

The background image shows two women in a classroom or office setting. The woman on the right is wearing glasses and a grey t-shirt with a donkey graphic and the text 'cos(s)'. The woman on the left is also wearing glasses. There are mathematical formulas like '(x,y)', '(1)', and 'sin()' overlaid on the image. A red box is in the top left corner containing the McGraw Hill Education logo.

**Mc  
Graw  
Hill  
Education**

## **The Corequisite Model**

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# What is a Coreq?

Corequisite courses offer students a chance to enroll in credit-bearing Math classes while simultaneously getting the support (prerequisite skills) they need from developmental Math classes.

# CoReq

is the

new PreReq



*STEM  
Track*

*Non-STEM  
Track*

Basic College Math

Prealgebra

Beginning Algebra

Math Literacy/Pre-Stats

Intermediate Algebra

Non-Credit

College Alg/Precal

Liberal Arts  
Math / QR

Intro  
Stats

Calculus

Credit

Coreq

Coreq

Coreq

# Overview of Traditional Math Reform

## The Traditional Curriculum of Developmental Math:

### Three Semester Sequence:

- Prealgebra
- Beginning Algebra
- Intermediate Algebra\*
- College Algebra/LAM/Statistics (Credit-Bearing)

## Traditional Models of Redesign:

- Acceleration
  - Get Them Thru Faster
- Modules
  - Short Strides, Better Outcomes
- Flipped Classroom
  - Change the Delivery/Engagement

\*In some cases IA is credit-bearing, but non-transfer

# Overview of Traditional Math Reform

## The Traditional Curriculum of Developmental Math:

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## Traditional Models of Redesign:

- Acceleration
  - Get Them Thru Faster
  - **Still Too Much Remediation**
- Modules
  - Short Strides, Better Outcomes
  - **Administrative Nightmare**
- Flipped Classroom
  - Change the Delivery/Engagement
  - **Doesn't Address Preparedness**

# Why Choose the Coreq Model?

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- 51.7% of 2-year students need remediation
- 22.3% of those students actually complete their degree in 2-years
- 9.5% graduate within 3 years...



# Why Choose the Coreq Model?

- 51.7% of 2-year students need remediation
  - Make enrollment in college-level courses the default for many more students
- 22.3% of those students actually complete their degree in 2-years
  - Use a placement range, not a single cut score
- 9.5% graduate within 3 years...
  - Align mathematics to programs of study (STEM & Non-STEM tracks)
  - Integrate needed support for college-level courses

\*Complete College America

# What to Consider When Considering a Coreq...



- Placement
- Scheduling
- Role/Number of Instructors
- Proactive or Reactive remediation
- Grouping of Students
- Course formats (F2F, Lab, Online, etc.)
- Quantity of homework
- Grading policy

