A CA Success: A FREE Co-Req College-Ready Math System – The Consortium Grows!

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2021 CMC3 Session Overview

California's AB 705 resulted in the 114 community colleges experimenting with ways for students to succeed in transfer level mathematics without placement tests or developmental education prerequisites.
Presenters will share a new math collaboration among National University in San Diego, the National Laboratory for Education Transformation, colleges and high schools.

JUST IN TIME MATH
Catch Up / Accelerate

2021 CMC3 Session – Goals/Outcomes

· Faculty will understand the differences between practice software and individualized systems that include social-emotional factors, as well as learning gaps.
· Faculty will learn the value of including mindset assistance within co-req models
· Participants will experience a demonstration of the system and will learn about how this can be an effective way to design and deliver co-requisite courses to support student success.

Brief history of JITM

Problem: Extreme diversity among our student population in a traditional system not currently flexible enough to accommodate the wide array of academic needs.

Brief history

Solution: Navigate every learner from their *current* skill levels towards their goals using specific guidance and pathways that are data-driven, uniquely personalized, and dynamic.

Brief history

Overarching Goal:

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To Enhance Student Outcomes by Delivering a Tailored Educational Experience to Each Learner by Adapting to Their Individual Performance.

Brief history

Enhancing Student Success through …………

- Goalsetting and career exploration tools
- Variety of aligned learning resources
- Continuous formative feedback
- Behavior guided nudging
- Comprehensive student dashboard
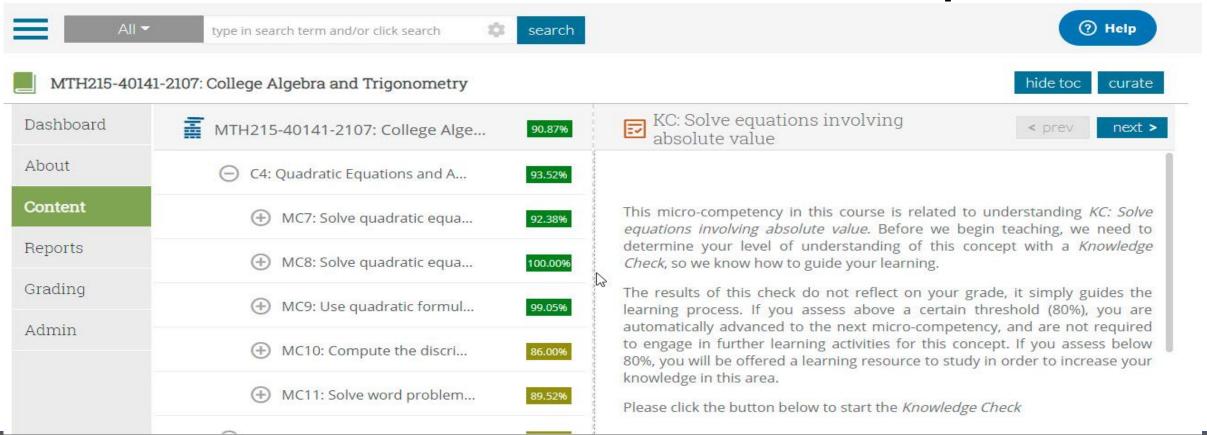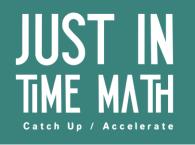- Data analytics for student navigation and outcome measurements

Using JITM
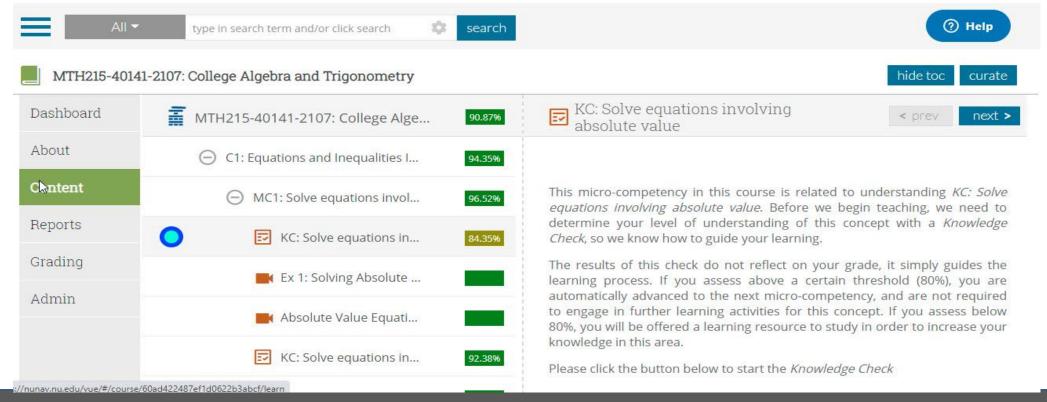
Presents course as a collection of Micro-competencies

Using JITM

Presents formative micro-assessments along with a variety of Learning Resources

Brief history & use

The Precision Learning Process ....

