations of some problems and attitudes prevalent
in the vocational education field which have limited the use of existing
facilities. Several examples we observed suggest that collaboration is
not only desirable but also achievable.

Schools only consider
their own facilities

Only marginal interaction was apparent among schools and between
schools and other training resources in most of the communities we vis-
ited. Generally, in planning program offerings public schools did not
consider training resources which were not under their direct control.
In most instances, consideration was only given to the facilities within
a single school—whether it was secondary or postsecondary.

Some States approved local applications without verifying the
nature and level of collaborative action cited by LEAs. In some cases,
we observed that the State did not actually require any statement from
the LEA which showed that representatives from other educational or
training resources in the area had been consulted or that any collabor-
ative effort had been made. As a result, there was no assurance that the
most beneficial utilization pattern would be implemented, and vocational
funds were used to duplicate programs and activities already underway
under the auspices of other training entities, instead of helping to fill
gaps in needed program offerings.

Secondary schools

Vocational opportunities in secondary schools generally have been
limited to traditional program offerings, such as typing, home economics,
agriculture, and retail sales. However, we observed that several
educational authorities had taken steps to enlarge the scope of secondary
programs.

—Two States we visited had established secondary vocational centers
by pooling their resources to offer a broader range of vocational
courses. In one State we were told 47 centers served half the
State's 436 school districts. In another State we were told
centers were available in 25 of the State's 58 joint vocational
districts.
---A metropolitan area in a fourth State decided to make better use of existing training facilities. The city and county, using transportation and agreements between school districts, community college districts, employers, and military installations, provided vocational opportunities to high school students for training in occupational fields at whichever facility was best suited to that training.

Community colleges

A goal of community colleges is to serve the needs of the community in which they are located. Yet, in most States there generally exists no mechanism or incentive for community colleges to engage in cooperative arrangements with other education institutions in their service area. Even in areas with several community colleges, each college tends to operate autonomously without regard to advantages which might accrue to students, community, or college through collaboration. At several community colleges we visited, officials said that facilities were not fully used and that there were opportunities for increased vocational training. In some cases, existing facilities could have been used to a much greater degree during the regular school day.

A spokesman for the American Association of Community and Junior Colleges said the Association had encouraged community colleges to make their facilities available—particularly in the afternoon when there was little activity and expensive labs and equipment were standing idle—but we were told examples of such sharing were exceptions. The one such example we observed is described below.

One State's education code provided for concurrent enrollment of students in secondary schools and community colleges, with students obtaining either high school or college credit for courses taken. In one city we visited in this State about 600 high school students annually enrolled in specialized vocational-technical courses at community colleges. Not all course offerings were available, however, since admittance of high school students was on a space-available basis.

One incentive for secondary schools and community colleges to participate in this program was the reimbursement received from the State on the basis of average daily attendance of students. A community college was credited with units of average daily attendance attributable to a high school student's hourly attendance, while the high school continued to receive State reimbursement for the same student if the student attended a minimum day (three hours). Because each facility earned State funds with the same student, the overall cost to the State was increased, but
this approach probably was more cost-effective than trying to provide the extensive range of vocational course offerings in each facility, particularly since the funds remained available for educational purposes.

Movement of high school students to community colleges programs did expand vocational opportunities available to high school students. They could receive training in technical areas not available at the high school level, such as aircraft mechanics, dental technology, cosmetology, criminal justice, plastics, fire science, technical illustration, and motorcycle mechanics.

We noted considerable variance in the degree to which these opportunities had been recognized by individual secondary schools in the community. For example, one high school with over 90 percent minority enrollment and classified as a disadvantaged school because of its high concentration of low-income students, had no students enrolled in community college programs during the 1973 fall semester, even though the school had limited vocational training options available. In addition, other high schools located in proximity to community colleges were making only minimal use of available options.

Vocational-technical institutes

Area vocational-technical institutes represent a third major delivery system for public vocational education. Since VEA's enactment in 1963 and its provision for Federal construction support, OE told us the number of these area schools has increased from 405 to 2,148.

All States have spent Federal vocational funds at the secondary level. Nationwide about 23 percent of Federal part B funds have been spent annually at the postsecondary level since fiscal year 1970. Almost all States each year have spent at least 15 percent (See app III B). Three of the States we visited directed most Federal funds at the postsecondary level toward strengthening their community college capability, the other four States directed most Federal funds toward augmenting other delivery systems, including area vocational-technical institutes. According to the State director of vocational education in a State which spends about two and one-half times more funds on postsecondary than it does on secondary, it was administratively easier to work with 33 postsecondary area schools than with 436 school districts.

In the States we visited there was little evidence of communication between community colleges and area vocational-technical schools, either at the State or local level. Generally, community colleges were not using area vocational-technical schools to provide vocational offerings which could not be made available at community college facilities and
vice versa. While some vocational-technical schools had extensive waiting lists, their facilities generally were underused because courses were offered only during certain hours, and they had not made arrangements with other institutions to provide training for individuals they were unable to accommodate. In some instances, area vocational-technical schools providing postsecondary training competed with neighboring community colleges for the same students by duplicating course options.

Training resources have not been inventoried

Most States and communities we visited did not have a process for identifying potential resources for training. Recipients of Federal funding generally had not inventoried facilities, equipment, or instructional supplies and materials in the community which could be used to provide training. Consequently, the respective State and local grantees often were not well informed about the training universe in which they operated. As a result, we noted cases where they failed to offer some training options that could have been provided, or they duplicated already existing opportunities. Several publicly-funded delivery systems for training—manpower and military—had not been considered by public secondary and postsecondary authorities.

Skills centers, formerly supported under MDTA, were operating in seven communities we visited. These centers usually were located in proximity to inner-city schools. Administered through BOAE and usually the same State and local agencies that administer VEA programs, skills centers have functioned to train unemployed and underemployed persons 16 years of age and older for available jobs in over 900 occupational areas.

Training slots under MDTA have been reduced in recent years, and in most instances the skills centers we visited had facilities which were underused and could have provided training for high school youth and adults—particularly school dropouts and the disadvantaged. School officials told us they had not considered using skills centers for vocational instruction. The utilization potential of a skills center is demonstrated by the following example.

The director of one skills center with a capacity to process 1,300 trainees said that only 343 trainees were enrolled. He described the approach of MDTA skills centers as job-skill training combined with individualized instruction in basic reading and math related to the field of training, supplemented with guidance and placement assistance. He said that his attempts to interest public school officials had not been successful, because the schools
preferred to limit vocational education offerings to those available in their own facilities

Military installations

DOD is one of the Nation's most experienced trainers and has a considerable investment in facilities, equipment, and curriculum. DOD officials said military installations throughout the country represent significant potential technical training resources for vocational education. They advised us that many of DOD's training facilities are available—especially after regular duty hours.

DOD's Domestic Action Program, formalized in 1969, encourages military installations to assist their neighboring communities in alleviating social and economic problems. This program makes it possible for public agencies to call upon DOD's extensive resources and human skills. Our 1974 report assessing the activities of the Domestic Action Program concluded that it has the potential to benefit both the military and the communities throughout the country.

Most public educational institutions we visited had not explored this potential. Generally secondary and postsecondary schools were not using neighboring military installations either to expand vocational program offerings, strengthen existing opportunities, or reduce training costs. Interaction between schools and the military was occurring in only two sites (both of which were selected specifically so that we could review this cooperation).

At one site secondary schools and community colleges were using Navy facilities and paying Navy instructors on an hourly basis as a way of expanding vocational-technical options available to students. At the same time, community colleges reciprocated by providing instruction for military personnel in specialized fields not available at military installations. The advantages of this relationship were expressed in the following statement by the coordinator of the college's biomedical technology program:

"** It will mean a significant saving of tax dollars because the clinical facilities and classrooms will be used by both the Navy and ** College and will not have to be duplicated by either. It would not be financially feasible for any community college in the nation to duplicate facilities and expertise provided by the ** [Navy] under this agreement. **"**

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1"Domestic Action Program Activities, Problems, and Assessment," (B-176807, May 20, 1974)
The commanding officer of a Naval training center said the center was motivated to get involved with the schools and the community under the Domestic Action Program. She indicated that because she served as a member of the school district's career education advisory committee, she felt committed to vocational education training. Furthermore, she advised us that Navy instructors received inservice teaching experience which could be applied toward a teaching credential, and this was beneficial for those interested after retirement in obtaining a teaching position in a high school or community college.

A DOD official told us that National Guard installations were located in 3,000 communities throughout the country, and that each State had a network of National Guard shops, armories, hangers, and other facilities in which over 42,000 full-time technicians provided training in a wide variety of skills to 480,000 guardsmen. We were told that the Guard's training schedule which concentrated on weekend duty provided ample opportunity during the week for provision of technical training to public school students.

In one community we visited, students who wanted to take advantage of the technical training capability in the Guard facilities spent half the school day on a one-to-one basis with a Guard technician. According to an evaluation study, the program had been favorably received by students, parents, public school officials, and guardsmen. The Guard coordinator told us that the Guard's participation had a positive public relations effect in the community.

School officials in the community making most use of military installations for training said they realize emergency situations could arise which might disrupt such training arrangements. They observed, however, that the benefits of using these facilities outweigh this potential problem. Photographs on the following page show students training at military installations.

