Corequisite Policy Forum



Materials Available Online

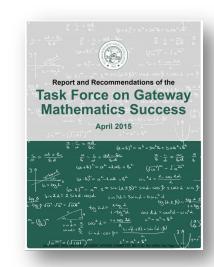
- Go to nshe.nevada.edu
- Click "Corequisite Policy Forums April 2019"
- These following materials are available:
 - Corequisite Policy Forum Agenda
 - Policy Proposal
 - Corequisite Policy Forum Presentation
 - Remedial Education Policy Paper

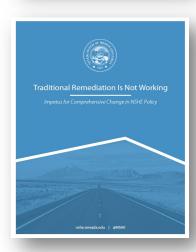
Existing Policy - Title 4, Chapter 16, Section 1

- "Gateway Course Success Policy" adopted in 2015
- All new, degree seeking students must be placed on a pathway to complete their gateway math and English courses within the first year of enrollment. Students must be continuously enrolled in the subject until completion of their gateway course. Exceptions include:
 - > Students with remediation needs deemed "less than high school" level
 - > Students on a STEM pathway are allowed three semesters to complete the gateway course
- Guaranteed College-Level Placement for:
 - Continuous enrollment in English and mathematics during high school AND enrolls in an NSHE institution in any term during the academic year following high school graduation
 - ACT 18 English and/or ACT 22 Math (the ACT Guarantee)

History

- November 2012 Remedial Transformation Project Report
- April 2015 Report from the Task Force on Gateway Mathematics Success
- January 2019 Board Presentation from Bruce Vandal, Complete College America Senior Vice President
 - Tennessee Board of Regents: <u>Co-requisite Remediation Full</u> Implementation 2015-16
- March 2019 Board Presentation from Theo Meek, NSHE Research Scholar
- NSHE Policy Paper: <u>Traditional Remediation is Not Working</u>





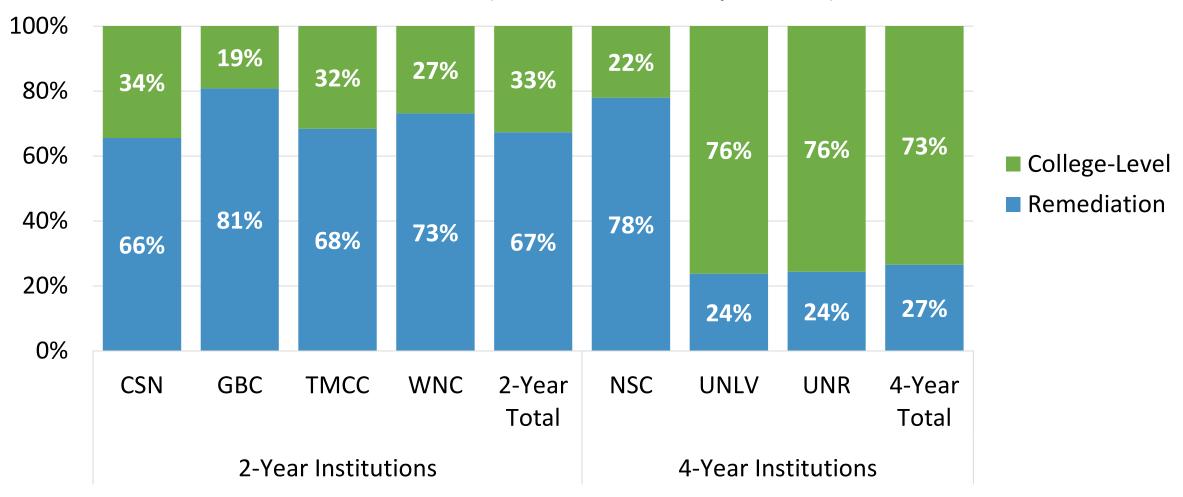
A Nationwide Concern Brought Home

- Nationally...
 - Placement rates are high
 - **68%** of community college students
 - **40**% of public, four-year students
 - Too many ethnic minorities are enrolled
 - **56%** of Black students enroll in remediation
 - 45% of Hispanic students enroll into remediation
 - Degree completion rates are low
 - Less than 10% of students who place into remediation will graduate