1. Students first engage in a pre-assessment Knowledge Check to determine their current level of topic understanding/proficiency.
2. If the learner assesses well, they simply move on to the next MC.
3. If the learner does not assess above the established threshold, the system serves up a curated learning resource covering the MC
4. The learner is then re-assessed to determine proficiency.
5. If knowledge level is determined adequate, they move on, if not, they are offered another learning resource.
6. This process can repeat a few times if necessary.

2 of 5   01:37

Evaluate the expression. Note that this is not an absolute value expression.

$$-(-21) =$$

| Question 1 |
| Question 2 |
| Question 3 |
| Question 4 |
| Question 5 |

Basic

7	8	9	÷	x	y	x^2	$\sqrt{\Box}$
4	5	6	×	$\frac{x}{\Box}$	$x\frac{\Box}{\Box}$	$x^{\Box}$	$x_{\Box}$
1	2	3	-	<	>	±	$
0	.	,	+	%	°	:	(□)
◄	►	⌫	=	‖ ‖	π	∞	

Next ►

JUST IN TIME MATH
Catch Up / Accelerate

Algebra Student Support

show TOC | Micro Competency - 1/182

Dashboard
Learn ▶
My Reports

KC: Properties of Integers

A

Time spent on KC: Properties of Integers is **0 hrs 3 mins 52 seconds**

Max Attempts **1** | Attempts Remaining **0**

60.00% **3/5** correct   question attempted 4/5

You got 3 out of 5 right.
Here is some study material that will help you understand the concepts of this micro competency better. Click "Start Learning" on the right.

Attempts Summary

Attempt #	Date and Time of Attempt	Result	Report
1	Oct 14, 2021 1:58:28 PM	3 / 5	Show Report

■ Add and Subtract Integers: Integers and Abs Value

Watch this video to learn about absolute value and negative signs in front of parenthesis.

