



MEMORANDUM

To: Members of the Joint Budget Committee, House Education Committee, and Senate Education Committee

From: Nancy McCallin, President, Colorado Community College System

Date: June 24, 2008

Re: Colorado Vocational Act report for Fiscal Year 2006-07

This report contains accountability information concerning career and technical education (CTE) in the public schools districts of Colorado for the 2006-07 school year. CCCS respectfully submits this report to the Joint Budget Committee and House and Senate Education Committees in compliance with the State Assistance for Vocational Education Act (commonly referred to as the Colorado Vocational Act) of 1970 as revised.

The CTE programs offered through Colorado's high schools are an important part of the comprehensive delivery system of CTE in the state. These programs are fundamental to the economic vitality and future development of local communities and the State of Colorado.

In Fiscal Year 2006-07, the general assembly provided \$20,635,922 to assist nearly 160 school districts in funding over 1200 secondary CTE programs. There were just over 108,000 total student enrollments in 265 high schools, 8 technical centers, 6 community colleges, one four-year college, and 4 area vocational schools/technical colleges.

Students Served: Of the 108,000 secondary CTE enrollments, 34.7 percent (37,793) were identified as disadvantaged and 9.8 percent (10,658) as disabled. Minority students represented 31.2 percent (34,442) of total CTE students. More than 23,345 students build leadership skills and participate in nine CTE student organizations as state affiliated members. Thirty-seven percent of the total 9-12th grade secondary students in Colorado were enrolled in at least one CTE program in 2006-07. The information above is based on duplicated headcount data. The unduplicated headcount within a career cluster is listed in Exhibit 1.

Job Placement: In 2006-07, there were 44,530 completers of all secondary CTE programs. During the last three years, for those students contacted and available

for the labor force, the percentage obtaining jobs has remained relatively consistent at about 97 percent. CTE has strong ties to the community and business and industry. More than 5,000 community and business leaders serve on advisory committees and councils supporting CTE programs. The information above is based on duplicated headcount data. The unduplicated headcount data is listed in Exhibit 1.

Colorado's Investment in CTE: Over the last 30 years, appropriations for the Colorado Vocational Act have dropped proportionately to the dramatic increase of the actual cost of CTE programs. In 1971-72, the General Assembly provided just over 58 percent of the actual cost of CTE programs (Actual cost: \$11.16 million, state funding: \$6.5 million). In 2006-07, the General Assembly provided 22.4 percent of the actual cost of CTE programs. (Actual cost: \$91.8 million, state funding: \$20.6 million).

With the passage of the reauthorization of the federal Perkins Act in 2006, Colorado has updated its CTE program areas to reflect the national movement toward Career Clusters and Career Pathways. Colorado grouped the Career Clusters into 6 Industry Sectors that reflect the unique economy of Colorado.

Below is a listing of the Colorado Industry Sectors and associated Career Clusters and Career Pathways. In Appendix A you will find the Colorado Career Cluster Model. This provides the general assembly with the specific nature of the types of programs funded. Although Colorado has seventeen Career Clusters, CCCS collects data only on those clusters with programs. Therefore, some clusters may not have data. Additionally, CCCS collects data on Academic and Career Success programs. For completeness, that data is included in this report. Finally, please note that CTE is transitioning into this new Career Cluster Model and we expect changes to be made over the next few years as we adapt the Model to Colorado's unique needs.

Colorado Career Clusters & Pathways:

Academic and Career Success

Agriculture and Natural Resources

- **Agriculture, Food & Natural Resources** -Animal Science, Agribusiness Systems, Environmental Service Systems, Food Products & Processing Systems, Natural Resources, Plant Science, Power, Structural & Technical Systems.
- **Energy** – Fossil Energy Production, Transmission & Distribution, Renewable Energy Production, Energy Research.

Business and Public Administration

- **Management & Administration** – Corporate/General Management, Administrative Services, Business Information Technology, Human Resource Management, Operations Management
- **Marketing**-Marketing Communications, Management, Research, Merchandising, Professional Sales/Management.
- **Finance**-Accounting, Banking Services, Corporate Finance, Insurance, Securities and Investments.
- **Government & Public Administration**-Revenue & Taxation, Foreign Service, Governance, Planning, Public Management & Administration, Regulation, Legal Services

Hospitality, Human Services and Education

- **Hospitality & Tourism**- Lodging, Recreation Amusements & Attractions, Restaurants & Food/Beverage Services, Travel & Tourism.
- **Human Services**-Consumer, Counseling & Mental Health, Family & Community, & Personal Care Services, Early Childhood Development.
- **Education & Training**- Teaching and Training, Professional Support Services, Administration & Administrative Support.

