



**FIND YOUR FUTURE IN CAREER PATHS & CAREER CLUSTERS**

**Science, Technology, Engineering and Mathematics**

Engineering and Technology  
Science and Math

**Architecture and Construction**

Design and Pre-Construction  
Construction  
Maintenance and Operations

**Manufacturing**

Production  
Manufacturing Production Process Development  
Maintenance, Installation and Repair  
Quality Assurance  
Logistics and Inventory Control  
Health, Safety and Environmental Assurance

**Transportation, Distribution and Logistics**

Transportation Operations  
Logistics, Planning and Management Services  
Warehousing and Distribution Center Operations  
Facility and Mobile Equipment Maintenance  
Transportation Systems and Infrastructure  
Planning, Management and Regulation  
Health, Safety and Environmental Management  
Sales and Services

**Human Services**

Early Childhood Development and Services  
Counseling and Mental Health Services  
Family and Community Services  
Personal Care Services  
Consumer Services

**Hospitality and Tourism**

Restaurants and Food and Beverage Services  
Recreation, Amusement and Attractions  
Travel and Tourism  
Lodging

**Government and Public Administration**

Public Management and Administration  
Governance  
National Security  
Foreign Service  
Planning  
Revenue and Taxation  
Regulation

**Law, Public Safety, Corrections and Security**

Correction Services  
Emergency and Fire Management Services  
Security and Protective Services  
Law Enforcement Services  
Legal Services

**Education and Training**

Administration and Administrative Support  
Professional Support Services  
Teaching and Training

**Agriculture, Food and Natural Resources**

Food Products and Processing Systems  
Plant Systems  
Animal Systems  
Power, Structural and Technical Systems  
Natural Resources and Environmental Systems  
Agribusiness Systems

**Human Services**

Helping Path

**Industrial & Engineering Technology**

Building & Fixing Path

**Essential Knowledge & Skills**

Academic Foundations  
Ethics & Legal Responsibilities  
Systems Leadership & Teamwork  
Informational Technology Applications  
Employability & Career Development  
Problem Solving & Critical Thinking  
Safety, Health & Environmental  
Communications  
Technical Skills

**Natural Resources Agriculture**

Nature Path

**Business, Management & Technology**

Business Path

**Health Services**

Health Path

**Arts & Communication**

Creative Path

**Arts, A/V Technology and Communications**

Audio and Video Technology and Film  
Printing Technology  
Visual Arts  
Performing Arts  
Journalism and Broadcasting  
Telecommunications

**Information Technology**

Network Systems  
Information Support and Services  
Web and Digital Communications  
Programming and Software Development

**Finance**

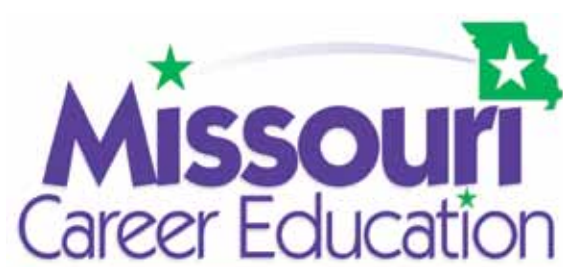
Accounting  
Insurance  
Banking Services  
Business Finance  
Securities and Investments

**Marketing**

Marketing Management  
Marketing Communications  
Marketing Research  
Professional Sales  
Merchandising

**Business Management and Administration**

General Management  
Human Resources Management  
Business Information Management  
Administrative Support  
Operations Management



Department of Elementary and Secondary Education  
Division of Career Education  
P.O. Box 480  
Jefferson City, MO 65102-0480  
(573)751-2660



# Career Clusters 15 Critical Components Implementation Guide

## Critical Component 1: Administrative Support

LEVEL 3: EXCELLENT	LEVEL 2: IN PROGRESS	LEVEL 1: NO PROGRESS
The college or school administrators and school board members support the concept of the career emphasis/focus (cluster) process and components. They provide scheduled chunks of time for the cluster team (administration, teaching faculty, industry and education partners, and career counseling staff) to meet together, offer professional development opportunities for the cluster team, and encourage learner participation and parent and community support.	The college or school administrators and school board members are informed of the Career Cluster. They think it is a good idea but do not spend time with the cluster team or have a clear perception of the process or components.	The college or school administrators are not particularly in favor of the Career Cluster and the faculty members are on their own to try to figure out how to implement the program. The school board knows little about the Career Cluster and does not see its value since it is not an academic program.

## Critical Component 2: Shared Planning

LEVEL 3: EXCELLENT	LEVEL 2: IN PROGRESS	LEVEL 1: NO PROGRESS
The entire Cluster Curriculum Team has regularly scheduled time for program planning and curriculum design. They have the equivalent of at least one full day each month to work together and compare learner progress and curriculum effectiveness.	The Teaching team has a schedule that allows for weekly, shared program planning, curriculum design and other Career Cluster related activities.	Teaching teams are not acknowledged and must try to do planning and other preparation during lunch, before or after school.

## Critical Component 3: Career Development

LEVEL 3: EXCELLENT	LEVEL 2: IN PROGRESS	LEVEL 1: NO PROGRESS
Each learner in the Career Cluster has a scheduled meeting with a career counselor, teacher advisor, or faculty advisor on at least two occasions each school year to develop and revise as necessary an individual career education plan (plan of study). Parents are included in the career planning sessions. Learners base their career plans on a number of career awareness and exploration experiences.	The Teaching team has a schedule that allows for weekly, shared program planning, curriculum design and other Career Cluster related activities.	Learners do not have a career education plan. They only see a counselor if they are having problems in school or wish to change a class.

