2017
COLLEGE CHANGES EVERYTHING®
CONFERENCE

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Tinley Park, Illinois

Understanding the *Postsecondary and Workforce Readiness Act* and Updates on its Implementation

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PWR Act

- **Public Act 99-0674** (HB 5729); signed by Governor on 7/29/16
- **Four components:**

1. Postsecondary and Career Expectations (PaCE)
2. Pilot of Competency-based High School Graduation Requirements
3. Scaling of 12th Grade Transitional Courses
4. College & Career Pathway Endorsements on High School Diplomas

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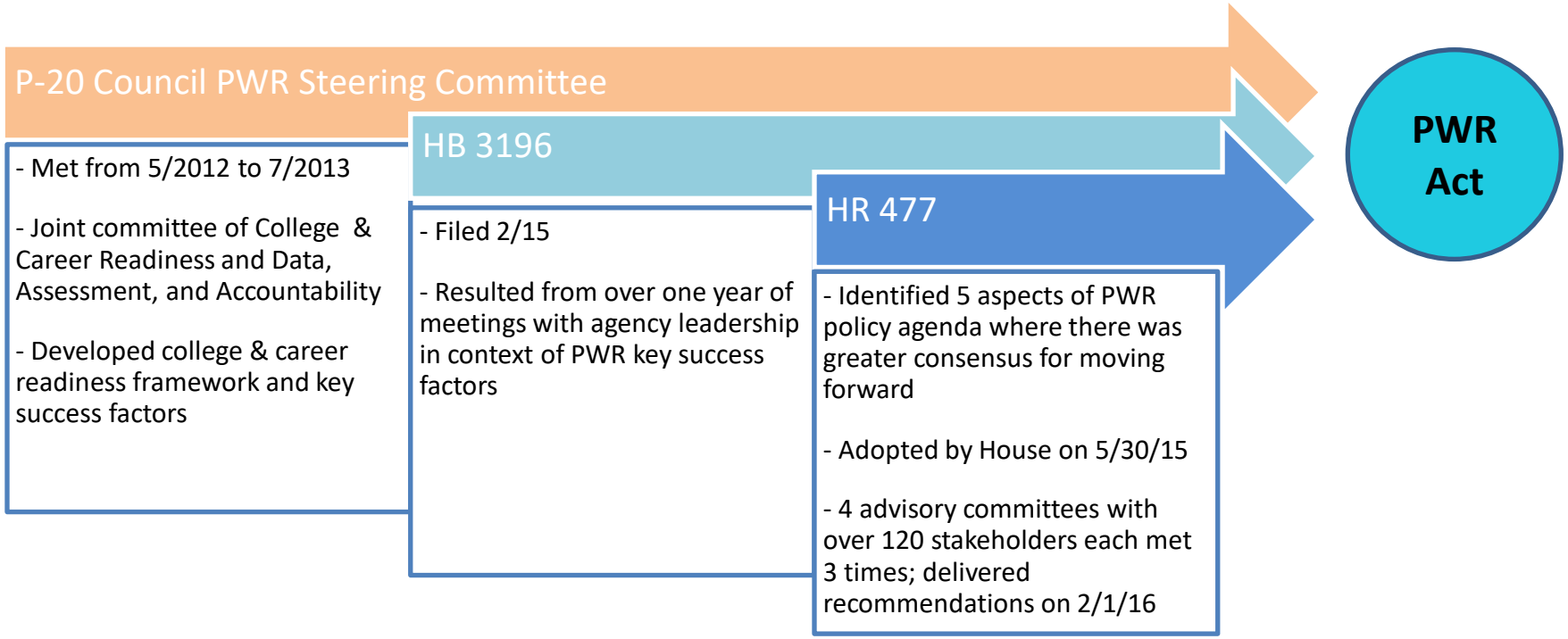
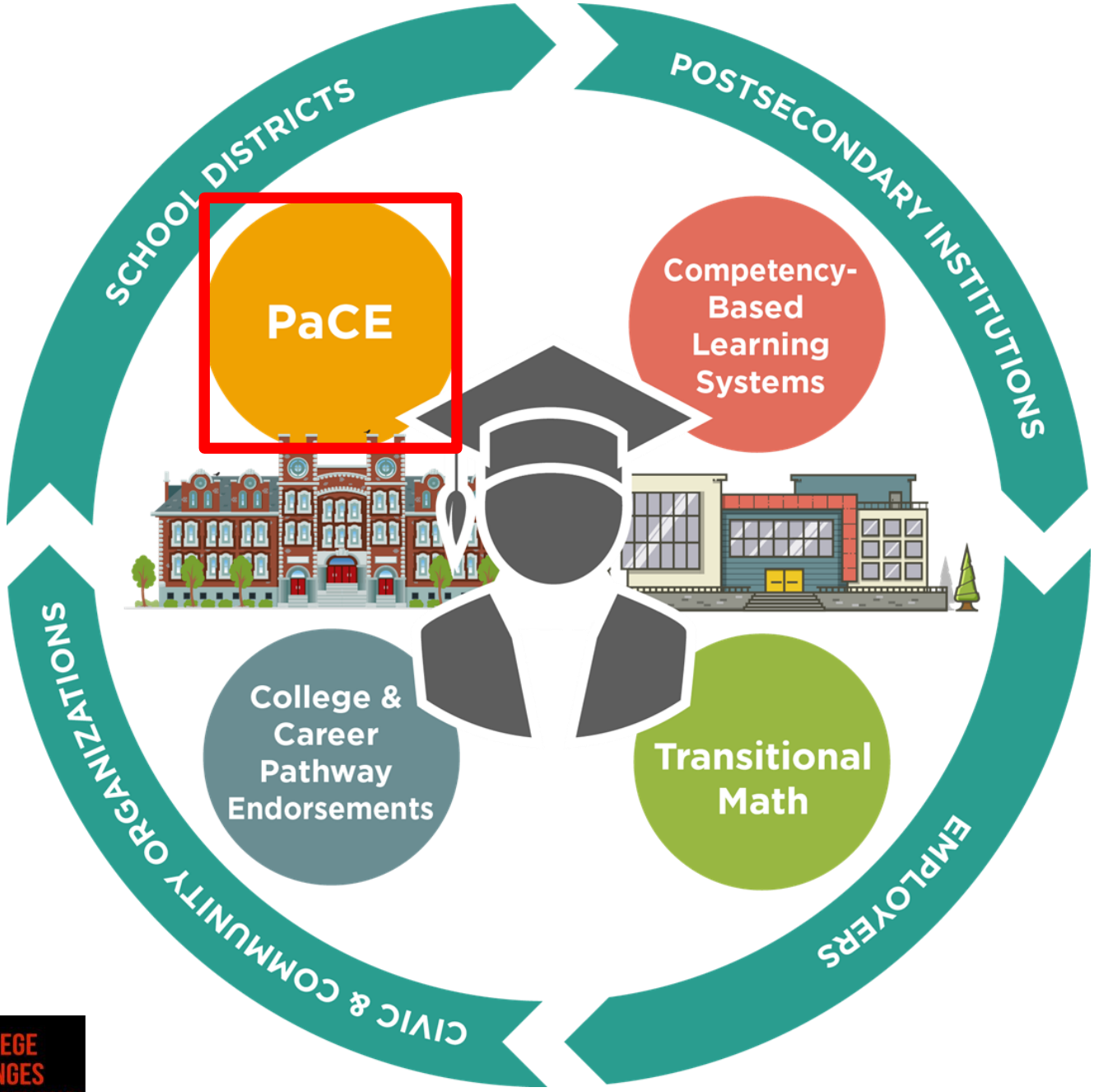
PWR Act Background





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Model Postsecondary and Career Expectations

ISBE, ICCB, IBHE, ISAC
7/1/2017

By end of 8th grade

By end of 9th grade

By end of 10th grade

By end of 11th grade

By end of 12th grade

- **Activities** to complete
- Related **knowledge** students should possess
  - *Supported by school districts, parents, community*

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Illinois PaCE: Postsecondary and Career Expectations

Each student should have an individualized learning plan to help them make career and college decisions, plan a course of study, and make financial aid assessments with family members.