Health Sciences and Public Safety

- **Health Sciences**-Biotechnology Research & Development, Diagnostic, Supportive, Health Informatics, & Therapeutic Services
- **Law, Public Safety, Corrections & Security**-Correction Services, Emergency & Fire Management Services, Law Enforcement Services, Security & Protective Services.

Skilled Trades and Technical Sciences

- **Transportation, Distribution & Logistics**- Facility & Mobile Equipment Maintenance, Health, Safety, & Environmental Management, Logistics, Planning & Management Services, Sales & Service, Transportation/Systems Infrastructure, Planning Management Regulation, Warehousing & Distribution Center Operations.
- **Architecture & Construction**-Construction, Design & Pre-Construction, Maintenance & Operations.
- **Manufacturing**-Production/Process Technology, Manufacturing Production, Maintenance, Installation & Repair, Quality Assurance, Health, Safety & Environmental Assurance, Logistics & Inventory Control.

STEM, Arts, Design and Information Technology

- **STEM**-Science, Technology, Engineering and Math
- **Arts, A/V Technology and Communication**-Audio/video Technology and Film, Journalism and Broadcasting, Performing Arts, Printing/Publishing, Telecommunications, Visual & Design Arts.
- **Information Technology**-Information Support and Services, Interactive Media, Network Systems, Programming & Software Engineering.

Exhibit 1 below depicts unduplicated headcount data within each cluster. A student may count in multiple clusters because he/she takes a CTE course in various clusters in an academic year. Many students choose to take more than one CTE class each year and when all of those students are counted in each class, enrollment is above 108,000. When duplication across and within clusters is removed from the data, there were 87,913 individual secondary students enrolled in CTE programs in Fiscal Year 2006-07. Colorado spends over \$81 million educating these secondary students in CTE. The average cost per student FTE is \$6,651.

Exhibit 1: Fiscal Year 2006-07 CTE Student and Cost Information

FY 2006-07 Colorado Career Clusters	FY 2006-07 student enrollment (1)	FY 2006-07 students completed	FY 2005-06 students employed (2)	FT 2006-07 Student FTE	FY 2006-07 school district cost	FY 2006-07 Cost per Student FTE
Academic & Career Success Cluster	20,200	7,029	1,945	2,010	\$16,263,255	\$8,091
Agriculture and Natural Resources Cluster	4,483	2,108	693	720	\$6,609,170	\$9,176
Architecture and Construction Cluster	7,283	2,934	891	869	\$5,621,024	\$6,467
Arts, A/V Technology and Communication Cluster	3,657	1,610	316	564	\$4,291,111	\$7,612
Education & Training Cluster	1,161	569	143	159	\$973,716	\$6,123
Health Science Cluster	1,464	1,033	334	373	\$2,515,739	\$6,750
Hospitality and Tourism Cluster	4,928	2,172	952	516	\$2,918,905	\$5,656
Human Service Cluster	2,029	980	569	444	\$3,799,874	\$8,565
Information Technology Cluster	928	393	111	83	\$531,689	\$6,397
Law, Public Safety, Corrections, & Security Cluster	185	148	55	59	\$387,599	\$6,567
Management and Administration Cluster	43,218	16,658	4,213	4,028	\$22,409,554	\$5,564
Manufacturing Cluster	2,587	1,012	368	513	\$3,680,357	\$7,170
Marketing Cluster	8,569	4,363	1,701	871	\$4,187,779	\$4,806
STEM Cluster	4,192	1,551	295	329	\$2,098,002	\$6,383
Transportation, Distribution, and Logistics Cluster	2,645	1,646	753	668	\$4,897,873	\$7,329
Totals	107,529	44,206	13,339	12,206	\$81,185,647	\$6,651

(1) Counts are all unduplicated within each cluster, but a student could be enrolled in multiple clusters

(2) Employed includes related to training, unrelated to training, military service full or part time

Appendix A: Colorado Career Clusters Model