As job market projections indicate that training in particular occupational categories would be appropriate, education agencies need to assess systems for delivering training to determine which alternative would be most cost-effective. Generally, the States and LEAs we visited did not engage in cost analysis to make a choice among alternative training strategies. In the States where funds were distributed on a project basis, some judgment about costs was exercised. However, costs were only considered within the context of a single delivery system. Generally cost analyses were not performed in evaluating training programs.
STUDENTS RECEIVE VOCATIONAL TRAINING AT MILITARY INSTALLATIONS

COMPUTER OPERATOR  Students receive training in computer fundamentals, including operation of advanced computer systems, from military instructors at a military installation.

AIR CONDITIONING AND REFRIGERATOR TECHNICIAN  Students learn to understand, operate, and repair household and commercial air conditioning and refrigeration systems, through instruction by military personnel at a military facility using curriculum developed by the military.
Public school authorities at one site we visited did not engage in formal cost analysis, but they had determined that, with only limited funds available to meet the need for expanded course options, they would have to consider other approaches to training. The following illustrates the types of facilities they used:

A community college district used a variety of public and private facilities for a range of courses, including a filtration plant, several banks, the State Department of Transportation, an auto body shop, a silk screen company, the county administration building, a post office, an insurance company, and large and small manufacturers.

Air transportation programs offered by the local school district were conducted at 24 separate facilities, including air freight offices, Federal Aviation Administration Tower, the weather bureau, several car rental offices, 4 national airlines, 5 private flying service companies, and a convention and visitors bureau. Instruction in health occupations took place at more than 20 different hospitals, including 11 convalescent, 1 Veterans Administration, and 1 university.

Because our review objective was to determine the factors considered by States and LEAs in the decisionmaking process, rather than to show adverse effects, we did not attempt to determine differential costs of alternative delivery systems or to quantify excess costs that might be incurred because more cost-effective delivery strategies were not used. But our review did demonstrate that such fiscal analysis was not undertaken. It is reasonable to expect that training costs for alternative delivery concepts need to be critically evaluated by States and LEAs if maximum impact is to be realized. The fact that wide variances exist among States in the cost of providing vocational education, as shown in the following chart, indicates that cost factors between alternative delivery systems should receive careful management attention.
## Vocational Education Expenditures, FY 1973 (note a)

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aThese figures, based on data reported to OE by States, do not take into account differences between types of instructional programs, level of training offered, or method of accounting for costs, but they do represent the ultimate resources allocated per student among the States.

bAnnual expenditures divided by number of students enrolled in vocational programs. It should be noted that only 19 percent of those enrolled actually completed the program that year. Students may be enrolled in secondary programs for 1, 2, 3, or even 4 years before they complete the program. Postsecondary programs usually require 2 years for completion. Programs for adult students vary in length and most are part-time.
Program scheduling has not been flexible

School officials in one community where students used a variety of training facilities said that this practice required a flexible attitude concerning scheduling of training. They advised us that if training hours could be more flexibly arranged to coincide with availability of existing training facilities, students could gain access to preparation in many more occupational fields. The delivery of vocational education in the States we visited, however, generally was not characterized by flexibility.

For the most part, training was restricted to a particular school facility for a regular 6-hour school day, 5-day week, 9-month year. (Some provision, however, was made for postsecondary students and adults to attend evening classes.) Alternative periods (hours, days, weeks, months) of study and work experience were not a common option nor were mini-courses, which take advantage of specialized training facilities and instructors on a short-term basis. Fixed schedules for delivery left students, in some cases, waiting for program offerings which could have been provided had public facilities and equipment not stood idle or had other resources, such as employer sites, been considered.

Employer sites

Authorities on education and training have observed that many people learn best in an environment of job realism rather than in school or simulated situations. They have suggested that using public and private business and industry to provide facilities and instructors can enrich and enhance vocational training programs. Several vocational educators in local areas we visited told us that of all the possible training resources available in the community, employer sites held the greatest potential for moving vocational training programs into the mainstream of the Nation's needs.

Generally no large-scale use of employer resources was evident in the sites we visited. Some specialized training, such as nursing, did provide for experience in hospitals or related clinical facilities, but this was the exception rather than the rule in most vocational programs. We did note that some employers, who had requested persons trained in particular skills, had made their facilities available to the school for instruction.

At only one site did we observe extensive use of employer sites for training. Courses were developed primarily under a State-initiated program which required that training be related to job opportunities. The example below describes use of such facilities.
A major shopping center served as an extended campus of the school district to provide a laboratory for high school students enrolled in the applied marketing occupations program. Students rotated among selected stores in the shopping center for eight hours per week, and participated in two hours of class instruction in a mobile unit located in the parking lot of the shopping center.

Seventeen stores were used as a training resource during the 1972-73 school year with about 175 students participating. Student learning was concentrated in the areas of sales, display, advertising, shipping, receiving, inventory and stock control, marketing, maintenance, restaurant operations, auto services, and clerical procedures.

We were told by various employer representatives that they were pleased with the program because it provided them with prospective employees, thereby avoiding the expensive search-and-train cycle. They said graduates of this program received definite preference in hiring.

Photographs on the following page illustrate similar activity.

Transportation often has not been provided.

VEA's definition of vocational education includes "travel of students and vocational education personnel while engaged in such a training program." Effective use of facilities through sharing requires provision for transportation. Lack of transportation can limit access to vocational education options.

School officials told us that students (1) were not always being trained in the most desirable facilities and (2) did not have access to some training opportunities because transportation was not provided.

--High school officials in one city said the exchange of students between various high schools, which offered a range of vocational courses, was minimal because students had to provide their own transportation.

--In a city in another State, where the school board had adopted as a goal the provision of a marketable skill for every student leaving school, transportation was available through contract for bus and taxi services, to carry students between secondary and postsecondary schools and employer sites, as well as between other training facilities, such as military installations.
APPLIED COMMUNICATION  In cooperation with a telephone company, which provides instructors and equipment, students acquire basic knowledge and skills required for entrance jobs within telephone companies and related industries.

AIR TRANSPORTATION  Students prepare for a wide variety of entry level jobs and advanced training opportunities in commercial aviation occupations, in conjunction with air transportation employers.
Several explanations were offered to explain why school districts had not used more funds for transportation. We were told one of the most important reasons was because State reimbursement of education costs was based on the physical presence of students at the school facility in which they were enrolled. Another reason cited was that school authorities felt there was little incentive to the school's image when students were sent elsewhere for training. School officials also believed that it was administratively easier to control programs if they were contained inhouse. The director of one school we visited, where students gain work experience either at employer sites or in simulated settings at the school, agreed that control of inhouse training activities was less complicated, but he said that using only inhouse training would restrict student opportunities.

Construction of new school facilities has been favored.

VEA does not limit the amount of Federal funds which can be used for construction. OE statistics show that between fiscal years 1965 and 1973 about $5 billion, or 16 percent, of Federal part B funds were spent for construction. When these expenditures for construction are added to those funds retained at the State level for administration and related activities, a significant portion of Federal funds in some States has been used to support infrastructure costs.

OE statistics for fiscal year 1971 to fiscal year 1973 show that the average annual proportion of part B funds used by States for construction ranged from 0 to 44 percent. An average of 12 States annually spent more than 20 percent of their part B funds for construction. Three of the States we visited had spent an annual average of 25 percent of their part B funds for construction. Two of these States also received about $12 million in other Federal funds during that period to construct and equip vocational facilities.

We observed that allocation of Federal funds for construction in the States we visited was not necessarily contingent upon need factors or upon maximum use of existing facilities. An official of HEW's Office of Facilities, Engineering and Property Management told us:

"All too frequently vocational facilities are built in rigid conformity with modes of the past, lacking the flexibility to adapt to changing training needs. Only through partnership with employers—with the schools using employer facilities for training students or employers using school facilities for training students—can vocational education expect to keep pace with rapidly evolving technology. Usually the need for such linkages between schools and employers is not taken into consideration in planning for school construction."
Action recommended in one State we visited illustrates the realization that construction of more facilities may not necessarily be the best response to the need for more useful vocational training services.

In 1973 a State commission with statutory coordinating responsibility for higher education recommended that no new area vocational-technical institutes be built. The commission also recommended that the State Board of Vocational Education not expand existing institutions without review of proposed construction by the commission. It was the Commission's opinion that the present needs of the State could be met by maximizing the use of the State's existing resources.

Several State directors advised us that they believed the use of Federal funds for construction has served as a catalyst. They noted that flexibility in use of Federal funds is helpful, since in some cases it is difficult to obtain State or local funding for construction. They suggested that construction of facilities is a good investment for the Federal Government, because State and local agencies then have to provide programs in those facilities. Although we did not make an analysis to determine to what extent this relationship existed, we did observe instances in which facilities used for vocational programs were not fully utilized, as indicated earlier in this chapter. Vocational officials in several States told us that underutilization of facilities resulted from insufficient funds to conduct programs.

Sources of equipment and supplies have not been fully explored.

Equipment for vocational-technical training represents a significant investment. Equipment and supplies can be purchased, received on loan, or donated by private sources, or obtained through Federal surplus, excess, or loanable property programs. Equipment acquired by gift or through Federal sources can reduce vocational costs substantially.

The extent to which States and LEAs actively pursued equipment available from Federal and private sources varied in the States reviewed, but most did not take full advantage of these options. A primary use for VEA funds was equipment and supply purchases including replacement. The following reflect some of the approaches taken.

--Vocational officials in a State with some of the Nation's poorest counties told us they had sufficient funds to purchase new equipment, they did not actively solicit donations from private sources or make extensive use of federally available equipment. We were also told that much of the Federal property designated excess or surplus was obsolete.
In another State vocational educators aggressively sought equipment at no or reduced cost from the Federal surplus and excess property programs and the National Industrial Equipment Reserve. Acquisition value of equipment obtained in fiscal year 1972 was over $8 million, an amount exceeding the total Federal part B expenditures of that State that year.