By the end of 8th grade

A student should be supported to:

- complete a career cluster survey
- attend a career exploration day
- complete a unit on education planning
- be exposed to a finance literacy unit in a course or workshop

A student should know:

- the concept of career clusters for further exploration
- possible career clusters of interest
- relationship between community service/ extracurricular activities and postsecondary (PS)/career goals

By the end of 9th grade

A student should be supported to:

- revisit career cluster survey and take a career interest survey
- complete an orientation to career clusters
- attend a postsecondary (PS) options workshop
- meet with a counselor to discuss coursework and postsecondary/career plans
- begin determining eligibility for AP courses
- outline a plan for community service/ extracurricular activities related to PS plans
- complete a financial aid assessment with a family member

A student should know:

- one or two career clusters for further exploration and development
- the relationship between HS coursework, attendance, and grades to PS plans
- importance of community service and extracurricular activities to PS and career plans
- general cost ranges of various PS options

By the end of 10th grade

A student should be supported to:

- visit at least one workplace aligned to career interests
- complete an orientation course to a particular career cluster or cluster grouping
- select a career pathway (CP) within a career cluster of interest
- begin determining eligibility for AP courses
- identify 2-3 adults to support him/her through the college and career selection process
- attend a college affordability workshop with adult family member

A student should know:

- educational requirements, cost, expected entry level, and midpoint salary for occupations in selected CP
- different types of PS credentials and institutions
- general timing of college entrance exams and apps
- benefit of early college credit opportunities to PS access and completion

By the end of 11th grade

A student should be supported to:

- revisit the career survey
- participate in a mock job interview
- create a resume and personal statement
- identify an internship opportunity related to CP
- determine readiness for college-level coursework in Math/ELA and enrolled in either "catch up" or "speed up" course
- complete or enroll in at least one early college credit opportunity
- attend a college fair
- visit at least 3 PS insitutions
- take at least one college entrance exam

A student should know:

- app deadlines, test timing, cost, and prep for industry-based certification for CP
- career attributes related to career interests
- entrance requirements, including app deadlines, for expected PS program of study
- 3-5 match schools, one safety, and one reach school for PS program of study
- negative impact of remediation on PS goals
- financial aid deadlines for chosen PS options

By the end of 12th grade

By 12/31 of 12th grade

A student should have:

- completed 3 or more admission applications to PS institutions
- met with a school counselor to ensure all steps in the PS admission process are completed on time
- attended a FAFSA completion workshop
- completed the FAFSA

By the end of 12th grade a student should be supported to:

- address any remedial needs in Math/ELA
- obtain an internship opportunity relating to CP
- if applicable, receive industry-based certification(s) relating to CP
- complete one or more team-based challenges or projects relating to CP
- attend a financial aid award letter workshop

A student should know:

- how CP courses and experiences articulate to degree programs at PS options
- estimated cost of each PS option
- affordability of PS options in relation to expected entry-level career salary and anticipated debt
- terms and conditions of any scholarship or loan

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Opportunities for Leading Communities

HBR Career Readiness Plan

Hinckley-Big Rock CUSD #429 defines career ready graduates as having the skills and motivation to pursue a self-directed goal, adapt to challenges along the way, and know the options to obtain their post-secondary career. It is our goal that all graduating seniors will have a defined plan and be career ready when they complete high school. This list of benchmark expectations will act as a guide for HBR staff, students, and parents as we plan and prepare for our students to be ready to go.

- ◆ skills and motivation to pursue a self-directed goal
- ◊ adapt to challenges along the way
- • know the options to obtain their PS career

By the end of 5th grade

A student should be supported to:

- ◆ identify and set personal and academic goals
- ◊ consistently apply the SEL (Grit/Growth/Goal Setting) in daily practices
- • gather information regarding training and education for jobs in field of choice
- ◆ create an inventory of interests and possible careers

A student should know:

- • the jobs and/or careers their parents hold
- ◆ the learning behaviors consistent with successful students

By the end of 8th grade

A student should be supported to:

- ◆ complete a career cluster survey
- • engage in annual career day
- • take part in a financial literacy exercise
- ◆ attend a day with parent/guardian at work

A student should know:

- ◆ the concept of career clusters for further exploration
- ◆ possible career clusters they are currently interested in
- ◊ the relationship between the skills acquired in community service and extracurricular activities and postsecondary career goals

By the end of 9th grade

A student should be supported to:

- • revisit/update the career interest inventory
- • complete orientation to career clusters
- • attend a PS options workshop
- • complete 4 year plan with counselor
- • outline a plan for school and community engagement aligned with PS goals

A student should know:

- • at least one career cluster for further exploration
- • the relationship between coursework, school and community engagement, and outcomes to PS goals
- ◊ general cost ranges of various PS options

By the end of 10th grade

A student should be supported to:

- ◆ complete orientation to a chosen CP
- ◆ chose a CP related to a career cluster
- ◆ identify 2-3 adults to support him/her through the PS planning/selection process
- • attend a PS financial workshop with an adult family member

A student should know:

- • educational requirements, cost, entry level, and median salary for chosen CP
- • different types of PS credentials and institutions
- • general timing of exams and applications aligned with chosen CP
- • benefit of early college credit related to PS goals

PS - Post-secondary, CP - Career Pathways

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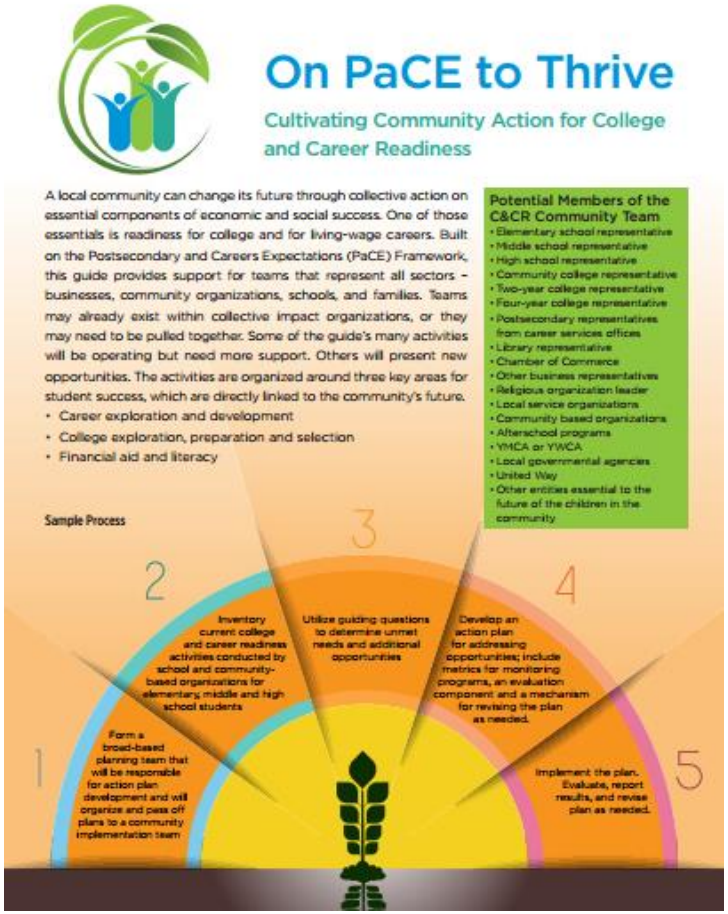
Outreach Status



- On PaCE to Thrive Guide and webinar
- Professional Development modules coming soon!
- Several examples of community adaptations, employer resources, and crosswalk to social science and SEL standards on www.pwract.org

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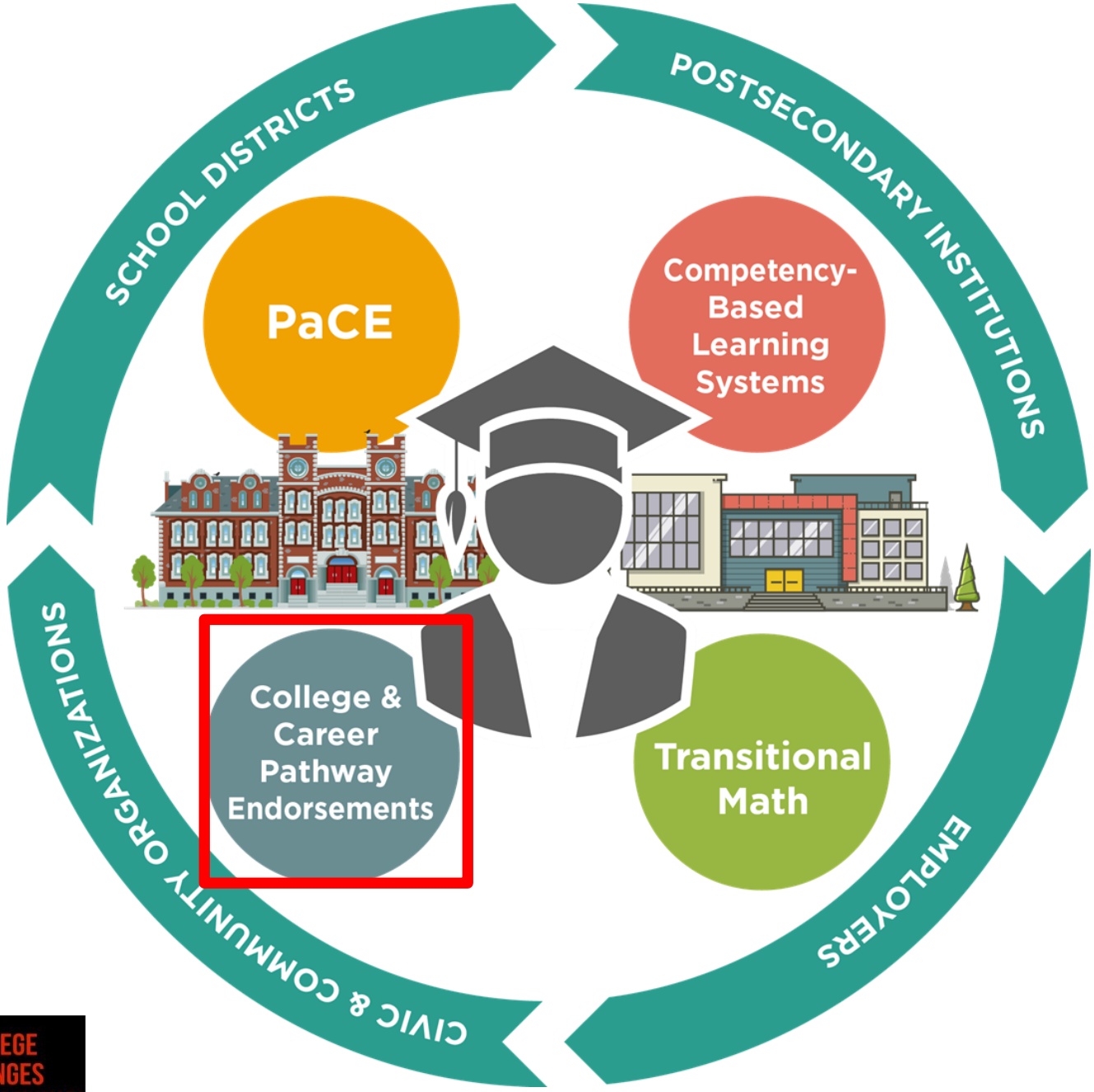

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Why?

