

AN INTRODUCTION TO ILLINOIS CTE PROGRAMS OF STUDY 2008

Illinois State Board of Education



Illinois Community College Board

PERKINS IV

“The premise of this legislation is that high schools, industry, and higher education institutions need to work together to provide our workforce with the skills they need in order to achieve and compete in the 21st century. This bill works to ensure that American students are not just getting a world class education, but the best education in the world.”

- Sen. Christopher Dodd (D-CT)

The Carl D. Perkins Career and Technical Education Improvement Act of 2006 (Perkins IV) seeks to provide students with the academic and technical skills necessary to succeed in the 21st Century knowledge- and skills-based economy. Perkins IV facilitates seamless transitions for students from secondary to postsecondary education and careers. CTE programs under Perkins IV will be held to specific, valid and reliable accountability standards as well as industry-based standards. Perkins IV requires secondary and postsecondary education to work with numerous constituency groups including business and industry, local communities, counselors, principals, parents, students including special populations, to place students in high-wage, high-skill, or high-demand occupations.

NEW LEGISLATIVE THEMES

Themes in Perkins IV:

- **Accountability** for results and program improvement at all educational levels
- **Coordination** within the CTE system
- **Integration** of academic and technical education
- **Connection** between secondary and postsecondary education, including baccalaureate level
- **Involvement** of business and industry

See www.acteonline.org/policy/legislative_issues/Perkins_background.cfm for additional information

SECONDARY AND POSTSECONDARY ALIGNMENT

In Illinois, Perkins IV alignment includes secondary education, community colleges, and four-year institutions through:

- Aligned curricula
- Seamless transition
- Dual credit opportunities
- Career development
- Professional development
- Articulation agreements
- Data-sharing agreements
- Partnerships and collaboration
- Continuous improvement

Secondary and postsecondary alignment is very important to Perkins IV and the Career Cluster framework. In Illinois, this alignment includes secondary education, community colleges, and four-year institutions through

Seamless transition

Reduced remediation

Non-duplicated courses

Integrated academic and CTE curricula

Standards-based curricula aligned with industry credentials and/or certification

Dual credit opportunities

Career development

Professional development

Articulation agreements

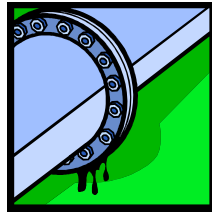
Data-sharing agreements

Partnerships and collaboration

Continuous improvement

ILLINOIS

Alignment is needed in Illinois as students are leaking through the educational pipeline.



THE STUDENT PIPELINE

Educational attainment in Illinois, 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 STUDENT PIPELINE CONT.

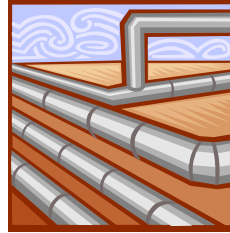
Percentage of 9th graders graduating from high school, four years later by race/ethnicity:

96.4%: Asian

84.4%: White

60.4%: Hispanic

52.0%: African-American

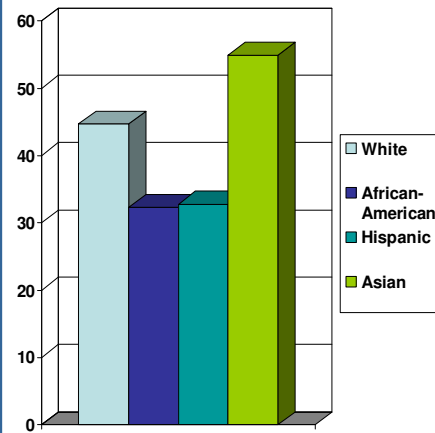


NCHEMS (March 17, 2008). *A public agenda for Illinois higher education: Planning for career and college success*. Summary observations and findings regarding public need.

THE STUDENT PIPELINE CONT.

In-state college-going rates: Percentage of high school graduates enrolling college the following academic year by race/ethnicity (average 2005 and 2006).

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



WHAT NOW?

The Career Cluster Framework!



ALIGNMENT VIA CAREER CLUSTERS

Career Clusters provides alignment through:

- Smooth transitions
- Empowering students
- Enhancing economic development



Career Pathways, Career Clusters, and POS allow students to get more involved and perform better in school by combining rigorous academics with career education so that students have a clear path to their future. Students who understand the relevance of what they are learning and how it aligns with a pathway to their educational and occupational goals, achieve greater success in high school and beyond. Career Clusters:

Create clear educational pathways students can follow from secondary to postsecondary education, to the workplace

Create smooth transitions in the educational pipeline

Empower students through information and experience they need to make educational choices

Design individual plan of study

Comprise a key element in enhancing economic development by connecting schools with business and industry.