A school in a third State obtained an army stretcher carrier which students in vocational-technical courses converted into a mobile TV van for electronics students to present guidance films to junior high youths to assist them in making career choices.

Since 1972 education agencies receiving Federal assistance under formula programs have not been eligible to acquire Federal excess property. Although the usefulness of Federal supply sources for supplementing vocational programs has been demonstrated, OE's Deputy Commissioner for Occupational and Adult Education advised us that attempts to get reversal of this restriction have not been successful. The National Advisory Council on Vocational Education also expressed its concern to us that this source of supply no longer was available for use in vocational programs. The Congress introduced a bill in 1973 which would have amended the Federal Property and Administrative Services Act to provide for such access to grantees, but it was not enacted.

Several sites had obtained equipment from private industry. We were told that such donations primarily reflected efforts of individual instructors, and donor industries benefited through tax deductions they were able to claim and from student acquaintance with their products. For instance

- A radio communications program instructor at one high school received $150,000 worth of donated equipment from various radio-TV sources. (In contrast, an instructor for the same program at another high school purchased his equipment through commercial sources.)

- A national manufacturer of photographic supplies located in the State provided many supplies free for a vocational school's photography classes.

- Local automotive and truck companies provided $200,000 worth of parts and diagnostic equipment for an auto-truck maintenance program.
--A national company donated computer equipment valued at $72,000 for use in a computer programming course.

Part of the reason for variance in use of donated equipment may be that there was no uniform OE instruction that LEAs receiving Federal funds should assess the availability of these resources before spending moneys for equipment and supplies.

Other obstacles have limited full use

Several other factors have contributed to limited use of training resources.

--One vocational director in a large city told us that training had to take place in facilities which met established standards for public schools. This had precluded taking advantage of training offered in most proprietary schools.

--A skills center director told us that school district teacher contracts provided for a 4-hour teaching day, thereby limiting the use of facilities. Three of that city's four area vocational facilities did not offer evening classes. School officials told us that the level of teacher salaries prevented scheduling several shifts, despite student demand.

--Several State education codes required that high school students be instructed by teachers who have acquired State certification. School districts were thereby prevented from contracting for training services with community colleges, manpower skills centers, private schools, employers, or military installations, whose instructors were not certified. At the time of our review, we noted in one of these States that the SEA was withholding State support from several school districts which had contracted with proprietary schools to provide cosmetology training for students on a half-day basis.

--Some school officials cited accident insurance for youth as limiting the use of nonschool facilities for training. In one State which depended on other than school-training facilities, however, arrangements had been made to extend school insurance coverage to students wherever they were engaged in training.

--Employer representatives in one city said there was labor union resistance to establishing work stations for vocational training programs. A local labor union representative told us that such arrangements might make union members less employable than students who have had exposure to particular employers and participated in such training.
CONCLUSIONS

Delivery of vocational education could be improved if all available training resources in the area to be served were taken into account in the planning process. Public education agencies should explore potential sharing of other resources in the community—particularly employer sites—and take steps to maximize the utilization of their own facilities. We believe that expanded vocational opportunities and strengthened program offerings would result from OE and States providing leadership in forging partnerships with all resources, including those outside the traditional vocational education pattern.

RECOMMENDATIONS TO THE SECRETARY OF HEW

The Secretary of HEW should

- Require States and LEAs to assess training resources and facilities in their respective geographic areas so the role of Federal funding can be viewed within the context of total available resources and costs can be determined for alternative training strategies.

- Require that LEAs in their applications to SEAs describe and document the nature and extent of their cooperative efforts with other sources of training and employment.

- Work with States to increase flexibility in vocational training arrangements, through such mechanisms as expansion of the present school day, week, or year, inclusion of transportation costs to make better use of existing facilities, and provision of vocational training in nonpublic facilities so that more people can be trained in more occupational categories.

- Work with States to identify statutes and administrative procedures which may prevent schools from using other community training resources and to implement plans for removing these obstacles, including encouraging State agencies to make recommendations to appropriate legislative bodies.

- Discourage use of VEA funds for construction except in instances in which there is adequate justification that additional facilities are needed after thorough consideration of alternatives and then require sufficient flexibility so that facilities can be adapted to changing training requirements.
HEW concurred with our recommendations and stated it had taken or planned to take actions to implement them (See app VI) HEW will

--Encourage States to assess all training resources and facilities as a part of the State planning process, investigate possible sources of funds to implement a study in fiscal year 1976 which will assess various alternative training strategies

--Review LEA application forms on file with State plans to determine the extent to which LEAs are required to describe and document cooperative efforts with other sources of training and employment, and assist States in revising their application forms where the information requested is inadequate

--Develop and fund a project during fiscal year 1976 to seek out successful examples of flexible arrangements and develop models for use by States and LEAs in increasing flexibility in vocational training arrangements

--Develop an evaluation study to identify Federal and State statutes and administrative procedures that limit the use of community training resources, and disseminate the results of the study for use in development of plans to remove such obstacles--including transmittal of this information through the Office of Management and Budget to the National Legislative Conference for consideration by State legislatures

--Encourage States to weigh carefully the expenditure of Federal funds for additional facilities. Because of the wide range of existing facilities which offer potential for expanded training, and the need for the greatest possible adaptability of facilities to evolving training requirements, we believe HEW should provide explicit guidance with respect to expenditure of Federal funds for construction

RECOMMENDATIONS TO THE CONGRESS

In its deliberations about VEA, the Congress should consider

--Establishing a set-aside requirement for cooperative arrangements to expand vocational offerings and strengthen programs through use of other public training facilities or nonpublic training resources (e.g., movement of secondary students to postsecondary facilities)
—Establishing, as a legislative policy, that Federal funds will not be used for construction except in instances in which there is adequate justification that additional facilities are needed after thorough consideration of alternatives.

The Congress also should consider

—Amending the Federal Property and Administrative Services Act to provide for eligibility of recipients of Federal vocational funds to acquire Federal excess property.
CHAPTER 6

IS TRAINING RELATED TO EMPLOYMENT?

Although VEA requires that vocational training or retraining be realistic in the light of actual or anticipated opportunities for gainful employment, this factor generally has not been adequately considered in planning for and evaluating vocational education programs. As a result, there is little assurance that changing manpower needs are being addressed in secondary and postsecondary occupational programs supported by Federal funds. Many students are enrolled in traditional courses and are not always able to obtain employment in fields for which they were trained. A number of factors have limited the relevancy of vocational programs:

--Labor market needs have been neither fully nor realistically assessed
--Work experience often has not been an integral component of the vocational curriculum
--Occupational guidance has not received adequate attention
--Responsibility for job placement assistance has not been assumed routinely by schools
--Followup of graduates and employers has been marginal
--Barriers have restricted access to training and employment

CHANGING MANPOWER NEEDS REQUIRE CHANGING PROGRAMS

VEA's enactment resulted in part from recognition that labor market demands required much greater flexibility on the part of vocational training institutions than had characterized their performance in the past. Requirements for new and updated skills for emerging jobs accelerated the need for educational institutions to adjust training programs to coincide with the employment scene. VEA provides that to be approved by OE a State plan must describe State policies and procedures which ensure that

"...due consideration will be given to the results of periodic evaluations of State and local vocational education programs, services, and activities in the light of information regarding current and projected manpower needs and job opportunities, particularly new and emerging needs and opportunities on the local, State, and national levels..."
The act further provides that the State plan must include provisions assuring that funds will not be used for any program of vocational education which cannot (1) prepare students for employment, (2) prepare individuals for successful completion of such programs, or (3) be of significant assistance to individuals enrolled in making an informed and meaningful occupational choice. HEW/OE instructions, 45 CFR 102.4 (k) implementing the act require that:

"Evaluation of the results of the program of instruction will be made periodically * * * by the State * * * and continuously on the local level with the results being used for necessary change or improvement in the program * * *"

Critics have claimed that vocational education is not responsive to current needs. For instance, a 1972 HEW report titled Work in America concluded that "** technical training in schools is based on outmoded assessment of future needs."

Student enrollments have not been aligned with employment opportunities

Enrollment in VEA-supported programs over the past decade does not indicate that training has shifted from traditional categories to new and emerging job opportunities. Studies financed by HEW show that much of the enrollment has been concentrated in programs with only a peripheral relationship to labor market needs. The charts on the following page, which show total enrollment growth by program from fiscal year 1963 to fiscal year 1973, as well as secondary and postsecondary enrollment growth by program from fiscal year 1967 to fiscal year 1973, indicate that most traditional programs have increased in enrollment.

Enrollments in postsecondary programs, when contrasted with secondary programs, reflect some adjustment to labor market conditions reported by DOL. As shown in appendix IV, in fiscal year 1972 13 percent of postsecondary enrollments were in health, contrasted with only 1 percent of secondary enrollments in that field. Technical subjects, such as electronics, data processing, and architectural technology, accounted for 14 percent of the vocational enrollments at the postsecondary level, contrasted with 1 percent at the secondary level. OE's Deputy Commissioner for Occupational and Adult Education advised us that expansion of some health programs at the secondary level may be limited by existing State licensing requirements. In several sites we visited, however, we noted extensive health programs at the secondary level.

