



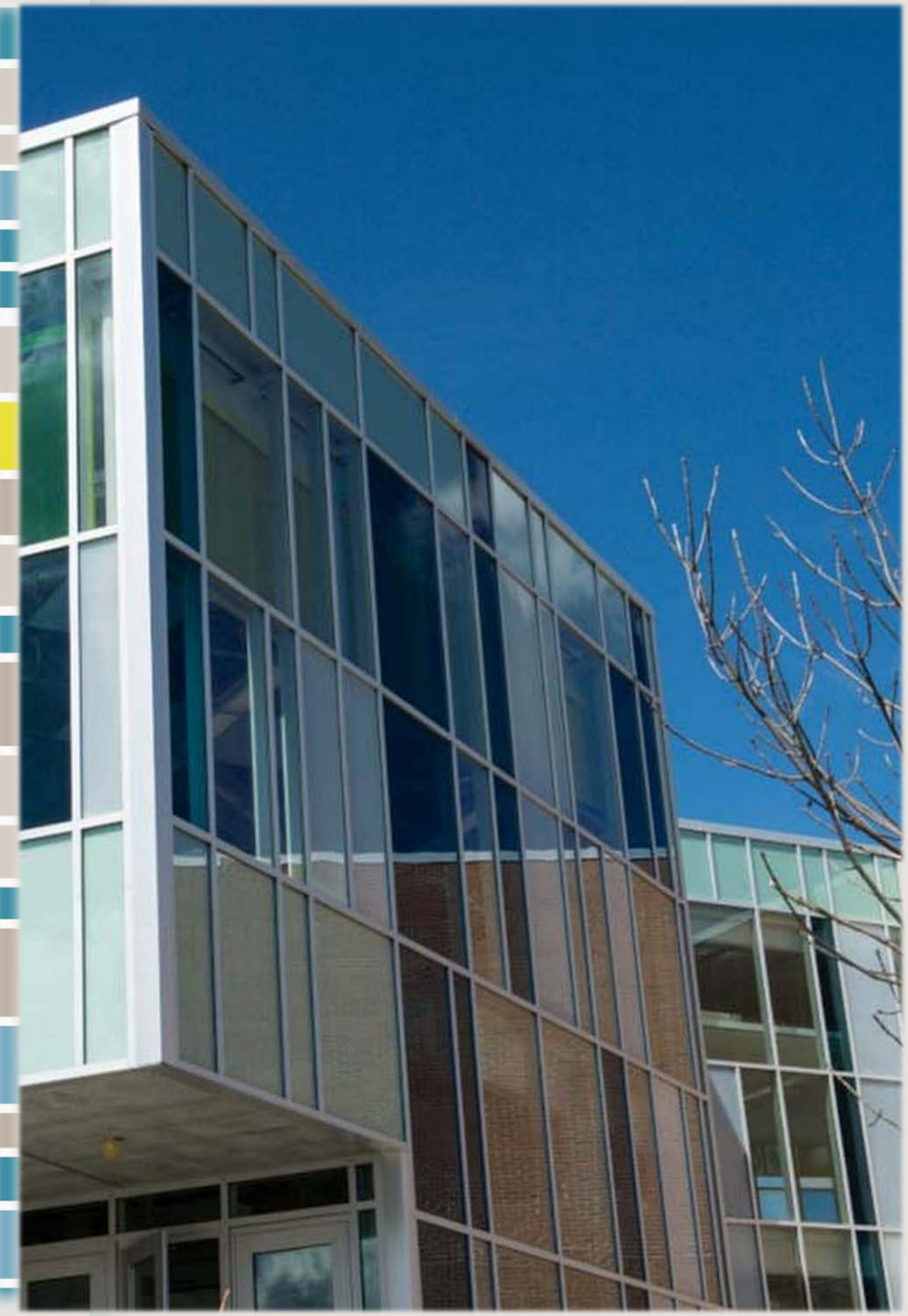
Co-requisite Remediation: Tales from the Front

October 18, 2018

Ayşe Şahin, Chair

Department of Mathematics and Statistics

Wright State University





A brief introduction to Wright State

We are a regional, access oriented 4-year institution located in Dayton, OH.

A total enrollment of 15,558 grad and undergrad combined (not including our medical school).