- Within NSHE...
 - Placement rates are comparable
 - **67**% of community college students
 - 27% of state & university students
 - Too many ethnic minorities are enrolled
 - **56%** of Black students enroll in remediation
 - **45**% of Hispanic students enroll into remediation
 - Degree completion rates are lower
 - 8% of students who place into remediation will graduate

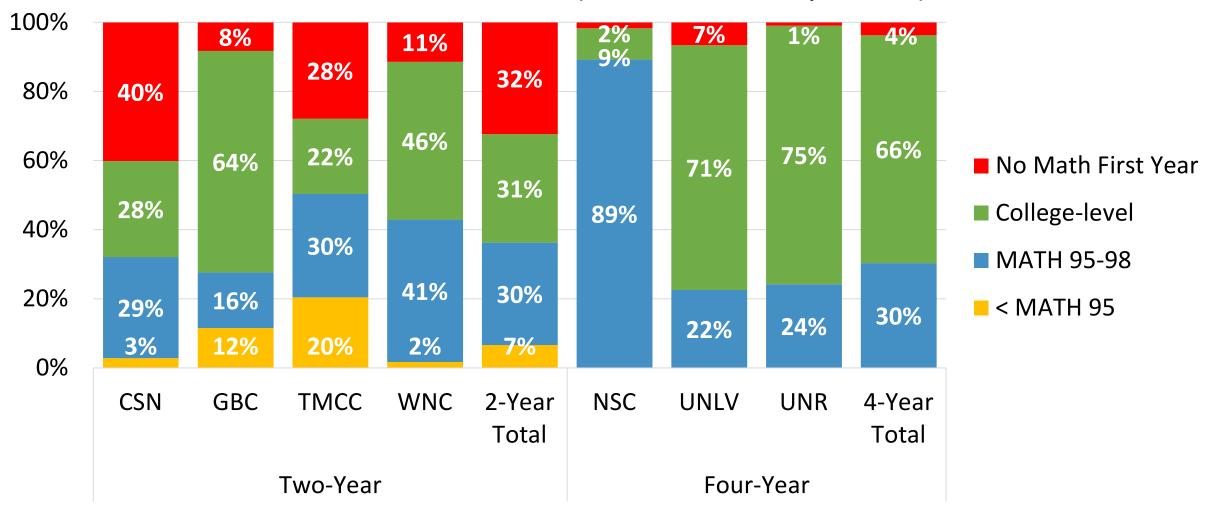
Mass Placement into Remediation





First Math Enrollment





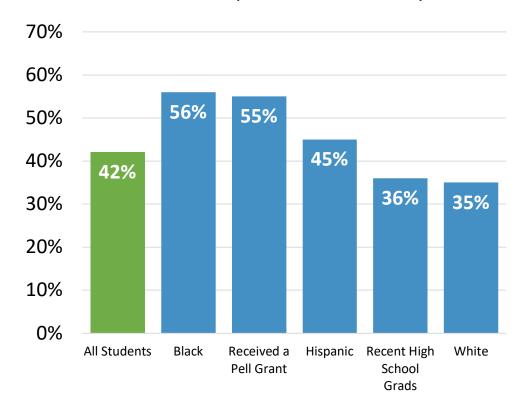
Remediation Hinders Degree Completion

		2014 Cohort						2015 Cohort		
		Enrolled Degree Completion		Enrolled	Degree Completion					
		#	#	%	#	#	%			
CSN	Less than MATH 95	356	45	12.6%	340	43	12.6%			
	MATH 95-98	646	92	14.2%	528	95	18.0%			
	College-Level	775	156	20.1%	944	170	18.0%			
	No Math First Year	2,415	32	1.3%	1,928	51	2.6%			
