

Montana Mathematics Initiatives

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Montana Board of Regents
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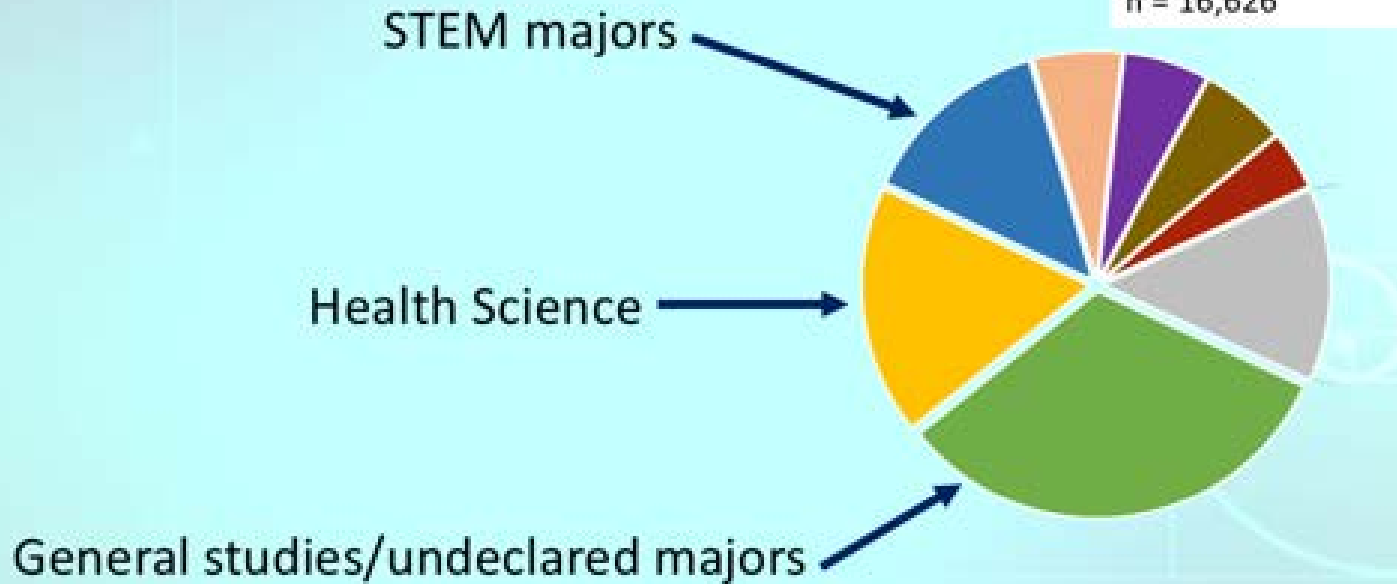
Math Pathways + Math Corequisite Model

Primary Goals:

- Teach mathematics content and skills that will be of value to students in their lives and careers
- Increase and accelerate student success in mathematics

Enrollment in College Algebra

Math 121 enrollment by major clusters:
Fall 2009 – Spring 2015
n = 16,626



1- Math Pathways: Recommendations

1. Provide clear pathways for students who pursue non-STEM majors
2. Enhance offerings of *algebraic-light* math courses for students in non-calculus meta-majors
3. Re-assess math requirements for non-STEM Majors
4. Strengthen advising processes for math/stats courses
5. Strengthen communications – both internal and external

1- Math Pathways: Accomplishment

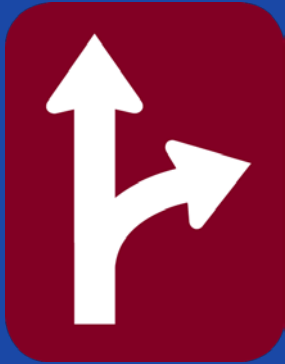
M 105Q – Contemporary Mathematics

2- Corequisite Model

Corequisite approach –

Improve the success of students who enter college but are not ready for college level math (and/or writing) courses

Remediation



Too many students start college in remediation

Nationally:

- 61% in 2-year institutions
- 28% in 4-year, non-flagship institutions

Montana (Math or English):

- 52% in 2-year institutions
- 47% in 4-year, non-flagship institutions
- 21% in 4-year, flagship institutions

Few Graduate or Transfer

Of 2-year students enrolled in remediation:

