

### Career And Technical Education: A Mechanism To Support Successful Transition For All Students? Introduction to Perkins IV and Programs of Study

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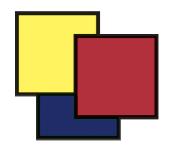
Illinois Community College Board



ILLINOIS STATE BOARD OF EDUCATION

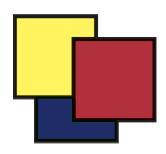






# Today's Agenda

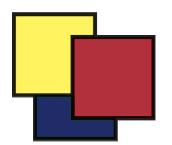
- Welcome and Introductions
- Overview: Perkins IV, Career Clusters and Illinois Programs Of Study (POS)
- Introduce the Guiding Principles, Design Elements, and Self-Assessment
- Discuss Transition from a Perkins IV and Special Education Perspective



# **Your Goals For Today**

 Please share your learning goals for today's workshop



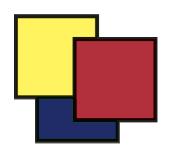


# From Voc. Ed. To

### CTE

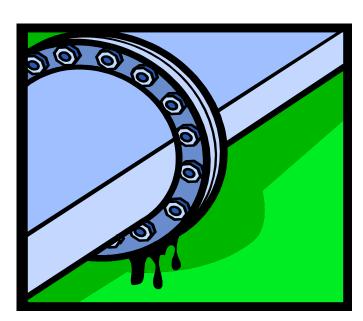
- For a few students
- Focused on a few jobs
- 6 7 program areas
- In lieu of academics
- High school focused

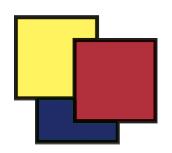
- For all students
- Focused on careers
- 16 clusters~79 pathways
- Aligns with & supports academics
- HS, postsecondary, and business/industry partnerships, including the baccalaureate level



# The Educational Pipeline

Is leaking . . .





### IL Educational Attainment, 2005

Age 18-24 with HS Diploma: 78.6%

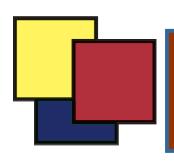
• Age 25-64 with HS Diploma: 88.4%

• Age 25-64 with Associate Degree: 8.3%

• Age 25-64 with Bachelor's or Higher: 31.8%

• Age 25-64 with Graduate/Prof. Degree: 11.7%

NCHEMS (March 17, 2008). A public agenda for Illinois higher education: Planning for career and college success. Summary observations and findings regarding public need.



# The Leaky Pipeline, con't.

Percentage of 9<sup>th</sup> graders graduating from high school four years later, by race/ethnicity:

96.4%: Asian

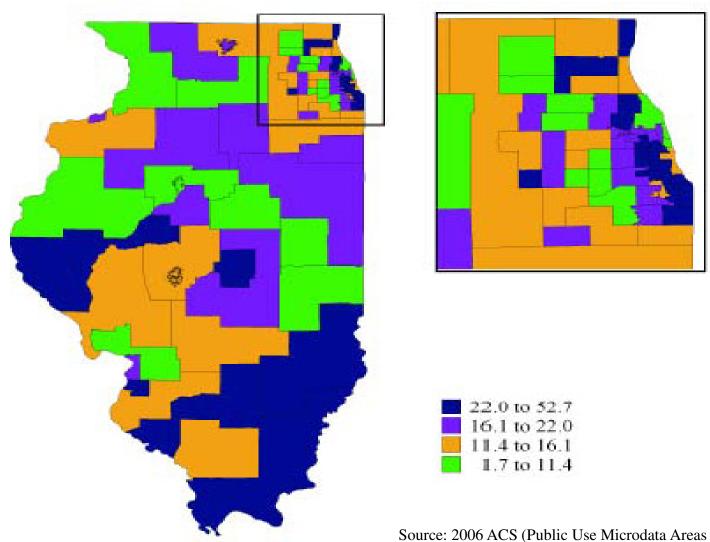
84.4%: White

60.4%: Hispanic

52.0%: African-American

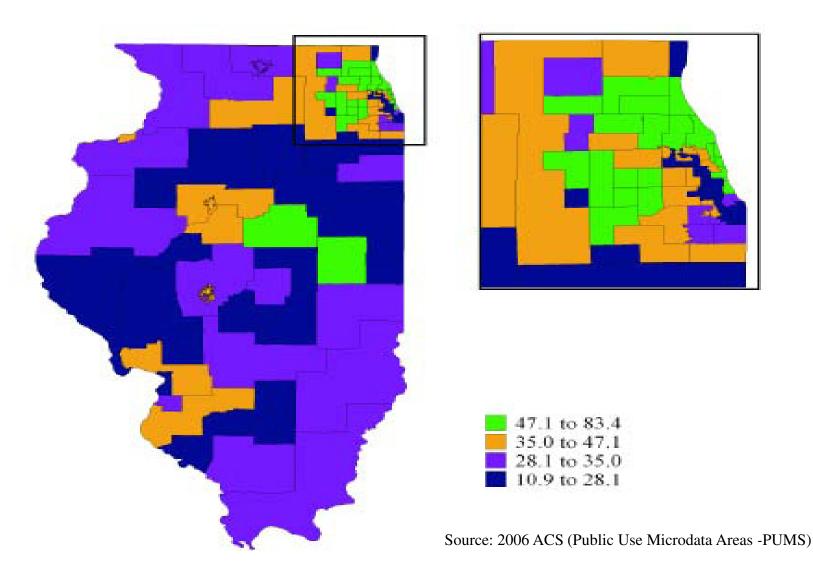


### Percent of population age 18-24 with no high school diploma or equivalency, 2006



Source: 2006 ACS (Public Use Microdata Areas -PUMS)

# Percent of population age 25-64 with an associate's degree or higher, 2006



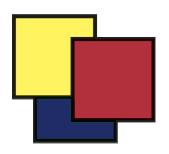
### Perkins IV THEMES

- Increased accountability for student and program outcomes, including technical skills attainment at the secondary level
- Greater coordination within the CTE system
- Stronger integration of academic and CTE curricula
- Closer connection between secondary and postsecondary education, including the baccalaureate level
- More involvement of business and industry

# Perkins IV Alignment

- Aligned curricula
- Seamless transitions
- Dual credit
- Career development
- Professional development

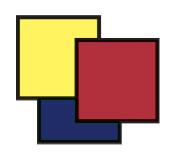
- Articulation agreements
- Data-sharing agreements
- Collaborative partnerships
- Continuous improvement
- Advisory committees



# WHAT NOW?

The Career Cluster Framework!

www.careerclusters.org



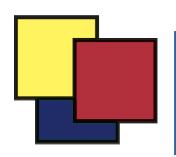
## **New Terminology**

Career Clusters

Career Pathways

Programs of Study (POS)

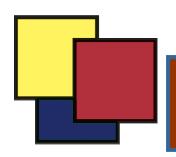
Partnerships for College and Career Success (Partnerships)



### What are Career Clusters?

Career Clusters are groups of occupations and industries that have in common a set of foundational cluster level knowledge and skills. There are 16 nationally recognized clusters, within which are multiple career pathways.

Clusters

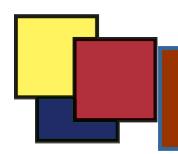


# What are Career Pathways?

Career Pathways are multi-year programs of academic and technical study that prepare students for a full range of postsecondary options within each of the 16 clusters. Currently, there are ~79 nationally recognized pathways, each with specific **pathway** level knowledge and skills.

**Clusters** 

<u>Pathways</u>



### What are Programs of Study (POS)?

- sequences of courses that incorporate a nonduplicative progression of secondary and postsecondary elements
- includes both academic and CTE content
- curriculum **alignment** to challenging standards and rigorous content
- lead to the **attainment** of an industry recognized credential, certificate, or degree.