GBC	Less than MATH 95	80	14	17.5%	90	13	14.4%			
	MATH 95-98	48	14	29.2%	50	15	30.0%			
	College-Level	41	25	61.0%	42	25	59.5%			
	No Math First Year	55	0	0.0%	56	2	3.6%			
TMCC	Less than MATH 95	245	25	10.2%	262	37	14.1%			
	MATH 95-98	381	93	24.4%	380	66	17.4%			
	College-Level	193	73	37.8%	262	99	37.8%			
	No Math First Year	398	5	1.3%	477	7	1.5%			
MAINIC	Less than MATH 95	14	3	21.4%	21	8	38.1%			
	MATH 95-98	303	50	16.5%	308	57	18.5%			
WNC	College-Level	236	82	34.7%	330	131	39.7%			
	No Math First Year	140	1	0.7%	106	3	2.8%			

Overrepresentation of Minority Populations

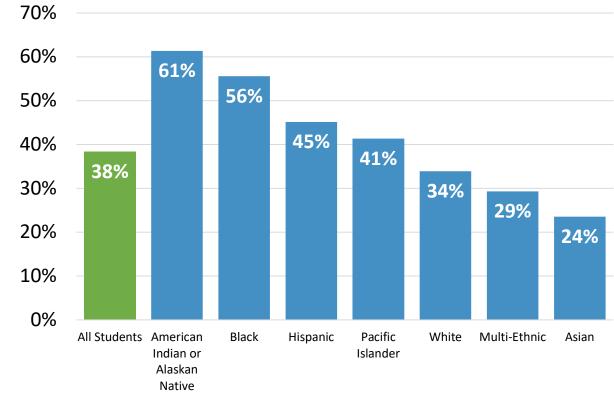
National Data

Percent of Subgroups Enrolled in Remediation (2014 CCA Cohort)



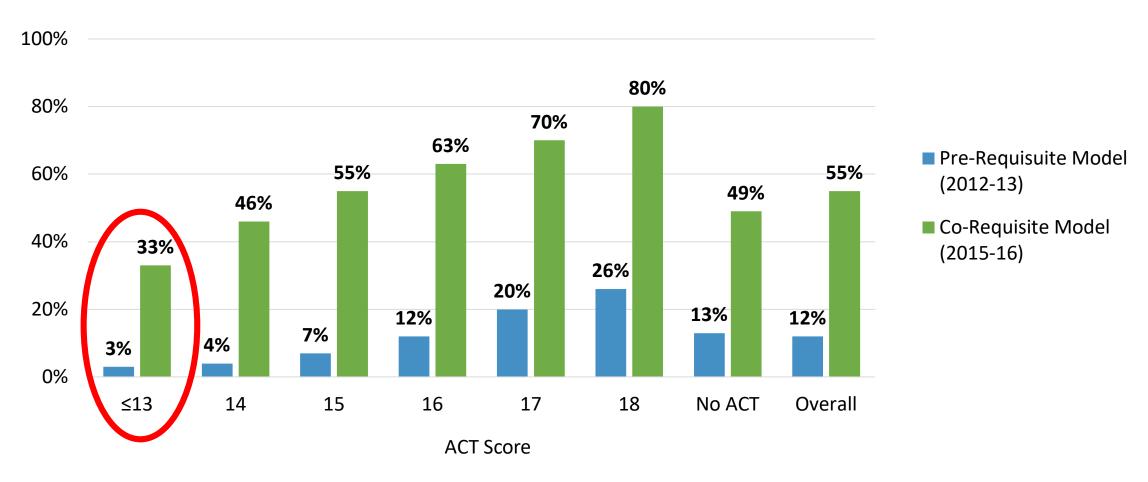
NSHE Data

Percent of Minority Subgroups Enrolled in Remediation (2016 Gateway Cohort)