CoReq  
Support



Credit  
Course

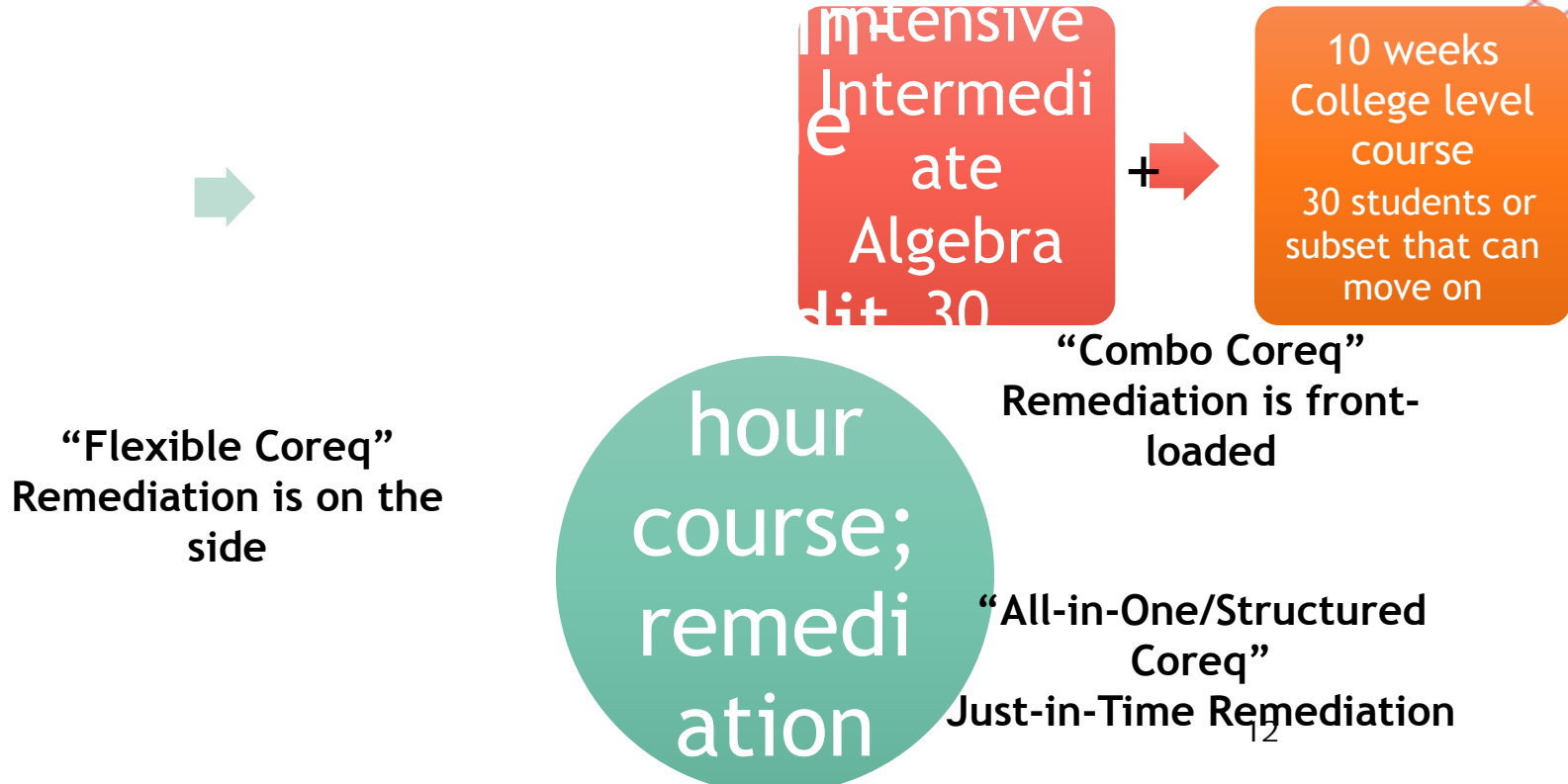


# Corequisite Challenges

1. Supporting wide range of student preparation
2. Coordinating complex teaching schedules
3. Aligning course schedules and pacing
4. Determining goals of coreq/support time

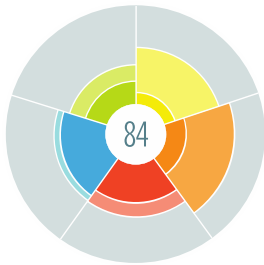
*How do we teach everything on Day 1?*

# Common Coreq Models



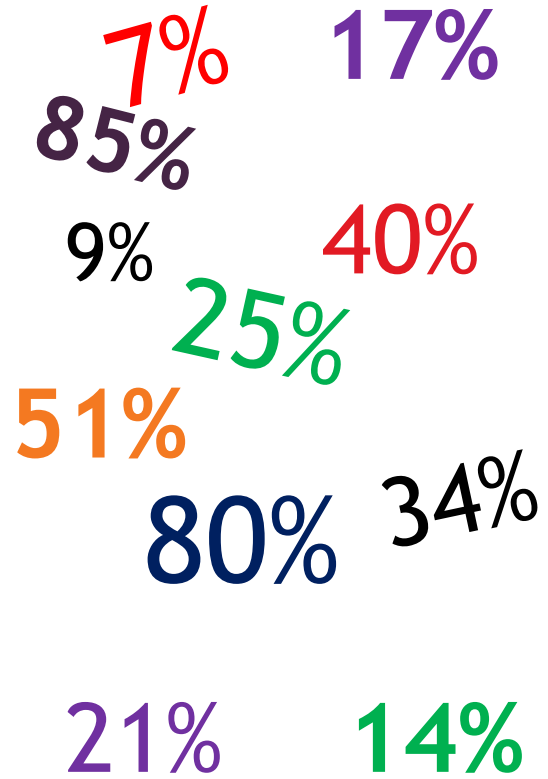
# The ALEKS Solution

- Flexible topic selection to support all solutions
- Initial Knowledge Check
- Personalized learning path
  - drive mastery
  - support credit course
- Data-led instruction to inform one-on-one interactions with coreq students









