

UNIVERSITY OF ILLINOIS  
AT URBANA-CHAMPAIGN

# A National Study of High School Graduation Requirements and Diploma Options

Connections Conference, 2013

Scott Chattin

Donald Hackmann

Office of Community College  
Research and Leadership



[illinois.edu](http://illinois.edu)



# Purpose

In this session we share the results of an investigation of high school graduation requirements and diploma options, including college preparatory and career-technical, across the 50 US states and the District of Columbia. We also present recommendations for Illinois high school educators who are interested in reviewing their curriculum, examining their graduation requirements, and considering creating designations for the high school diploma.



# The Need for Postsecondary Training in Illinois

Jobs in Illinois increasingly are requiring postsecondary education:

- 81% of Illinois' jobs are middle or high skills, requiring some postsecondary education or training.
- Only 41% of Illinois' adults have a postsecondary degree (associate's or higher).
- Fewer than 20% of Illinois' jobs are considered to be unskilled.

[www.achieve.org/illinois](http://www.achieve.org/illinois)



# The Need for Postsecondary Training in Illinois

The economic motivation for specialized training beyond the high school diploma...

Mean Income	Education Level	Unemployment Rate
\$9,711	High School Dropout	22%
\$26,978	High School Graduate	13%
\$29,618	Some College	8%
\$62,801	Bachelors and Above	5%



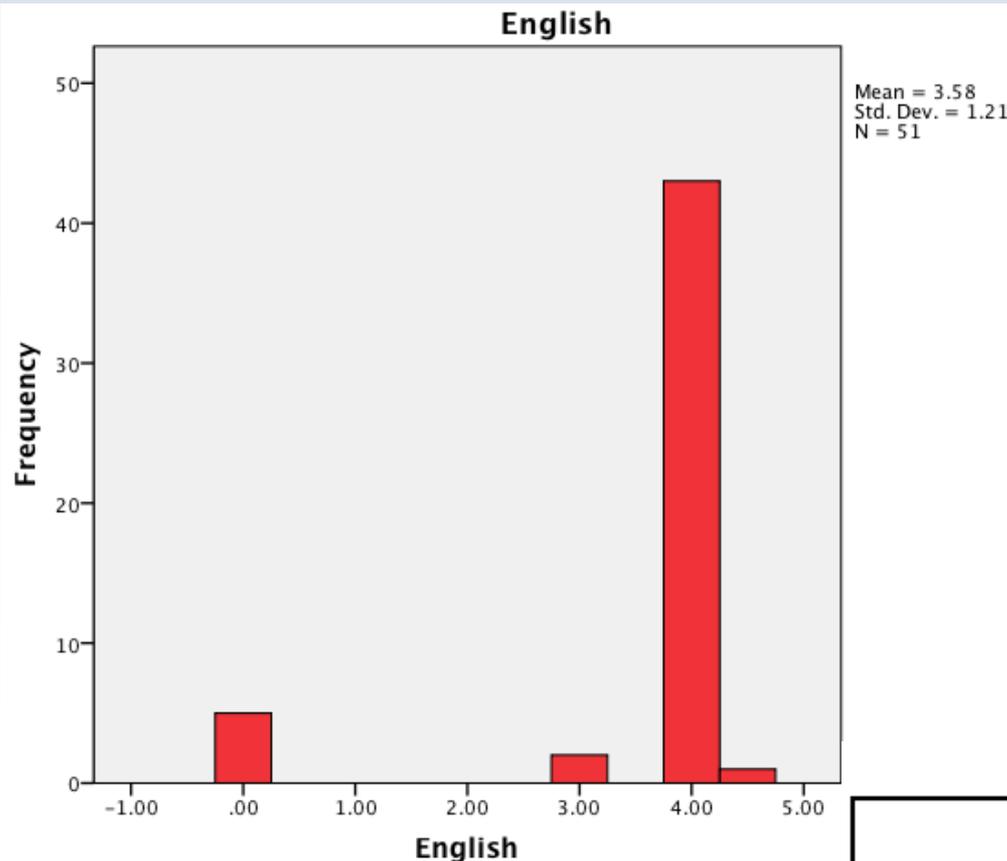
# The Need for Rigorous High School Preparation for All Students

