

## Wright State Co-Req Implementation

Ohio Math Chairs Networking, OSU; November 2, 2017 Ayşe Şahin, Math and Stat





## **Project Support**

WSU Provost Office, WSU Department of Mathematics and Statistics, and ODHE:

Bridges to Success – joint with Sinclair Bridges to Success Implementation

We targeted three of our pathways:

MTH 1450: quantitative literacy/general

audience

STT 1600: introductory statistics

MTH 1280: college algebra





### First Pilot

MTH 1450:

We overhauled the curriculum to match OTM QR

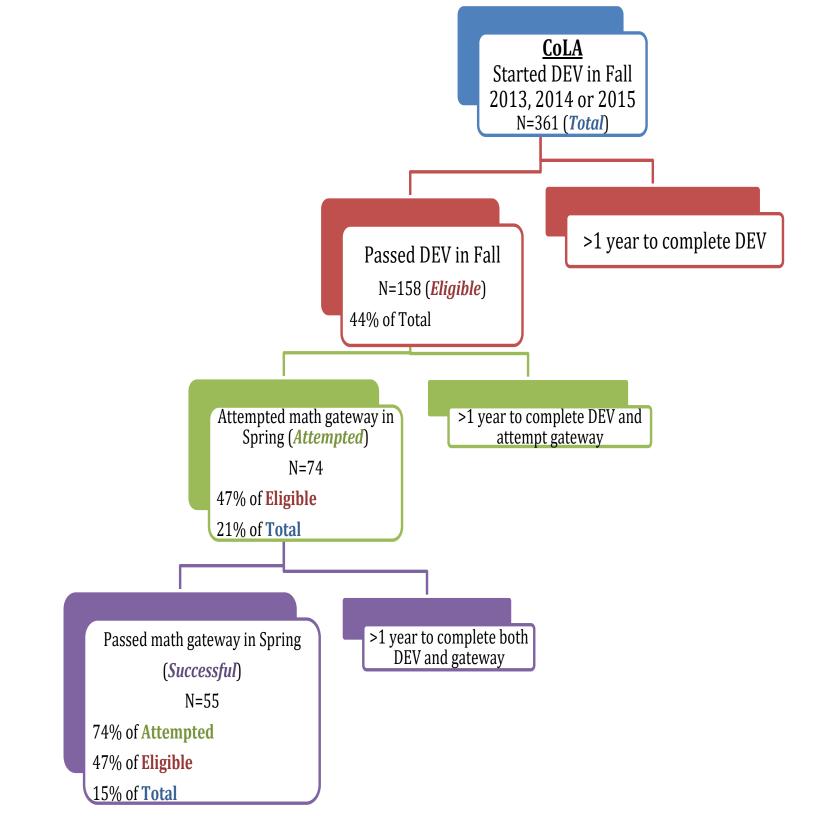
Department of Mathematics and Statistics

Served small N, but good pass rate:

23 coreq students across two sections. 70% pass rate

This is in comparison to:







## Registration model

We are fortunate that WSU has experience with this from implementing the corequisite English writing program. Department of Mathematics and Statistics

QR – Section 11: 20 Students (Co-Req) QR – Section 12: 20 Students (Co-Req)

DEV 0950 – Section 01: 20 Students (Co-Reg Only) DEV 0950 – Section 02: 20 Students (Co-Reg Only) Students must register for both the DEV and a QR.





## Ongoing Pilots F'17

We are piloting co-requisite remediation in three pathways:

- 1. MTH 1450: Math and the Modern World
- 2. MTH 1280: College Algebra
- 3. STT 1600: Statistical Concepts





## Our corequisite remediation model

#### **Gateway Mathematics Course**

20 Students (Need remediation) 20 Students (No remediation necessary)

#### **Customized DEV Course**

Just in time remediation.
Curriculum is merged
with the gateway content.





DEV xxxx-12 20 Students (Co-Req)

DEV xxxx-14 20 Students (Co-Reg)

MTH yyyy-12: 20 Students (Co-Req)

MTH yyyy-02: 20 Students (Direct Placement) MTH yyyy-14: 20 Students (Co-Req)

MTH yyyy-04: 20 Students (Direct Placement)





- The "just in time" curriculum working well for QR course with Dana Center materials for MTH 1450.
- Professional development opportunity focusing on active learning techniques delivered by Dana Center folks for a group of faculty WSU and Sinclair.
- STT 1600 co-req material was designed this summer. It's being run through for the first time.
- MTH 1280 College Algebra co-req material was also designed this summer. It is a mix of home grown, on line ALEKS, and publisher provided.





- What structure is necessary to make sure there is sufficient communication between the instructor(s) and the GTA's teaching the DEV courses?
- Department of Mathematics and Statistics

 How do we accommodate differences in approach and notation between the two instructors?

When we go to scale we will have 10+ sections of each course. Will be impossible to guarantee same instructor feeds the coreq course.

Using the MTH 1450 and STT 1600 pilots to learn.





## WRIGHT STATE College Algebra

- Who will be successful in co-req remediation? In particular, translating content necessary to appropriate placement marker.
- If students come in with too big a deficit, there is too much to do "just in time"
- It seems some students should be able to drop the MTH and keep the DEV. Consequences?
- ALEKS: its structure forces too much "backtracking" for remediation students, not enough flexibility to do "just in time".



# WRIGHT STATE Chair's perspective/Lessons learned

- Crucial to work with Student Success infrastructure of the university.
- Crucial to work with advisors.
- Crucial to have registrar support to set up registration structure.
- Crucial to have good course numbering to avoid confusion.
- Crucial to share data with constituents.





Department

- Everything flows more smoothly if the curriculum of the college credit bearing class is overhauled along with the design, everyone is perforce "on the same page" lessening communication issues.
- Stretch courses are not as good models for co-req (except for Calculus level).
- You have to convince your faculty it's not a waste of resources saving students from the inevitable eventual failure.
- You should track "successor course" success
- You should track "persistence"