# ALEKS Initial Knowledge Check

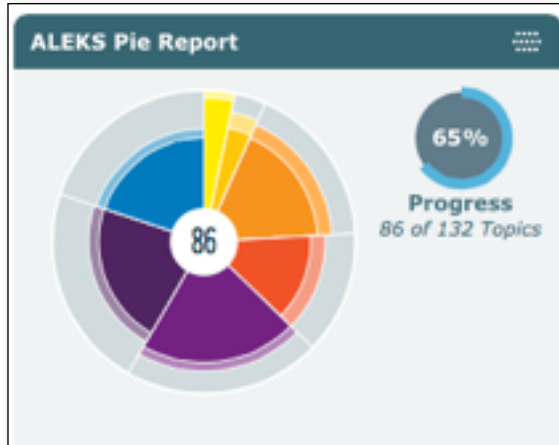
Last Assessment	Reason	Course Mastery before (%)
08/18/2015	Initial Assessment	7
08/18/2015	Initial Assessment	25
09/15/2015	Initial Assessment	80
08/18/2015	Initial Assessment	19
08/24/2015	Initial Assessment	88
08/18/2015	Initial Assessment	41
09/15/2015	Initial Assessment	18
08/18/2015	Initial Assessment	85
08/18/2015	Initial Assessment	30
08/18/2015	Initial Assessment	27
08/18/2015	Initial Assessment	23
08/18/2015	Initial Assessment	34
08/31/2015	Initial Assessment	31
08/18/2015	Initial Assessment	51
08/18/2015	Initial Assessment	31
08/31/2015	Initial Assessment	30
08/18/2015	Initial Assessment	17
08/18/2015	Initial Assessment	9
08/18/2015	Initial Assessment	25
08/18/2015	Initial Assessment	40
08/20/2015	Initial Assessment	14
08/22/2015	Initial Assessment	21



# ALEKS Initial Knowledge Check

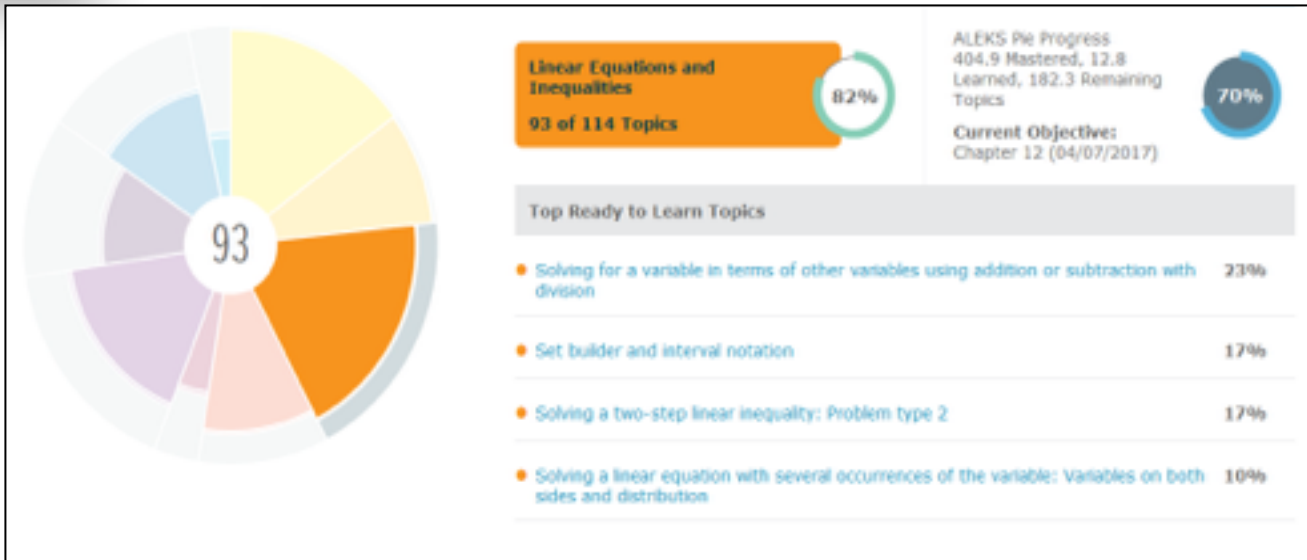
Start: 01/10/2017 Finish: 01/10/2017 Time: 33m 36s	Initial Knowledge Check	 20 +53 %	84	15h 40m	5.4
Start: 01/09/2017 Finish: 01/09/2017 Time: 49m 41s	Initial Knowledge Check	 23 +35 %	56	15h 43m	3.6
Start: 01/15/2017 Finish: 01/19/2017 Time: 2h 2m	Initial Knowledge Check	 31 +8 %	14	7h 33m	1.9
Start: 01/12/2017 Finish: 01/12/2017 Time: 24m 21s	Initial Knowledge Check	 31 +52 %	82	14h 22m	5.7
Start: 01/14/2017 Finish: 01/14/2017 Time: 1h 1m	Initial Knowledge Check	 79 +12 %	19	4h 10m	4.6
Start: 01/16/2017 Finish: 01/16/2017 Time: 1h 30m	Initial Knowledge Check	 14 +10 %	17	11h 8m	1.5