Approximately 9,000 undergrad across 7 colleges.



2022 Incoming Class:

(First-time, full and part time, degree seeking undergrad profile)

- 27% are first-generation students
- 35% are Pell Grant recipients
- Average HS GPA: 3.36
- Average ACT: 22
- 48% have borrowed Stafford Loans (\$1,786 average for Fall)
- 45% are receiving scholarships (\$2,044 average for Fall)



Where we were

WSU has had well defined pathways for students in different majors for at least a decade:

- *Mathematical and quantitative literacy*; general audience.
- *College Algebra*; feeder for three different Calculus tracks: life sciences, business, STEM.
- *Statistics*; feeder for research methods courses in psychology, nursing, and some education and social science majors.
- *Early and middle childhood mathematics education*.



DEV: where we were

In 2013 WWSU redesigned its developmental mathematics courses (DEV) in the Mathematics Emporium model, using computer aided instruction (ALEKS).

The redesign increased the DEV completion rates by 13%.

However, there were “flow through” issues that resulted in a one year completion rate for gateway math around 30% for students in the QR and Statistics pathways.



Introducing Co-Requisite Remediation at WSU

We were awarded two grants from the Ohio Department of Higher Education:

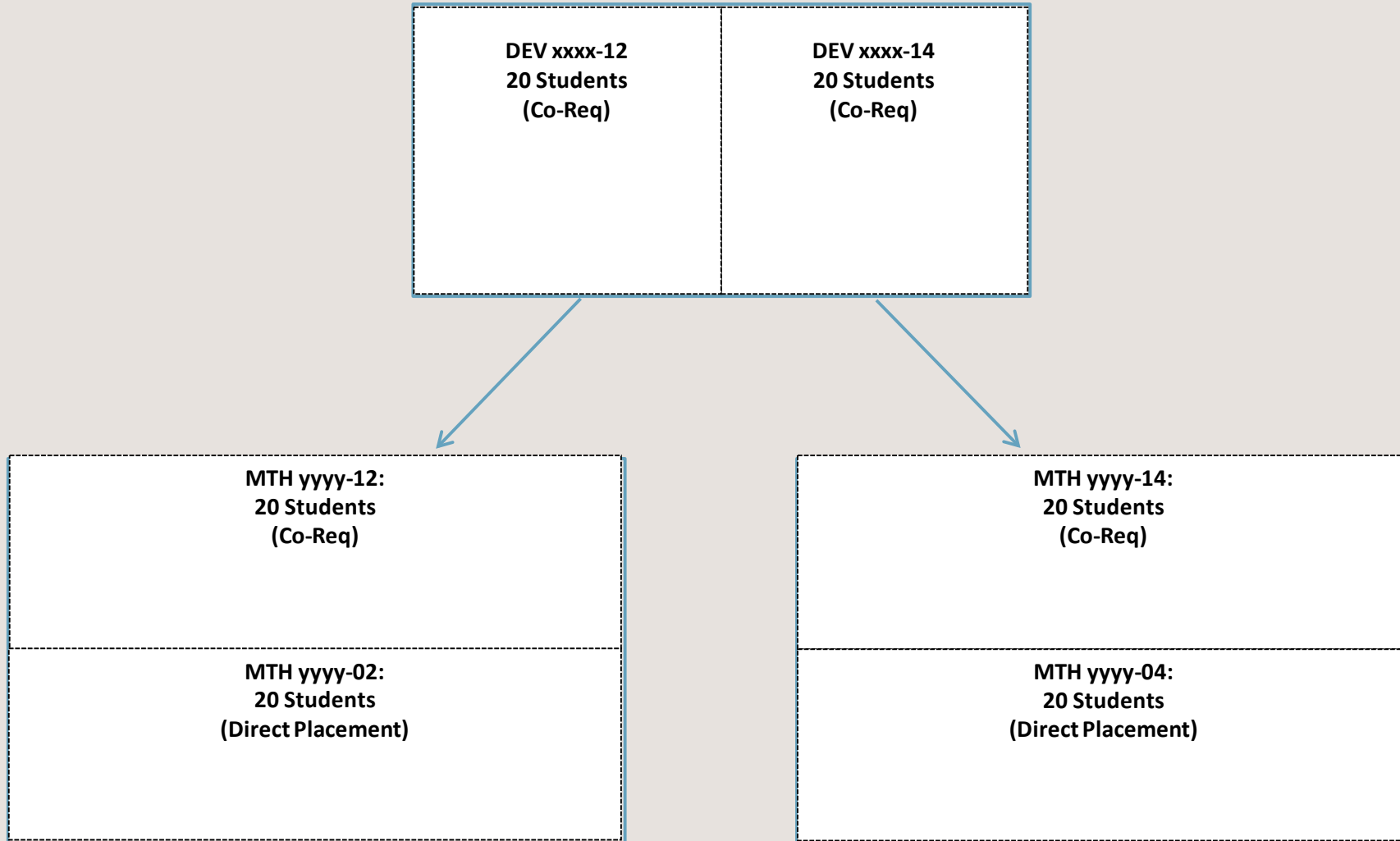
- Bridges to Success Pilot Grant (joint with Sinclair College) (2016)
- Bridges to Success Implementation Grant (2017)