CAREER CLUSTERS

What are Career Clusters?

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



CAREER PATHWAYS

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 81 nationally recognized pathways, each with specific pathway knowledge and skills.

Clusters



Pathways

These pathways provide a context for exploring career options at all levels of education and a framework for linking learning to the skills and knowledge needed for future education and employment

Pathway knowledge and skills are built on a common core of knowledge and skills required for career success in all POS aligned with the pathway. This core is specific to the pathway and consists of elements selected by secondary and postsecondary educators with input from business and industry and other stakeholders.

PROGRAMS OF STUDY (POS)

What are Programs of Study (POS)?

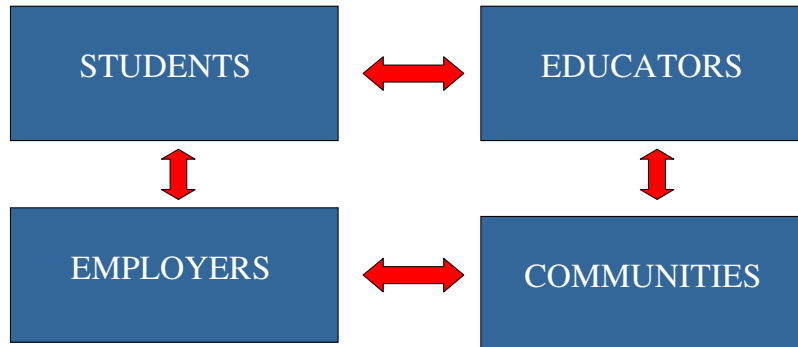
Programs of Study are sequences of courses that incorporate a non-duplicative progression of secondary and postsecondary elements which include both academic and CTE content, curriculum alignment to challenging standards, rigorous content, and lead to the attainment of an industry recognized credential, certificate, or degree.



Programs of Study (POS) are a sequence of courses that incorporate a non-duplicative progression of secondary and postsecondary elements which includes both academic and CTE content. An effective POS should start no later than the 9th grade and continue through at least 2 years of postsecondary education. A POS includes opportunities to earn college credit (dual credit) in high school, an industry-recognized credential or certificate at the secondary/postsecondary level, and an associate or baccalaureate degree.

WHO BENEFITS ?

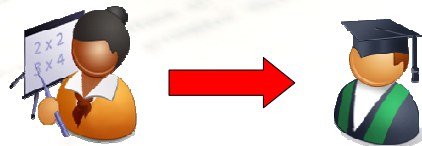
Who benefits from Career Pathways and POS?



STUDENTS

Students benefit as Programs of Study:

- Smooth the transition from high school to college
- Motivate through hands-on learning experience
- Provide career guidance and a framework for students to plan their future.



Students benefit as POS provide a link between education and careers. Pathways provide career guidance and a framework for students to plan their future. Students are more motivated when they can see the relevance of their education and are provided with smooth transitions to college and careers.

EDUCATORS

Educators benefit as Programs of Study:

- Integrate academic and CTE curricula
- Include high quality professional development
- Align with school reform
- Provide a career context for teaching and learning

Educators benefit as POS provide support for educators to integrate academic and CTE curricula, partake in professional development, align with school reform, and receive administrative support. It also connects educators with local business and industry to ensure that what students learn connects to careers.

EMPLOYERS

Employers benefit as Programs of Study offer the opportunity:

- To partner with educators to better prepare future employees
- To help determine the necessary knowledge, skills, and credentials to succeed in the workforce

Employers benefit as POS provide the opportunity to partner with educators to prepare future employees by determining the necessary skills, certification, and knowledge to succeed in the workforce