1Except programs under part F—Consumer and Homemaking Education—for which $26 million in Federal funds were spent in fiscal year 1973.
ENROLLMENT IN VOCATIONAL EDUCATION BY INSTRUCTIONAL PROGRAM

TOTAL**

IN 000'S


HOME ECONOMICS (NOT FOR WAGES)*
OFFICE*
OTHER*
TRADE & INDUSTRY
AGRICULTURE
TECHNICAL
DISTRIBUTIVE
HEALTH
HOME ECONOMICS (GAINFUL)*

SECONDARY

IN 000'S


POST SECONDARY

IN 000'S


*Data not available prior to year indicated
**Total includes secondary, postsecondary, and adult

SOURCE OF annual vocational and technical education selected statistical tables
Only marginal efforts have been made by OE to review the adequacy of vocational offerings in relation to availability of jobs. In 1972 an OE-contracted study concluded that changes were needed to align program offerings more closely with areas of expanding opportunity, but OE officials told us that no subsequent action has been taken. In the States and communities we visited such a review was not conducted routinely.

The standard program categories used by OE to report enrollment data frequently are too broad and the programs within categories too diverse to appraise the significance of change in enrollment in different instructional programs. Further, these program categories do not correspond with occupational classifications used by the Bureau of the Census or DOL, making it difficult to compare the applicability of different courses offered with anticipated job opportunities. We were told by State and local educational officials that this noncomparability of data was a significant obstacle to effective review and appraisal of course offerings.

We did note in the States visited that there had been little effort to use VEA funds to initiate courses in program areas with an increasingly high labor market demand. For instance, DOL projections for 1980 show that 3 in every 10 new jobs will be in public service occupations, such as fire science and law enforcement. When training in such occupational skills was available, it rarely was offered at the secondary level where the largest portion of vocational enrollments was concentrated.

Ratio of completions to enrollments has been low.

OE statistics show that the output of vocational education in terms of program completions is far smaller than the input in terms of enrollments (see app. IV). These figures indicate that there is wide variance in the completion rate among programs. Some program categories show a high number of noncompletions.

A national study contracted by OE suggested that the relation to job opportunities is one variable influencing the holding power of vocational courses. The highest ratio of completion to enrollment has been in health programs at both levels—50 percent for secondary and 36 percent for postsecondary. The allied health fields have experienced greater employment growth in recent years than many other occupational areas in which vocational students have been trained.
Students may not be employed in fields for which trained

One indicator of the extent to which training is matched with job opportunities is the proportion of graduates who subsequently are employed in fields related to their training. Each year States are required to report by November 15 to OE the number of students who actually complete courses in which they are enrolled and what they are doing after they leave school. The chart in appendix IV, based on OE data, shows the extent of this match between training and employment by program category at secondary and postsecondary levels.

Data reported by OE for fiscal year 1972 indicated that about one-third of those who completed secondary programs and three-fifths of those who completed postsecondary programs and were available for full-time work were employed in fields related to their training. Officials told us, however, that the data sent to OE was not necessarily accurate. For instance, in one State we noted that the figures provided to OE for the two largest cities were substantially higher than those submitted to the State by those cities.

Neither OE nor the States had developed criteria on which to assess placement so that courses could be altered or dropped, as necessary. As a result, programs have continued year after year whether or not students trained in those programs were finding employment. A 1971 study by an OE contractor observed that the most striking fact about program terminations was the small number of instances in which they took place.

PRACTICES LIMIT RELEVANCY OF VOCATIONAL PROGRAMS

A dynamic economy with expanding employment needs is a prerequisite for optimum match between training and employment. Whatever the status of the economy, however, the composition of the labor market continues to change. A variety of factors determine the extent to which vocational education succeeds in providing training geared to actual job opportunities. The importance of coordinated, comprehensive planning was addressed in chapter 3, and maximum utilization of training resources in chapter 5. Other practices which influence the relevancy of vocational programs are discussed below.
Labor market needs have been neither fully nor realistically assessed

To insure that vocational training is relevant to the needs of the labor market, VEA requires that these needs be examined and taken into account in the planning of vocational programs. In the States we visited, vocational educators at both State and local levels had not given adequate consideration to labor market factors. Labor market demand and supply had not been fully assessed, and there was no assurance that the training provided corresponded with manpower needs.

Manpower data is unavailable or unused

OE requires that each State plan include a statewide projection of manpower needs and job opportunities. For each program of instruction, a summary analysis of labor demand and labor supply is supposed to list corresponding quantitative data on current employment levels, projected employment expansion and replacement needs, and projected labor supply, including output from sources outside of public-supported vocational education.

All States we visited had an OE-approved State plan which included at least some labor demand and supply projections. State education officials told us that available projections of labor demand and supply were unreliable and were included in the State plans only to comply with OE requirements. The State plan therefore was not considered a valid assessment of manpower needs. One State plan did not provide current employment and replacement needs for 58 of its 169 instructional programs, nor did it project labor supply output from other sources for 148 programs.

Demand data

At the local level secondary and postsecondary schools placed little reliance on manpower projections in developing and reviewing vocational offerings. Instead they frequently relied on informal input from selected employers serving on advisory committees (described in ch. 3). Student interest and course enrollment also were cited as justification for program offerings.

If manpower data was consulted at all, it usually was for justification after a decision had been made to start new courses. Since there was little coordinated planning among institutions offering vocational training (as discussed in ch. 3), the same data was used to justify
decisions at several schools, thereby contributing to potential oversupply in some occupational areas. For example:

In one community we visited, three high schools independently had applied for support of secretarial and clerk-typist courses. To establish the need for these courses, the applications described the labor market demand in the area. The wording and statistics of this labor market information contained in each application were identical.

Supply data

Vocational officials told us there was no mechanism for accurately projecting labor supply from all sources at national, State, or local levels. We frequently were told that as long as students got jobs, there was a need for the program. Yet, these same officials agreed there was inadequate followup about whether students actually got jobs and little information as to the adequacy of the training for potential employment. As a consequence, schools lacked assurance that they were not contributing to oversupply in some occupational areas and undersupply in others. For example:

One large city school district, in planning for, establishing, and conducting its vocational education programs, did not consider the potential supply of manpower generated by (1) the parochial system of the city which enrolled about 30,000 high school students, (2) the community colleges located in counties adjacent to the city, (3) the public and nonpublic secondary school systems located in 8 surrounding counties (3 in another State) which with the city comprised the metropolitan area, or (4) numerous proprietary schools located in and around the city.

Educators claim data limitations, data producers cite user unfamiliarity

Although both quantity and quality of manpower data have improved in recent years, vocational educators told us manpower data were not used in a systematic manner because they considered them inadequate. Officials of the Bureau of Labor Statistics (BLS), the agency responsible for technical direction of the cooperative Federal and State Occupational Employment Statistics program, said vocational educators often were not familiar with and lacked the expertise to use data which could be helpful in their planning. Following are specific data limitations cited by vocational educators we interviewed, and BLS responses.
Vocational educators

Employment projection statistics are reported for the Nation as a whole. Because decisions about vocational training are made primarily at the local level (individual schools or school districts), it is difficult to relate national projections to localities affected.

Employment service data is mainly concerned with workers who are covered under unemployment compensation laws and therefore do not address the total employment scene.

Classification systems are incompatible. OE's basic breakdown of seven education program categories is not easily comparable to the employment service occupational groups.

BLS officials

By 1971 over 40 States had developed manpower projections for 160 occupations, using procedures of BLS' Tomorrow's Manpower Needs. By 1974, 48 State employment security agencies had available projections for 420 occupations—not only for each State as a whole but also for over 100 sub-State areas of at least 250,000 population.

It is not realistic to project employment on a school district basis because planning for vocational education needs to take account of the entire labor market area, which often is considerably larger than a single school district. In some instances, labor market areas even cross State boundaries.

In addition to information about employment covered by unemployment insurance, each State has for many years obtained monthly information on total employment of wage and salary workers in all industries except agriculture.

BLS has attempted to bridge the gap in projections information through a coding structure familiar to vocational educators. A cross coding system has made it possible to relate about 460 occupations to the occupations in the Dictionary of Occupational Titles and through them to the vocational education program codes.
A 1972 study under the auspices of the National Advisory Council on Vocational Education concluded that limited use of manpower data by vocational educators often resulted from inadequate communication about the existence of such data. An NIE-supported project launched in 1974 sought to identify specific reasons why the available data are not used.

Funds have not been used for planning data.

VEA specifically authorized OE to reserve an amount (not to exceed $5 million in any fiscal year) to finance, in conjunction with DOL, "national, regional, State, and local studies and projections of manpower needs for the use and guidance of Federal, State, and local officials, and of advisory councils." We were told by an OE official that OE had decided not to reserve funds for these studies because it would have decreased the amount of funds available to the States. Not until fiscal year 1974 did BOAE designate manpower data a priority for support under the vocational research program (part C of VEA) and subsequently funded 22 projects in 18 States at a cost of $22 million.

BLS officials told us they have been concerned about recent proliferation of projects engaging in isolated, duplicative, and expensive activity in obtaining manpower data. They advised us they had not been consulted by OE in the review of such proposals funded by OE. They said that a coordinating mechanism was needed to provide guidance to independent efforts so that projects could take advantage of data and systems already available, thereby avoiding costly duplication.

Although States can use part B funds for development of State plans including obtaining information regarding current and projected manpower needs, the States we visited had used only a limited amount of available funds for such purposes. However, several States, prodded by recommendations of their respective State advisory councils, have undertaken efforts to identify and acquire more adequate manpower information. For example:

A project in one State we visited had developed a methodology by which national and State manpower projections of industrial and occupational trends prepared by BLS and the State could be superimposed on a local area to permit the matching of manpower supply with manpower demand. This approach had been used in several metropolitan areas of the State, and plans were underway for using it in others.
Work experience often has not been an integral component of vocational curriculum.