- **Recognize and incentivize student attainment of** knowledge and demonstrations of skills important for both success in both postsecondary and employment
- **Encourage career exploration and development** to improve decision-making
- **Promote greater consistency** of college and career pathway program structures
- **Institutionalize college and career pathways** as a key strategy for postsecondary and career success

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HB 5729 College & Career Pathway Endorsement Example: MANUFACTURING

	9th	10th	11th	11th or 12th
Individualized Plan	Individualized plan for college, career, and financial aid; resume; personal statement			
Career-focused instructional sequence *(consult with EFE; 2 years of coursework or equivalent competencies)*	Manufacturing Orientation and Safety (OSHA 10-based competencies with industry focus)		Quality Practices and Measurement* (MSSC, NIMS, AWS) Mfg. Processes & Production (MSSC, NIMS, AWS)*	Advanced topics* in: 1. Manufacturing Processes & Production (pre-apprenticeship) OR 2. Maintenance Awareness & Automation (MSSC)
			***2022-23 SY:** Include at least 6 hours of early college credit*	
Professional Learning	At least 2 career exploration activities, or one intensive		60 cumulative hours of paid or for-credit supervised career development experiences with a professional skills assessment	
	At least 2 team-based challenges with adult mentoring			
Academic Competencies	Ready for non-remedial coursework in reading and math by high school graduation through criteria defined by district and local community college			

District and local CC certify articulation to cert./degree with labor market value

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Implementation Status

- 7 state agencies have adopted **interagency plan for supports**
- **Endorsement framework** developed that groups all industry clusters for purposes of the career-focused instruction component
- **Public-private steering committees** launching this month to identify model competencies in Health Science, MFG/Engineering, IT, Finance/Business
- **Communities preparing for endorsements** for Class of 20 graduates

State Endorsement Framework

HIGH SCHOOL GRADUATES CAN OBTAIN COLLEGE AND CAREER PATHWAYS ENDORSEMENTS IN THE FOLLOWING SECTORS:			
	AFNR (Agriculture, Food, and Natural Resources		**Health Sciences and Technology**
	Arts and Communication		**Information Technology**
	Finance and Business Services		**Manufacturing, Engineering, Technology and Trades**
	Human and Public Services		Multidisciplinary

(*__Bold__ indicates a prioritized industry)

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10 Pilot Districts!

- Peoria Public Schools District 150
- Huntley Community School District
- Rantoul Township High School District 193
- Williamsfield Community Unit School District 210
- Kankakee School District 111
- Proviso Township High School District 209
- East St. Louis School District 189
- Ridgewood High School District 234
- Round Lake Community Unit School District 116
- Six schools in Chicago Public Schools District 299

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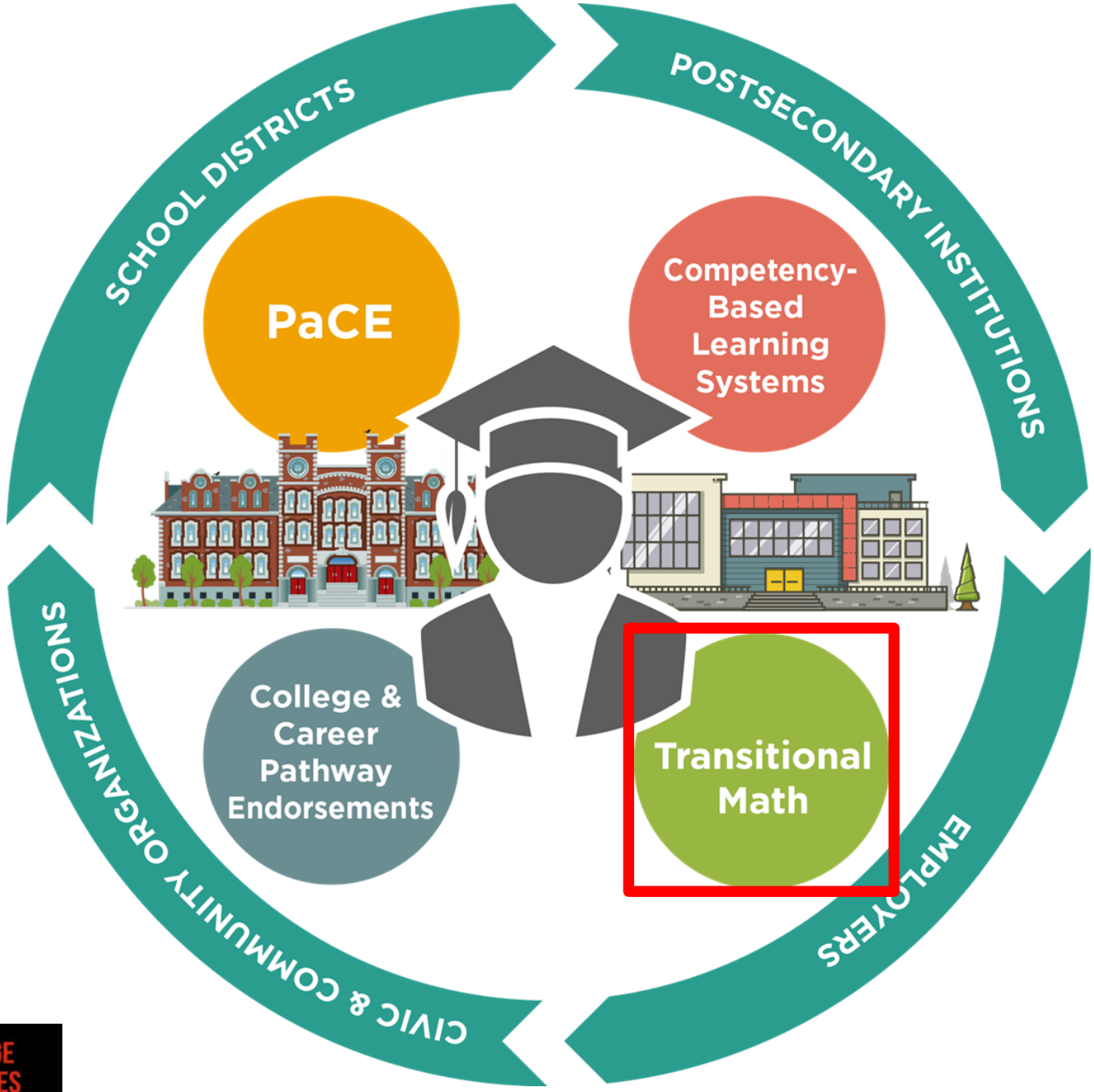
Alignment Across PWR Act Components

- **Williamsfield:** Beginning with the 2017-18 school year, the district will offer **four new graduation pathways**
- **Peoria:** The goal of Phase 1 of the Competency-Based Education Pilot is to identify those math, English, and science **competencies related to the pathway capstone courses** for the district's high school **career programs**
- **Kankakee & Proviso East**: Implementing competency-based education in the context of **wall-to-wall career academies.**