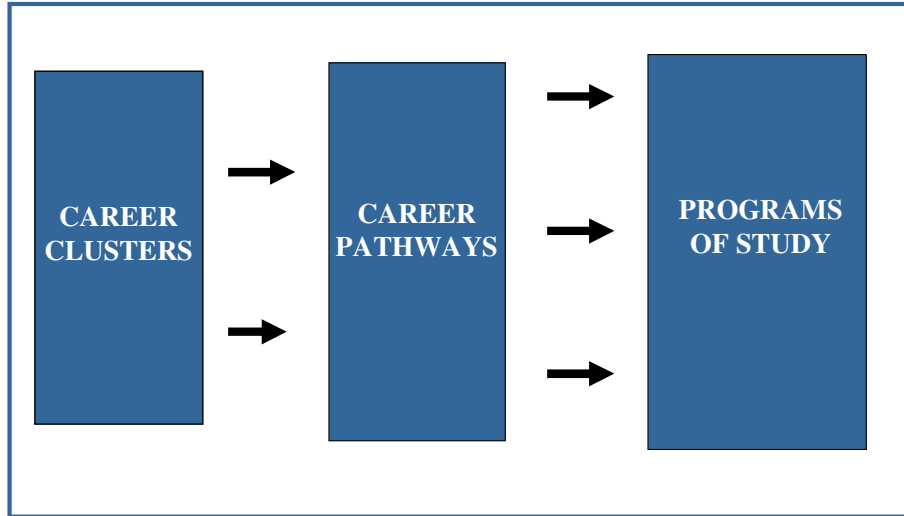
COMMUNITIES

Communities benefit from Programs of Study as:

- Higher levels of educational attainment contribute to increased economic development
- Local employers partner with education for regional economic development and educational planning.

Communities benefit from POS as provide a common framework for business and industry to partner with education for economic development and educational planning. Higher levels of educational attainment contribute to increased economic benefit in a community and a healthier local economy.

PROGRAMS OF STUDY OVERVIEW



The cluster framework is composed of 16 career clusters, currently 81 pathways and then programs of study which lead to occupations.

ILLINOIS' SECONDARY CAREER CLUSTER TRANSITION

ISBE CTE Areas	Career Clusters
Health Services	Health Science
Family and Consumer Sciences	Education & Training; Hospitality & Tourism; Human Services
Agricultural Education	Agriculture, Food, & Natural Resources
Business, Marketing, & Computer Education	Business Management & Administration; Finance; Information Technology; Marketing; Government & Public Administration
Technology & Engineering Education	Architecture and Construction; Arts; Audio/Video Technology & Communications; Law, Public Safety, Corrections & Security; Manufacturing; Science, Technology, Engineering & Mathematics; Transportation, Distribution & Logistics

This table illustrates the relationship between the five CTE areas used by the Illinois State Board of Education and the corresponding 16 Career Clusters.

CLUSTERS



- **Agriculture, Food & Natural Resources**
Food Products and Processing Systems
Plant Systems
Animal Systems
Power, Structural & Technical Systems
Natural Resources Systems
Environmental Service Systems
Agribusiness Systems



- **Architecture & Construction**
Design/Pre-Construction
Construction
Maintenance/Operations



- **Arts, Audio/Video Technology & Communications**
Audio and Video Technology and Film
Printing Technology
Visual Arts
Performing Arts
Journalism and Broadcasting
Telecommunications



- **Business Management & Administration**
General Management
Human Resources Management
Business Information Management
Administrative Support
Operations Management

CLUSTERS CONT.



- **Education & Training**
Administration and Administrative Support
Professional Support Services
Teaching/Training



- **Finance**
Securities and Investment
Business Finance
Banking Services
Insurance
Accounting



- **Hospitality & Tourism**
Restaurants and Food/Beverage Services
Lodging
Travel & Tourism
Recreation, Amusements & Attractions



- **Government & Public Administration**
Governance
National Security
Foreign Service
Planning
Revenue and Taxation
Regulation
Public Management and Administration



- **Health Science**
Therapeutic Services
Diagnostic Services
Health Informatics
Support Services
Biotechnology Research and Development

CLUSTERS CONT.



Human Services

- **Human Services**
Early Childhood Development & Services
Counseling & Mental Health Services
Family & Community Services
Personal Care Services
Consumer Services



Information Technology

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



Law, Public Safety, Corrections & Security

- **Law, Public Safety, Corrections & Security**
Correction Services
Emergency and Fire Management Services
Security & Protective Services
Law Enforcement Services
Legal Services



Manufacturing

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

CLUSTERS CONT.