It is generally acknowledged that inclusion of actual work experience in vocational education curriculum provides students with valuable real life exposure to work requirements and helps assure they receive training appropriate to employer needs. Such experience often can better prepare students for subsequent placement in jobs related to their training. The Congress has recognized this need and, in part G, VEA specifically encouraged cooperative arrangements between schools and employers. OE statistics for fiscal year 1973 show that about 508,000 students—4 percent of the total enrollment in vocational education—were enrolled in cooperative programs.

In the States we visited there was a wide variance in using work experience as an integral part of the vocational curriculum. We observed that most schools were not operated on the philosophy that vocational education students learn best in an environment of job realism. Students often were only exposed to simulated situations and performed theoretical exercises. When work experience was part of the curriculum, it was more often at the postsecondary level and then only in specialized fields, such as health. Some provisions for work experience were as follows:

On-the-job training was only offered as part of the regular curriculum in the allied health program at the community colleges in one large city. All three campuses were served by a single work experience coordinator who was responsible for placing students in all other jobs related to their training. This coordinator told us he had about 50 students in cooperative employment. This amounted to only about one percent of the full-time vocational student enrollment in 1973 (excluding those in allied health fields).

That city’s secondary schools generally had no established programs for combining classroom instruction with on-the-job training, except in business education.

OE advised us that national trade unions, as well as business and industry organizations, had endorsed the work experience concept. The results were mixed in actual practice. In some cities we visited, there were instances of resistance by local unions to its implementation. One institution we visited, however, which enrolled over 4,500 students in school year 1972-73, had developed working partnerships with local employers and unions to provide realistic training for all students. Its accomplishments are discussed below.
Realistic on-the-job training

This institution serving the vocational and technical needs of both secondary and postsecondary students, offered more than 50 different trade and technical skills in an occupational training program geared to realistic on-the-job training.

The educational process at this institution was based on the belief that instructional methods should use the most realistic and productive training available. School officials asserted that making training as "live" as possible provides a student with greater motivation, resulting in a better qualified, more employable student. Vocational training was offered either in conjunction with local employers off-campus or in the school's "organized businesses" on-campus.

Cooperative training, which used local business facilities off-campus, was an arrangement for bringing relevancy to formal instruction through alternating employment in the community with classroom instruction. School officials said that the most rewarding benefit of cooperative training was that students learned occupational skills under actual conditions of employment. During school year 1972-73 about 1,000 vocational students were enrolled in 18 cooperative training programs.

The other instructional approach, called Realistic Training Enterprises, was designed to expose students to realistic on-the-job conditions comparable to those in the community for the occupation for which the student was training. In addition, it produced a saleable product which was used to help defray costs of the program. During the 1972-73 school year about 3,000 vocational students were enrolled in 34 Realistic Training Enterprise programs, which were available on-campus in school organized businesses.

The fiscal goal of the Realistic Training Enterprise program was to charge the cost of the course to the customers. In this manner, those who benefited from the purchased products, and not the taxpayers or students, primarily shared the training costs. Total expenditures for school year 1972-73 were $407,510, and revenues were $409,970.

Advisory committees for each skill program were used to gain support from the community business and labor interests. Reportedly, no Realistic Training Enterprise plan was operated at the school without explanation to, understanding of, and endorsement by the same or similar business establishment in the community. Any complaints were referred to and resolved by the advisory committee responsible for the respective programs. Two of the school's businesses are pictured on the next page.
GREENHOUSE AND NURSERY MANAGEMENT  Retail Nursery, $10,000 gross volume, serving students, staff, public. Greenhouses built by students, all plants, trees, shrubs, flowers propagated by students for retail sale.

DENTAL ASSISTANT  Complete dental clinic, $35,000 gross revenue from Department of Public Assistance. Clinic serves school age children of welfare recipients with free dental care. Five local dentists participate one morning each week.
Occupational guidance has not received adequate attention

VEA provides for guidance services to assist students in selecting career objectives. Yet these services did not appear to be adequate in many of the schools visited during our review. In fact, students generally did not receive vocational guidance and counseling unless they made a specific request. Few schools had cooperative arrangements with the system of public employment offices in the State to provide these services, although State plans gave assurances of such provisions. As a result, students were not routinely exposed to the range of occupational options available and therefore had to make decisions on the basis of limited job information.

Vocational educators told us that school counselors generally were academically oriented and did not know a great deal about vocational manpower needs, and that consequently, students often were guided toward college and pursuit of a liberal arts curriculum rather than a career based on vocational education preparation. We were advised by secondary and postsecondary school officials that there was no systematic effort to inform students of the various vocational offerings and the types of jobs available.

Various national and State studies have concluded that more consideration should be given to vocational career planning. A 1972 report of the National Advisory Council on Vocational Education focused entirely on changes needed in guidance and counseling services. Most State advisory councils in the States we visited had commented on the insufficiency of current guidance practices and suggested recommendations for improvements. For instance:

One council addressed the importance of augmenting the school's guidance capability by using a variety of agencies and groups, such as the business, industry, and labor community and the State employment commission for inservice training and support of school counseling activities.

Schools have not routinely assumed responsibility for job placement assistance.

VEA includes job placement in its definition of vocational education, implying that skill training, if it is to be successful, needs to be linked with placement in appropriate employment. The act also requires that State plans provide for entering into cooperative arrangements with public employment offices so that placement of persons leaving or completing vocational courses can be facilitated.
We were told by the director of the placement project of the National Advisory Council that most schools and many teachers view their sole function to be that of education and training. We were advised that generally neither schools nor teachers have been held accountable for placing students in jobs when they complete that training. Consequently, he told us, schools have not always taken the initiative to see that students were placed in jobs related to their training. A recent OE-financed national survey of almost 18,000 1972 high school graduates found that 77 percent of those responding expressed the opinion that schools should help students find jobs when they leave school.

In many schools we visited systematic placement of students generally did not occur at either secondary or postsecondary levels. When placement was accomplished, it happened at the initiative of individual teachers acting on behalf of individual students. Officials advised us that while some teachers were aggressive and interested in the placement of their students, others did not attempt to actively seek employment for their students. Several instances in which placement was considered a responsibility of the school are described below.

--A career development center in one city had its own placement officer who concentrated primarily on familiarizing local business and industry personnel with the center's programs, while instructors and advisory committee members assisted students in locating jobs. A State employment commission counselor was assigned full-time to the center and assisted in providing students with information about jobs available in the metropolitan area.

--In another city each of five inner-city schools had a job placement specialist responsible for placing students in jobs located through employer contacts made by the schools' job development specialists. According to school district statistics, over 6,100 high school graduates have been placed since the program began in 1966. Total State and Federal expenditures have amounted to $584,000, an average of $95 per graduate placed. Project officials told us that cost was minimal compared with the graduate's immediate earnings. In 1973 the National Advisory Council on Vocational Education identified this program as exemplary and recommended its replication.

Followup of students and employers has been marginal.

VEA stipulates that consideration be given to the results of periodic evaluations of State and local vocational programs in light of manpower needs and job opportunities. In the States we visited the existing vocational programs at all levels lacked adequate student
followup We were told that without this type of information, (1) it is extremely difficult to determine the extent to which specific training is impacting on individual and labor market needs and (2) essential information on which to base instructional changes is not available to vocational educators and planners.

States collect some information on the status of vocational graduates, many primarily to comply with Federal reporting requirements. For those graduates who are known to be available for employment—who did not go on for further education—there are three categories for reporting: (1) employed fulltime in a field in which they were trained or a related field, (2) employed in a field unrelated to training, or employed part time, and (3) unemployed. School officials said these reports prepared to meet the Federal requirement were not useful because data is collected too soon (5 months) after graduation.

In the States we visited formal, systematic followup of students generally was not performed. School officials told us that in most cases an informal followup was the basis for Federal reports. They said most teachers use an informal personal followup with a limited number of former students to obtain information about student status and to judge the appropriateness of their curriculum. The extent and nature of the followup depended upon individual instructor interest, time, and concern. In contrast to this prevailing approach:

One school we visited required students to complete 6 months of successful employment in a job related to their training before they could be awarded a diploma. We were told that between 80 and 90 percent of the students received diplomas. This technique, which assured response from students since the diploma served as an incentive, provided teachers with valuable feedback on ways for relating instruction to current employer needs.

Barriers have restricted access to training and employment.

In the States we visited we noted several barriers, in addition to those cited elsewhere in this report, which inhibited public vocational institutions from adapting their training programs to meet current manpower and individual needs. We did not review the degree to which specific barriers limited either the number of students participating or the range of occupational options available, or the degree of impact on the labor market area. Several of the more visible obstacles are discussed below.
Age

Age limitations have prevented students from (1) participating in many work experiences, (2) entering various secondary and postsecondary programs, (3) enrolling in apprenticeship training, and (4) getting some types of jobs.

Considering the objectives and strategies set forth in the VEA, current Federal and State laws and administrative procedures may be unintentionally restricting youth from participation. For instance, several 1973 studies have observed that safeguards designed to protect workers under the age of 18 act as a disincentive to some employers to hire or provide training for these youth, thereby restricting vocational efforts to integrate work experience into the curriculum. School officials said such protective devices also restrict efforts designed to facilitate an adjustment process for 14- and 15-year olds who need to improve their self-image and be encouraged to complete school within a work environment.