We have used these to design and implement co-requisite remediation in three of our pathways:

QR, Statistics, and College Algebra.

We have taken QR and Intro Stats to scale this fall.

Our corequisite remediation model

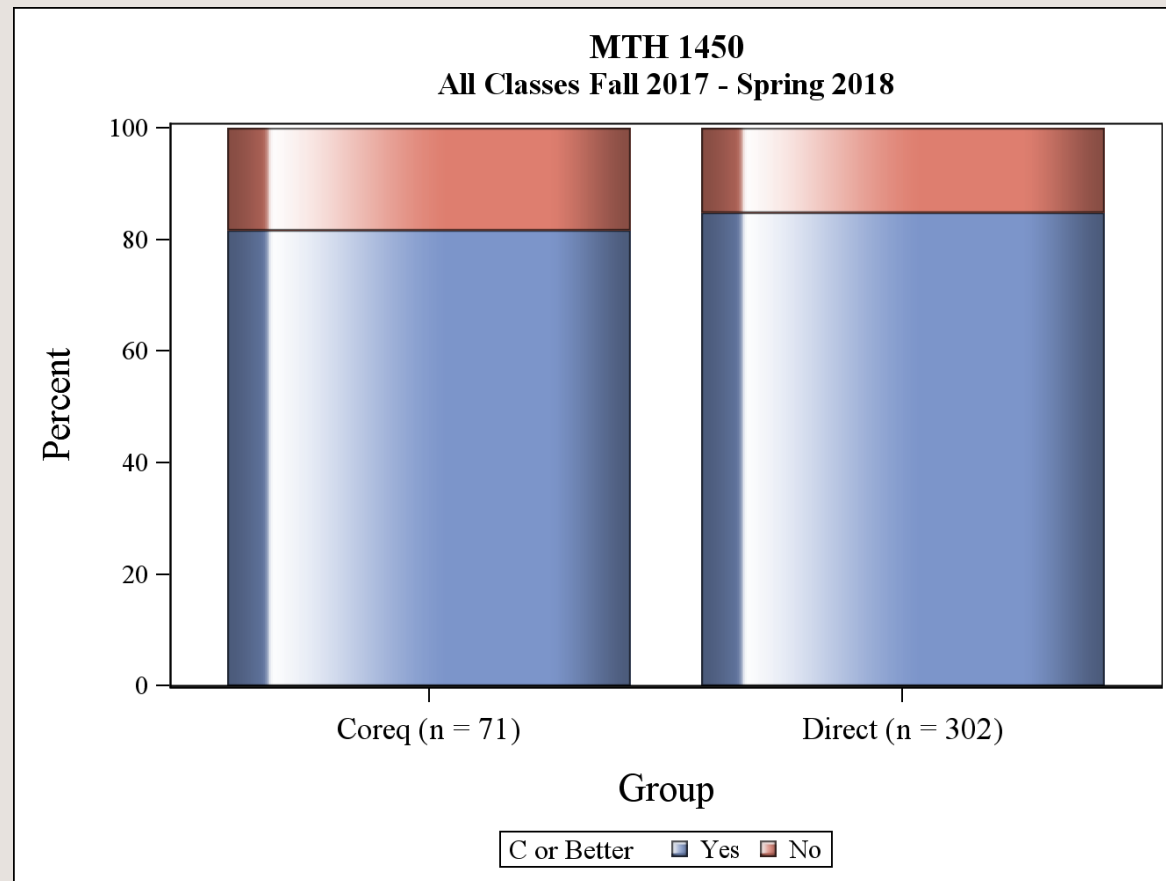




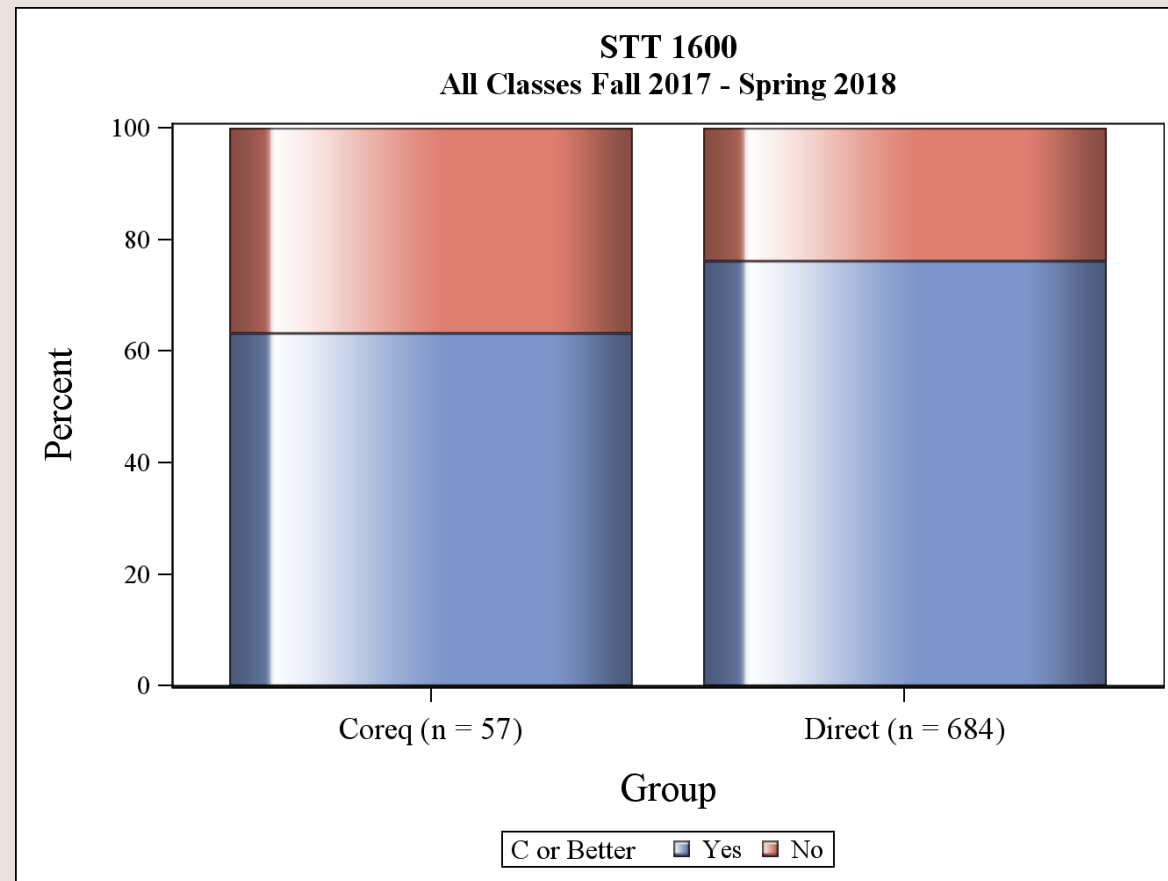
Who is eligible for co-req remediation?

- MTH 1450 - QR
 - No pre-req. Pilot contained many students who succeeded had previously tried traditional remediation multiple times.
- STT 1600 – Intro Stats
 - No pre-req. Almost all students in our pilot were first time admits, direct from high school.
- MTH 1280 – College Algebra
 - Our existing remediation requires 5 modules of ALEKS (through intermediate algebra) for MTH 1280. Most students finish 3 in one semester. These students were admitted to 1280+coreq DEV. So no students new to WVSU.