Nationally:

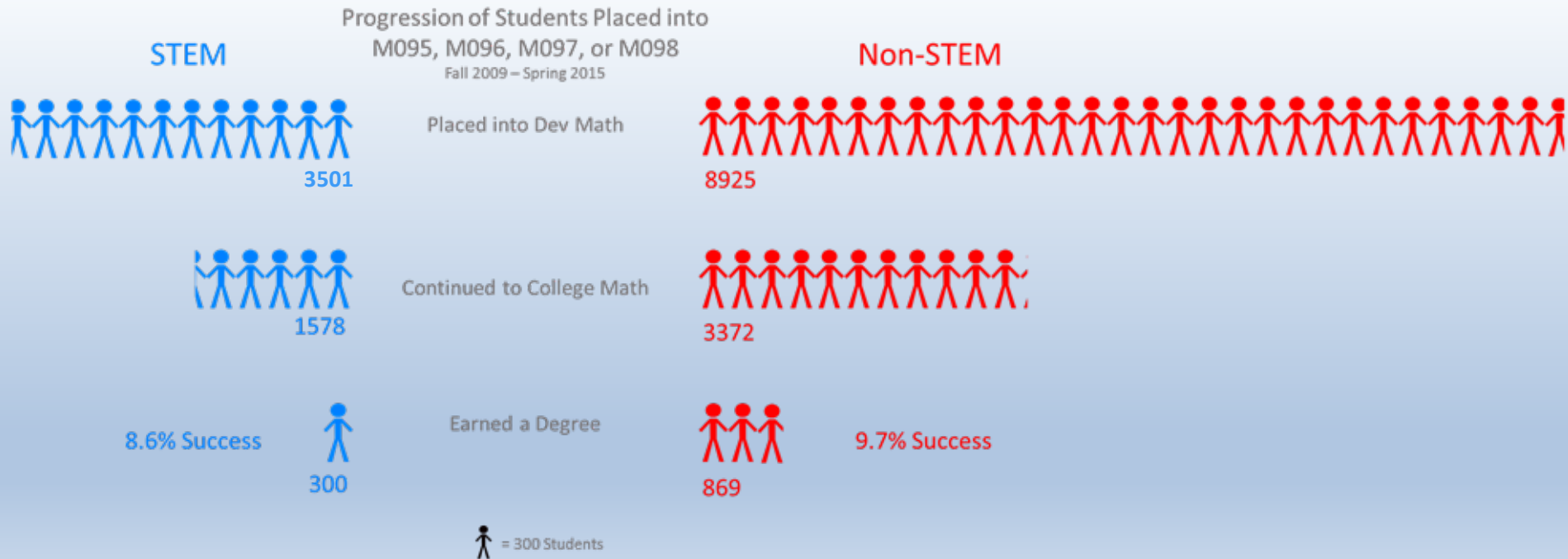
- 11% graduate in 3 years
- 18% transfer to 4-year institution, in 4 years

Montana (Math or English):

- 15.3% graduate in 3 years
- 16.4% transfer to 4-year institution, in 4 years

**Student attrition is at
the heart of the
matter...**

Student Attrition in Developmental Math Sequence (*MUS data*)