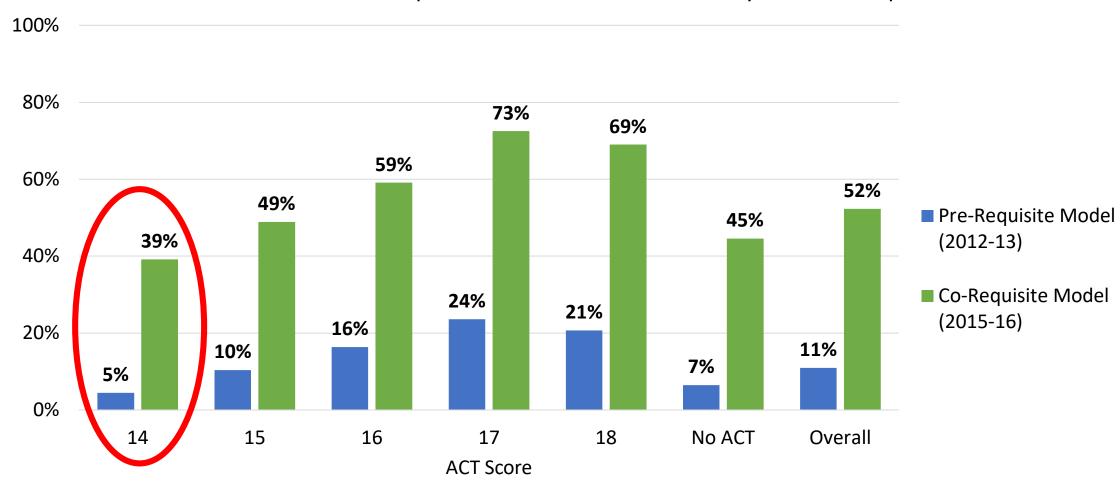
Underprepared or Under Placed?: Math

Traditional versus Corequisite Remediation and Gateway Course Completion



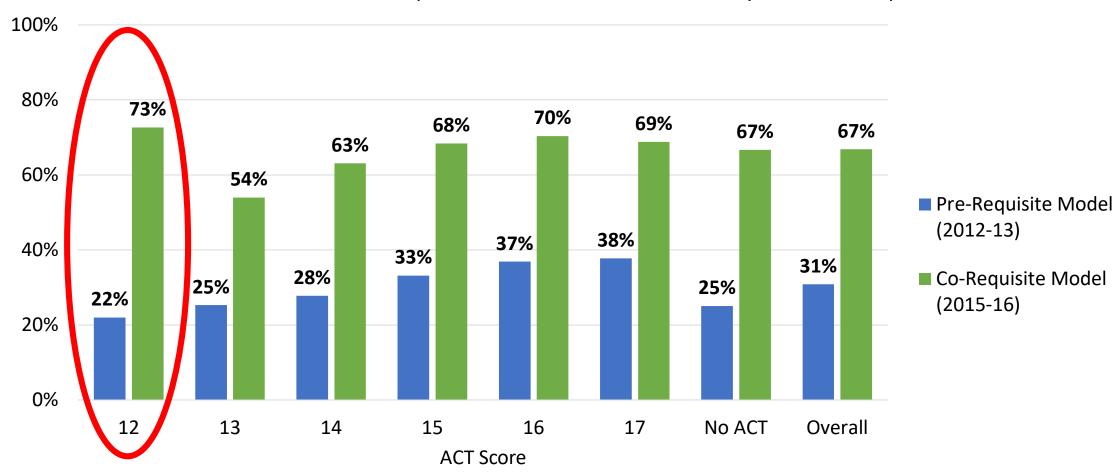
Adult Learners are No Exception