Age, reflected in grade, also acts as a restricting factor. For instance, in one large city many vocational courses were limited to students in eleventh or twelfth grade. This could result in younger students, particularly the disadvantaged, dropping out of the school program because they are unable to find relevant educational experiences. Our report on the education of the handicapped, cited in chapter 2, observed that many handicapped individuals are cut off from educational opportunities critical to their self-development because of restrictive eligibility requirements related to age.

Most States have an age requirement with respect to entrance to community college programs for students who have not graduated from high school. Youth below the age of 18, who drop out of school before completing high school, generally are unable to obtain training at community colleges.

Trade unions also set age limitations for acceptance as an apprentice. The maximum age for entering an apprentice plumber program in one urban area was 21. Consequently, a person out-of-school for a few years and over 21 could not pursue plumbing under the union apprenticeship program.

Frequently age requirements are imposed by employers which do not necessarily coincide with the age at which youth are prepared for employment. For instance:

A major employer in one city we visited had requested that a specific vocational program be provided by the secondary schools. Yet
this employer restricted hiring to persons over age 19-1/2, which meant that most graduates of the training program had to wait about 1 1/2 years before they could be employed by that company. Schools officials had not been able to overcome this barrier for their graduates.

Sex

Explicit in the VEA is the intent that all persons should have an equal opportunity to participate in training. In a 1974 speech to the National Schools Committee for Economic Education, HEW's Acting Assistant Secretary of Education described his visits to vocational-technical schools. He observed that

In one city the average expected wage for trades learned by girls was 47 percent lower than for trades learned by boys. So not only were students channeled into traditionally male or female jobs, but girls were guided into employment at lower income levels.

Analysis of OE statistics for fiscal year 1972 indicates that members of one sex tend to be clustered around some occupations while members of the other sex tend to be clustered around others. For example, enrollees in health and office occupations were predominantly female, whereas enrollees in technical and industrial fields were predominantly male. The chart on the next page illustrates the number of enrollees by program and sex and shows related clusters.

A 1972 OE report about women in education called attention to several factors which have limited training opportunities for females: sex-segregated courses, restricted admissions in vocational schools, and vocational interest inventories which provide different occupational scores for males and females.

Title IX of the Education Amendments of 1972 prohibits discrimination in education on the basis of sex, but in several States we noticed practices that could discourage deviation from traditional roles. For example

--Catalogs describing vocational programs used the exclusive pronoun "he" when referring to course requirements in almost all subjects, yet the exclusive pronoun "she" when describing secretarial and nursing courses. Vocational officials agreed that potential students studying this material might get the impression that courses were restricted to members of one sex.

1After fiscal year 1972 OE no longer collected data on sex (nor data on race and ethnic background)
TOTAL VOCATIONAL ENROLLMENT BY PROGRAM & SEX, FY 1972

AGRICULTURE

DISTRIBUTIVE

HEALTH

HOME ECONOMICS (GAINFUL)

HOME ECONOMICS (NOT FOR WAGES)

OFFICE

TECHNICAL

TRADE & INDUSTRY

OTHER *

- 80,000 MALES
- 80,000 FEMALES

*Group guidance, remedial programs, and special programs

SOURCE DE vocational and technical education selected statistical tables, FY 1972
Sometimes classes were physically located in a manner which could encourage sex role stereotyping. In one secondary area vocational school, clerical, health, and cosmetology courses were offered in one building and all other courses in an adjacent building. Female students questioned by us about their vocational interests said the courses they were taking did not necessarily coincide with what they hoped to do later. They said their choices for training were limited because girls were not allowed in the "boys' building." The school director agreed that girls might get that impression but said that girls could apply for courses offered in the other building.

Entrance requirements

In addition to age and sex, other barriers can prevent students from gaining access to vocational training. Such obstacles include prior school performance, scores on aptitude tests, and specific entrance requirements for particular occupations set by advisory committees. For example:

School officials in one city told us that disapproval of applications for admission to that city's career development center was based on poor record of achievement, poor attendance, and poor disciplinary record. Only about 8 percent of the city's 36,000 high school students were enrolled at the center, yet over 500 spaces were unfilled in fall 1973.

Postsecondary school officials in several cities said graduation from high school or the equivalent is required for many trades for which licensing or union apprenticeship is required, even though students have successfully completed postsecondary training. High school graduation or the equivalent also is required for students seeking Federal assistance under the Higher Education Act of 1965, as amended, to support their postsecondary vocational training, which may prevent some students from pursuing such training.

Teacher tenure

Vocational education's capacity to respond to changing labor market needs depends to a great extent on adaptability of the instructional force. The education codes of most of the States we visited authorized school districts to dismiss vocational teachers if training in particular occupational areas no longer could be justified.

School officials told us, however, that once teachers obtained tenure with the school system, it is difficult to dismiss them. The specialty
areas of teachers than become a determinant for course offerings, rather than current or anticipated job opportunities.

**Scheduling**

Flexible scheduling, which provides for several course starting and completion dates, enables training institutions to respond to individual and community needs. However, we were told that students enter many VEA-funded programs only once or twice during the year. Because most public schools operate on a 9-month year, graduates flood the labor market in June and are not always able to be absorbed immediately. As a consequence, graduates may wait months to locate suitable employment, or they may be forced to accept jobs not necessarily related to their training. One effort to alleviate the problem of entry into the job market has been staggering the flow of graduates.

--- One State we visited planned to implement a 12-month school year with students selecting whichever three of four quarters they wished to attend.

--- Another State was experimenting with early placement, which placed students in jobs as students were ready rather than when the school year was officially over.

**CONCLUSIONS**

Although VEA's focus is on implementing changes needed to align program offerings more closely with areas of expanding employment opportunity, large enrollments have persisted in program areas with only a limited relationship to labor market considerations. As a result, graduates do not always obtain employment in fields for which they are trained, and there is little assurance that manpower needs in new and emerging occupations are being addressed. When States and LEAs continue to support with Federal funds, programs which offer limited opportunity for employment, it is questionable whether such action is consistent with VEA's intent.

**RECOMMENDATIONS TO THE SECRETARY OF HEW**

The Secretary of HEW should

--- Expand efforts to develop labor market data in a form which will better enable vocational planners at State and local levels to match occupational training with manpower needs, by working cooperatively with the Department of Labor, and provide technical assistance to States for training vocational planners in the use of such data.
--Assist States in developing techniques for obtaining information from students and employers to assess the appropriateness and adequacy of training and annually review the extent to which changes have been made in programs as a result.

--Assist States in identifying and implementing strategies to eliminate or dissipate barriers which inhibit improvement or expansion of vocational programs or restrict persons from fully participating, and evaluate periodically State progress and advise the Congress. For instance:

1. Review legislative provisions and administrative procedures designed to protect workers under the age of 18, and implement an action plan for the consideration of the Congress and State legislatures to change the laws and procedures to enable youth to interact with the adult world in ways that will better prepare them for the transition from school to work.

2. Implement applicable provisions of title IX of the Education Amendments of 1972 to eliminate sex discrimination in vocational education, particularly by adopting techniques proved effective in recruiting members of one sex to occupations traditionally considered the prerogative of the other sex.

3. Analyze entrance requirements to institutions and courses and advise States that Federal funds are not to be used to support programs which unfairly deny entrance to students who want training.

AGENCY COMMENTS AND GAO EVALUATION

HEW generally concurred with our recommendations and stated it had taken or planned to take actions to implement them. (See app V) HEW will:

--Cooperate with BLS to develop (1) manpower supply and demand data for dissemination to SEAs by July 1976, and (2) a matrix of available data and strategies for use in improving comprehensive State and local vocational education planning, monitor a study which is supposed to identify by January 1976 planning elements needed in State and local planning, schedule regional conferences in fiscal year 1976 for State and local planners to strengthen the use of available labor market data.

--Start a review in fiscal year 1975 of selected ongoing State followup studies of vocational students to determine their effectiveness and appropriateness for consideration in other States.
develop a national sampling technique for student followup for use by States in fiscal year 1976

--Evaluate periodically, and advise the Congress, of progress made by the States in overcoming barriers which inhibit improvement or expansion of vocational programs and restrict persons from fully participating

--Work closely with DOL to review legislative provisions designed to protect students enrolled in vocational programs. We believe that, because age limitations restrict students from interacting with the world of work, HEW's review of pertinent legislative provisions and administrative procedures should culminate in implementation of an action plan to change such laws and procedures.

--Request changes in State statistical reporting procedures to provide data on enrollments by sex in vocational programs in fiscal year 1975, undertake a study in fiscal year 1976 to identify successful recruiting techniques that have resulted in increased enrollments of one sex in occupational areas traditionally considered the prerogative of the other sex. The information developed through these efforts should be helpful, but we believe that HEW should take more aggressive action to eliminate the sex-stereotyping so prevalent in vocational education.

--Examine entrance requirements, through a national appraisal of postsecondary vocational programs conducted by the Office for Civil Rights, and seek remedy in instances where Federal laws are violated, monitor vocational education institutional policies on all State and local visits to determine if unfair entrance requirements exist. Although these efforts should aid in identifying entrance barriers, we believe that reference to the survey conducted by the Office for Civil Rights is misleading. According to an Office for Civil Rights official, this survey represents a first attempt to obtain information about 1,500 area vocational schools—800 of which are postsecondary. He said that such information has not been collected about vocational programs offered by high schools in the country's approximately 17,000 LEAs. In our opinion, HEW should also take action to insure that entrance barriers are identified at the high school level, where the major portion of vocational enrollments are concentrated.