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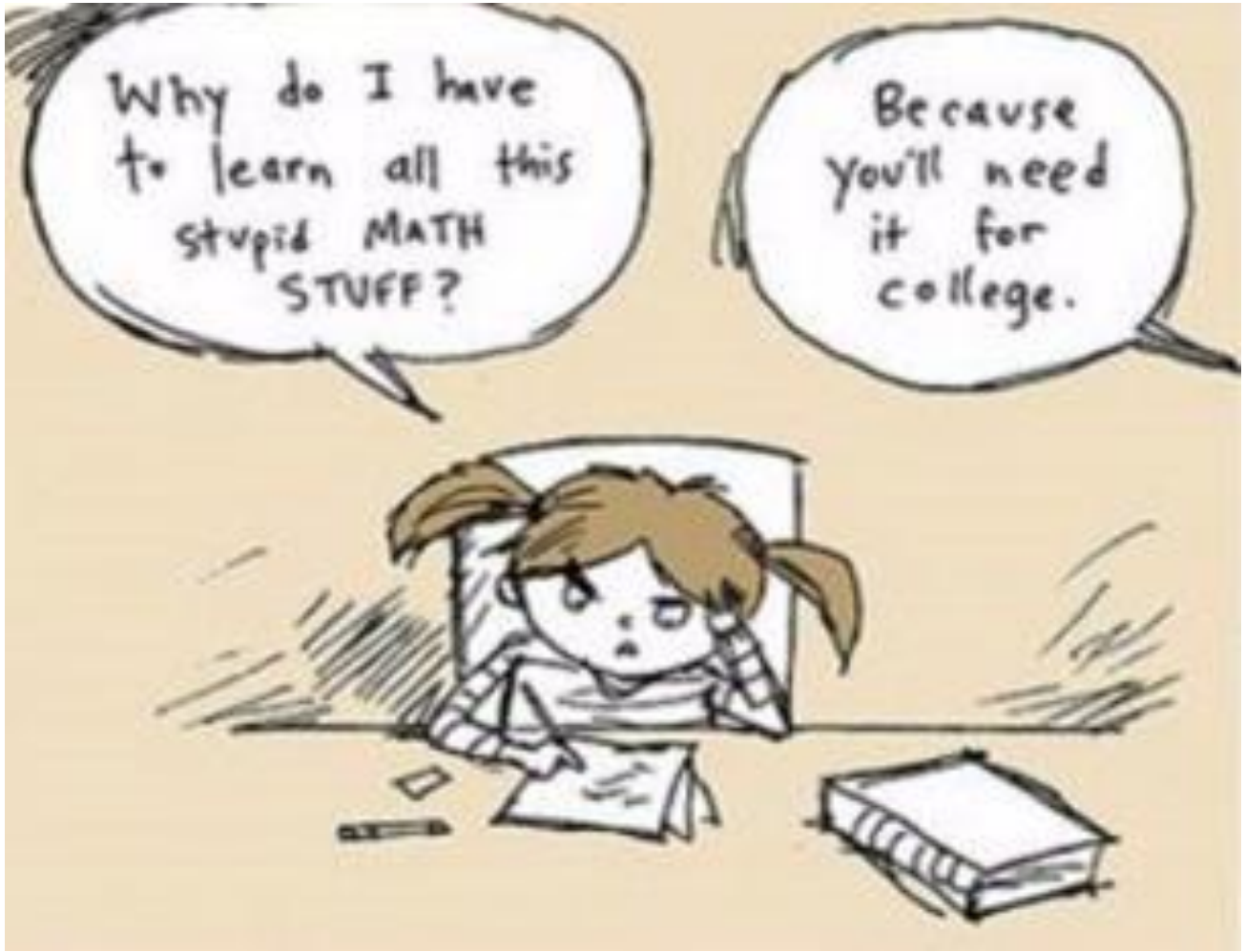

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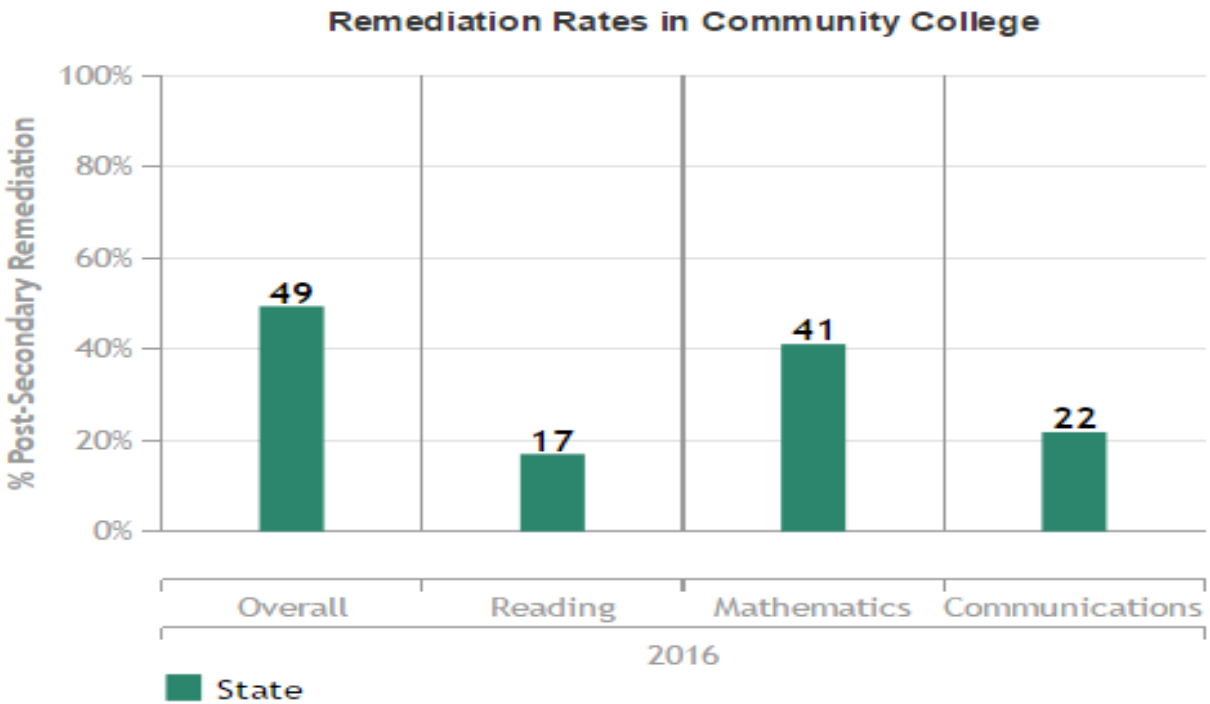

Class of 2014

	State
Graduates (N)	132,661
Attending Illinois Community Colleges (N)	42,256
Attending Illinois Community Colleges (%)	31.9%
Enrolled in Remedial Courses (N)	20,894
Enrolled in Remedial Courses (%)	49.4%

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A problem with the system?

1. Students **complete a placement test**

   inaccurately rates too many students as not being able to succeed in credit-bearing coursework.

2. Content needed is focused on **succeeding in college algebra**

   few kids need unless they are going into a STEM field

3. **Results in developmental education**

   only 10-11% make it through a credit bearing course eventually

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A problem with the system?

1. Students **complete a placement test**

   inaccurately rates too many students as not being able to succeed in credit-bearing coursework.

Assessment and Placement Research

By: Clive Belfield & Peter M. Crosta — February 2012. New York: Community College Research Center, Teachers College, Columbia University

		Placement According to Exam	
		Developmental	College Level
Student Ability	Developmental	✓	*Over-placed* (English – 5%) (Math – 6%)
	College Level	*Under-placed* (English – 29%) (Math – 18%)	✓

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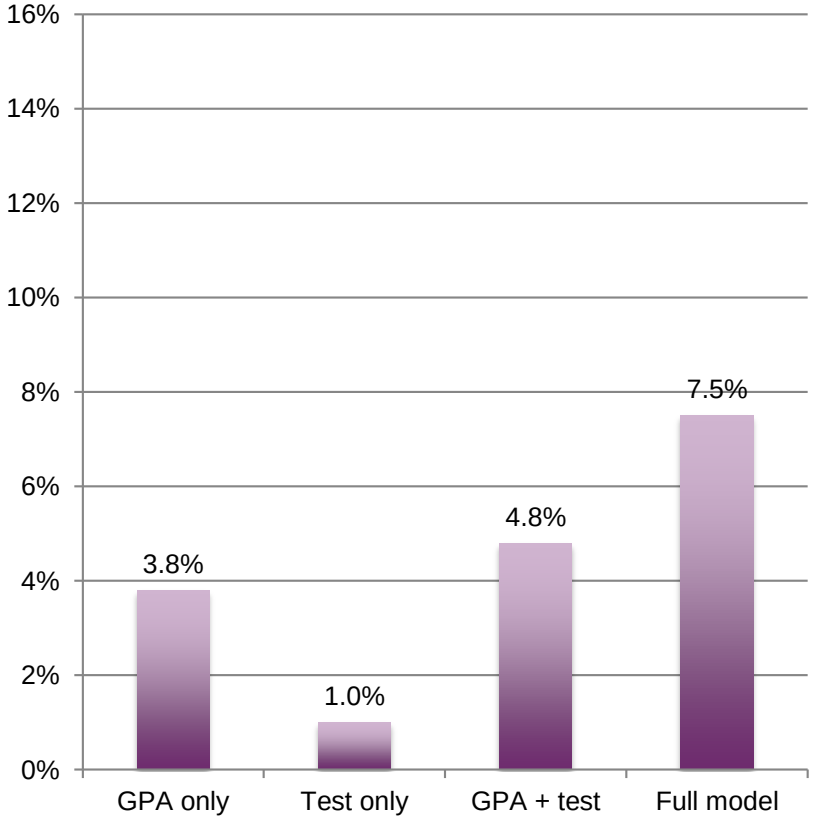
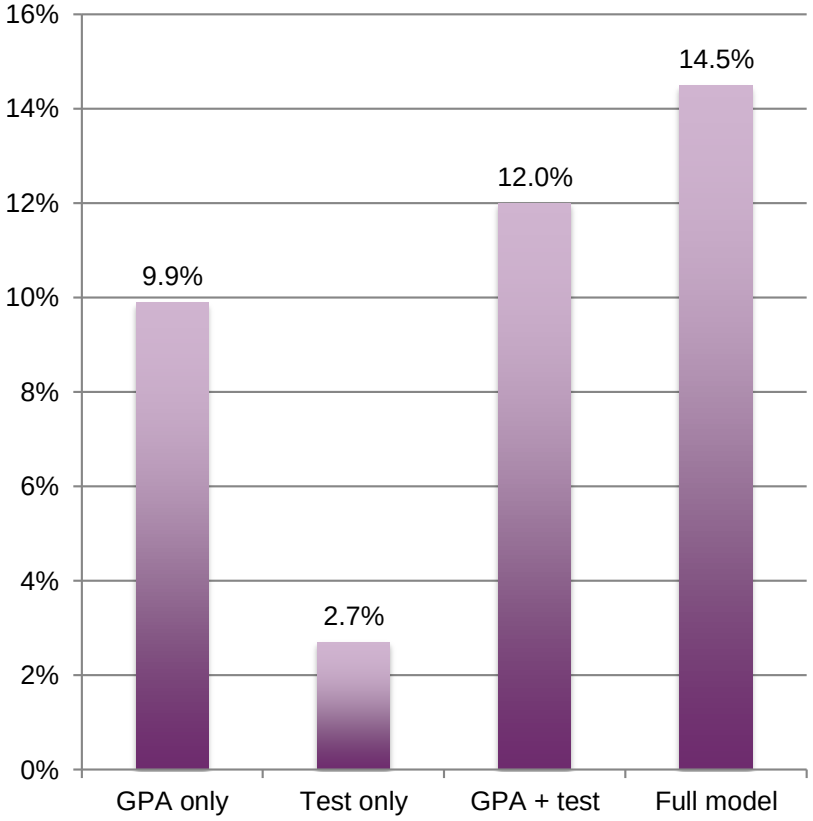
Placement Tests: Accuplacer and Compass

Predictors of Success: SUNY College B

ENGLISH



MATH



Dr. Elisabeth Barnett, Community College Research Center

A problem with the system?