Traditional versus Corequisite Remediation and Gateway Course Completion

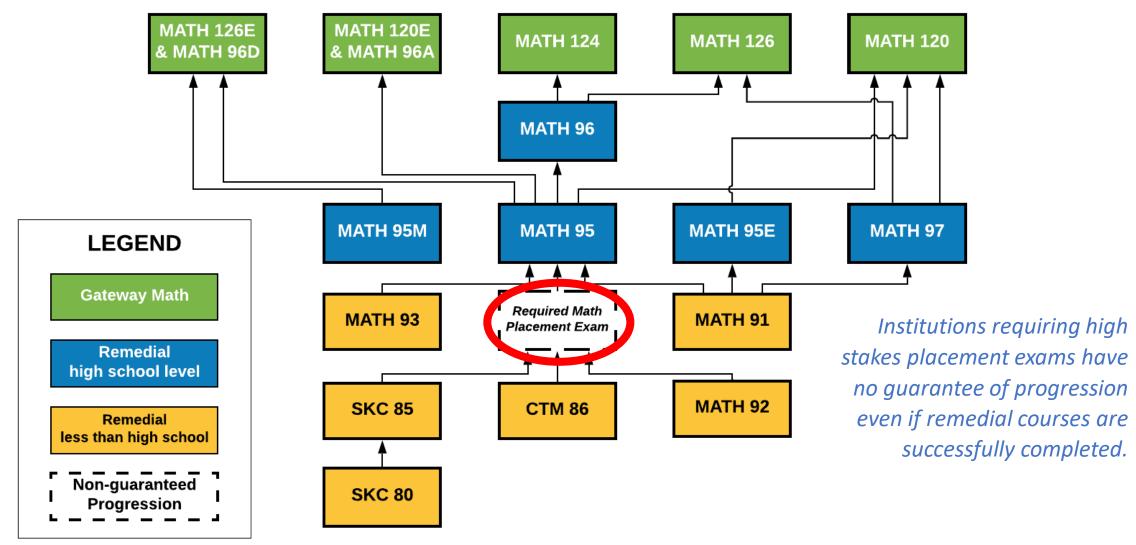


Underprepared or Under Placed?: English

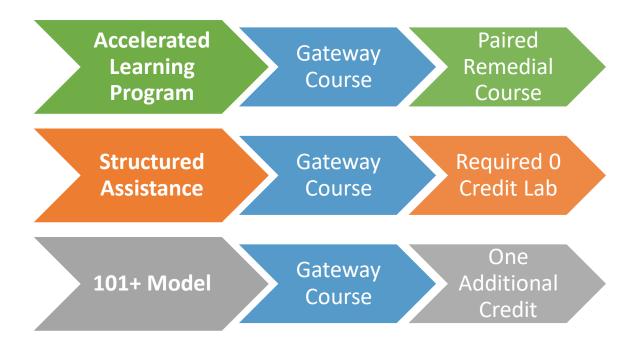
Traditional versus Corequisite Remediation and Gateway Course Completion