- **Marketing**
 - Marketing Management
 - Professional Sales
 - Merchandising
 - Marketing Communications
 - Marketing Research



- **Science, Technology, Engineering & Mathematics**
 - Engineering and Technology
 - Science and Math

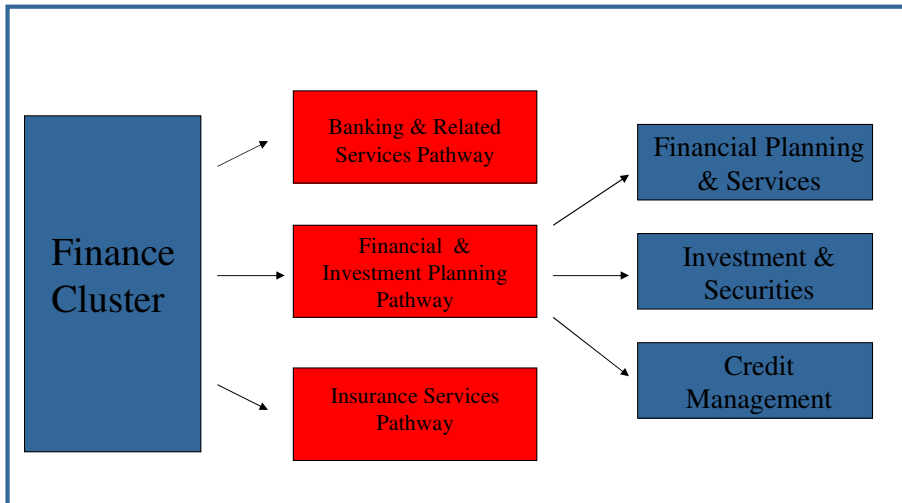


- **Transportation, Distribution & Logistics**
 - Transportation Operations
 - Logistics Planning and Management Services
 - Warehousing and Distribution Center Operations
 - Facility and Mobile Equipment Maintenance
 - Transportation Systems/Infrastructure Planning, Management and Regulation
 - Health,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

The Career Clusters icons and language are being used with permission of the: States' Career Clusters Initiative, 2008, www.careerclusters.org

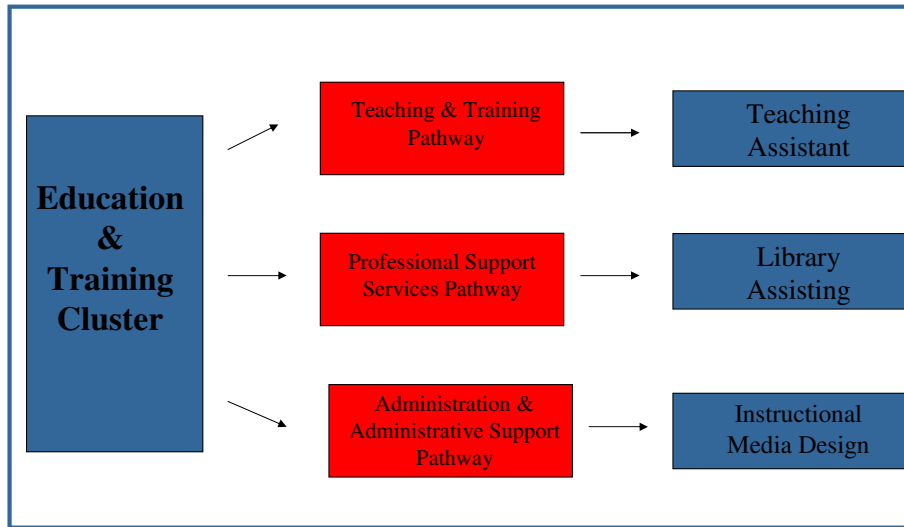


ILLINOIS EXAMPLE: FINANCE



This is an example using Illinois programs and titles of a cluster, three possible career pathways and then three programs of study for one specific pathway. Occupations related to the finance cluster include tax preparation, sales agents, revenue agents, loan officers, tellers, customer service reps, credit report providers, claims clerks, processing clerks, accountants, economists, financial planners, and foreign exchange managers.

ILLINOIS EXAMPLE: EDUCATION



This is an example of the Education and Training Cluster for Illinois including three possible pathways and one POS for each career pathway.

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): <http://www.acteonline.org/>

Illinois Resources

Illinois Community College Board: <http://www.iccb.org/cte.html>

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

OCCRL Programs of Study Website: <http://occrl.ed.uiuc.edu/Projects/perkins/>

Career Clusters, Pathways, and POS

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

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

Career Voyages – collaboration between the U.S. Department of Labor and U. S. Department of Education: <http://www.careervoyages.gov/about-main.cfm>