2. Content needed is focused on **succeeding in college algebra**

few kids need unless they are going into a STEM field

Reaffirming the role of Algebraic-Intensive Courses

Mathematical Association of America, 2004 CUPM Curriculum Guide

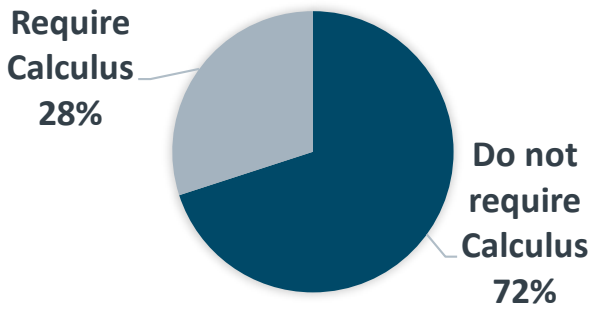
"Unfortunately, there is often a serious mismatch between the original rationale for a college algebra requirement and the actual needs of students who take the course."

AMATYC Position Statement on the Appropriate Use of Intermediate Algebra a Prerequisite

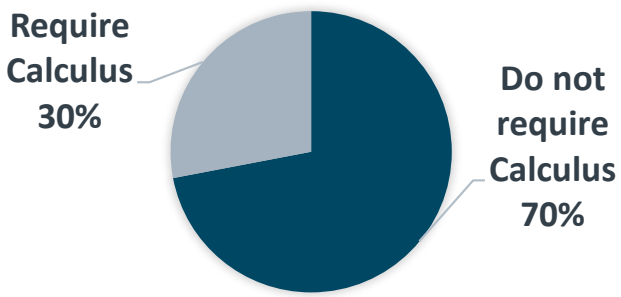
"Prerequisite courses other than intermediate algebra can prepare students for courses of study not leading to calculus."

Need for College Algebra: Who takes Calculus?

2-YEAR COLLEGE STUDENT ENROLLMENT INTO PROGRAMS OF STUDY



4-YEAR COLLEGE STUDENT ENROLLMENT INTO PROGRAMS OF STUDY



Source: Burdman, 2015; Chen & Soldner, 2013

Where did those students go?

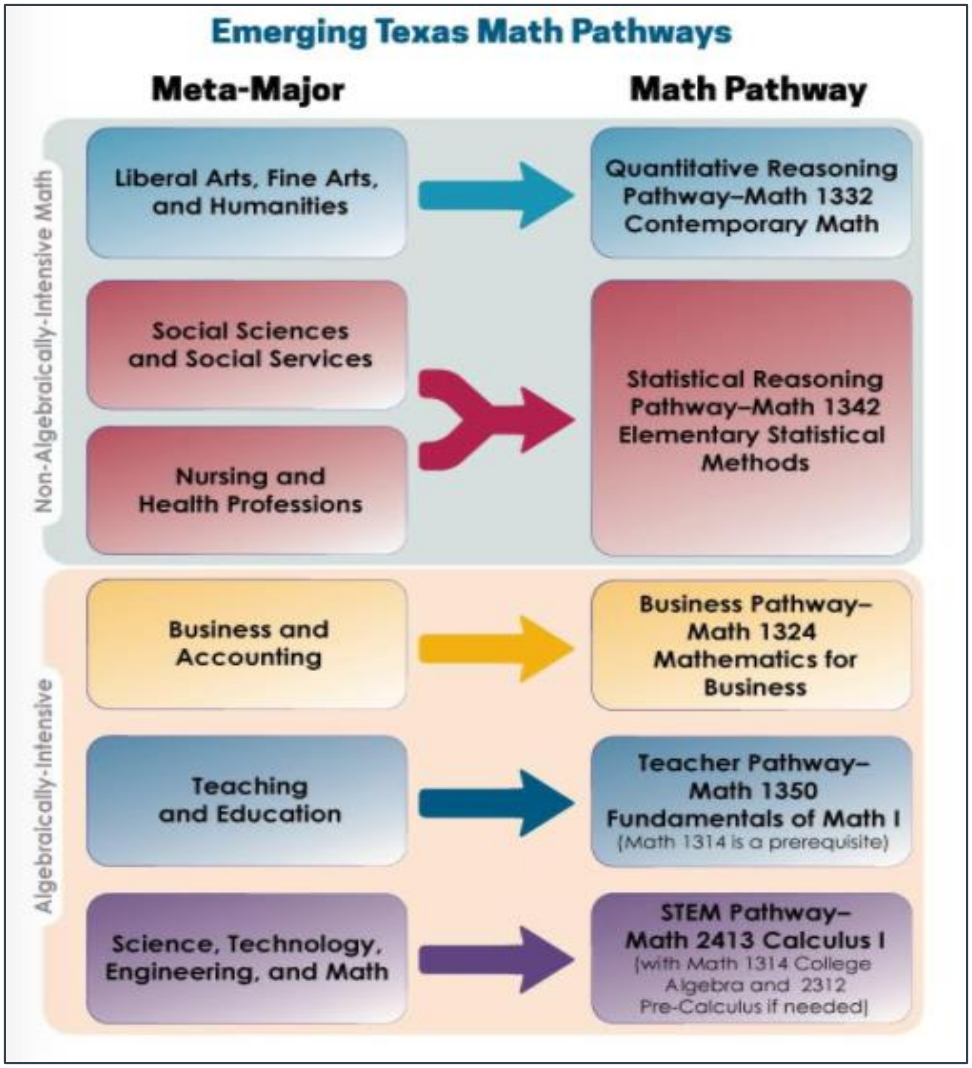
College Algebra became the default gateway course.

Mathematics Course Enrollments in Two-Year Colleges, 2000, 2005.

Course	2000	2005	Percent Change
College Algebra	173,000	206,000	19%
Statistics	71,000	111,000	56%
Math for Liberal Arts	43,000	59,000	37%
Calculus I	53,000	51,000	-4%

Source: College Board of Mathematical Sciences 2005 Survey.

Small set of pathways aligned to meta-majors



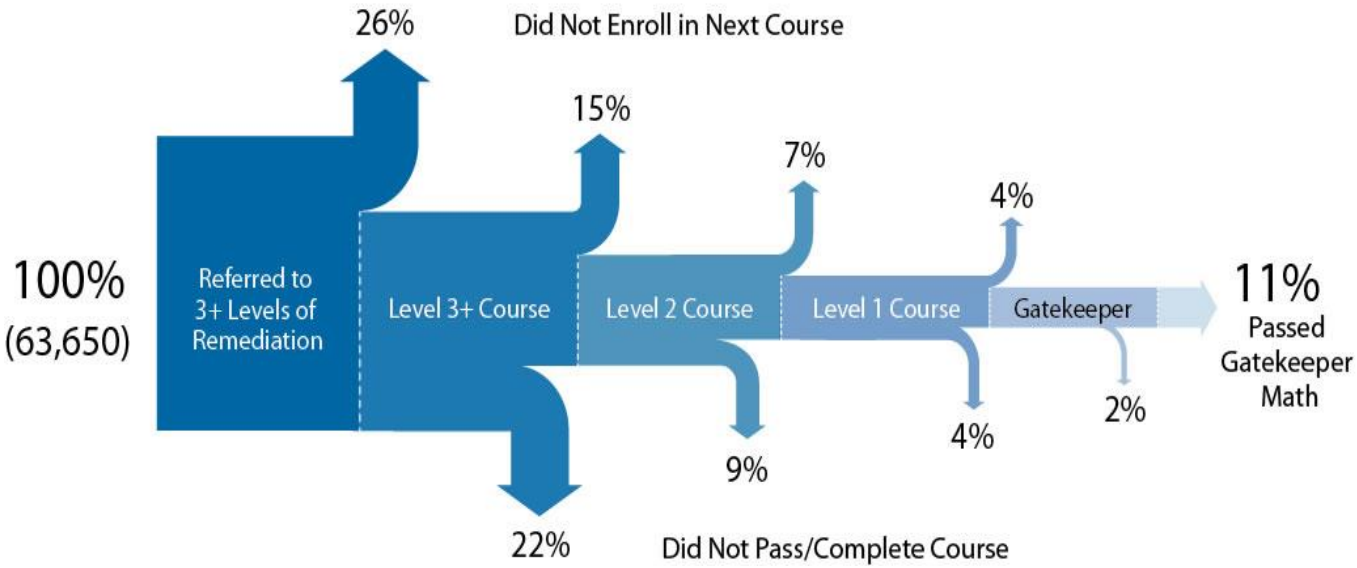
A problem with the system?