- Percentage of ACT-tested graduates ready for college-level work in Illinois in 2011:
  - English: 65%
  - Math: 42%
  - Reading: 48%
  - Science: 28%
  - All four subjects: 23%
- 21% of students in Illinois community colleges require remedial coursework.
- Only 59% of students entering community college or public colleges in Illinois complete their degrees.



Alliance for Excellent Education, 2012

# National High School Graduation Requirements: English



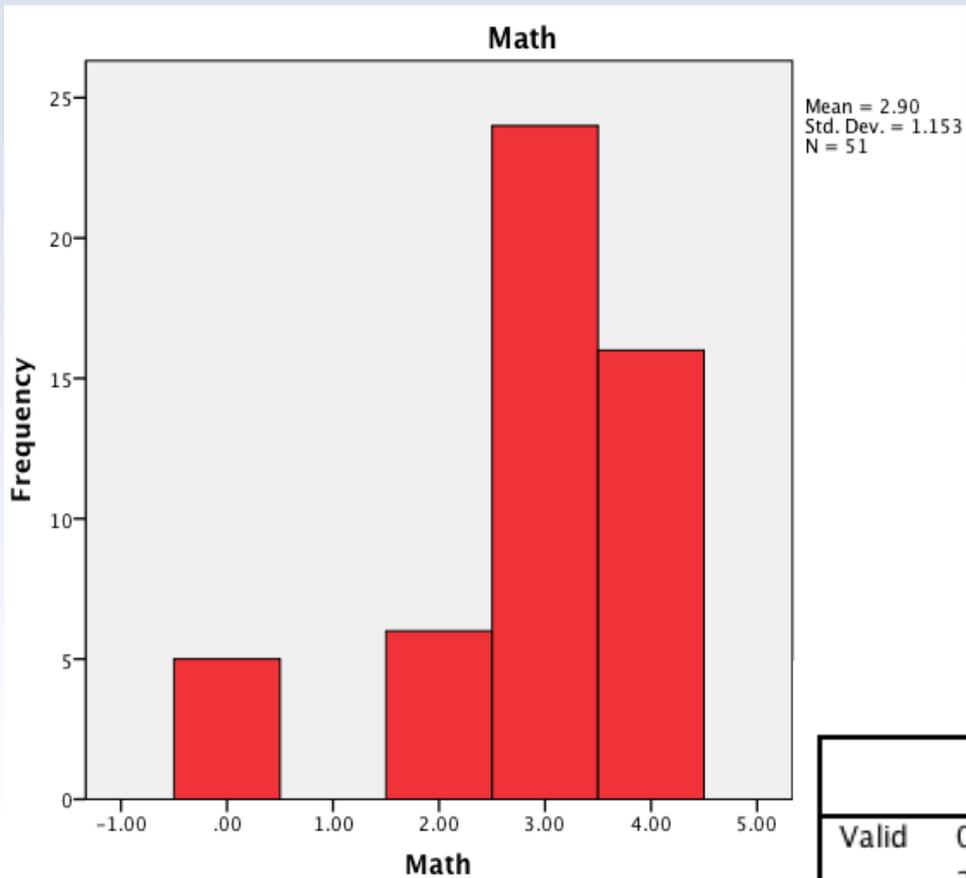
**Illinois: 4 Units**

**National Average:  
3.58 Units**

		English			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 Units	5	9.8	9.8	9.8
	3 Units	2	3.9	3.9	13.7
	4 Units	43	84.3	84.3	98.0
	4.5 Units	1	2.0	2.0	100.0
	Total	51	100.0	100.0	



