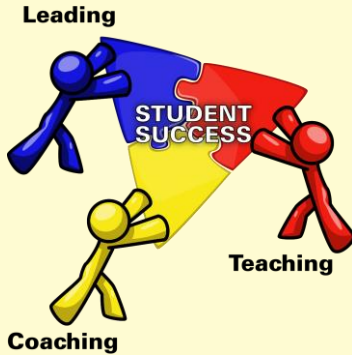


# School Improvement for Student Success Conference



## Best Practices in Mathematics Instruction for Student Success

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*Secondary Math Consultant  
NC Department of Public Instruction*

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## Welcome

Who is in the room?

- Elementary, Middle, High
  - Teams, Individual
- Small, Medium, Large



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## Session Goals

- To develop a plan that will create and facilitate productive and impactful math instructional teams.
- To build upon your plan for instructional teams to develop and refine standards-aligned math units.



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## Session Goals

### Indicator Connections:

- **A2.02** (Creating Instructional Teams),
- **A2.04** (Instructional Teams Create Units of Instruction),
- **A2.05** (ALL Teachers develop Lesson Plans based on the Units of Instruction),
- **A2.13** (Unit of Instruction include Objectives and Criteria for Mastery),
- **A2.14** (Units of Instruction include Specific Learning Activities aligned to an Objective),
- **A2.15** (Instructional Teams Develop Learning Activities and Share Among Themselves)
- **A3.04** (Instructional Teams use Pre and Post Test data to make Decisions about Curriculum and Instructional Plans)



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## Instructional Teams

According to Dr. Rick DuFour, it is widely accepted that the most impactful variable in student success is high quality instruction. So how do you improve instruction?

Teachers are **relatively autonomous subcontractors**

Improve Instruction through:

- Grad Classes
- Workshops/Conferences
- Financial Incentives
- Evaluate into a better performance

Teachers are part of a **system of continuous improvement**

Improve Instruction through:

- Teams work interdependently to achieve common goals for which members are mutually accountable
- Common units of instruction/pacing
- Frequent common assessments
- Common criteria to judge the quality of student work



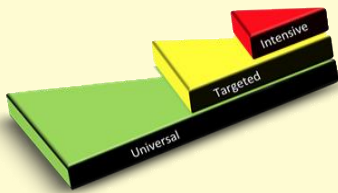
Professional Learning Communities: The Key to Improved Teaching and Learning. TEACHING & LEARNING (2009). Dr. Rick DuFour  
<http://www.advanc-ed.org/source/professional-learning-communities-key-improved-teaching-and-learning>

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## Instructional Teams

There are two main task for Instructional Team.



1. Guiding the Multi-Tiered System of Support for individual Students.

2. Developing Units of Instruction – This is our focus for today.

(MTSS can only work when the core instruction for all students is successful.)



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## Breaking Down Practice

### Math Instructional Teams Cycle of Development and Refinement

<b>Instructional Teams</b>	How are math instructional teams organized at your school?	What are your areas of strength?
	What do math instructional teams do during meetings?	What are some things to consider for improvement?
	How are teams held accountable?	Who can I contact for ideas/support?
	Questions to focus on Current Practice	Ideas to Consider



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## Instructional Teams

**How are math instructional teams organized at your school?**

**What do math instructional teams do during meetings?**

**How are teams held accountable?**

### Panel

Describe the logistics and accountability measures of the math instructional teams at your schools.

- Elementary
- Middle
- High School



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# Standards-aligned Units of Instruction

## UNIT PLANNING

Who created the math instructional units used in your school?

Briefly describe your math instructional units. (Pacing guide, objectives, activities, assessments, etc.)

How are criteria for student mastery discussed?

## Panel

Describe the unit plans created by your math instructional teams at your schools.

### Union County

Winston-Salem/Forsyth Schools

Brunswick County

Carteret County

## Panel

How are criteria for student mastery discussed?



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# Instructional Teams

## ASSESSMENT

Does your school give benchmark assessments? If so describe them. (Who creates them, where the questions come from, how the results used)

Describe the math unit assessments in your school?

## Panel

Describe assessments (benchmark and unit) in your schools.



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## Instructional Teams

### RESOURCES

How are aligned task created/found for each unit of instruction?

When do math teachers create and discuss tasks?

How often do your math teachers use a shared task?

### Panel

What role does your instructional team take in task creation/modification?

How do you approach a teacher who is not open to sharing?



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## Lesson Plans

Are math teachers required to use the units of instruction for their lesson plans?

How do lesson plans receive feedback for improvement?

### Panel

Are math teachers at your schools required or encourage to use the units of instruction?  
Common activities?

How do you monitor participation?



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## Impact and Refinement of the Unit of Instruction

How do your math instructional teams determine their impact?

What do instructional teams do if a deficit is detected?

How do instructional teams refine their units of instruction?

### Panel

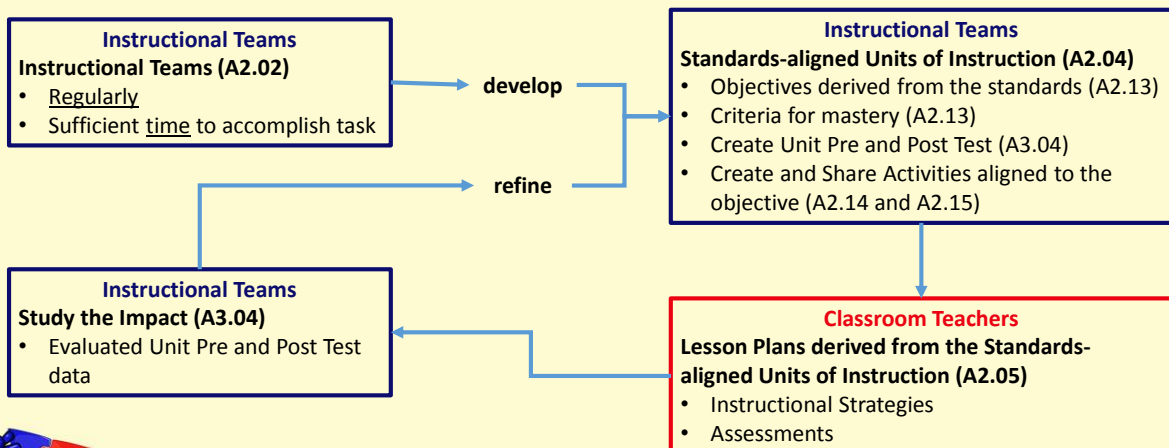
What is the evaluation and refinement process for your units of instruction?



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## The Instructional Team Cycle of Development and Refinement



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S.W.O.T Analysis

Internal	Strength	Weakness
External	Threats	Opportunities



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Thanks for all that you are  
doing for our students!



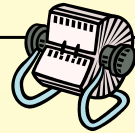
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