

Coordinating Core Math Courses for Large Scale Assessment Projects

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Presenters:

- **Dr. Swatee Naik**
 - Associate Professor
 - Core Mathematics Director

- **Danelle Clarke**
 - Visiting Lecturer
 - Math 120 Coordinator

Guidelines of Assessment

- The American Association of Higher Education (AAHE) Assessment Forum put forth nine principles of good assessment.
- Two of these stand out as critical for the Core Math Program.

- **Clearly and explicitly stated outcomes.**

- Proper assessment starts with a clear concept of what you are evaluating.

- Assessment for assessment's sake will yield insubstantial results.

- *"If you don't know where you are going, you might wind up someplace else."* – Yogi Berra

• Commonalities in the experiences leading up to those outcomes.

- In order to properly assess learning students need to have a common and level playing field.**
- Ensuring a common experience will give us insight into which students learn best with what methods**

Core Math Program (CMP)

- The Core Curriculum Office and the Mathematics and Statistics Department made the decision to establish a formal Core Math Program (CMP) to begin in the summer 2005.
- The reasons were multifold.

Core Math Program

- Create the position of Core Math Director to be an effective liaison between the Math/Stat Department and the Core Curriculum Office.
- Provide structure and guidance for the numerous temporary instructors teaching the lower-division courses.
- Improve the alignment of the courses in the pre-calculus series.
- Provide students with a more uniform experience in the Core math courses.

CMP Goals.

1. Alignment

- The Core courses in the Math/Stat Department are properly aligned according to curriculum and learning outcomes.

2. Proper Placement.

- Students are properly placed in Core courses based on a number of factors including, ACT and SAT scores, placement exams and passing of prerequisite courses.

3. Common Experience.

- Ensure that across the numerous sections of the same course students are having a uniform experience, thereby giving them the best opportunity to master the expected learning outcomes.

Relating the CMP and assessment.

- The CMP and assessment ultimately care about the same thing –student learning.
- Therefore the goals of assessment and the CMP and work in tandem with each other.
- Activities carried out by administrators and instructors for the CMP can often be translated into projects done for assessment.

Relating the CMP and assessment.

- Before the CMP began preliminary assessment was conducted.
 - Attempted to understand the student population.
 - Where did they start?
 - Where did they ultimately end up?
 - Performed syllabi analysis.
 - Done in an effort to assess the differences between the individual sections of the same Core course.
 - Met with Core Curriculum Director and department faculty to understand history and current state of Core courses.

Relating the CMP and assessment.

- Based on this initial assessment we are able to establish updated course outcomes.
- Utilizing these outcomes we can then properly align Core courses.
 - With better alignment we can more effectively place students in the correct courses.
- Being able to clearly communicate our outcomes and expectations with instructors gives the coordination activities a purpose and cohesion.

Relating the CMP and assessment.