# National High School Graduation Requirements: Math



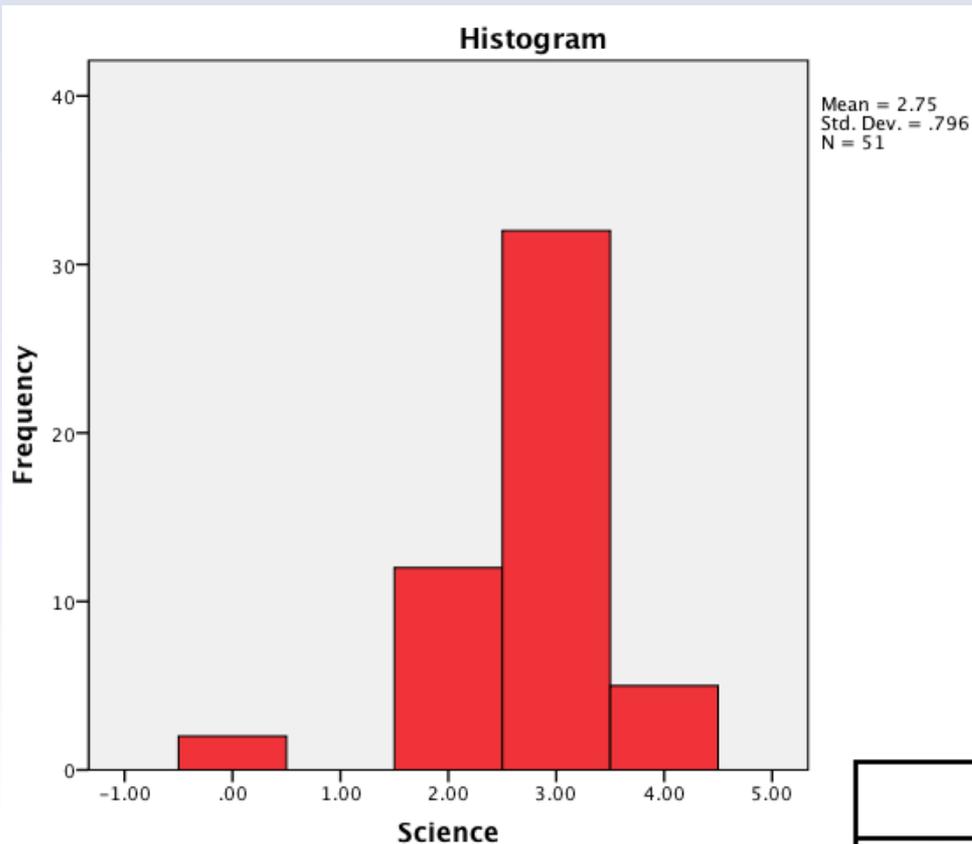
**Illinois: 3 Units**

**National Average:  
2.9 Units**

		Math			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 Units	5	9.8	9.8	9.8
	2 Units	6	11.8	11.8	21.6
	3 Units	24	47.1	47.1	68.6
	4 Units	16	31.4	31.4	100.0
	Total	51	100.0	100.0	