NSHE Math Pathways are Long and Complex

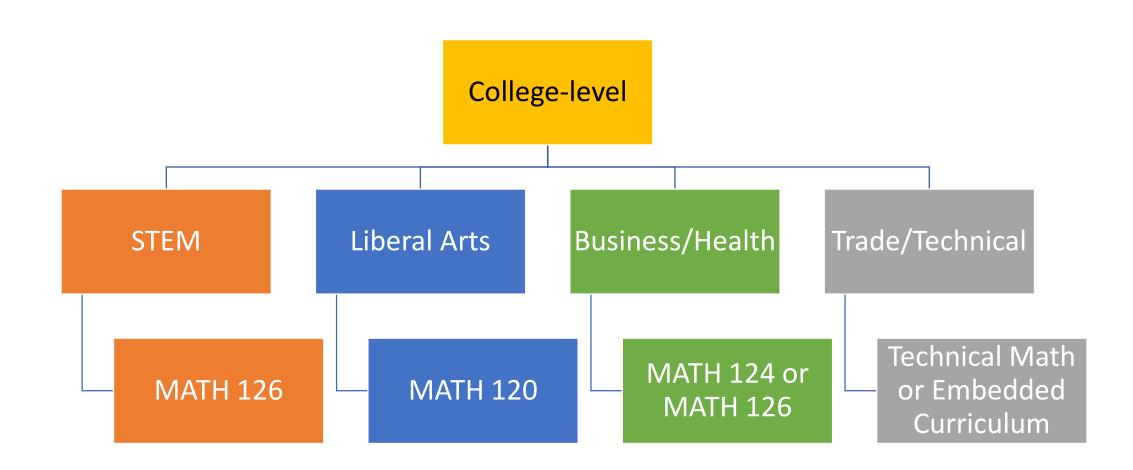


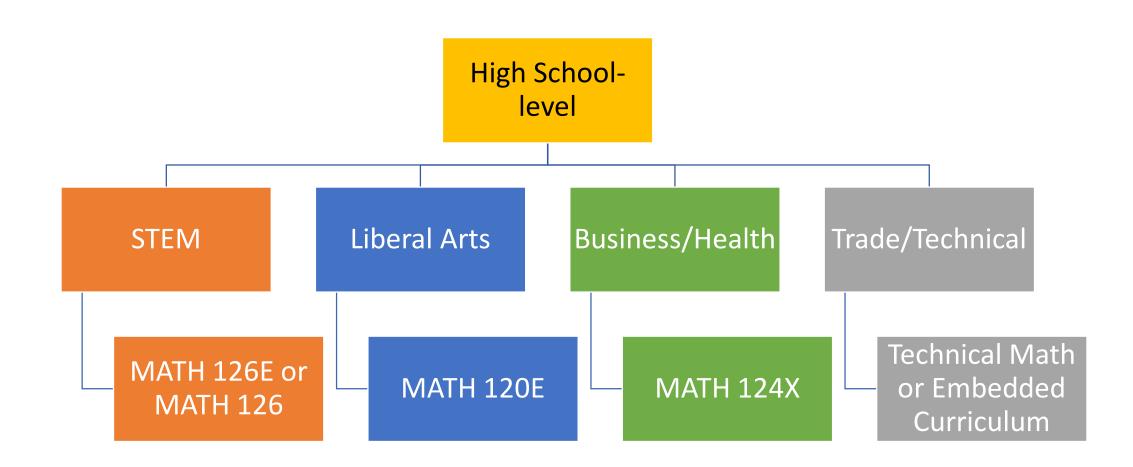
Corequisite Remediation Models

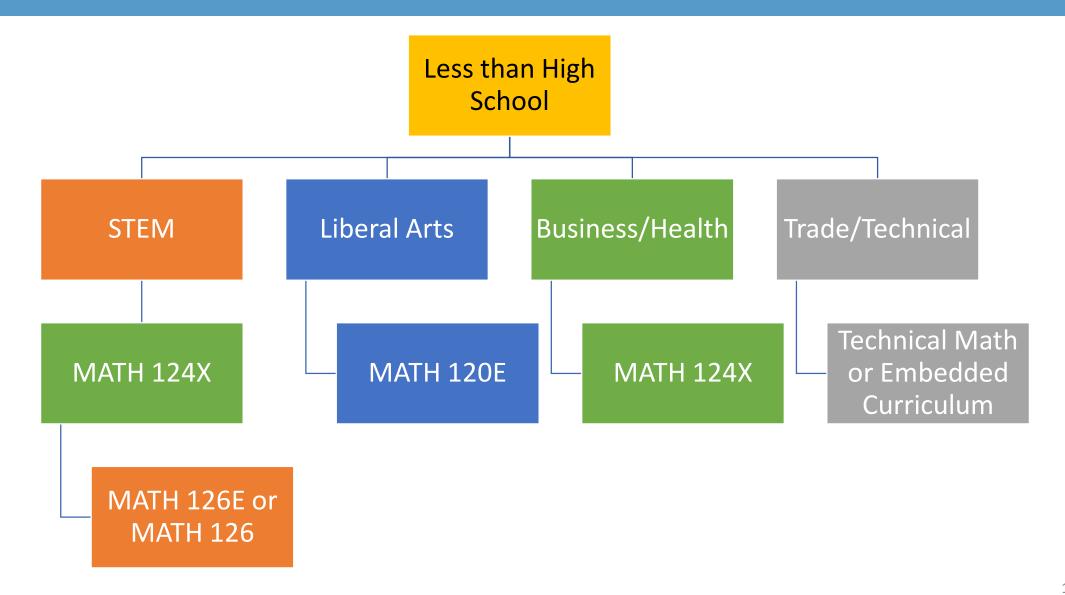


Corequisite Remediation at UNR

- ➤ MATH 126E: Pre-Calculus Expanded (5 credits)
 - MATH 96D (2 credits) +
 - MATH 126E (3 credits)
- MATH 120E: College Mathematics Expanded (4 credits)
 - MATH 96A (1 credits) +
 - MATH 120E (3 credits)







MATH 120

Public Safety, Education, Social Behavioral Sciences, Human Services, Arts, Humanities, Communication, and Design

➤ MATH 124

Business, Health Sciences

MATH 126

Science, Technology, Engineering, and Math

Trade Math

Industry, Manufacturing, Construction, Etc.

Some Systems that are on board

























Mathematical Association of America

- Supports the success of corequisite remediation
 - Improving mathematical learning at all levels will require a fundamental shift
- The use of corequisite courses demonstrates substantial improvements in initial math courses and subsequent courses
- Grounded in research, Common Core State Standards for Mathematics, and the MAA Instructional Practices Guide

"We owe it to our discipline, to ourselves, and to society to disseminate mathematical knowledge in ways that increase individuals' access to the opportunities that come with mathematical understanding."

-<u>Instructional Practical Guide</u>, Mathematics Association of America

English Corequisite Remediation

- > Texas Corequisite Study, Fall 2016 to Fall 2018
 - Randomized control trial of Corequisite Implementation at 5 colleges placed more minority students in corequisite courses with promising qualitative data
- Colorado Community College System
 - Corequisite Model in 2014-15: 95% of students passed college-level English
 - Prerequisite Model in Previous Years: 34% passed college-level English

"Accelerated pathways, including corequisite classes, benefit students from all racial and ethnic groups, all placement and income levels"