Clusters

**Pathways** 

POS

# Unduplicated Students (grade 9 to 12) with Disability Counts

# STUDENTS WITH DISABILITY **TOTAL SECONDARY CTE YEAR ENROLLMENTS** 2006 43355 2007 44878 41035 2008

Source: ISBE CTE Division from ISIS databases August, 2009

### Government & Public Administration

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



Marketing
Management
Professional Sales
Merchandising
Marketing
Communications
Marketing Research

#### Business Management & Administration

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

#### Information Technology

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

#### Finance

Securities & Investments
Banking Services
Business Finance
Accounting
Insurance

#### Law, Public Safety, Corrections & Security

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

#### Transportation, Distribution & Logistics

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

#### Science, Technology, Engineering & Mathematics

Engineering & Technology Science & Math

#### Manufacturing

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

#### Architecture & Construction

Design/Pre-Construction Construction Maintenance/Operations

#### Arts, Audio/Video Technology & Communications

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

### Agriculture, Food & Natural Resources Food Products & Processing

Systems
Plant Systems
Animal Systems
Power, Structural & Technical
Systems
Natural Resources Systems
Environmental Service Systems
Agribusiness Systems

June 8, 2009

http://www.careerclusters.org



Essential Knowledge and Skills

Health Science

**Health Science** 

Diagnostic Services

Biotechnology Research & Development

Support Services Health Informatics Therapeutic Services

#### Hospitality & Tourism

Restaurants & Food/ Beverage Services Lodging Travel & Tourism Recreation, Amusements & Attractions

#### Education & Training

Administration & Administrative Support Professional Support Services Teaching/Training

#### Human Services

Early Childhood Development & Services Counseling & Mental Health Services Family & Community Services Personal Care Services

#### Career Cluster Framework

Essential Knowledge and Skills

Consumer Services

2 CTE Areas: Secondary (5)

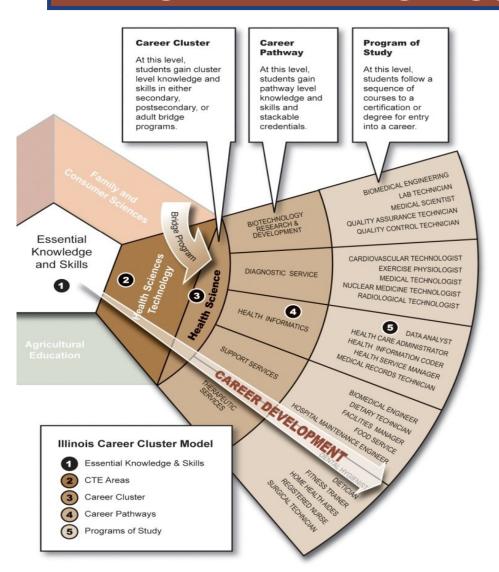
3 Career Clusters (16)

Career Pathways (79)

# Students with Disability – Enrollments Disaggregated by CTE Areas

STUDENTS WITH DISABILITY						
	TOTAL SECONDARY CTE ENROLLMENTS					
YEAR	AGRICULTURE	BUSINESS	FAMILY & CONSUMER SCIENCE	HEALTH	INDUSTRIAL	SPECIALIZED VOCATIONAL PROGRAM
2006	3657	17169	13392	632	16223	5575
2007	3851	17569	14163	711	16403	5846
2008	3704	16076	13702	610	14755	4446

# ILLINOIS CAREER CLUSTER MODEL



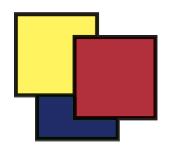
The Illinois' Career Cluster Model shows the relationship between:

- One of Illinois' five, secondary career and technical education areas (Health Sciences Technology)
- The related career cluster (Health Science)
- The five pathways within that cluster
- Sample programs of study within the pathway.

#### It also illustrates:

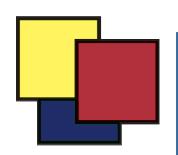
- Essential knowledge and skills
- Cluster level knowledge and skills
- Pathway level knowledge and skills
- Programs of study
- Career development
- Adult Bridge Programs