Start Learning

https://competencyedu.pragyasystems.com/vue/#/course/60499b2e00f34505a9f02989/learn/LearningContent/60499b2e00f34505a9f0299e
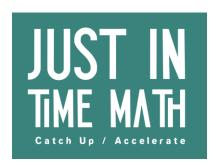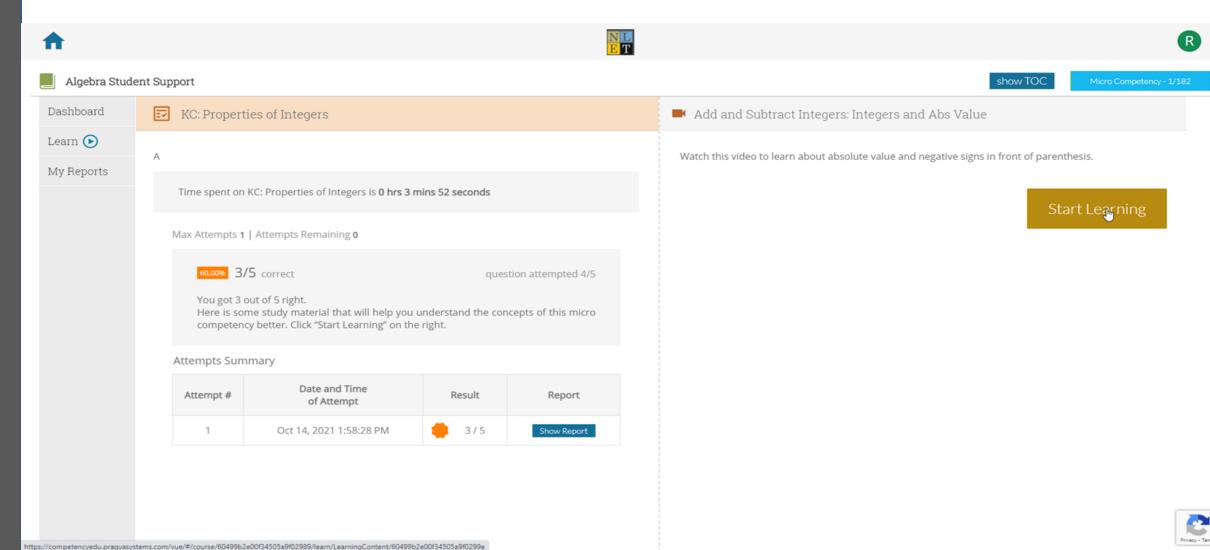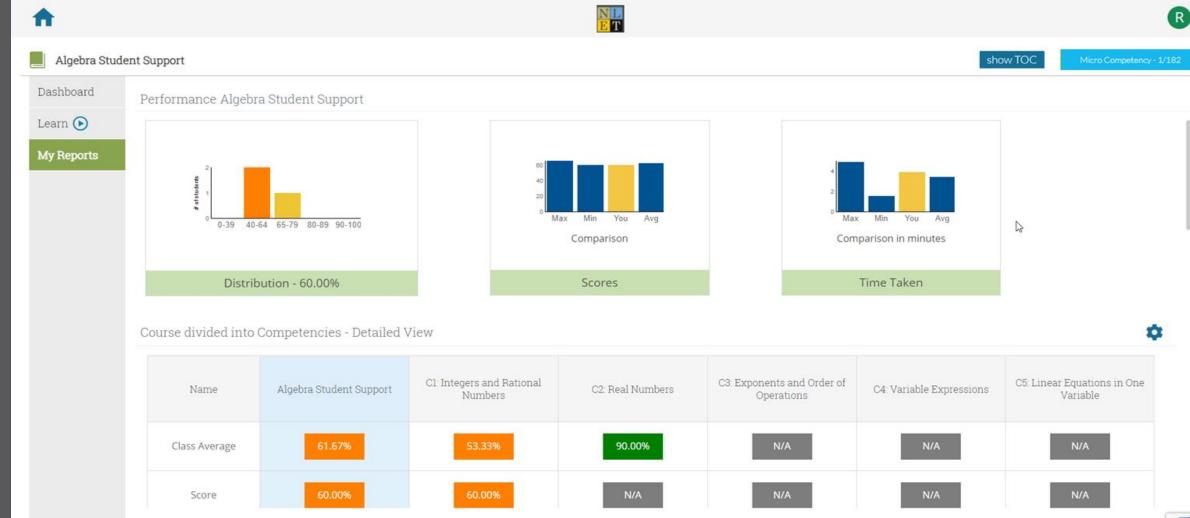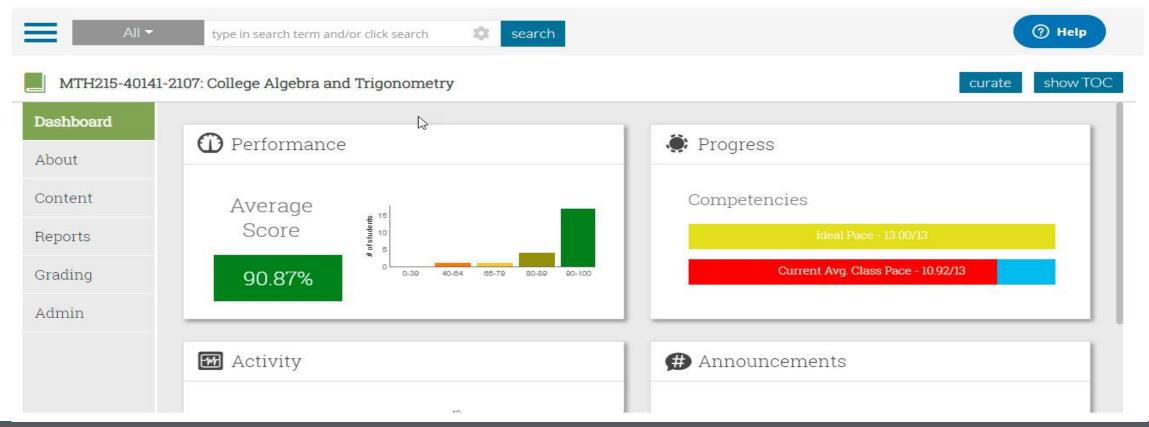
Brief history & use

Provides Faculty Dashboard to track student progress

Brief history & use

Faculty View of Student Dashboard: Formative Scores
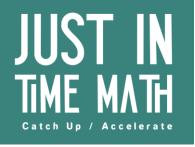
Reports MTH12A-15021-1902: Algebra I