RECOMMENDATIONS TO THE CONGRESS

The Congress, in its deliberations about VEA, should consider
--Requiring that Federal vocational funds directed to LEAs for programs be used for those skill areas for which existing or anticipated job opportunities, whether local, regional, or national, can be demonstrated.

--Requiring that work experience be an integral part of part B programs to the extent feasible.

--Requiring that schools take responsibility for job placement assistance and followup in federally supported vocational education programs.

The Congress also may wish to reduce the impact of several barriers which inhibit persons from participating in vocational education, by

--Considering amendment of the general provisions of the Higher Education Act of 1965 (20 U.S.C. 1088), specifically the provisions relating to definition of eligibility for particular student assistance programs, so that students without a high school diploma or the equivalent can take advantage of Federal grant and loan programs for postsecondary schools, by allowing designated school officials to certify students as eligible on the basis that they could reasonably be expected to complete the courses satisfactorily.

--Considering amendment of VEA to remove restrictions which result in vocational education opportunities being limited to those in or above ninth grade. Not all handicapped youth, for example, can reach the secondary level, yet need vocational services and training.
FLOW OF VOCATIONAL FUNDING IN ONE STATE

LOCAL $7.5 MILLION

$7.5 MILLION

SUPERINTENDENT OF PUBLIC INSTRUCTION $22.6 MILLION

$22.6 MILLION

LOCAL SCHOOL DISTRICTS VOCATIONAL-TECH INSTITUTES $25.4 MILLION

$25.4 MILLION

STATE $36.8 MILLION

$36.8 MILLION

COORDINATING COUNCIL $6 MILLION

$6 MILLION

FEDERAL $7.8 MILLION

$7.8 MILLION

STATE BOARD FOR COMMUNITY COLLEGE EDUCATION $16.2 MILLION

$16.2 MILLION

COMMUNITY COLLEGE DISTRICTS $18.8 MILLION

$18.8 MILLION

$25.4 MILLION

$24 MILLION
APPENDIX I

FLOW OF VOCATIONAL FUNDING IN ONE STATE

The source of the illustration is a 1972 State advisory council on vocational education report. According to the report, the source for all data was the State's coordinating council for occupational education, and the figures are from fiscal year 1972. The main purpose of the illustration is to depict sources and flow of vocational education funding. The data depicted is subject to some correction. Although the dollar amounts cited are fiscal year 1972 actual, they have been rounded for clarity. The total State and local dollars reported as going to local school districts and vocational-technical institutes was $30.1 million. This amount was divided into $22.6 million State and $7.5 million local to depict the local funding source. Without extensive data analysis, the State advisory council found it impossible to show an actual amount for local. The $7.5 million is an estimate based upon general analysis of the common school distribution formula and actual breakdown from vocational-technical institutes.

In addition, the report stated that:

"* * * It appears to be impossible to accurately split local from State funds because of the equalization formula and the manner in which associated records are kept in the Office of the Superintendent of Public Instruction."
## APPENDIX II

### STATE AND LOCAL DOLLARS FOR EVERY FEDERAL DOLLAR, VI A PART B

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*States which spent fewer state and local dollars for every federal dollar in fiscal year 1973 than in fiscal year 1970

Source: OE annual vocational and technical education selected statistical tables
### APPENDIX II A

#### STATE AND LOCAL DOLLARS FOR EVERY FEDERAL DOLLAR,

**VEA PART B, DISADVANTAGED**

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| NATIONAL         | 1    | 58   | 1    | 70   |

*States which expended fewer State and local dollars for every Federal dollar in fiscal year 1973 than in fiscal year 1970

Source: OE annual vocational and technical education selected statistical tables

94
STATE AND LOCAL DOLLARS FOR EVERY FEDERAL DOLLAR,  
VEA PART B, HANDICAPPED  
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*States which expended fewer State and local dollars for every Federal dollar in fiscal year 1973 than in fiscal year 1970.

Source: OE annual vocational and technical education selected statistical tables.
### APPENDIX III

#### PERCENT OF FEDERAL VOCATIONAL EXPENDITURES

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Source: OF annual vocational and technical education selected statistical tables.
## APPENDIX III A

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Source: OE annual vocational and technical education selected statistical tables
## APPENDIX III B

### PERCENT OF FEDERAL VOCATIONAL EXPENDITURES

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**National** | 73.1 | 77.9 | 77.4 | 73.7

Source: OE annual vocational and technical education selected statistical tables
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*Group guidance, remedial programs and special programs
*Enrolled in instruction in one or more occupational preparation classes
*Completed required sequence in a vocational program and left school or graduated
*Does not include those who continued their education joined the Armed Forces or were otherwise not available to be placed in employment or whose status was unknown

Source: OE Vocational and Technical Education Selected Statistical Tables for 1972 and OE computer printouts
Dec 10 1974

Mr Gregory J Ahart
Director, Manpower and Welfare Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Ahart

As requested, we are pleased to furnish you with our comments, enclosed, on your draft report to the Congress entitled, "What is the Role of Federal Assistance for Vocational Education?" We have addressed our comments to the report's recommendations as modified based on a meeting of representatives of the Comptroller General and the Department on November 22. Also, we understand that certain parts of the draft report we reviewed will be modified to incorporate further references to positive results achieved by the Vocational Education Program.

We appreciate the opportunity to meet and discuss this report with your representatives, and to comment on it in draft form.

Sincerely yours,

John D. Young
Assistant Secretary, Comptroller

Enclosure
Department of Health, Education, and Welfare Comments Pertaining to the Draft Report by the General Accounting Office entitled "What is the Role of Federal Assistance for Vocational Education?"

GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

--Identify and accumulate data about strategies for providing vocational education that are catalytic and offer the greatest pay-off, and review the use of Federal funds to assure that they serve the catalytic role intended by Congress.

DEPARTMENT COMMENT

We concur with the recommendation that additional data on vocational education are needed. An improved data base for decision-making is one major outcome expected from Office of Education research contracts. "Administration of vocational education at the State level" is a high priority area for research in fiscal year 1975 under Part C of the Act and proposals are being solicited which will design, develop and field test a comprehensive educational management and information system. Additionally, we will develop procedures for identifying, accumulating, and disseminating information about strategies which provide vocational education programs that are catalytic and offer the greatest pay-off. We assume "greatest pay-off" means most cost effective.

We believe our procedures do give assurance that Federal funds are indeed used as a catalyst as well as for all of the other purposes authorized in the Act. We believe that catalytic effect is demonstrated by such things as significant increases in enrollment, the increased number of area vocational schools constructed in the last few years and the subsequent tripling of new training stations, the addition of programs in new and emerging occupations, the number of disadvantaged and handicapped students being served, and the continued State and local matching funds far in excess of those required by law. Consequently, we do not concur with the last part of this recommendation because we do not agree with the assumption that funds are not now being used as catalytic.

GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

--Develop with States an improved approach to planning which will better meet State needs as well as provide information necessary to adequately monitor and evaluate Federal program expenditures.

DEPARTMENT COMMENT

We concur with this recommendation. Vocational Education legislation soon to be introduced, emphasizes the continued need for improved long-range planning.
GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

---Expand management evaluations to State and local vocational education programs supported by Federal funds

DEPARTMENT COMMENT

We concur with this recommendation. The law places responsibility for evaluation of programs on the National Advisory Council for Vocational Education, the State Advisory Councils, and State Boards for Vocational Education. Reports of these evaluations are a matter of public record. The Office of Education conducts impact evaluation studies on a regular basis for reporting program status to Congress. We will attempt to expand management evaluation at the State and local levels.

GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

---Expand its effort to enforce the requirement that all local and State education agencies, in planning vocational programs, identify the needs of public and private business, industry, labor and students, and that those needs be considered the primary basis for decision-making about provision of vocational services supported by the VEA

DEPARTMENT COMMENT

We concur with this recommendation that data are needed for planning vocational education programs. The present review and approval procedure for the State Vocational Education plan attempts to assure that the planning needs identified in the recommendations are being met. Local plans and applications required by States contain similar requirements. In regularly scheduled meetings and workshops throughout the year we will continue to assist the States in strengthening and improving comprehensive State and local planning. In addition we are currently monitoring 21 projects in 19 States that were developed in response to a 1974 research priority entitled "Manpower Information and Systems for Education."

GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

---Expand its efforts to have State and local education agencies establish working partnerships among all institutions providing occupational training at all levels—secondary, postsecondary, adult
DEPARTMENT COMMENT

We concur with this recommendation. Many States have commissions to coordinate public and private agencies at all levels and represent various interest groups and institutions. The activities of State Advisory Councils for Vocational Education complement such coordination and assist local advisory councils in promoting such working partnerships. We will encourage State agencies to assist local education agencies in developing working partnerships among local institutions.

GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

--Increase its efforts in the development of vocational information systems that will provide comparable data, and continuously review utilization of that data to improve vocational programs.

DEPARTMENT COMMENT

We concur with this recommendation. The vocational education information system for collecting statistical information provides for annual reporting of comparable data by all States and is constantly under review and modification. Leadership for improved reporting will be provided during the fiscal year through 10 regional training sessions for regional and State personnel responsible for reporting. We wish also to call attention to an Office of Education funded project entitled "The Development of a Basic Vocational Education Information System." In addition, a priority area for research in fiscal year 1975 under Part C of the Act entitled "Administration of Vocational Education at the State Level" will also address this recommendation.

GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

--Clarify the roles of various organizational entities within HEW involved in occupational training and implement some mechanism by which these jurisdictions can engage in coordinated, comprehensive planning.