# *ALEKS: Your glass bottom boat*





# ALEKS Pie Report...



# =Class Level Data

Chapter 7		Progress 47%		
	Progress ⓘ	Remaining ⓘ	Ready to Learn ⓘ	Attempted, Not Yet Learned ⓘ
Section 7.1 (Progress 68%)				
<ul style="list-style-type: none"> <li>Factoring out a monomial from a polynomial: Univariate</li> </ul>	70%	30%	20%	3%
6 students out of 30 (20%) are Ready to Learn this topic.			<a href="#">Message Students</a>	
(0) Other topics that these students are <b>Ready To Learn</b> in this Objective				
<ul style="list-style-type: none"> <li>Baker, Herbert V.</li> <li>Baker, John R.</li> <li>Fisher, David L.</li> <li>Lewinsky, Joel R.</li> <li>Mendes, Bill E.</li> <li>Nixon, Maria R.</li> </ul>				
<ul style="list-style-type: none"> <li>Factoring out a monomial from a polynomial: Multivariate</li> </ul>	40%	60%	0%	0%
<ul style="list-style-type: none"> <li>Factoring out a binomial from a polynomial: GCF factoring, basic</li> </ul>	53%	47%	0%	0%
<ul style="list-style-type: none"> <li>Factoring a univariate polynomial by grouping: Problem type 1</li> </ul>	43%	57%	0%	3%
<ul style="list-style-type: none"> <li>Factoring a univariate polynomial by grouping: Problem type 2</li> </ul>	30%	70%	0%	0%

# ALEKS Time & Topic Report...

← Send Message to Selected Students

(A)	Name (Login/Student ID)	Total time in ALEKS (hrs)	Last Login	Total Time (for date range)	Time Log (Number of topics learned / Number of topics attempted)									
					Fri 03/17	Sat 03/18	Sun 03/19	Mon 03/20	Tue 03/21	Wed 03/22	Thu 03/23	Fri 03/24	Sat 03/25	Sun 03/26
1	Baker, Bart C.	106h 43m	03/30/2017	7h 13m (17/31)	31m (2/4)	-	-	1h 10m (3/5)	17m (1/3)	41m (3/3)	1h 21m (2/5)	31m (2/3)	-	-
2	Baker, Herbert V.	89h 19m	03/30/2017	6h 08m (22/29)	12m (2/2)	-	-	54m (2/4)	25m (2/3)	1h 06m (2/5)	12m (2/2)	50m (2/3)	-	-
3	Baker, John R.	91h 33m	03/30/2017	5h 34m (22/28)	1h 19m (3/5)	-	-	28m (3/3)	29m (5/2)	27m (2/3)	17m (3/3)	32m (3/3)	-	-
4	Baker, Kai T.	79h 42m	03/30/2017	5h 10m (25/30)	22m (2/2)	-	-	24m (3/3)	24m (4/4)	32m (3/4)	28m (4/4)	43m (3/4)	-	-
5	Browning, Herbert J.	87h 16m	03/30/2017	6h 22m (20/29)	16m (2/2)	-	-	33m (1/3)	31m (5/2)	53m (4/4)	28m (2/2)	29m (1/2)	-	-
6	Cameron, Bart V.	105h 30m	03/30/2017	6h 52m (10/29)	46m (1/4)	-	-	31m (0/3)	28m (1/3)	59m (2/4)	1h 06m (1/4)	23m (1/2)	-	-
7	Cameron, Karen R.	103h 36m	03/30/2017	8h 07m (18/34)	45m (0/0)	-	-	1h 04m (3/4)	58m (2/4)	51m (2/4)	1h 03m (2/4)	41m (2/4)	-	-
				6h 50m	1h 04m			57m	27m	42m	39m	17m		

# =Student Level Data

Date	Total for this Period
03/29/2017	3 Learned   2 Attempted, Not Learned   1h 6m
Duration	Topic
9:01 AM   9m 29s	Adding rational expressions with denominators $ax^n$ and $bx^m$   Learned
✓ ✓ ✗ ✗ ✓ ✓ ✓	
9:11 AM   10m 25s	Writing an equation and drawing its graph to model a real-world situation: Advanced
✓ ✓ ✗ ✗ ✗ ✗ ✗	
9:23 AM   14m 38s	Rational exponents: Power of a power rule   Learned
✓ ✓ ✓ ✗ ✗ ✓ ✓ ✗ ✓ ✗	
Correct	
9:35 AM   1m 33s	
9:38 AM   16m 18s	Algebraic symbol manipulation with radicals
✓ ✓ ✗ ✗ ✓ ✗ ✓ ✓ ✗ ✗ ✓ ✗ ✓	
9:55 AM   11m 57s	Solving a linear equation with several occurrences of the variable: Variables on both sides and fractional coefficients   Learned
✗ ✓ ✗ ✓ ✗ ✓ ✓ ✓	

# Additional Resources



## Workbooks to Support:

- College Algebra
- Precalculus
- Quantitative Reasoning
- Elementary Statistics

## Course Templates

## Implementation Support

# Questions?