

# College & Career Pathways: Developing Our Future Talent Pipeline

May 20, 2019

# The Changing Face of Education

Iowa Big

School Community Partnerships

Crosstown High

What thoughts do you have about these high schools?

How does a community start down this path?

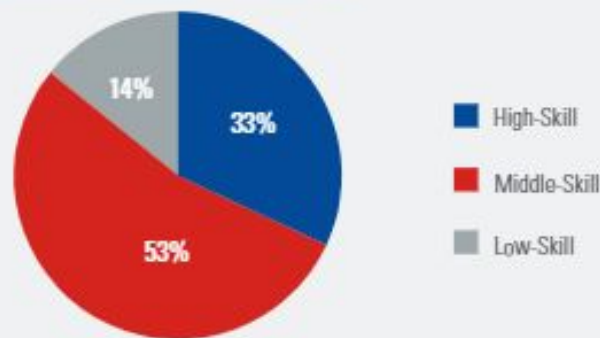
Why is Change Necessary?

# Job Market Projections

## Illinois' Forgotten Middle

Middle-skill jobs, which require education beyond high school but not a four-year degree, make up the largest part of America's and Illinois' labor market. Key industries in Illinois are unable to find enough sufficiently trained workers to fill these jobs.

Jobs by Skill Level, Illinois, 2015



### Demand for Middle-Skill Jobs is Strong

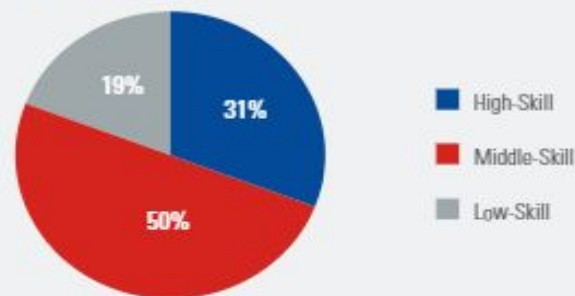
Fifty-three percent of all jobs in 2015 were middle-skill.

Source: NSC analysis of Bureau of Labor Statistics Occupational Employment Statistics by State, May 2015.

## Demand for Middle-Skill Jobs Will Remain Strong

Between 2014-2024, 50 percent of job openings will be middle-skill.

Job Openings by Skill Level, Illinois, 2014-2024

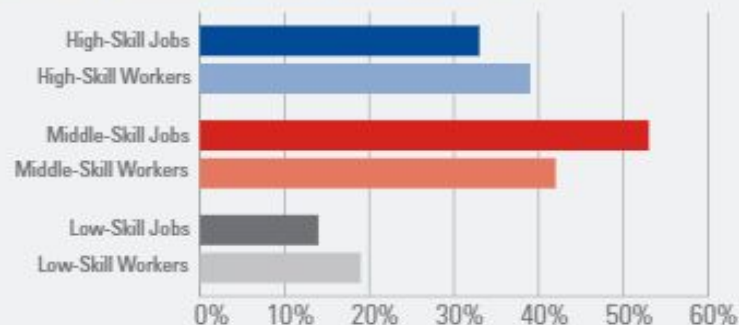


Source: NSC analysis of long-term occupational projections from state labor/employment agency.

## A Middle-Skill Gap

Middle-skill jobs account for 53 percent of Illinois' labor market, but only 42 percent of the state's workers are trained to the middle-skill level.

Jobs and Workers by Skill Level, Illinois, 2015



Source: NSC analysis of Bureau of Labor Statistics Occupational Employment Statistics by State, May 2015 and American Community Survey data, 2015.



Renewed Focus on College & Career  
Readiness

# Redefining Readiness

Test scores on Standardized Tests are not an indicator of College and Career Readiness, they are more a measure of “memorization and regurgitation” and do not correlate with success in all jobs.

What skills are needed for students to be successful in the workplace (McLean County)?

# BN Advantage and Chamber Survey from 2017

**1. Treats others with honesty, fairness, and respect**

*(Self Discipline, Self Respect, Empathy, Social Awareness)*

**2. Demonstrates respect for company time and property**

*(Integrity, Time Management, Teamwork, Caring)*

**3. Accepts responsibility for one decisions and actions**

*(Accountability, Decision Making, Courage, Ethics)*

# BN Advantage and Chamber Survey from 2017

**4. Absences minimal with proper communication when**

*(Commitment, Integrity, Perseverance, Respect)*

**5. Demonstrates desire to work toward organization goals**

*(Goal Attainment Process, Collaboration, Teamwork, Sacrifice)*

**6. Demonstrates the ability to work with others**

*(Social Intellect, Emotional Intellect, Cultural Intellect, Self Skill)*

# BN Advantage and Chamber Survey from 2017

Aside from the “most important skills” mentioned in the previous slide, these skills also were mentioned as important, and was noted that new employees lack the greatest.