DEPARTMENT COMMENT

We concur with the recommendation and will institute an intradepartmental coordinating council on Occupational Education which will meet monthly to discuss mutual interests. It will be presided over by the Assistant Secretary for Education.
GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

--Analyze actual State practices in distribution of Federal funds to determine consistency with the law's criteria

DEPARTMENT COMMENT

State expenditure procedures as provided in the State Plan are reviewed for assurance that Federal funds are to be distributed in accordance with the criteria in the law. Regional program officers will continue to review State practices in carrying out these procedures to determine their effectiveness in actually meeting the varying needs of local education agencies. We will establish procedures to coordinate this effort with the HEW Audit Agency.

GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

--Improve technical assistance to States to help them in identifying, developing, and applying appropriate data which will adequately consider each criteria in the law

DEPARTMENT COMMENT

We concur with this recommendation. We will expand the guidance we have already extended to the States in relation to criteria for the disadvantaged and handicapped. Insofar as staff resources permit, we will work with the Regional Offices in order to impact on the States' need to improve the identification, development and application of data pertinent to each criteria in the law.

GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

--Perform follow-up reviews to assure that States improve their distribution procedures so that Federal funds can be better targeted to meet needs defined in the law

DEPARTMENT COMMENT

We concur in this recommendation and will direct the Regional Offices to provide technical assistance and follow-up reviews in the States to assist them in improving their distribution procedures in accordance with the Act.
GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

--Encourage State and LEA's to assess training resources and facilities in all geographic areas so the role of Federal funding can be viewed within the context of total available resources.

DEPARTMENT COMMENT

We concur with this recommendation. We believe that such information is essential to occupational planning. States are now required to include training data from available resources in their State Plans. In addition, LEA applications must be developed in consultation with representatives of education and training resources available in the area served and coordinated with training offered under CETA. We will encourage States to assess all training resources and facilities as a part of the state planning process to expand vocational and technical education training opportunities in all areas of the State. We will investigate possible sources of funds to implement a study in Fiscal Year 1976 which will assess various alternative training strategies.

GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

--Require that LEA's in their applications to SEA's describe and document the nature and extent of their cooperative efforts with other sources of training and employment.

DEPARTMENT COMMENT

We will review LEA application forms on file with State plans to determine to what extent the LEA's are now being required by States to describe and document cooperative efforts with other sources of training and employment. In those States where the information requested is inadequate, we will assist the States in revising their application forms.

GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

--Work with States to increase flexibility in vocational training arrangements, through such mechanisms as expansion of the present school day, week or year, inclusion of transportation costs to make better use of existing facilities, and provision of vocational training in nonpublic facilities so that more people can be trained in more occupational categories.
APPENDIX V

DEPARTMENT COMMENT

We concur with this recommendation and will continue to work with States to increase flexibility in vocational training arrangements and improve the use of resources. During Fiscal Year 1976 a project will be developed and funded to seek out successful examples of flexible arrangements and to develop models for use by States and LEAs in increasing flexibility in vocational training arrangements.

GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

- Work with States to identify statutes and administrative procedures which may prevent schools from utilizing other community training resources, and implement plans to remove these obstacles, including encouraging State Agencies to make recommendations to appropriate legislative bodies.

DEPARTMENT COMMENT

We concur with the recommendation and will develop an evaluative study to identify Federal and State statutes and administrative procedures that limit the use of community training resources. The dissemination of the results of the study will provide information useful in the development of plans to remove such obstacles. We will also disseminate the information through the Office of Management and Budget to the National Legislative Conference for their consideration.

It must be observed, however, that most institutional barriers are well recognized by State administrative personnel who have often been working for years to develop ways of removing such obstacles.

GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

- Discourage the use of VEA funds for construction except in instances in which there is adequate justification that additional facilities are needed after thorough consideration of alternatives, and then require sufficient flexibility so that facilities can be adapted to changing training requirements.

DEPARTMENT COMMENT

We concur with this recommendation. We will continue to encourage States, as they develop their annual and long-range plans, to weigh carefully the expenditure of Federal funds for additional facilities unless adequate justification can be provided and operational funds can be assured.
GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

--Expand efforts to develop labor market data in a form which will better enable vocational planners at State and local levels to match occupational training with manpower needs, by working cooperatively with the Department of Labor, and provide technical assistance to States for the training of vocational planners in the use of such data.

DEPARTMENT COMMENT

We concur with the recommendation and wish to call attention to activities to strengthen the supply and use of valid labor market data already initiated.

--Monthly meetings are being held with DOL/BLS (Bureau of Labor Statistics) to develop manpower supply and demand data within States and selected labor market areas. State participation will be accelerated during the rest of the Fiscal Year. It is anticipated that data from this source will be available and disseminated to all State Divisions of Vocational and Technical Education by July 1, 1976.

--Monitoring the North Carolina State University Research Center study which will identify planning elements needed in State and local planning. This information should be available by January 1, 1976.

We will cooperate with the Bureau of Labor Statistics in developing a matrix of available National, State, and local labor market data and strategies for use in improving comprehensive State and local vocational education planning. A series of regional conferences will be scheduled in Fiscal Year 1976 for State and local planners to strengthen the use of available labor market data at both the State and local planning levels.

GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

--Assist States in developing techniques for obtaining information from students and employers to assess the appropriateness and adequacy of training, and annually review the extent to which changes have been made in programs as result.
APPENDIX V

DEPARTMENT COMMENT

On-going activities and projects will be continued and strengthened to provide additional information from the follow-up of students and information from their employers. A staff review of selected on-going State follow-up studies to determine their effectiveness and appropriateness for consideration in other States will be started during the fiscal year 1975.

A National Sampling Technique for student follow-up will be developed for use by States in Fiscal Year 1976 and base year data of the National Longitudinal study of the high school graduating class of 1972 will be disseminated to States.

GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

---Assist States in identifying and implementing strategies to eliminate or dissipate barriers which inhibit improvement or expansion of vocational programs or restrict persons from fully participating. Periodically evaluate State progress, and advise Congress. Specifically.

DEPARTMENT COMMENT

We concur with this recommendation. It is recognized that a multiplicity of barriers exist in States which inhibit improvement or expansion of vocational education or which limit participation in these programs. Overcoming these barriers, which may have a long history in tradition, practices or laws, is a major concern at the Federal, State, and local levels. State vocational officials have shown continued sensitivity to such restrictions as teacher certification requirements, union hiring practices, length of the school day, use of facilities for an extended day, student transportation, and use of private schools. We will periodically evaluate progress made by the States in overcoming these barriers and will advise Congress of the progress.

GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

---Review legislative provisions and administrative procedures designed to protect workers under the age of 18, and implement an action plan for the consideration of Congress and State legislatures to change the laws and procedures to enable youth to interact with the adult world in ways that will better prepare them for the transition from school to work.
DEPARTMENT COMMENT

We will continue to work very closely with the Department of Labor to review legislative provisions designed to protect the students enrolled in programs of vocational and technical education.

Pilot programs, such as "WECEP", have been operating as joint projects of the Departments of Labor and Health, Education, and Welfare to provide opportunities for students ages 14 to 15 to participate in work experience programs. We will initiate a request to the Secretary of Labor to extend "WECEP" to 14 and 15 year old students in all States.

GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

--Implement applicable provisions of Title IX of the Education Amendments of 1972 to eliminate sex discrimination in vocational education, particularly by adopting techniques proved effective in recruiting members of one sex to occupations traditionally considered the prerogative of the other sex.

DEPARTMENT COMMENT

We concur in this recommendation and have taken positive steps with the Office of Civil Rights and through Department policy directives to eliminate sex discrimination.

Changes in State statistical reporting procedures will be requested to provide data on enrollments by sex in all vocational and technical education programs in fiscal Year 1975. In addition, we will undertake a study in Fiscal Year 1976 to identify successful recruiting techniques that have resulted in increased enrollments of the one sex in occupations traditionally considered the prerogative of the other sex.

GAO RECOMMENDATIONS TO THE SECRETARY, HEW

HEW Should

--Analyze entrance requirements to institutions and courses and advise States that Federal funds are not to be used to support programs which unfairly deny entrance to students who want training.

DEPARTMENT COMMENT

The National appraisal of postsecondary vocational education programs being conducted by the Office of Civil Rights will examine these requirements. States whose programs are found to be in violation of Federal laws will be required to remedy such situations. We will continue to monitor vocational education institutional policies on all State and local visits to determine if unfair entrance requirements exist.
PRINCIPAL HEW OFFICIALS
RESPONSIBLE FOR ADMINISTERING
ACTIVITIES DISCUSSED IN THIS REPORT

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<tr>
<th>Tenure of office</th>
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<tr>
<td>Secretary of HEW</td>
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<td>Caspar W Weinberger</td>
<td>Feb 1973</td>
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<td>Frank C Carlucci (acting)</td>
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<td>Elliot L Richardson</td>
<td>June 1970</td>
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<td>Assistant Secretary for Education</td>
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<td>Virginia Y Trotter</td>
<td>June 1974</td>
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<td>Sidney P Marland, Jr</td>
<td>Nov 1972</td>
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<td>Commissioner of Education</td>
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<td>Terrell H Bell</td>
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<td>Associate Commissioner, Adult, Vocational, Technical and Manpower Education</td>
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<td>Charles H Buzzell (acting)</td>
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<td>William F Pierce (acting)</td>
<td>Sept 1973</td>
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<td>Robert M Worthington</td>
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