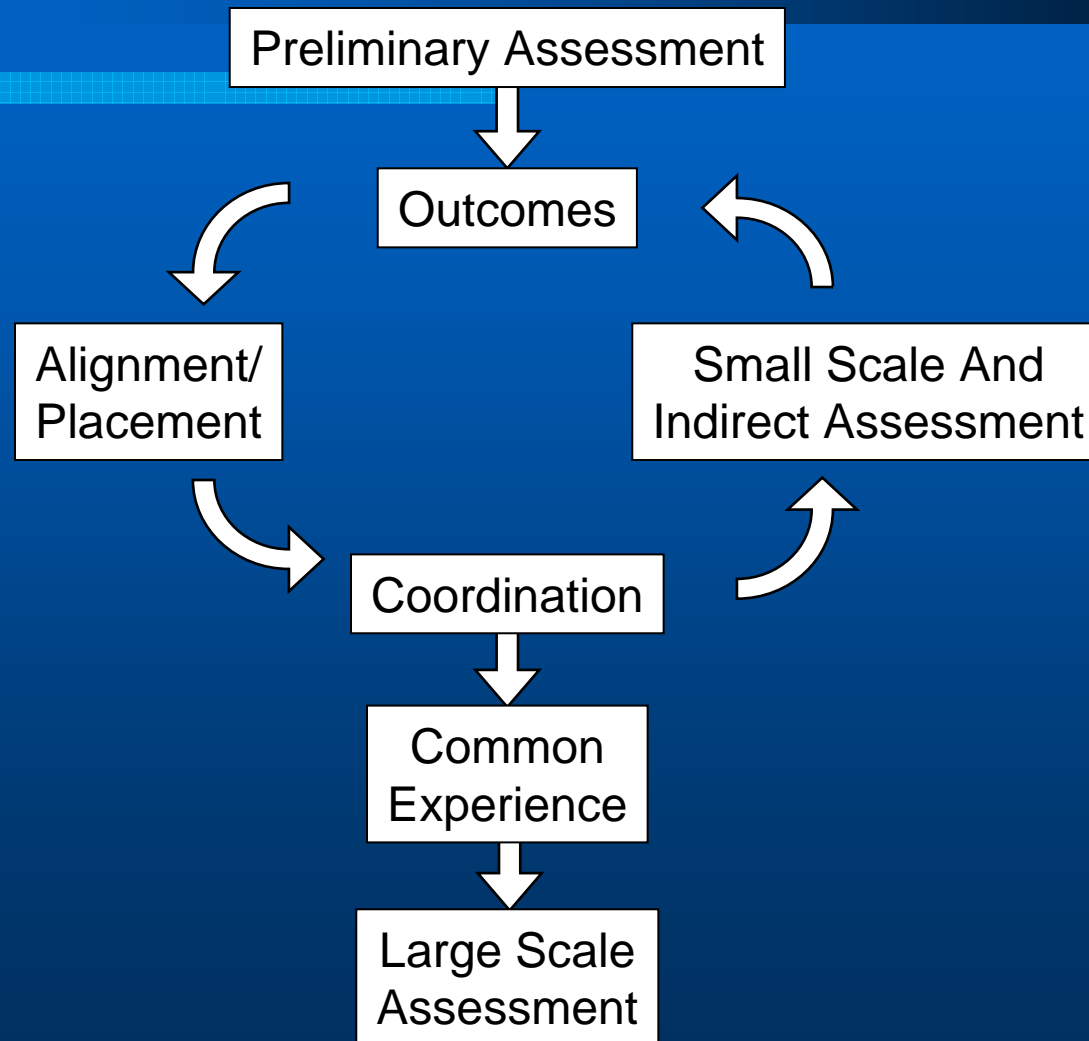
- One of the main goals of coordination is that students in the same Core math course share a common experience.
- When each course is providing a more uniform experience we can then be more confident in the validity of conclusions drawn from large scale assessment projects.
 - Additionally, the results will be more applicable to a large majority of the student population.

Relating the CMP and assessment.

- However, as with most endeavors things are rarely straight forward.
- What we have found in the CMP is that our process looks more like this:

Model for Assessment and Coordination.

return



Closing the Loop

- **Even with appropriate placement, correct alignment and good coordination improvements need to be sought and revisions made periodically.**
 - Small scale or indirect assessment helps detail and refine the course outcomes.
 - In turn, this allows for better alignment between the courses and better placement for the students.
 - Subsequently, coordination efforts are more “on target” with a focused approach.
 - Furthermore, through coordination we can ensure that every class is meeting defined learning outcomes and that students have a common experience in different sections of a multi-section course.