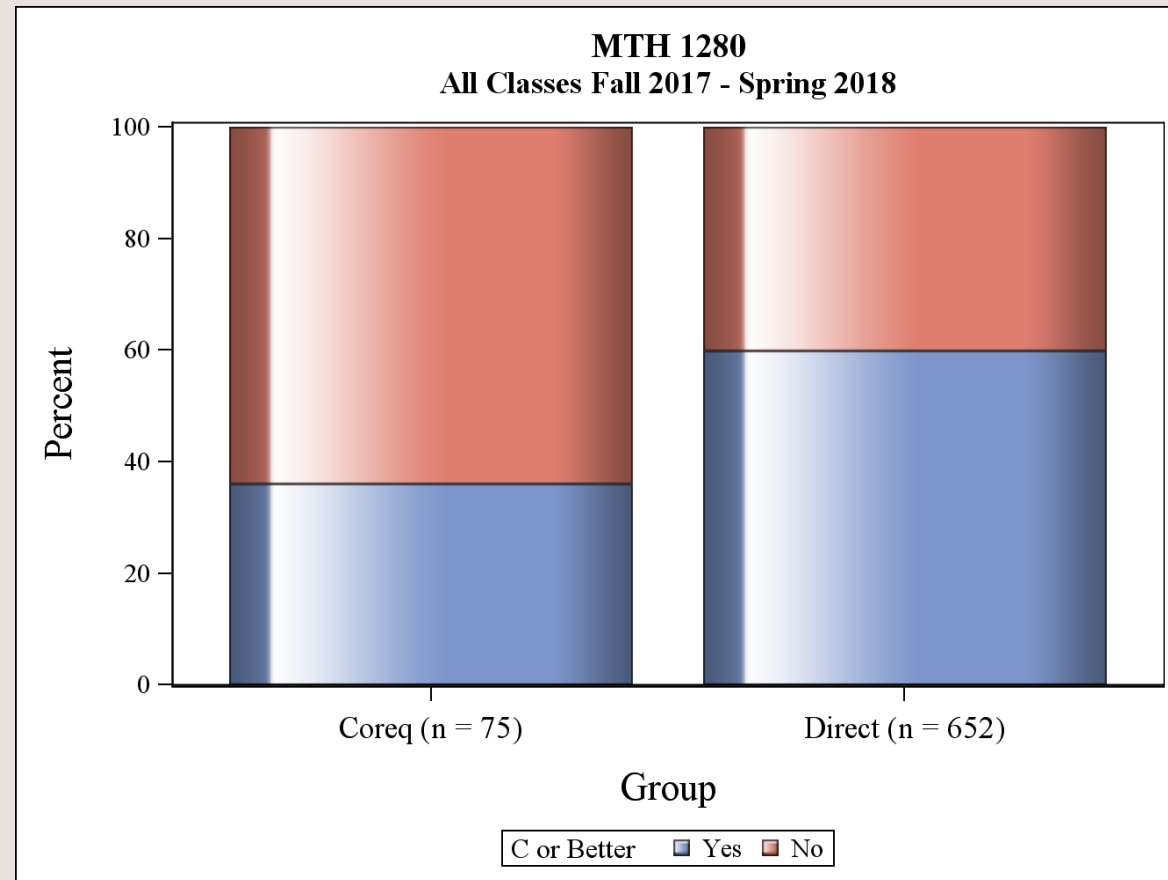
Quantitative Reasoning



Introductory Statistics



College Algebra





Our experience

We have worked hard for two years on the details:

- Designing co-requisite curriculum and course structure
- Dealing with issues of change
- Learning what an important role is played by our university partners:
 - The registrar's office
 - Student success office, advisors in particular
 - Other units depending on our courses for their programs
- Learning the importance of institutional recognition for our work



Going to Scale

Current faculty conversations are focused on:

- Soft skill issues: We see students in our classroom at least a year before we normally would. Classroom management looks different now.
- Literacy issues: many students in the co-req are also in co-req English
- Teaching/learning community vs independent teaching
- How are students doing in successor courses?
- What assumptions have we built into our courses that form barriers to equity?