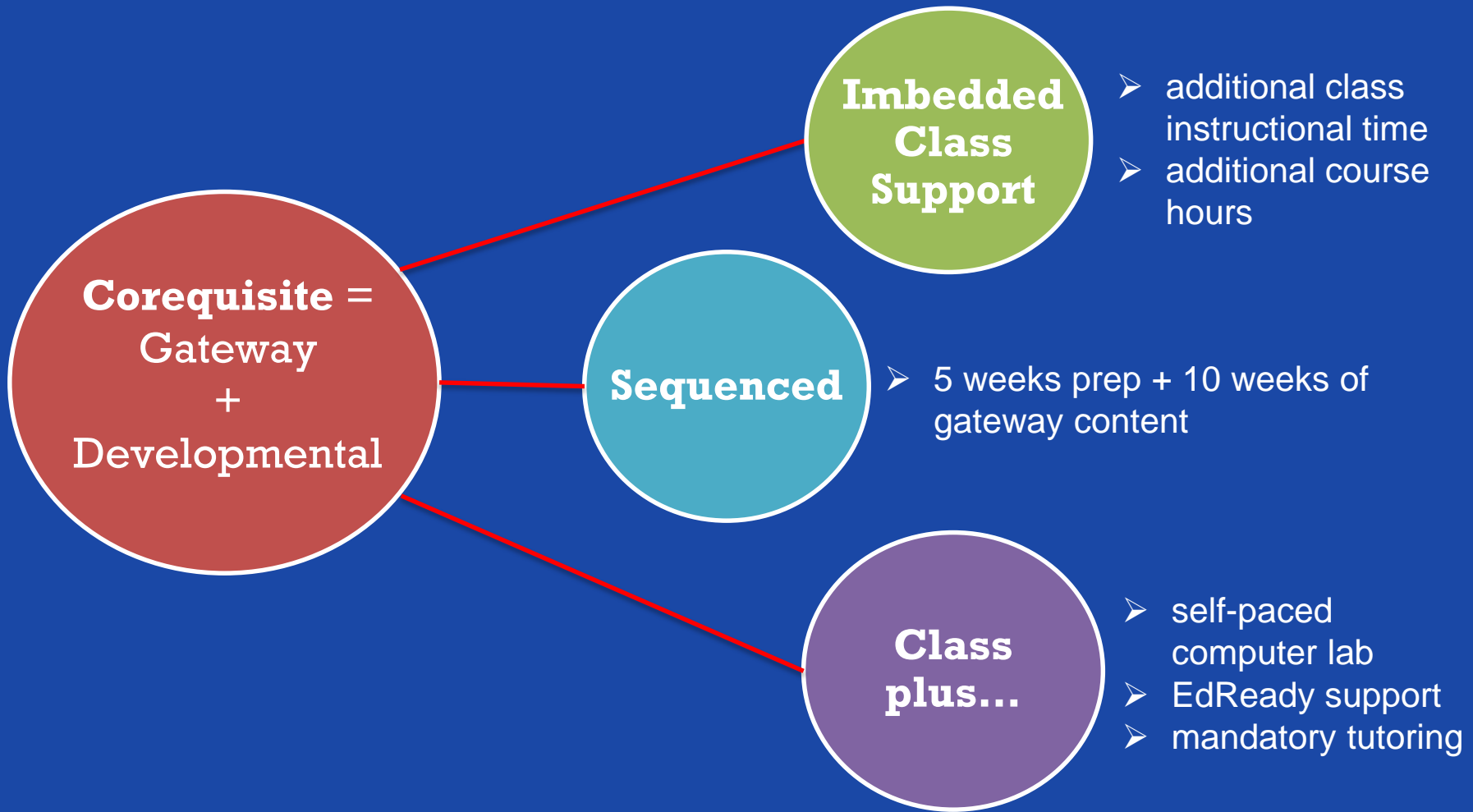
Corequisite at Scale

The corequisite model represents an alternate approach to non-credit-bearing developmental courses