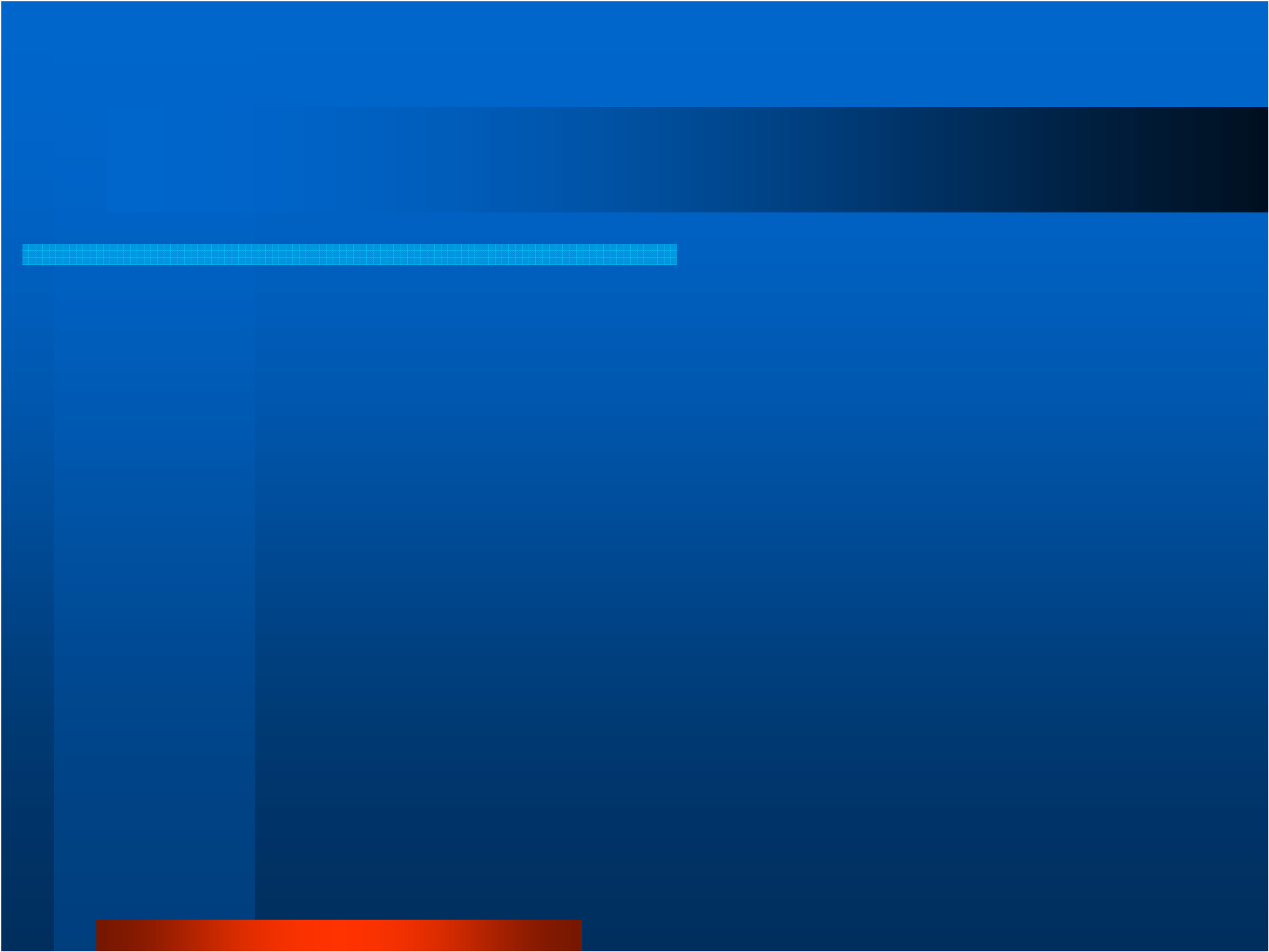
Specifics

■ What are our coordination activities?

- Course Coordinators
- Semester Orientation
- Common Syllabi
- Monthly Meetings
- Common Finals for the Pre-Calculus Series Courses
- MOODLE –Website for Course Resources
- Observations and Mentoring of Instructors

Progress and Future Plans

- Student Concerns
- CLASSE Surveys
- Teaching Evaluations
- Accreditation



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