# National High School Graduation Requirements: Science



**Illinois: 2 Units**

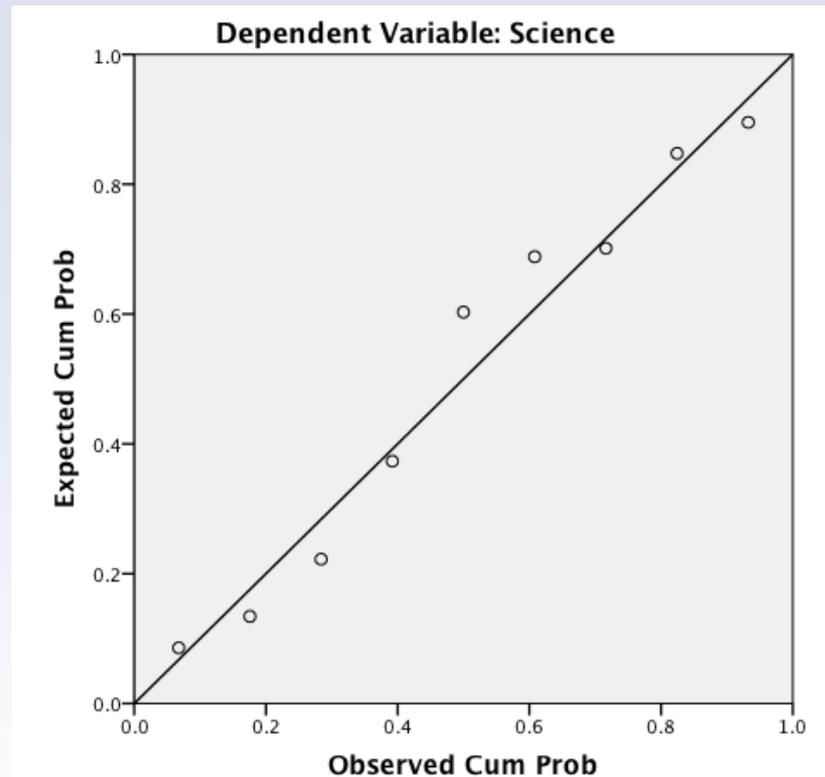
**National Average:  
2.75 Units**

**Science**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 Units	2	3.9	3.9	3.9
	2 Units	12	23.5	23.5	27.5
	3 Units	32	62.7	62.7	90.2
	4 Units	5	9.8	9.8	100.0
	Total	51	100.0	100.0	



# Relationship of Science/Math and ACT Scores



ANOVA<sup>a</sup>

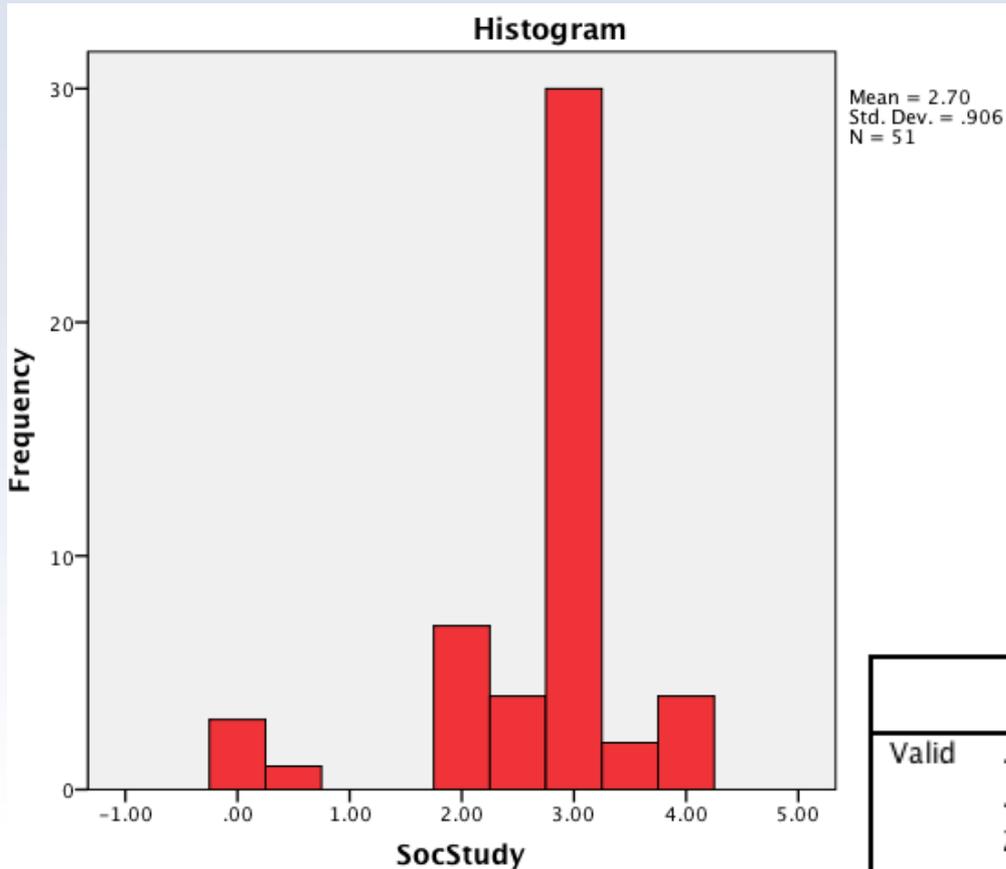
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.996	1	3.996	145.279	.000 <sup>b</sup>
	Residual	.193	7	.028		
	Total	4.189	8			