3. Results in developmental education

only 10-11% make it through a credit bearing course eventually

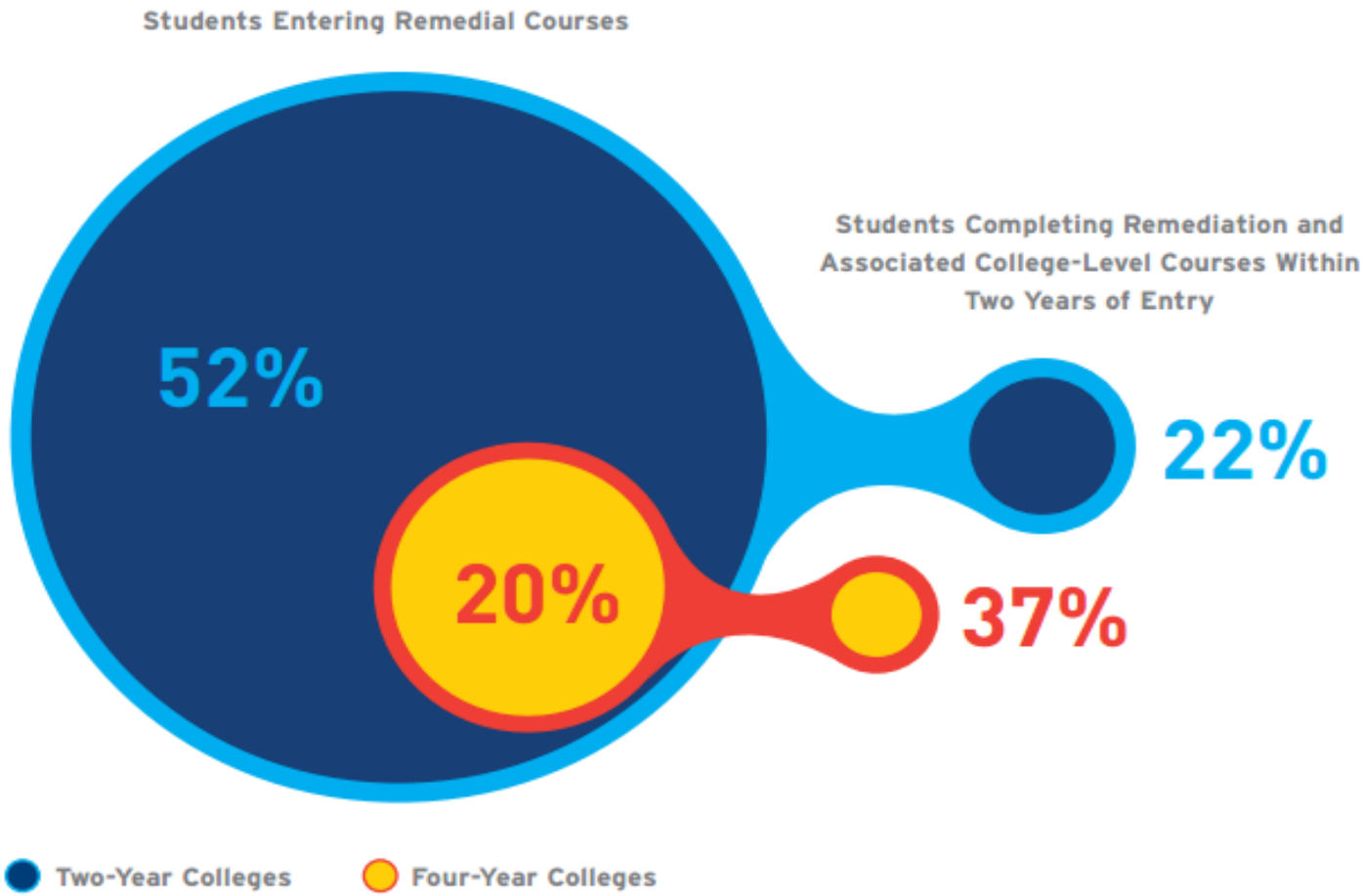
Concerns about long developmental sequences

Student Progression Through the Developmental Math Sequence[21]



Bailey, Jeong & Cho, 2010

Why?



Source: Complete College America. 2012. *Remediation: Higher Education's Bridge to Nowhere.*

Northern Illinois P20 Network Data

In the 11 community colleges within the P-20 Network

- 23% of students who were determined to be one level below “ready” end up completing developmental ed and successfully earn math credit
- 11% of students determined to be two levels below subsequently earn math credit.

For writing: 35% earned credit if one level below and 20% earned credit if two levels below.

http://niu.edu/p20network/_pdfs/work-groups/standards/Community-College-Developmental-Education-Survey-final.pdf

Transitional Math in Illinois

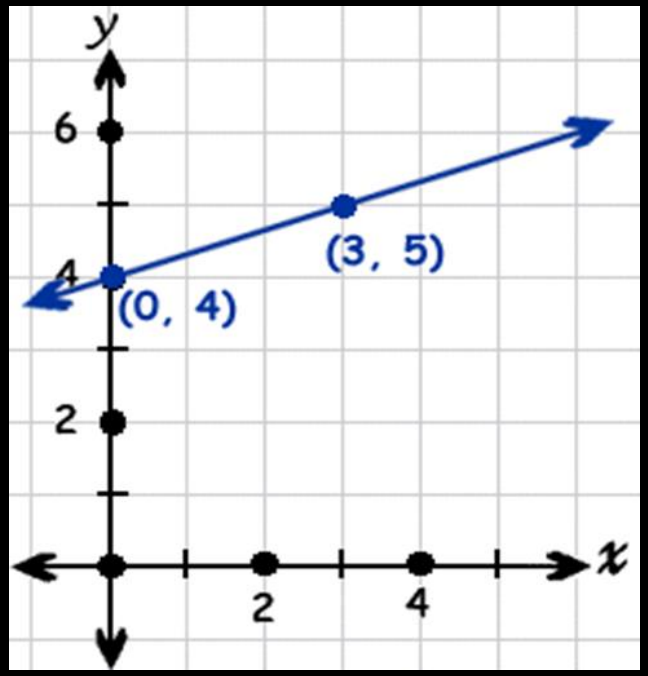
Developmental math (DM) pathways

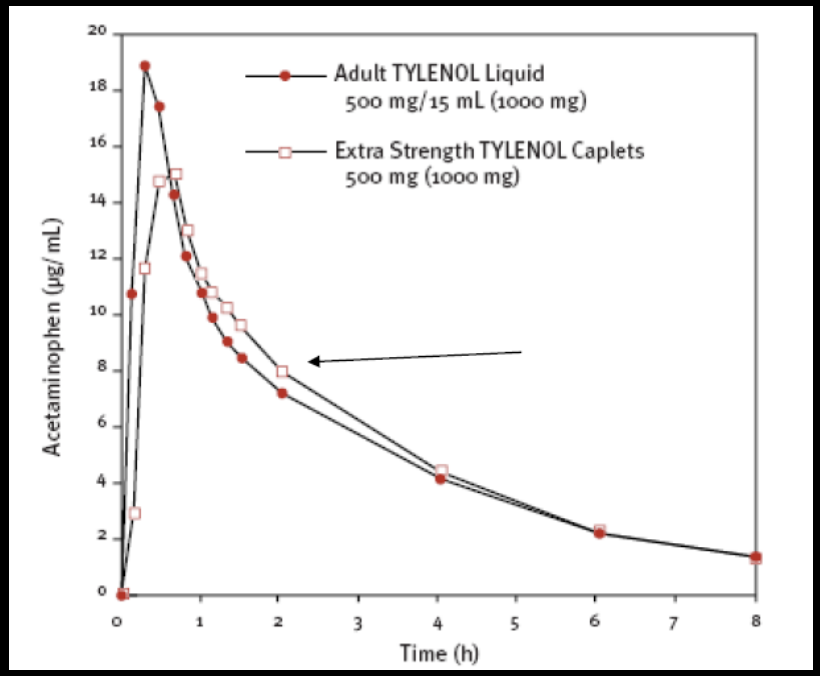
Courses other than beginning and intermediate algebra that accelerate developmental math*

- Use updated content based on contextualized learning and problem solving
- Look forward to college-level courses
- Develop critical thinking, literacy, college readiness, and 21st century skills
- Differentiate content based on STEM vs. non-STEM

