



Maryland Career Clusters

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Presentation Objectives

- Provide an overview of Maryland's Career Cluster Framework
- Discuss Career Cluster Implementation and sustainability
- Encourage you to consider how the CC's might advance your work



Definition

- Career Clusters are groupings of interrelated occupations that represent the full range of career opportunities in Maryland's economy
- Embraced nationally at both secondary and postsecondary levels

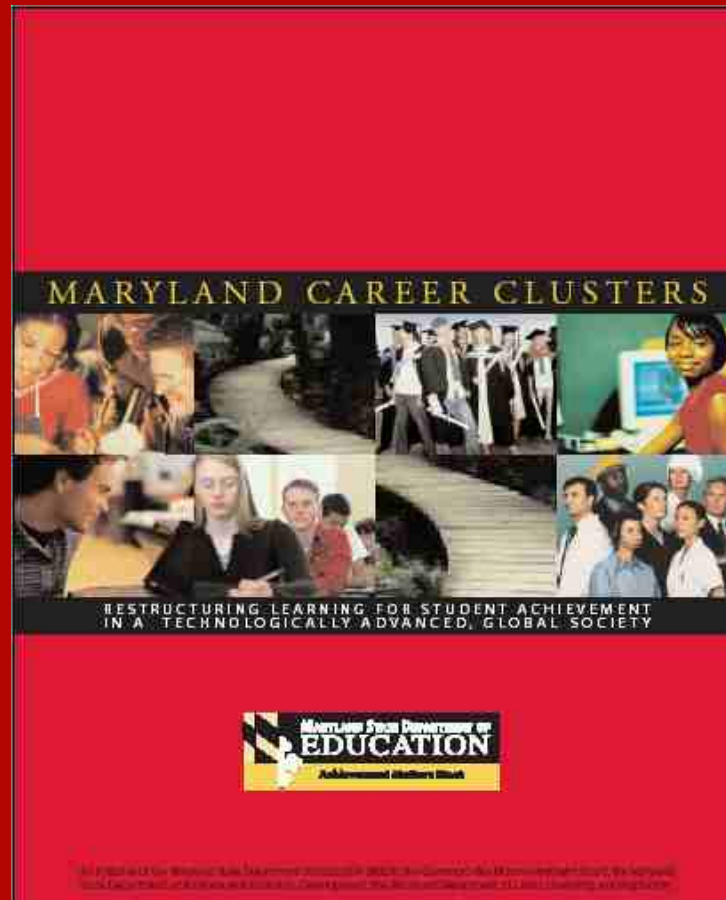


Ten Career Clusters

1. Arts, Media, & Communication
2. Business, Management & Finance
3. Consumer Services, Hospitality, & Tourism
4. Construction & Development
5. Environmental, Agricultural, & Natural Resources Systems
6. Health & Biosciences
7. Human Resource Services
8. Information Technology
9. Manufacturing, Engineering & Technology
10. Transportation Technologies



Career Cluster “Red Book”





Career Cluster Organization

- Developed by over 350 MD employers
- Industry Insights – “teaser”
- Cluster Knowledge and Skills
- Career Pathways – Core Business Functions/economic activities of the Industry
- Cross Cluster Skill Areas



Why Career Clusters?

to connect educators and employers

- Changing Economy
 - Global Economy- Value, Speed Agility
 - Career Progression/Preparation
 - Shift in Work Organization and Employment
- Changing Educational Landscape
 - College and Career Ready
 - Alignment of the Learning levels
 - Completion Agenda



Why Career Clusters?

- Students struggle to find relevance that coursework will have on their future
- CC's promote success by relating educational experiences to future goals and aspirations
- Leads to focused programs of study



A Single, Organizing System to:

- Create a common language
- Bridge education and workforce preparation
- Implement priorities for economic development
- Improve school and student performance