a. Dependent Variable: Science

b. Predictors: (Constant), MathAvg



# National High School Graduation Requirements: Social Studies



**Illinois: 2 Units**

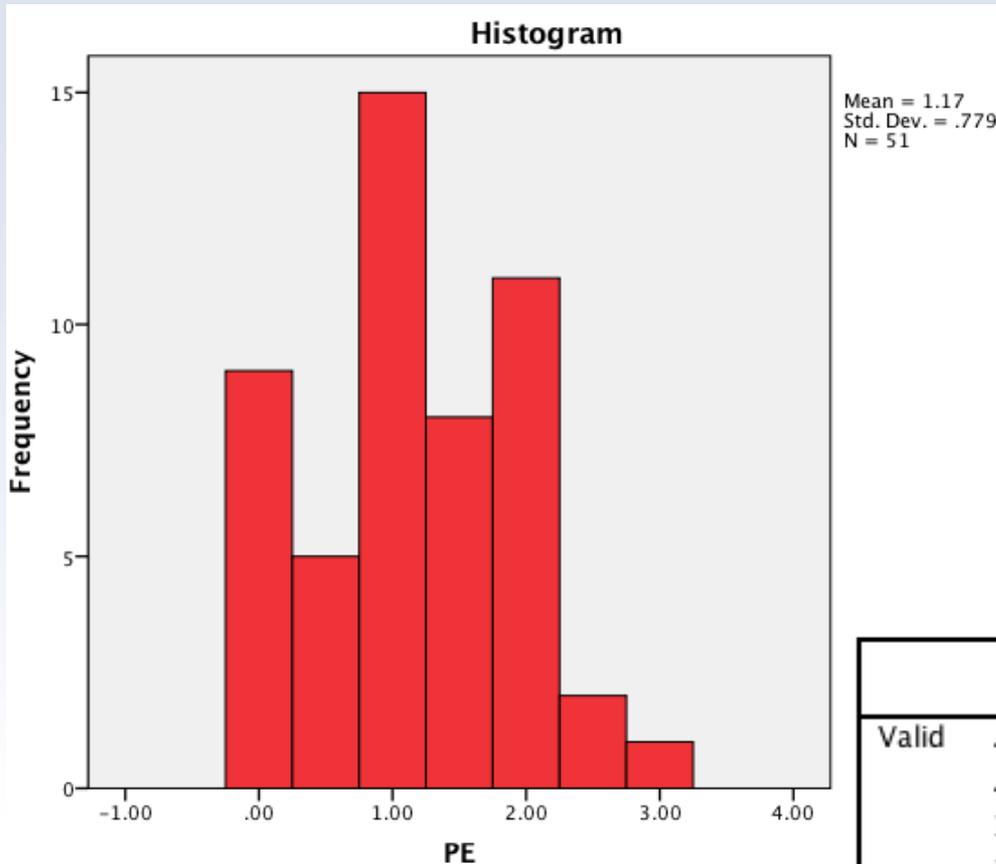
**National Average:  
2.7 Units**

**SocStudy**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	3	5.9	5.9	5.9
.50	1	2.0	2.0	7.8
2.00	7	13.7	13.7	21.6
2.50	4	7.8	7.8	29.4
3.00	30	58.8	58.8	88.2
3.50	2	3.9	3.9	92.2
4.00	4	7.8	7.8	100.0
Total	51	100.0	100.0	