Name ▲	MTH12A-15021-1902: Score	C1: Integers and Rational Score	C2: Real Numbers Score	C3: Exponents and Order of Score
Class Average	73.41%	80.20%	88.91%	86.96%
👤 [_____]DESTINEE	67.67%	62.00%	75.00%	88.00%
👤 [_____]Debra	87.78%	98.00%	95.00%	92.00%
👤 [_____]Martha	64.61%	80.00%	80.00%	92.00%
👤 [____]Austin	80.21%	90.00%	95.00%	92.00%
👤 [_____]Noah	77.78%	90.00%	80.00%	88.00%

Algebra II on NuNav2. Faculty Dashboard View. Course started on April 9, 2018. This data was pulled on A[...]
From a calendar perspective, students should have completed 1/3 of the course by now (Competency C5).

Reports MTH12B-25082-1804: MTH12B Algebra II

Name	MTH12B-25082-1804: MTH12B Score	C1: Solving by Linear Score	C2: Solving by Substitution Score	C3: Solving by Elimination Score	C4: Reducing Problems to Score	C5: Add/Subtract Score	C6: Simplification Score	C7: Simplifying Integer Score	C8: Divide Polynomials Score	C9: Factoring Polynomials Score	C10: Rational Expressions Score	C11: Multiplication/D Score	C12: Addition/Subtra Score	C13: Equations with Rational Score	C14: Radic Expression Score
	42.50%	80.00%	N/A	N/A	N/A	5.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vala	76.67%	93.33%	60.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
gan	80.00%	85.00%	86.67%	93.33%	50.00%	85.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ng	93.67%	100.00%	93.33%	93.33%	100.00%	80.00%	90.00%	86.67%	90.00%	96.67%	93.33%	100.00%	95.00%	86.67%	100.00%
res	91.25%	95.00%	100.00%	100.00%	60.00%	90.00%	85.00%	100.00%	100.00%	N/A	N/A	N/A	N/A	N/A	N/A
mey	97.29%	100.00%	100.00%	100.00%	100.00%	95.00%	100.00%	93.33%	90.00%	N/A	N/A	N/A	N/A	N/A	N/A
uirre	89.79%	100.00%	93.33%	93.33%	90.00%	100.00%	95.00%	86.67%	60.00%	N/A	N/A	N/A	N/A	N/A	N/A
es	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
drog	85.74%	70.00%	80.00%	93.33%	90.00%	95.00%	100.00%	93.33%	70.00%	80.00%	N/A	N/A	N/A	N/A	N/A
lahl	97.04%	100.00%	93.33%	100.00%	100.00%	100.00%	90.00%	100.00%	90.00%	100.00%	N/A	N/A	N/A	N/A	N/A
ell	96.67%	90.00%	100.00%	100.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
e	91.25%	95.00%	86.67%	93.33%	90.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
strong	88.06%	100.00%	93.33%	100.00%	50.00%	90.00%	95.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
le	93.33%	100.00%	100.00%	100.00%	90.00%	100.00%	70.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
n	79.26%	75.00%	93.33%	100.00%	50.00%	85.00%	100.00%	80.00%	90.00%	40.00%	N/A	N/A	N/A	N/A	N/A
	72.67%	75.00%	73.33%	60.00%	N/A	95.00%	60.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
grove	76.88%	85.00%	66.67%	100.00%	90.00%	40.00%	93.33%	80.00%	60.00%	N/A	N/A	N/A	N/A	N/A	N/A
	90.42%	95.00%	93.33%	93.33%	80.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ra	78.67%	90.00%	93.33%	100.00%	90.00%	20.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

This year – building the consortium

Consortium/workgroup

- Faculty who teach either Pre-calculus, College Algebra, or another first transfer level course(e.g., Introductory Statistics)

- Faculty whose students need remedial support while in the current course

- Faculty who are interested in a FREE online support system

- Faculty who want individualized support for their students

- Faculty who want to assist in developing formative assessment questions and curate OER support

Why participate

- Improve support for your students

- Pinpoint what topics you need to review with the entire class & what topics just a few students need

- Join a community of colleagues working together

- Work on developing more questions that capture misconceptions as quickly as possible

- Funding is available for stipends

Next steps

Consortium/workgroup

- Are you interested in working with us?

- What's your interest?

- Are you interested in piloting this free service for your students?

- Do you know of other faculty to join us?

- Other questions for us?