#### Program of Career Cluster Career **Pathway** Study At this level. students gain cluster At this level. At this level. level knowledge and students follow a students gain skills in either pathway level sequence of secondary, knowledge and courses to a postsecondary, or skills and certification or stackable adult bridge degree for entry programs. credentials. into a career. BIOMEDICAL ENGINEERING LAB TECHNICIAN MEDICAL SCIENTIST Bridge Program QUALITY ASSURANCE TECHNICIAN BIOTECHNOLOGY RESEARCH & DEVELOPMENT QUALITY CONTROL TECHNICIAN Essential Knowledge CARDIOVASCULAR TECHNOLOGIST and Skills Health Science EXERCISE PHYSIOLOGIST DIAGNOSTIC SERVICE MEDICAL TECHNOLOGIST NUCLEAR MEDICINE TECHNOLOGIST RADIOLOGICAL TECHNOLOGIST HEALTH INFORMATICS HEALTH CARE ADMINISTRATOR 6 DATA ANALYST HEALTH INFORMATION CODER SUPPORTSERVICES HEALTH SERVICE MANAGER MEDICAL RECORDS TECHNICIAN CAREER DEVELOPMEN BIOMEDICAL ENGINEER HOSPITAL MAINTENANCE ENGINEER DIETARY TECHNICIAN FACILITIES MANAGER FOOD SERVICE Illinois Career Cluster Model Essential Knowledge & Skills FINESS TRANGE roughear manes RECISTARDNIRSK SURCICAL ROMON **CTE Areas** Career Cluster Career Pathways Programs of Study



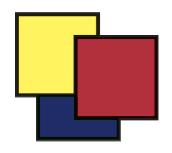
### **Perkins IV: Your Critical Role**

- Increased involvement at state and local levels
- Member of local and state advisory groups
- Participate in "high quality, sustained, intensive professional development focused on instruction"
- Local involvement to develop students' graduation and career plans
- Assure access for special populations



### The Benefit to Students

- Smooth the transition from high school to college
- Motivate through relevant, contextual learning
- Expand learning to include context of knowledge and skills of the cluster
- Provide career guidance and a framework for students to plan their future.



### **Illinois POS Framework**

Six Guiding Principles

Background & Origin

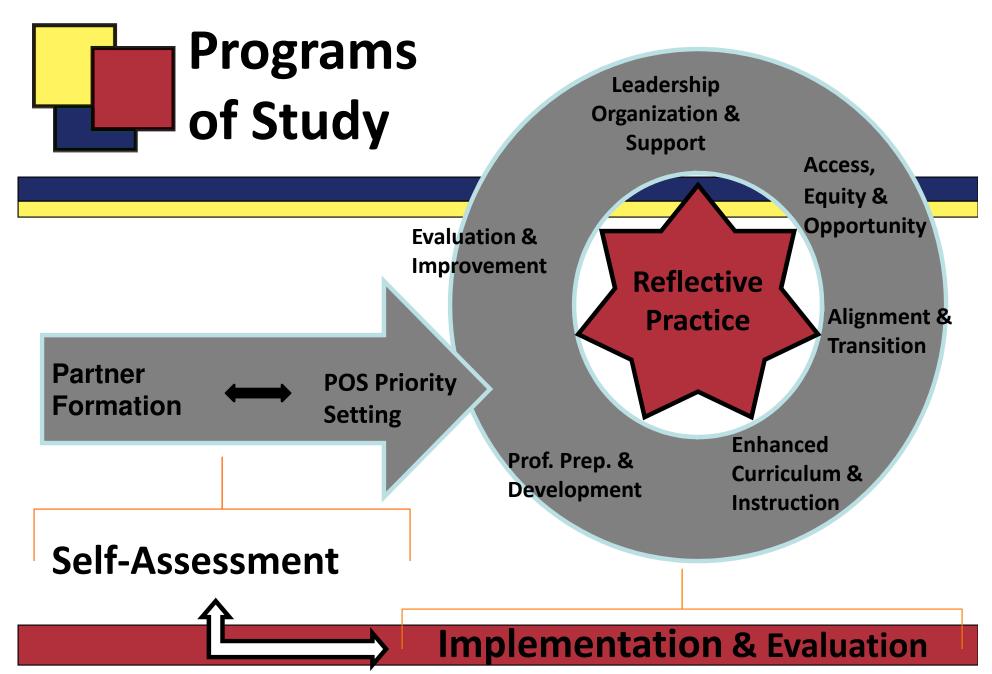
Principle Overview



# SIX GUIDING PRINCIPLES

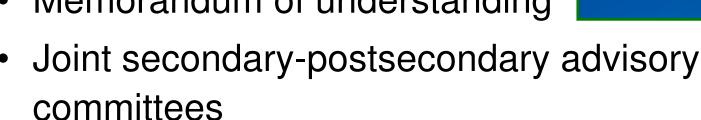
- 1. Leadership, organization, and support
- 2. Access, equity, and opportunity
- 3. Alignment and transition
- 4. Enhanced curriculum and instruction
- 5. Professional preparation and development
- 6. Program improvement and accountability