# National High School Graduation Requirements: PE



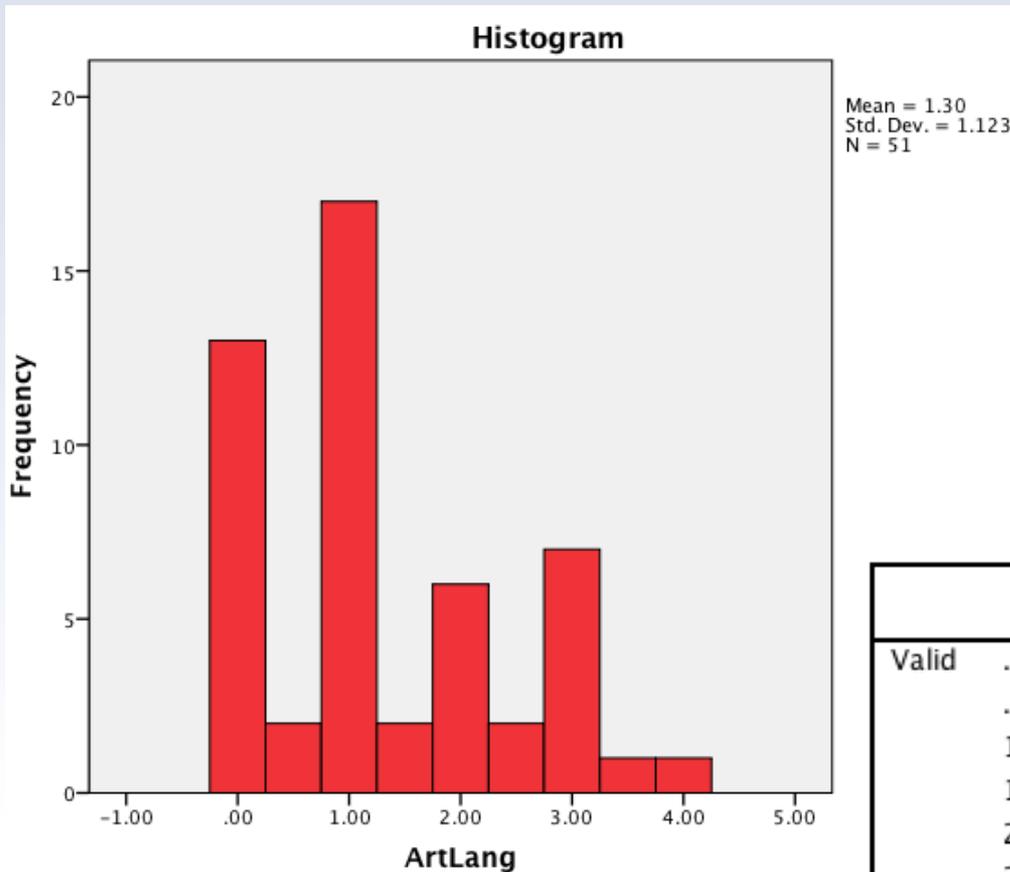
**Illinois: 2 Units**

**National Average:  
1.17 Units**

		PE			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	9	17.6	17.6	17.6
	.50	5	9.8	9.8	27.5
	1.00	15	29.4	29.4	56.9
	1.50	8	15.7	15.7	72.5
	2.00	11	21.6	21.6	94.1
	2.50	2	3.9	3.9	98.0
	3.00	1	2.0	2.0	100.0
	Total	51	100.0	100.0	



# National High School Graduation Requirements: Arts/Foreign Language/CTE



**Illinois: 1 Unit**

**National Average:  
1.3 Units**

**ArtLang**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	13	25.5	25.5	25.5
.50	2	3.9	3.9	29.4
1.00	17	33.3	33.3	62.7
1.50	2	3.9	3.9	66.7
2.00	6	11.8	11.8	78.4
2.50	2	3.9	3.9	82.4
3.00	7	13.7	13.7	96.1
3.50	1	2.0	2.0	98.0
4.00	1	2.0	2.0	100.0
Total	51	100.0	100.0	