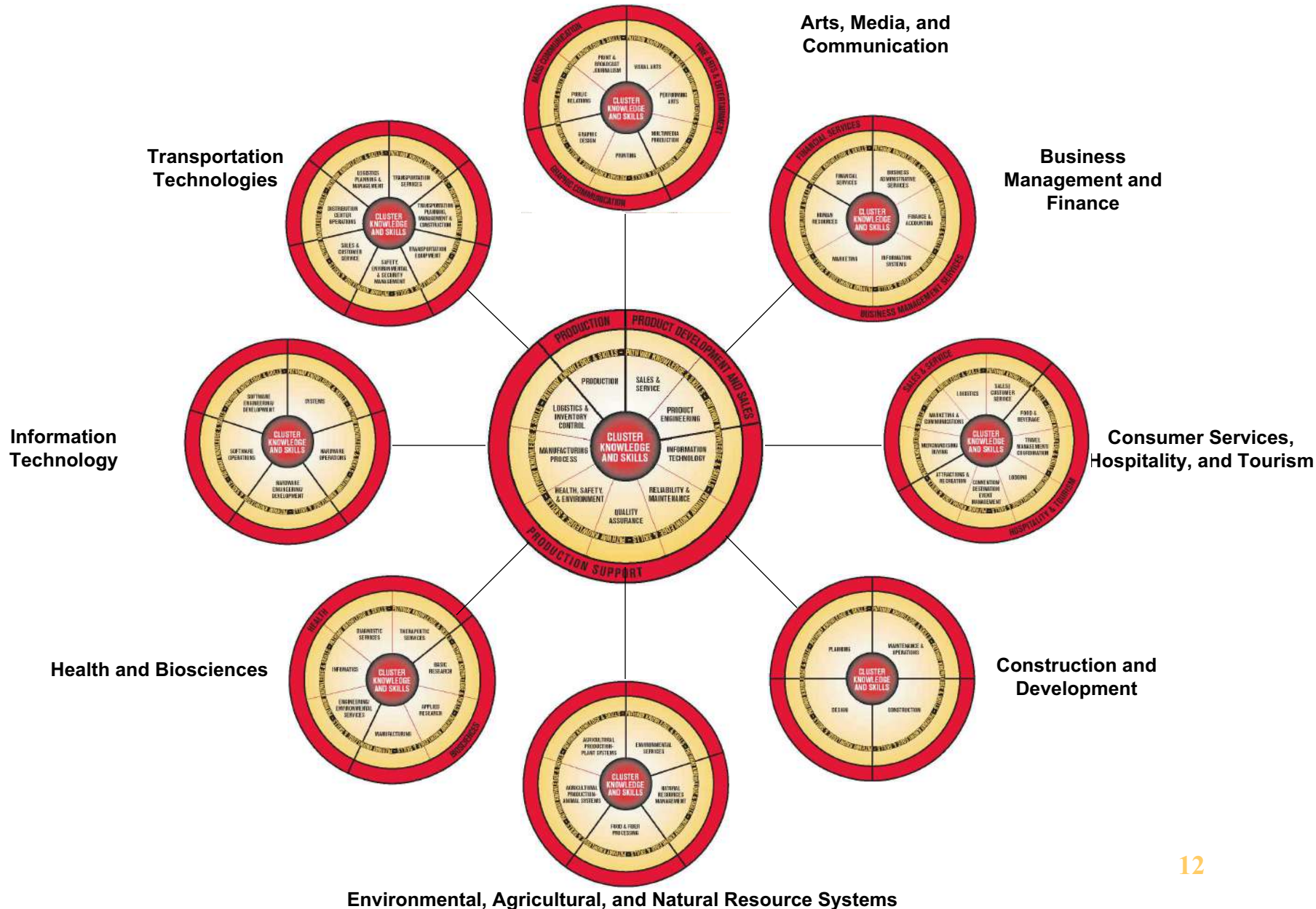
Goals and Outcomes

- Increased academic achievement
- Increased high school graduation rates
- Decreased school dropout rates
- Increased postsecondary transition and completion rates
- Increased career success rates — employment/earnings
- Better labor market responsiveness

Manufacturing, Engineering and Technology



Manufacturing, Engineering and Technology Overlapping Features





Maryland's System of Career Clusters is used to:

- Revise or develop CTE state programs of study
- Organize comprehensive high schools into academies, signatures
- Inform career development



CTE Programs of Study

- Grades 9-16 Program Articulation
- High School-College Preparatory Curriculum- Academic Core
- A minimum of 4 credits- Career Pathway Core
- Work-based Learning Opportunities
- Early college credit/industry certifications and licensure



CTE Programs of Study

- Program Advisory Committees (LACs)
- Aligned with postsecondary
- Early college credit
- Industry certifications



A Model: Project Lead The Way Pre-Engineering Sequence

Foundation Courses

- **Principles of Engineering**
- **Introduction to Engineering Design**
- **Digital Electronics**

Pathway Courses (HS offers 1 or more)

- **Computer Integrated Manufacturing**
- **Civil Engineering/Architecture**
- **Bio Engineering (In Development)**
- **Aerospace Engineering (In Development)**

Capstone Course/Articulation

- **Engineering Design and Development**



Career Pathways

- Core Functions of each industry cluster
- Become roadmaps for learning
- Not every pathway has a program of study
- Secondary CTE chose only what was appropriate for high school level study.
- An organizer that allows us to engage employers in our work to meet their needs



Career Development

- K-P/Adult Framework
- Standards by Grade Spans
 1. Self Awareness
 2. Career Awareness
 3. Career Exploration
 4. Career Preparation
 5. Job Seeking/Advancement
 6. Career Satisfaction/Refocus/Transition
- Decision-Making Process throughout