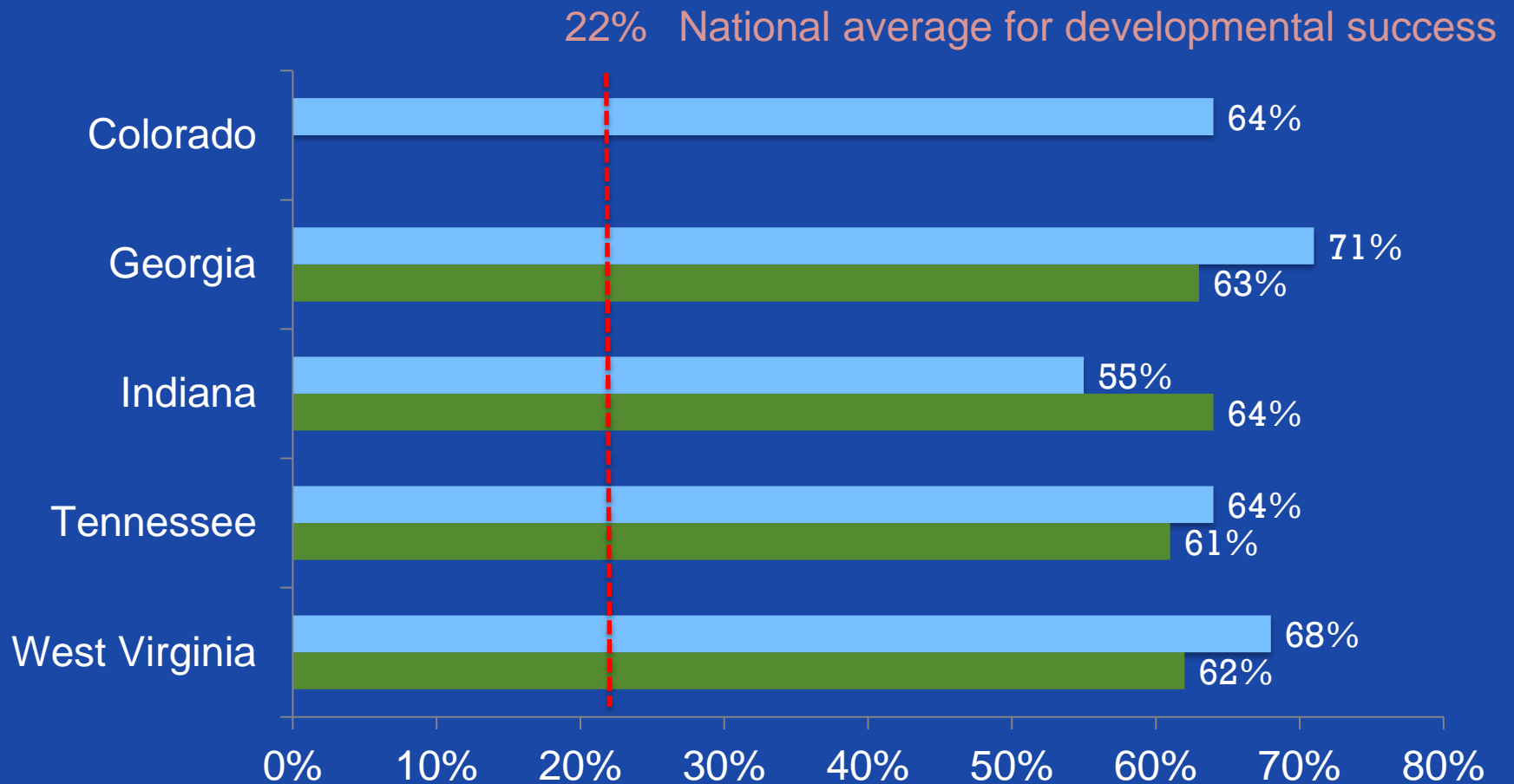
Corequisite Courses are College Courses

- **Corequisite students are treated as college students on day one**
- **Students complete gateway courses and enter programs of study in their 1st academic year**
- **Corequisite students are learning college-level content with integrated academic support**

What is a corequisite course?



Success of Corequisite Programs at Scale (CCA 2016)



(Source: Complete College America)

Montana Corequisite At-Scale

Timeline...

- **March 30, 2016:** Corequisite at Scale Leadership Academy (CCA)
- **May 2016:** Assemble Montana Task Force; communicate initiative; identify data needs
- **July-Aug 2016:** Examine existing pilot programs; identify potential challenges and solutions; collect and assess data
- **Sept 30 (tentative):** Conduct state-wide corequisite summit and workshop
- **Oct-Dec 2016:** Communicate recommendations and develop implementation plan
- **Spring-Fall 2017:** Refine corequisite models; expand pilot offerings; assess and finalize programming details
- **Spring 2018:** Full scale implementation

Keys to a successful process:

- Engage faculty
- Establish a sense of urgency
- Communicate – plan ahead with positive messaging
- Use an information-driven approach
- Join forces across sectors and campuses
- Emphasize the common ground → student success

Acknowledgments

Montana's Co-Requisite Team:

- Robert Nystuen (Regent)
- Robert Mokwa (Math Department Chair, MSU)
- Joyce Walborn (Faculty, Helena College)
- Sara Pett (Faculty, Miles Community College)
- Shannon O'Brien (Dean, Missoula College)
- Mike Halligan (President, Dennis & Phyllis Washington Foundation)
- Bruce Vandal (Senior Vice President, Complete College America)
- John Cech (Deputy Commissioner)

Questions?