<b>Subject</b>	<b>State of Illinois Minimum Graduation Requirements</b>	<b><i>High Schools That Work Recommended Curriculum</i></b>	<b>ACT College Preparatory Curriculum</b>	<b>Achieve, Org.</b>
English	<i>4 years</i>	<i>4 years</i>	<i>4 years</i>	<i>4 years</i>
Math	<i>3 years</i> (Algebra I and one course with geometry content)	<i>4 years</i> (rigorous Algebra I, Geometry, Algebra II, and higher level course).	<i>3 years</i> (rigorous Algebra I, Geometry, Algebra II)	<i>3 years</i> (rigorous math through Alg II/Integrated Math III (or equivalent))
Science	<i>2 years</i>	<i>3 years</i> of college-prep science (Biology, Chemistry, Physics or Applied Physics, Anatomy/Physiology)	<i>3 years</i> (rigorous Biology, Chemistry and Physics)	
Social Studies	<i>2 years</i> (1 year U.S. Hist. or combination U.S History and Amer. Govt.)	<i>3 years</i> of college-prep social studies courses	<i>3 years</i>	
Additional	<i>1 year Elective</i> (art, music, foreign lang., or vocational ed.). <i>2 years Writing</i> (1 yr must be English course, 1 yr may be part of any course). <i>4 years Physical Education</i> (daily PE required). <i>One semester (18 weeks) Health Ed.</i> <i>One quarter (9 wks) Consumer Ed.</i>	<i>Career or academic concentration</i> (at least four courses) in Humanities, Mathematics and Science, Career/Technical. <i>At least one computer course or demonstrated proficiency in computer technology beyond simple keyboarding.</i>		



# Graduation Overview: *A Comparison*

Subject	National Average (State Minimums)	Illinois Minimum	High Schools That Work	ACT College Prep	Achieve
English	3.58	4	4	4	3
Math	2.9	3	4	4	3
Science	2.75	2	3	3	
Social Studies	2.7	2	3	3	
PE	1.17	4 years			
Arts/Foreign Language, CTE, etc.	1.3	1			



# Differentiated Diploma Options

State	Advanced Designations	Career/Technical Education
Arkansas	✓	
California	✓	
Colorado	✓	✓
Florida	✓	✓
Hawaii	✓	
Indiana	✓	✓
Kentucky	✓	✓
Louisiana	✓	✓
Massachusetts	✓	
Missouri	✓	
Nevada	✓	
New York	✓	✓
North Carolina		✓
Ohio	✓	✓
Texas	✓	
Virginia	✓	✓
Wyoming	✓	



# Advanced Designations Available

State	Diploma Option
Arkansas	Advanced Diploma
*California	Golden Seal Merit Diploma
Florida	International Baccalaureate option, Three-year college preparatory program
*Hawaii	Board of Education Recognition Diploma (GPA-based)
Indiana	Core 40 Diploma with Academic Honors, Core 40 Diploma with Technical Honors
Kentucky	Pre-College Curriculum
Louisiana	College and Career Diploma
*Massachusetts	Certificate of Mastery (Advanced score on Massachusetts state assessment)
Missouri	College Preparatory Studies Certificate
Nevada	Advanced Diploma
New York	Regents Diploma with Advanced Designation (Based on Regents exam scores)
Ohio	Academic Diploma with Honors, International Baccalaureate Diploma with Honors
Texas	Recommend High School Program, Distinguished Achievement Program
Virginia	Advanced Studies Diploma, Governor's Seal, Board of Education Seal
*Wyoming	Advanced Endorsement (Based on advanced performance on standards)