Webinars on each principle and their design elements are located: <a href="http://occrl.illinois.edu/projects/perkins/webinars">http://occrl.illinois.edu/projects/perkins/webinars</a>



## Leadership, Organization and Support

- Authentic collaborative partnerships
- Vision, mission, and goals
- Shared decision making
- Collaborative culture
- Memorandum of understanding



- Tangible and intangible resources
- Technical and technology assistance

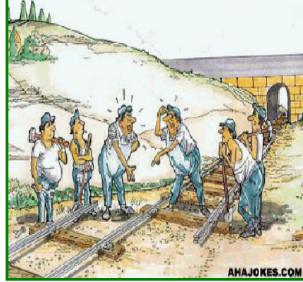


# Access, Equity and Opportunity

- Recruit, enroll, and retain underserved, underrepresented, and special population students
- Gaps and barriers are identified and addressed
- Barriers to initial entry or re-entry are addressed
- Support services are available
- Universal design is applied to physical, virtual, and learning spaces
- Special population sub-groups are clearly identified so progress can be quantified
- Reflect learner's and their families' perspective and interests
- Access to networks and resources

# Alignment and Transition

- Secondary and postsecondary collaboration
- Articulation agreements
- Multiple entry and exit points
- A coherent sequence of courses and programs
- Data-sharing agreements
- "College knowledge"



### Enhanced Curriculum and Instruction

- Contextual instruction
- Career exploration, development, and guidance
- Dual credit opportunities
- Business, industry, and community partners
- Integrated and rigorous CTE and academic content
- Reduce the need for remedial/developmental education
- Multiple measures of assessment
- Develop, improve, or expand the use of technology

### Professional Preparation and Development

- Coordinated with teacher certification or licensing, inservice and pre-service learning
- Comprehensive and instruction-focused to impact classroom instruction
- Improve quality of instruction
- Needs assessment is utilized to identify training needs
- Combine resources
- Based on best and promising practices
- Opportunities to collaborate on curriculum alignment and integration

# Program Improvement and Accountability

- Multiple forms of assessment and measurement
- Culture of program improvement
- Local improvement and regional development
- Labor market data
- Longitudinal data
- Reliable and valid data
- Performance targets
- Disaggregated and cohort based

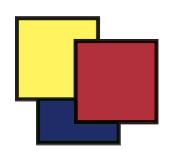


### The Self Assessment Process

- Determine the partners
- Complete the curriculum inventory



- Determine readiness for POS implementation
- Assess status of Principles & Elements
- Review, reflect and plan POS implementation



### RESOURCES

#### **Perkins IV**

Illinois 5-year Perkins IV State plan:

http://www.iccb.state.il.us/pdf/career\_tech/postsecondary/PerkinsStatePlanDraft1-08.pdf

Association for Career and Technical Education (ACTE): <a href="http://www.acteonline.org/">http://www.acteonline.org/</a>

#### Illinois Resources

Illinois Community College Board: <a href="http://www.iccb.org/cte.html">http://www.iccb.org/cte.html</a>

Illinois State Board of Education: http://www.isbe.net/career/default.htm

OCCRL Programs of Study Website: <a href="http://occrl.ed.illinois.edu/Projects/perkins/">http://occrl.ed.illinois.edu/Projects/perkins/</a>

#### Career Clusters, Pathways, and POS

The States' Career Cluster Initiative: http://www.careerclusters.org

National Career Pathways Network (NCPN): <a href="http://www.cord.org/ncpn-index.cfm">http://www.cord.org/ncpn-index.cfm</a>

Career Voyages – collaboration between the U.S. Department of Labor and U.S.

Department of Education: <a href="http://www.careervoyages.gov/about-main.cfm">http://www.careervoyages.gov/about-main.cfm</a>