- Is present and engaged while at work
- Demonstrates appropriate use of technology at work
- Is open to corrections
- Effectively explains a process verbally or in writing
- Uses appropriate strategies and solutions in dealing with conflict

# Workforce Commision Thoughts on Future Skills

**Thinking Skills IQ** - Cognitive Flexibility, Critical Thinking, Adaptive Thinking, Coding, Creativity, Design, Understanding AI, Cognitive Load Management, Growth Mindset

**EQ/SQ/CQ** - Negotiation, People Management, Collaboration, Cross Cultural Competencies, Empathy, Communications, Caring at the Core

**Executive Skills** - Self Discipline, Respect, Service Orientation, Self Awareness, Self Efficacy, Independent Learning, Drive, Integrity, Ethical Clarity, Risk Sharing

# What Does That Mean for HS

- We need to change focus from content memorization to skill acquisition and demonstration.
- “Academic skills” are just a part of what is needed, we need to be teaching and assessing skills that will help students be successful in the future.
- We need to place a focus on learning opportunities that promote college and career development.
- We need to partner with business, community, college, and families to provide individualized opportunities and pathways for student success.

# Postsecondary & Workforce Readiness Act

PWR was signed into law in 2016 as a result of:

Half of Illinois High School graduates that enroll in community colleges need remedial coursework.

Employers report high school graduates are lacking critical skills for employment.

PWR lays out requirements for schools to prepare kids for college or career (PaCE Framework)



# PaCE Framework - Postsecondary & Career Expectations

## Illinois PaCE Postsecondary and Career Expectations

Each student should have an individualized learning plan to help make decisions about career and post-secondary (PS) education or training, to plan a course of study, and to make financial aid assessments with family members.



By the end of 8th grade	By the end of 9th grade	By the end of 10th grade	By the end of 11th grade	By the end of 12th grade
<p><b>A student should be supported to:</b></p> <ul style="list-style-type: none"> <li>complete a career cluster survey</li> <li>attend a career exploration day</li> <li>complete a unit on education planning</li> <li>be exposed to a financial literacy unit in a course or workshop</li> </ul> <p><b>A student should know:</b></p> <ul style="list-style-type: none"> <li>the concept of career clusters of interest</li> <li>relationship between community service/extracurricular activities and postsecondary (PS)/career goals</li> </ul>	<p><b>A student should be supported to:</b></p> <ul style="list-style-type: none"> <li>revisit career cluster interest survey and take a career interest survey</li> <li>complete an orientation to career clusters</li> <li>attend a PS options workshop</li> <li>meet with a counselor to discuss coursework and PS/career plans using the ISBE College and Career Readiness Indicators</li> <li>begin determining eligibility for advanced placement (AP) courses</li> <li>outline a plan for community service and extracurricular activities related to PS plans</li> </ul>	<p><b>A student should be supported to:</b></p> <ul style="list-style-type: none"> <li>visit at least one workplace aligned with career interests</li> <li>complete an orientation course to a particular career cluster or cluster grouping</li> <li>select a career pathway (CP) within a career cluster of interest</li> <li>begin determining eligibility for AP courses</li> <li>identify 2-3 adults to support the student through the PS and career selection process</li> <li>review coursework, and PS/career plans in relation to the ISBE College and Career Readiness</li> </ul>	<p><b>A student should be supported to:</b></p> <ul style="list-style-type: none"> <li>revisit the career survey</li> <li>participate in a mock job interview</li> <li>create a resume and personal statement</li> <li>identify an internship opportunity related to the CP</li> <li>determine readiness for college-level coursework in math/ELA and enrollment in either "catch up" or "speed up" course</li> <li>complete or enroll in at least one early college credit opportunity</li> <li>attend a college fair</li> <li>visit at least 3 PS institutions</li> </ul>	<p><b>By 12/31 of 12th grade a student should have:</b></p> <ul style="list-style-type: none"> <li>completed 3 or more admissions applications to PS institutions</li> <li>met with a school counselor to ensure all steps in the PS admissions process are completed on time</li> <li>attended a FAFSA completion workshop</li> <li>completed the FAFSA</li> </ul> <p><b>By the end of 12th grade a student should be supported to:</b></p> <ul style="list-style-type: none"> <li>address any remedial needs in math/ELA</li> </ul>

