

STEM Programs of Study and Individual Learning Plans

“For districts serving grades 9-12, the district establishes two or more Programs of Study promoting critical STEM application areas; for other districts, as applicable, the district establishes an individual learning plan program, commencing in 7th grade, that aligns to a Programs of Study model in the predominant feeder schools for high schools implementing STEM Programs of Study.”

- Grades 9-12: Research and select two Programs of Study
- Grades 7-8: Research and select an individual learning plan model
- Pilot “individual learning plan” model in 2013 – 2014
- Full implementation in 2014 – 2015

NOTE: For K-8 districts: If your predominant feeder schools for high schools that have Programs of Study – not just STEM Programs of Study, you are required to develop an individual learning plan program.

Race to the Top 3

Participating LEA Implementation Timeline

	2012 Jan - July	2012 July - Dec	2013 Jan – June	2013 July - Dec	2014 Jan - June	2014 July - Dec	2015 Jan - June	2015 July - Dec
Learner Profiles and Pathways	<ul style="list-style-type: none"> Identify STEM application areas 	<ul style="list-style-type: none"> STEM POS systems designed Individual Learning Plan model selected 		<ul style="list-style-type: none"> Continued POS design, preliminary implementation Individual Learning Plan piloted 		<ul style="list-style-type: none"> Full implementation of POS and Individual Learning Plan 		

Defining STEM Learning Exchanges

- Statewide public-private partnership networks organized to support local implementation of P-20 STEM Programs of Study by improving coordination and reducing the transaction cost among network partners.
- A separate statewide Learning Exchange will be launched in each of the identified STEM application areas.
- Designed to support participating Race to the Top districts, but are available to partner with and support other K-12, postsecondary, and workforce programs throughout the state.

Who makes up a STEM Learning Exchange?

- Employers and employer-led organizations
- Labor unions
- Professional associations
- Secondary and postsecondary teachers and faculty
- Students and student organizations
- Community colleges and universities
- School districts and regional
- Economic and workforce agencies
- STEM education experts
- Federal labs and research centers
- Local workforce investment boards
- Museums and non-profit organizations
- Community-based organizations

Types of STEM Learning Exchanges

Implementation

- Agriculture, Food, and Natural Resources
- Manufacturing
- Information Technology
- Research and Development
- Health Science

Planning

- Energy
- Transportation, Distribution, and Logistics

* Note: Architecture and Construction, and Finance is neither Implementation nor Planning.

STEM Learning Exchange Implementation Clusters

Will Develop and Produce over the next 3 years:

- E-learning curriculum resources
- Expand access to classroom and laboratory space and equipment
- Support student organizations and their activities
- Provide internships and other work-based learning opportunities
- Sponsor challenges and project management resources
- Provide professional development resources for teachers and administrators
- Provide career development and outreach resources
- Provide tool and resources to assist students and schools with ILPs
- Review and report on performance of STEM Programs of Study.

STEM Learning Exchange Planning Clusters

Will undertake planning activities over the next year to:

- E-learning curriculum resources
- Expand access to classroom and laboratory space and equipment
- Support student organizations and their activities
- Provide internships and other work-based learning opportunities
- Sponsor challenges and project management resources
- Provide professional development resources for teachers and administrators
- Provide career development and outreach resources
- Provide tool and resources to assist students and schools with ILPs
- Review and report on performance of STEM Programs of Study.

9 STEM Learning Exchange Cluster Areas



STEM Learning Exchanges and the Selection of 2 POS



Development, production, processing, distribution of agricultural commodities and resources, including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

STEM Learning Exchanges and the Selection of 2 POS



Lead Entity – Illinois Foundation FFA

www.illinoisworknet.com/ilpathways

STEM Learning Exchanges and the Selection of 2 POS



Developing, planning, and managing the production of energy including renewable energy and clean coal technology and its distribution through smart grid technologies.

STEM Learning Exchanges and the Selection of 2 POS



Lead Entity – Illinois State University

STEM Learning Exchanges and the Selection of 2 POS



Product and process development and managing and performing the processing of materials into intermediate or final products and related support activities.

STEM Learning Exchanges and the Selection of 2 POS



Lead Entity – Illinois Manufacturers' Association Education Foundation

STEM Learning Exchanges and the Selection of 2 POS



Designing, developing, managing, supporting and integrating hardware and software systems.

STEM Learning Exchanges and the Selection of 2 POS



Lead Entity - CompTIA

www.illinoisworknet.com/ilpathways

STEM Learning Exchanges and the Selection of 2 POS



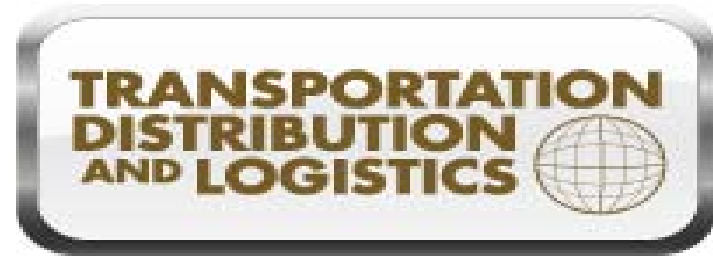
Designing, planning, managing, building, and maintaining the built environment, including the use of green technologies.

STEM Learning Exchanges and the Selection of 2 POS



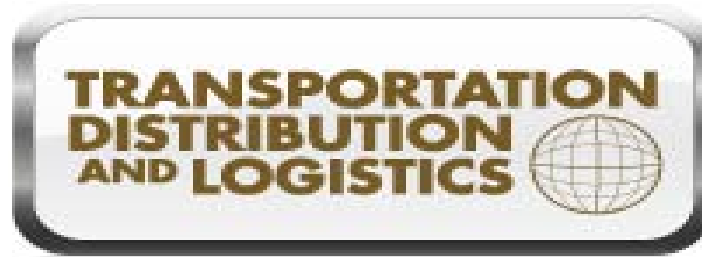
No Lead Entity

STEM Learning Exchanges and the Selection of 2 POS



Planning, management, and movement of people, materials, and goods across all transportation modes as well as maintaining and improving transportation technologies.

STEM Learning Exchanges and the Selection of 2 POS



Lead Entity - Illinois Chamber of Commerce Foundation

www.illinoisworknet.com/ilpathways

STEM Learning Exchanges and the Selection of 2 POS



Scientific research and professional and technical services including laboratory and testing services as well as biomedical research and development.

www.illinoisworknet.com/ilpathways

STEM Learning Exchanges and the Selection of 2 POS



Lead Entity - Illinois Science & Technology Institute

www.illinoisworknet.com/ilpathways

STEM Learning Exchanges and the Selection of 2 POS



Planning, managing, and providing therapeutic, diagnostic, health informatics, and support services as well as biomedical research and development.

STEM Learning Exchanges and the Selection of 2 POS



Lead Entity – University of Illinois at Chicago

STEM Learning Exchanges and the Selection of 2 POS



Securities and investments, business finance, accounting, insurance, and banking services.

STEM Learning Exchanges and the Selection of 2 POS



Lead Entity – No Lead Entity at this time