## Critical Component 4: Professional Development

LEVEL 3: EXCELLENT	LEVEL 2: IN PROGRESS	LEVEL 1: NO PROGRESS
The entire Cluster Team jointly participates in professional development activities that help build their knowledge, skills, and abilities in the selected Career Cluster and the application to teaching methodology.	The Teaching team is provided resources and release time to attend at least one professional development activity each year.	Release time for professional development is not made available for other than school related in-service sessions.

## Critical Component 5: Standards-Based Curriculum

LEVEL 3: EXCELLENT	LEVEL 2: IN PROGRESS	LEVEL 1: NO PROGRESS
Curriculum is designed to include both the Career Cluster Foundation and Pathway Knowledge and Skills, industry standards, and appropriate academic standards. Curriculum enhances and reinforces academic content and, as a result, improves both Career Cluster and academic achievement.	Curriculum is focused on academic content. Little attention is paid to the Career Cluster Foundation Knowledge and Skills.	Traditional curriculum is offered. It may not be standards based.

## Critical Component 6: Parent and Community Support

LEVEL 3: EXCELLENT	LEVEL 2: IN PROGRESS	LEVEL 1: NO PROGRESS
Parents and/or guardians/mentors are informed of the program content, participate in the career decision-making process, and support the program in various settings. Community groups offer program support through sponsorships and marketing. They assist with identifying workplace learning sites and building industry partnerships.	Parents/guardians and community groups receive notification of the selected Career Cluster. They are invited to participate.	Parents/guardians and community groups are not actively involved in the Career Cluster. They receive responses as requested.

## Critical Component 7: Education Partnerships

LEVEL 3: EXCELLENT	LEVEL 2: IN PROGRESS	LEVEL 1: NO PROGRESS
Elementary school, middle school, high school, career technical school, college, university, and adult skill center faculty are included in the Career Cluster team, as appropriate, to assure a learning continuum. Partnerships are formalized -- interdisciplinary and sequential -- across levels of education.	Partnerships are formal or informal and may be limited to specific teaching faculty and courses.	Education partnerships have not been developed.

## Critical Component 8: Business and Industry Partnerships

LEVEL 3: EXCELLENT	LEVEL 2: IN PROGRESS	LEVEL 1: NO PROGRESS
Partners are fully engaged as Cluster Team members. They are representative of the entire Career Cluster. The representatives participate in planning and development as well as assist in classroom and workplace implementation and support.	Industry partnerships are limited to individual classroom participation based on one to one relationships.	Industry partnerships have not been developed.

## Critical Component 9: Multi-Measure Assessment

LEVEL 3: EXCELLENT	LEVEL 2: IN PROGRESS	LEVEL 1: NO PROGRESS
Assessment includes both cumulative (projects, research papers, portfolios, workplace learning or community service) and on-demand (multiple choice, presentation, demonstration, scenario response) measures and meets the criteria for several disciplines.	Assessment is limited to on-demand modalities or a single cumulative modality and only measures content for one discipline.	Assessment is traditional, e.g., multiple choice, matching, essay and true-false items.

## Critical Component 10: Interdisciplinary Teams

LEVEL 3: EXCELLENT	LEVEL 2: IN PROGRESS	LEVEL 1: NO PROGRESS
The Cluster Teams work collaboratively to offer the curriculum in an interdisciplinary approach. The content is typically designed around a common theme or project with a culminating activity, product, or service as a result of the instruction.	Teachers from two disciplines work together to connect content around a common theme or project.	Teachers work independently in single disciplines. Content is not connected.

## Critical Component 11: Flexible Schedules

LEVEL 3: EXCELLENT	LEVEL 2: IN PROGRESS	LEVEL 1: NO PROGRESS
School schedules are flexible and allow for interdisciplinary team managed blocks of time as needed for projects, labs, and other action-based activities.	Blocks of time are assigned to particular disciplines.	The school schedule is organized in traditional blocks of time.

## Critical Component 12: Integrated Curriculum

LEVEL 3: EXCELLENT	LEVEL 2: IN PROGRESS	LEVEL 1: NO PROGRESS
The curriculum is developed and taught by the Cluster Team. The content is multidisciplinary and based on academic and Career Clusters Foundation Knowledge and Skills and taught within the context of the selected Career Cluster industry. Career Cluster content is strengthened by the integration of academic concepts.	The curriculum is enhanced, expanded or reinforced through collaboration between an academic and a career technical teacher.	Integration is unilaterally determined by the career technical teacher.

## Critical Component 13: Creative and Innovative Teaching Strategies

LEVEL 3: EXCELLENT	LEVEL 2: IN PROGRESS	LEVEL 1: NO PROGRESS
Team-building, critical-thinking, and problem-solving activities are incorporated into the program. All content is reinforced through application and practice.	Instruction is limited to use of applications to reinforce the content.	The content is taught in traditional lecture, read and test mode.

## Critical Component 14: Workplace Learning

LEVEL 3: EXCELLENT	LEVEL 2: IN PROGRESS	LEVEL 1: NO PROGRESS
All learners participate in workplace learning experiences consistent with their career goals. The workplace learning is directly related to and consistent with the classroom instruction.	Each learner has limited job shadow experience opportunities. The experience is related to the learners' career goals.	Workplace learning is not a part of the program.

## Critical Component 15: Student-Centered Learning

LEVEL 3: EXCELLENT	LEVEL 2: IN PROGRESS	LEVEL 1: NO PROGRESS
Learners are involved in the design and development of their coursework based on their interests, career goals and consistency with the standard(s) to be met.	Learners are provided with an outline of the course with expected outcomes. They are given a list of project topics from which to make a selection.	Curriculum is offered in a traditional mode with teachers presenting the information.