-Katie Hern, English Instructor and co-founder of the California Acceleration Project

Policy Paper Conclusion

> Traditional remediation is not working

- Too many start in remediation and are unsuccessful in completing their gateway course
- Psychological challenges and long pathways to gateway course completion
- Closing the achievement gap starts with reinventing remediation

Corequisite remediation results in much higher student success outcomes

- Placing students in a college-level course where academic support is provided just-in-time as students need it better facilitates long term student success
- Success at UNR and NSC as well as nationwide support corequisite remediation

Regardless of academic preparation, success levels are higher for students in corequisite remediation

 Even students at the lowest level of academic preparedness perform better in corequisite models

The Proposed Policy: Subsections 1 and 2

- Subsection 1: Ability-to-benefit test for federal student aid
 - No changes
- Subsection 2: Initial Placement
 - a) Continuous Enrollment
 - > Continuous Enrollment in gateway mathematics and English is maintained
 - ➤ Required enrollment in gateway mathematics and English courses (including embedded curriculum or alternative math courses (BUS, CUL, STAT, APST, etc.))
 - b) Remediation Exceptions
 - ➤ Effective Fall 2021, remedial courses (numbered below 100) shall not be offered independently with the exception of:
 - > Remedial courses offered to high school students in the form of college preparatory courses
 - > Remedial courses offered as mandatory corequisite courses, simultaneously taught with a college-level gateway mathematics or English course

Implications on Embedded Curriculum

- Students enroll in gateway mathematics and English courses as required by their degree program
- Embedded curriculum is gateway completion
 - Courses with math foundations
 - COT, CUL, BUS, PSY, SOC, STAT
 - Programs that fulfill gateway math over multiple courses
 - Welding, etc.