# Career/Technical Options Available

State	Diploma Option
Colorado	Postsecondary and Workforce Readiness Endorsement
Florida	Three-year career preparatory program
Indiana	Core 40 Diploma with Technical Honors
Kentucky	Career/Technical Education Industry Certifications
Louisiana	Career Diploma with Career/Technical Endorsement
New York	Technical education certificate with completion of approved career/technical education program
North Carolina	Future-Ready Occupational Diploma
Ohio	Career-Technical Diploma with Honors
Virginia	Career & Technical Education Seal, Advanced Mathematics and Technology Seal



# Trends and Interesting Approaches

- Forty-six states + DC have adopted the Common Core State Standards, and the remaining four states have developed their own college and career-ready (CCR) standards.
- Many states have recently increased their graduation requirements/rigor in the English and mathematics.
- Twenty-three states + DC have established a CCR curriculum that includes at least math through Algebra II and four years of grade-level English to earn a high school diploma.
  - Nine states + DC have implemented mandatory course/graduation requirements for the CCR curriculum in math and English.
  - Fourteen states automatically enroll students in the “default” CCR curriculum but allow students to “opt out” if their parents sign a waiver. Seven states offer a separate minimum diploma; seven allow students to opt out of individual courses (typically advanced-level math or science).
    - Florida has created three-year high school alternatives, with college



# Recommendations for Illinois High Schools

- Consider local high school requirements that are above the minimum Illinois state graduation requirements. Review and revise the district curriculum for language arts and mathematics, in light of the Achieve college/career readiness expectations and Common Core State Standards.
- Focus on both college and workforce readiness. Offer career pathways for both college and career/technical education, with rigorous expectations for both options. The school also should develop Programs of Study, allowing students in the career option clear pathways to attain workforce credentials.
- Consider the honors options (with strands for college-ready and career-ready) as the default requirement with an “opt-out” provision for students/parents to elect the minimum basic diploma option.
  - To attain honors, consider expectations beyond simply taking classes. Examples include: minimum ACT score, minimum GPA, minimum number of AP/IB classes (or minimum scores on these tests), work-based experiences and/or service-learning responsibilities.



# Providing Support

- High school educators may need collaborative time to develop curriculum and additional professional development to strengthen their content knowledge and teaching/learning practices in core areas that have additional context expectations.
- Faculty conversations are necessary to talk about incorporating English and mathematics throughout the curriculum, and also to ensure that college/career conversations are incorporated into learning activities.
- Additional resource supports must be in place to assist students who may need additional learning opportunities to meet more rigorous expectations.



# Questions?

## Contacts:

- Scott Chattin (chattin1@illinois.edu)
- Don Hackmann (dghack@illinois.edu)

Office of Community College Research and Leadership  
University of Illinois at Urbana-Champaign



# References

- Hackmann, D. (2013, Jan.). *Promoting college and career readiness: Recommendations for Illinois high schools*. Champaign, IL: Office of Community College Research and Leadership.
- Achieve, Org. (2013). *Illinois college- and career-ready commitment*. Retrieved from [www.achieve.org/illinois](http://www.achieve.org/illinois)
- Alliance for Excellent Education. (2012). *Illinois high schools*. Retrieved from [www.all4ed.org](http://www.all4ed.org)
- Advance Illinois. (2010). *The state we're in 2010: A report card on education in Illinois*. Retrieved from [www.advanceillinois.org](http://www.advanceillinois.org)
- Alliance for Excellent Education. (2009). *Understanding high school graduation rates in Illinois*. Retrieved from [www.all4ed.org](http://www.all4ed.org)



# **Upcoming OCCRL Workshops:** “Promoting Student College/Career Success with the Illinois Career Cluster Model”

8:30 am – 3:00 pm

April 18, Hyatt Lodge, Oak Brook, IL

May 9, Doubletree Hotel, Bloomington, IL

*Registration is free to Illinois high schools*

Teams of 2-4 are encouraged.



Contact: Don Hackmann ([dghack@illinois.edu](mailto:dghack@illinois.edu))