# Sixteen Nationally Recognized Career Clusters

- Agriculture, Food & Natural Resources
- Architecture & Construction
- Arts, AV Technology & Communication
- Business Management & Administration
- Education & Training
- Finance
- Government & Public Relations
- Health Science
- Hospitality & Tourism
- Human Services
- Information Technology
- Law, Public Safety, Corrections & Security
- Manufacturing
- Marketing
- STEM
- Transportation, Distribution & Logistics

# Career Pathways

## Pathway: Agriculture Mechanics & Technology

### Pathway Courses

Year 1-2	Intro to Agriculture Basic Agriculture Science
Year 3-4	Agriculture Mechanization & Technology Agriculture Business Management/AGRI 110: Introduction to Agricultural Economics

### Related Electives

BUS 150: Intro to Business  
Energy and Transportation Technology  
Environmental Science/AP Environmental Science  
Internship  
Probability & Statistics

### Recommended Early College Credit Options

AGRI 110: Introduction to Agricultural Economics- Heartland Community College - 3 Credits

### Career Related Activities

Athletics  
FFA  
STEM Club

# IT Career Pathway Technical Courses

Red = BACC

Purple = BHS

Blue = Unit Dist. #5

Brown = Olympia

## Network Systems

## Programming and Software Development

## Web and Digital Communications

### Freshman

Orientation  
Courses, ICP  
development and  
career portfolio  
begins

+Computer Science  
Essentials/Technology  
Concepts  
+Computer App. 1&2

+Computer Science  
Essentials/Tech  
Concepts  
+Computer App 1&2  
+Personalized Career  
Skills

+Computer  
App./Web Design  
+Computer App. 1&2

### Sophomore

Review ICP,  
expand career  
portfolio, increase  
specific career  
focus

+Computer Technology  
and Networking 1\*  
+Computer Science  
Essentials/Technology  
Concepts  
+Computer App. 1&2

+Computer Science  
Essentials/Tech.  
Concepts  
+Problem Solving with  
Computer Programming  
+Computer Tech. and  
Programming

+Graphic Design and  
Video Production I  
+Animation and  
Rendering  
+Graphic Comm.

### Junior

Refine ICP, identify  
W-B-L experiences,  
dual credit and  
industry certification

+Computer  
Technology and  
Networking 2 (DC)\*

+AP Computer  
Science Prin.  
+Intro. To Computer  
Science/ +Computer  
Science  
+AP Comp. Science  
Prin.

+Graphic Design and  
Video Production 2  
(DC)\*  
*Adobe Cert. in  
Photoshop and  
Illustrator CS5*

+Digital Media  
Production  
+Comp.Science  
+Web Page Design &  
Internet

### Senior

Expand portfolio,  
identify w-b-l, dual  
credit,  
Ind. Cert., Post sec.  
Selection &  
transition planning

+Computer Technology  
and Networking 3 (DC)\*  
*CompTIA A+ Cert.*

+AP Computer Science A  
+Senior Math STEM  
+AP Computer Science  
(JAVA)  
+Senior Math STEM  
+AP Computer Science A  
+AP Computer Science  
Principles

+Graphic Design and  
Video Production 3 (DC)\*

Advanced Digital Media  
Production  
+Advanced Digital  
Media  
+Animation

Robust Career Pathways May Lead to  
Pathway Endorsements

# What is Required to Earn a Pathway Endorsement?

- ILP (Individualized learning plan; resume and personal statement); annual process for updating.
- Career focused instructional sequence (at least 2 years of coursework) within one or multiple endorsement areas.
- Complete 2 Career Exploration Activities (or one intensive Exploration Experience), 2 Team Based Challenges, and at least 60 cumulative hours of participation in one or more Supervised Career Development Experiences.
- Demonstrate readiness for non-remedial coursework (transitional math).

# How Can Local Business Contribute?

- Externships for teachers (Professional Development for Teachers)
- Job shadowing for younger students (early high school)
- Internships for older students (juniors/seniors)
- Extend opportunities to students within and outside of primary business sector
- Partnering for projects (Project Based Learning)
- Partner on grant writing to obtain funding
- Reach out for Win-Wins (Apprenticeships) (New Flexibility in High Schools)
- Help build systems and programs for youth
- Support High Schools publically

What do you need from schools so that we can partner to ensure our students are ready to fill the current and future workforce needs in McLean County?



# Resources & Information

<https://www.istcoalition.org/education-programs/stem-challenges/>

<https://roe17.org/resources/college-and-career-readiness>

<http://www.advanceillinois.org/pwr/>

<https://www.bnstem.org/the-loop.html#join>