The Proposed Policy: Subsection 2 (cont'd)

- Subsection 2 (continued):
 - c) College-Ready Placement
 - ➤ Meeting any of the College Readiness Benchmarks prohibits placement into corequisite remediation (Benchmarks are unchanged)
 - > Institutions may use high school transcripts and GPA to determine placement (unchanged)
 - Institutions may use alternative mechanisms for higher placement if the college readiness assessment was not taken within the past three years (e.g. old ACT or SAT scores)

The Proposed Policy: Subsection 2 (cont'd)

- > Subsection 2 (continued):
 - d) Placement for Students who do not meet College-Readiness Benchmarks
 - > Degree and certificate seeking students shall be placed in a corequisite course whereby:
 - The total corequisite course does **not** exceed six units
 - > Academic support, whether through credit or non-credit options, is provided just-in-time
 - > Students are not required to complete a placement test for enrollment in subsequent courses (e.g. ACCUPLACER as a final exam)
 - No standalone remediation can be offered to students, regardless of their level of academic under-prepardness (except for high school students)
 - > Loopholes for placement below high school level and STEM students are closed

The Proposed Policy: Subsection 3 (cont'd)

- Subsection 3: Publication Requirement
 - Institutions must post criteria and placement information on their website (unchanged)
- Subsection 4: Definitions
 - College-level: 100 and above
 - Co-requisite: college-level gateway course numbered 100-level and above where academic support is provided simultaneously in the same semester.
 - Remedial course: below college-level, numbered below 100
- Subsection 5: Reporting
 - Chancellor's Office will audit course taxonomy files

Students with Disabilities

- > Students with documented disabilities may be placed on alternative pathways
- Written recommendation from the disability resource center is required
- > E.g. MATH 19 and MATH 119

Select Additional Reading Material

Reports

- Multiple Education Agencies: <u>Core Principles for Transforming</u> <u>Remediation, A Joint Statement</u>
- Brookings: <u>Evidence-based reforms in college remediation are gaining steam</u>
- Community College Research Center: <u>Do High-Stakes Placement</u> <u>Exams Predict College Success?</u>
- Complete College America: <u>Remediation: Higher Education's</u>
 Bridge to Nowhere
- Complete College America: <u>Corequisite Remediation: Spanning</u> <u>the Completion Divide</u>
- Complete College America: <u>Scaling Corequisite Academic</u> <u>Support</u>
- RAND Corporation: <u>Designing and Implementing Corequisite</u>
 Models of Developmental Education
- Tennessee Board of Regents: <u>Co-requisite Remediation Full</u> <u>Implementation 2015-16</u>

Articles

- California Acceleration Project: <u>Leading the Way: Cuyamaca College</u> Transforms Math Remediation
- The Chronicle of Higher Education: <u>Co-Requisite Math Doesn't Result in</u> Weak Foundational Knowledge
- The Chronicle of Higher Education: <u>Evidence Clearly Favors Corequisite</u> Remediation
- The Chronicle of Higher Education: <u>The End of the Remedial Course</u>
- Complete College America: <u>Corequisite Support Case Study: Colorado</u> <u>Community College System</u>
- Inside Higher Ed: <u>The Extensive Evidence of Co-Requisite Remediation's</u>
 <u>Effectiveness</u>
- Los Angeles Times: <u>Cal State remedial education reforms help thousands</u> <u>more students pass college-level math classes</u>

Corequisite Implementation Webinar



Heidi Loshbaugh
Dean, Center for Math and Science
Community College of Denver

Friday, April 26 at 10am

Roundtable Discussion