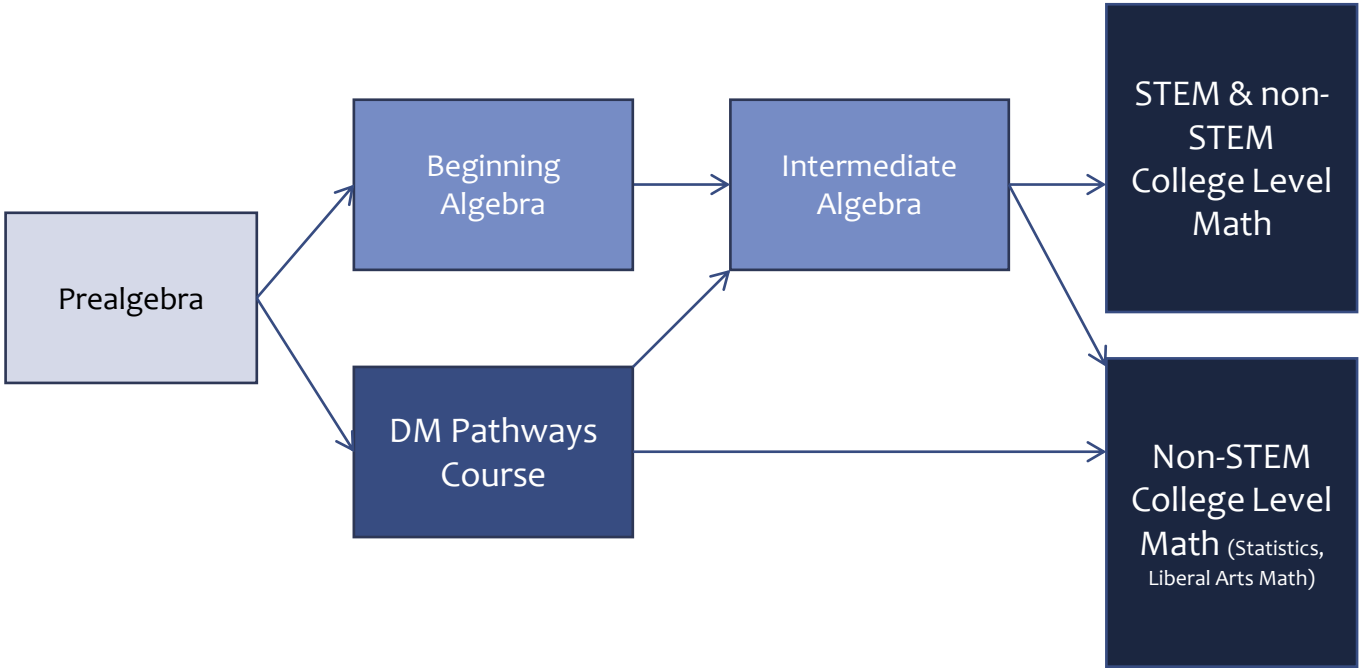
NOTE: Developmental math refers to courses that remediate high school deficiencies such as prealgebra, beginning algebra (Algebra 1), intermediate algebra (Algebra 2), and geometry

Traditional Algebra vs. DM Pathways Approach





DM Pathways Augment Traditional Sequence



Illinois DM Pathways Option: PMGE

Preparatory Mathematics for General Education

- 3-4 semester hours
- **Non-STEM intermediate algebra**
- Develops conceptual understanding and problem solving abilities
- Satisfies the Common Core Standards for Mathematical Practice
- Flexible implementation
  - One approach: Integrated model of Beg. Alg. + PMGE called **Math Literacy**

Transitional math courses

Where we are

- Some IL high schools have been offering 4th-year courses for seniors not taking dual credit or AP courses to reduce college remediation
- Natural evolution of DM redesigns & pathways pilots
- Bridging the Gap (BTG) grant funds some existing transitions initiatives
- Doing so with local partnerships
  - Example: Rockford 205 & Rock Valley College Math Literacy pilot

Issues

- Not at scale
- No consistent requirements
- No portability

Postsecondary Workforce Readiness Act

1. Postsecondary and Career Expectations (PaCE)
2. Pilot of Competency-based High School Graduation Requirements
3. College and Career Pathway Endorsements on High School Diplomas
4. **Transitional Math Courses**
   - **Provides urgency and portability**

PWR Act Transitional Math Courses

Comprised of 3 pathways related to career pathways:
STEM, Technical Math, and QL/Statistics

- High school courses designed to provide guaranteed placement at IL colleges and universities
- **Reduce remediation** needed when students go to college
- Take existing 4th-year course pilots to portability beyond local colleges when they meet statewide criteria
- Designed for seniors to give them a different experience their last year (from first 3 years or DM)
- Integrate contextualized learning, problem solving, and **college and career readiness**
- Align with the Common Core and the New Illinois Learning Standards

Transitional Math: A Student's Perspective

11th Grade Projected Readiness Determination:
Use statewide criteria
Based on each student's postsecondary math pathway

Not Projected Ready:
Transitional math co-developed by school district and community college

Projected Ready:
Student decides whether to take math in 12th grade

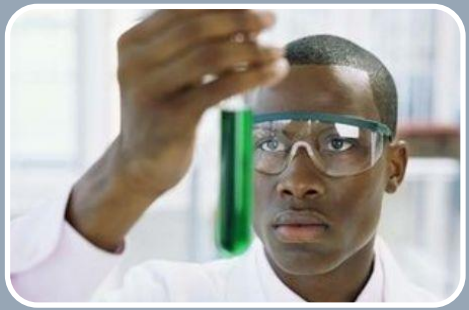
Successful Completion of Transitional Math:
Placed in college-level math course in applicable math pathway

Unsuccessful Completion or No Math Senior Year:
Subject to general placement processes

Successful Completion of Rigorous Math in 12th Grade:
Placed in college-level math course in applicable math pathway

ILLINOIS P-20 COUNCIL
College & Career Readiness Committee

Postsecondary Math Pathways



STEM

Career goals that require application of calculus or advanced algebraic skills

Technical

Career goals in technical fields that do not require application of calc, advanced algebraic, or advanced stats skills

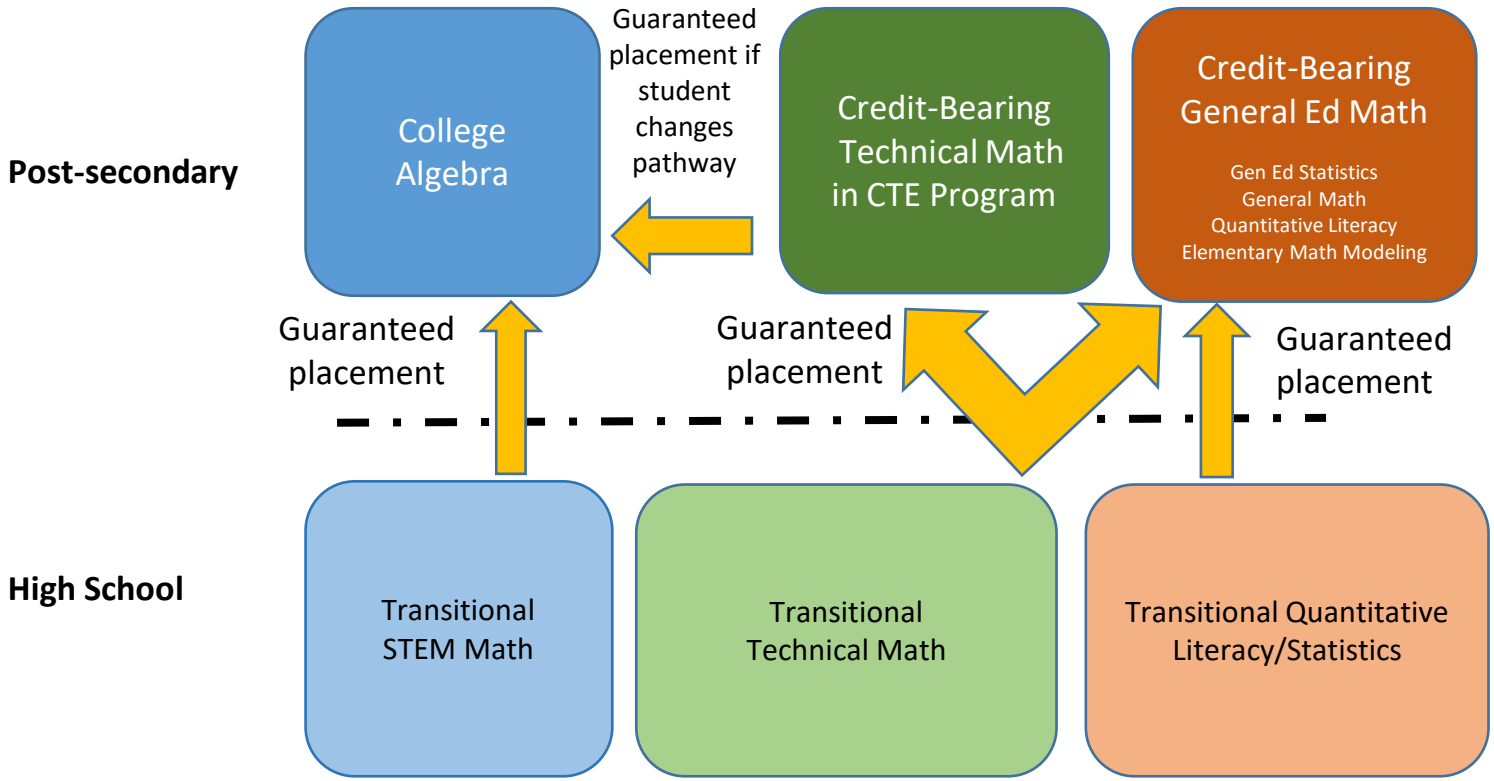
Quantitative Literacy/ Stats

Career goals outside of STEM or Technical – focus on general stats, data analysis, quant. literacy, problem solving

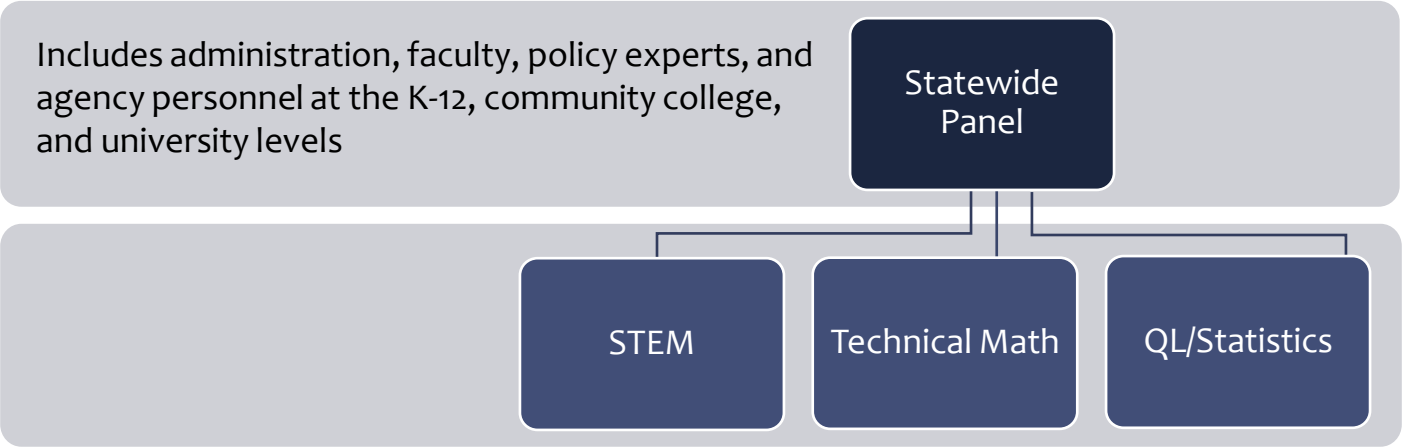
ILLINOIS P-20 COUNCIL

College & Career Readiness Committee

Transitional Math Pathways into Credit-Bearing Postsecondary Courses - ***Draft***

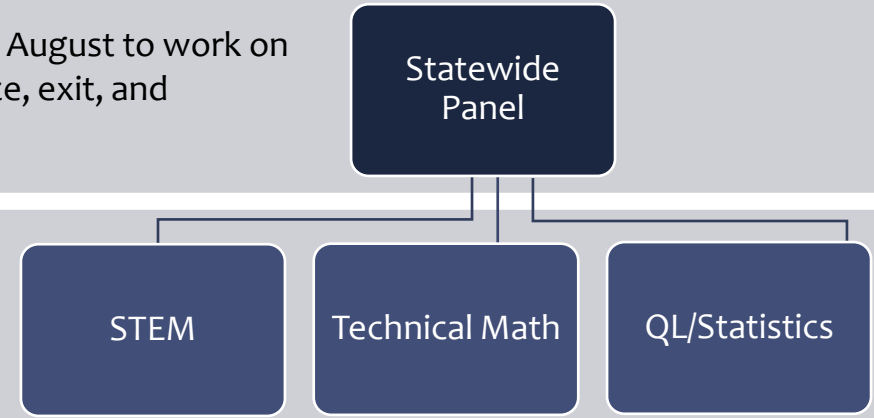


Transitions Courses & Policy Development



Transitions Courses & Policy Development

Meeting since March, again in August to work on recommendations for entrance, exit, and portability



Transitions Courses & Policy Development

Meeting since March, again in August to work on recommendations for entrance, exit, and portability

Statewide Panel

Faculty who are creating competencies to define required objectives in the courses

STEM

Technical Math

QL/Statistics

Status of IL Transitions Courses

- Statewide panel and subcommittees working since March
  - Public commenting period to come
- Illinois 60 by 25 Network supporting pilot implementation in 5 community college districts
- ICCB has issued new round of funding for additional support
  - BTG funded 10 colleges in FY17; 7 doing transitions
  - BTG is funding 15 colleges in FY18; 12 doing transitions

Leading and Emerging Models

- **McHenry College and Career Readiness Alliance:** Reduced % of entering high school grads needing developmental courses in math from 57% to 26% over 4 years; uses MCC developmental course sequence; moving to multiple measures placement
- **Triton College:** Currently offers transitional courses leading to 3 math pathways (STEM, Technical, and General (consistent with Quant. Lit./Stats.)); developing MAT 055 course that includes assessment of career competencies to assist students to select appropriate math pathway
- **Kankakee:** Designing a modular transitional math framework supported through an adaptive learning system (ALEKs); students complete conceptualized problem sets and real-world projects aligned to their chosen professional/academic pathway in the Kankakee High School academies model

Leading and Emerging Models (continued)

- **Many additional schools with transitions course or creating them**

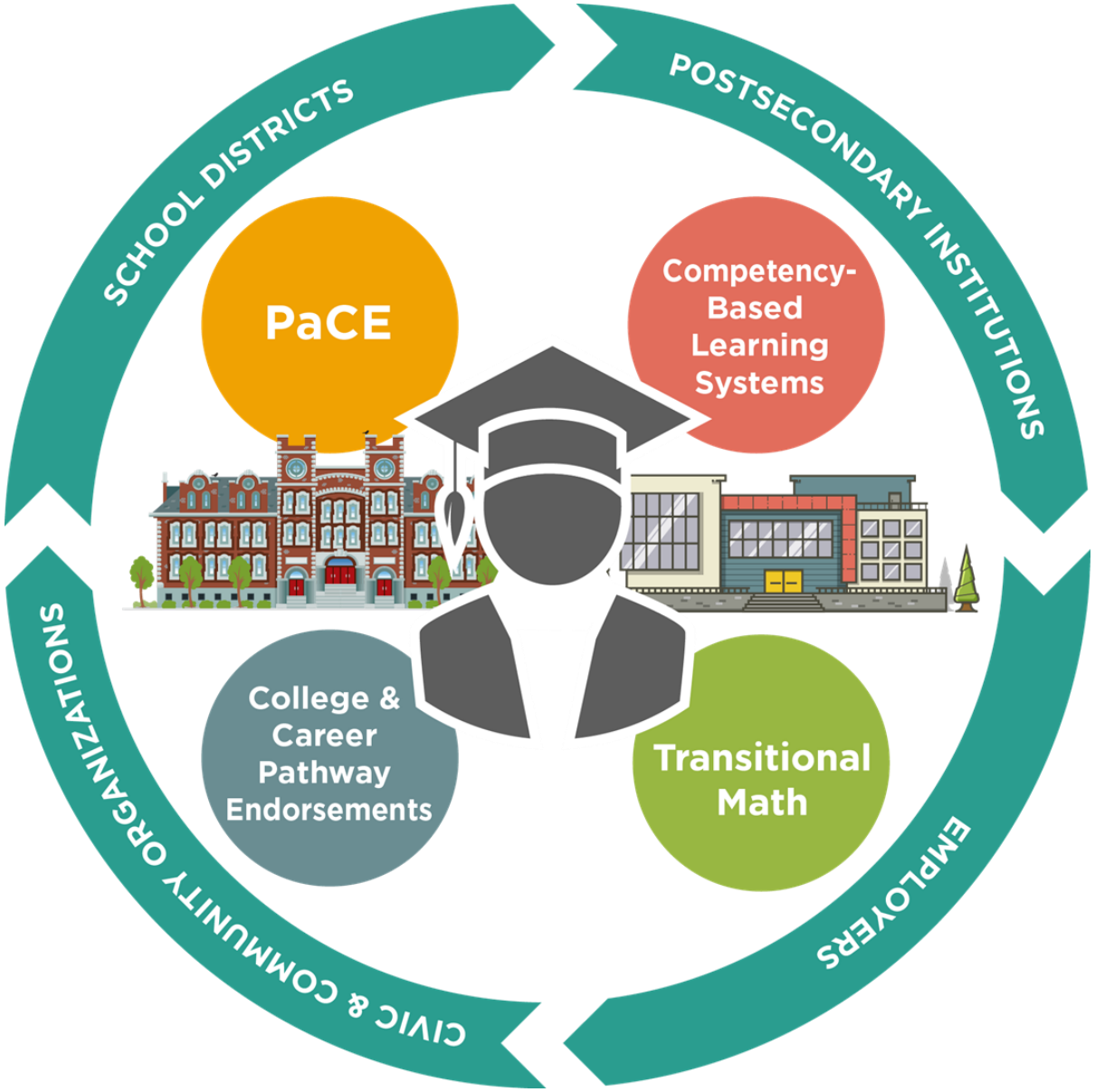
  Examples include:

Blackhawk College	Joliet Junior College
College of DuPage	Oakton Community College
College of Lake County	Prairie State College
Harper College	South Suburban College
Highland Community College	Southwestern Illinois College
Illinois Valley Community College	Waubonsee Community College

What's next?

- Sample materials and syllabi for transitions courses
- Sample Memos of Understanding between HS and colleges
- Professional development
- Support for high schools and colleges as they implement and scale

NOTE: Schools should **not** wait to develop and pilot transitions courses.



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