



COLLABORATIONS AMONG RESEARCH SCIENTISTS AND EDUCATORS

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What is the significance of these alliances?

- Classrooms and schools are often the laboratory for translational research related to teaching and learning
- Federal agencies, including NIH, NSF and IES, recognize their importance in driving related innovations
- Basic and applied science are enhanced by the work of multidisciplinary teams that include both research scientists and educators

What is the significance of these alliances?



What are the challenges?

- Primary foci and missions differ dramatically
- Reward systems differ dramatically
- Relationships must be built and nurtured over time

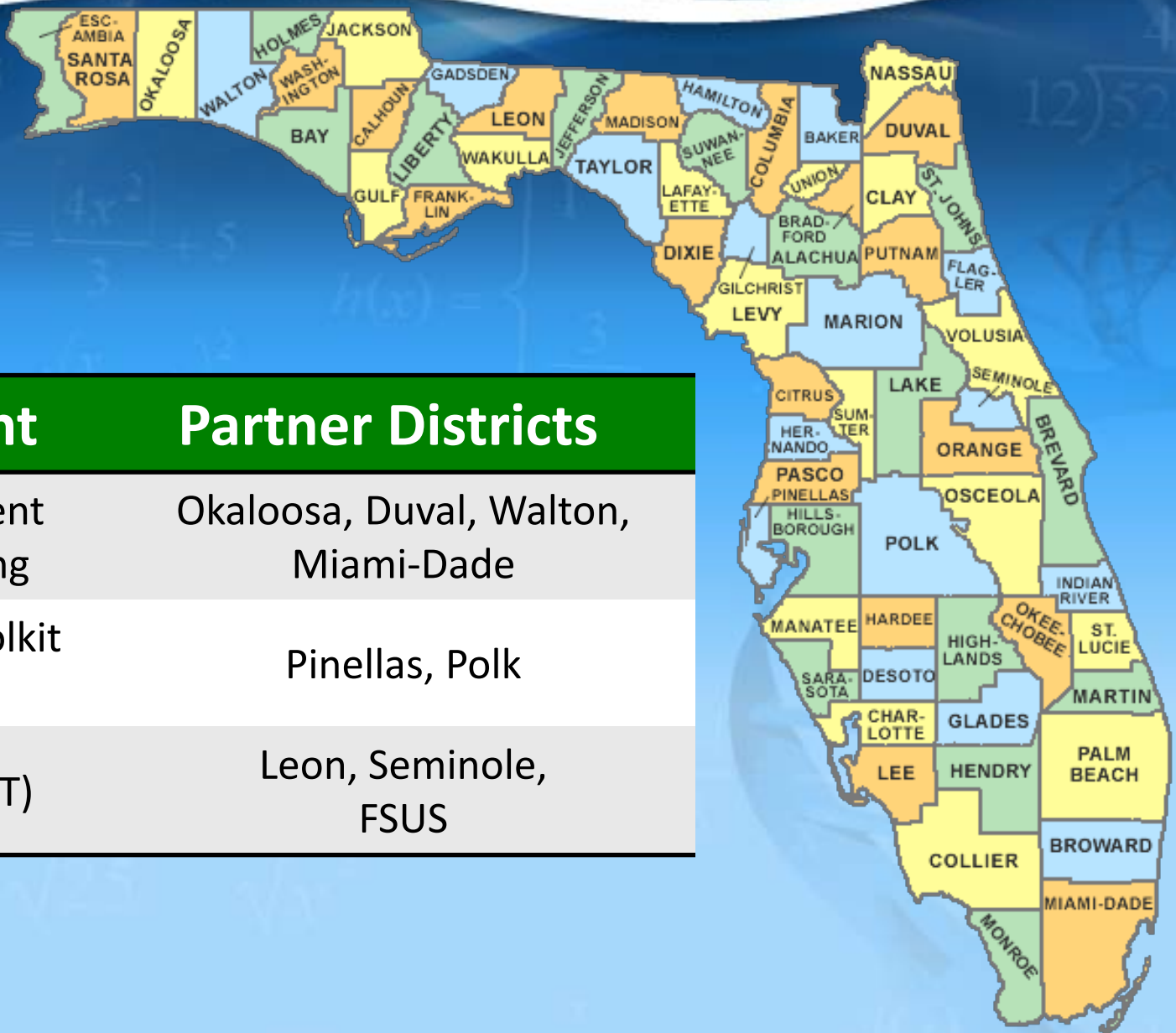
What are the benefits?

- Research questions and interventions that are informed by practice – and practice that is informed by evidence
- Reduces the average ten year gap between scientific findings and their practical application
- “Translational research has proven to be a powerful process that drives the (clinical) research engine” (NIH)

How are teams formed? The MFAS Team

- Laura Lang, Principal Investigator
- Robert Schoen, Co-Principal Investigator
- Maureen Oberlin (Project Manager, Leon & FSUS)
- Dusty Anderson (Pinellas)
- Charity Bauduin (Okaloosa)
- Zachary Champagne (Duval)
- Phyllis Parker (Polk)
- Michelle Robinson (Seminole)
- Joania Torres (Miami-Dade)
- Linda Walker (Walton)
- Mark LaVenja, Methodologist
- Val Shute and WestEd staff

MFAS-CCSS Partner Districts



| Component | Partner Districts |
|------------------------------------|-------------------------------------|
| Task Development and Field Testing | Okaloosa, Duval, Walton, Miami-Dade |
| Lesson Study Toolkit Development | Pinellas, Polk |
| 2012 Study (RCT) | Leon, Seminole, FSUS |

Definition of Formative Assessment

Formative assessment is a process used by teachers and students during instruction that provides feedback to adjust ongoing teaching and learning to improve students' achievement of intended instructional outcomes.

(CCSSO, 2008, p. 3)

MFAS-CCSS Project 2011-2013

Objectives

- The development of 376 **formative assessment** tasks aligned to the CCSS
- The development of 18 **lesson study toolkits** aligned to the domains of the CCSS
- Two **randomized field studies** of the effect of the use of the MFAS on student achievement and teacher knowledge of mathematics content and pedagogy
- Updates to **CPALMS.org**

MFAS-CCSS Project 2011-2013

| Component | Year One (2011-2012) | Year Two (2012-2013) |
|---------------------------------------|---------------------------------|---------------------------------|
| Task Development and Field Testing | Grades K-1 | Grades 2-3 |
| Lesson Study Toolkit Development | Grades K-3 | Pilot Study |
| Field Study (RCT) | Grades 2-3 (MFAS-NGSSS) | Grades K-1 (MFAS-CCSS) |

2012 Study– MFAS NGSSS Grades 2 & 3

- 21 schools in two districts, 160 teachers
- 160 2nd and 3rd grade teachers
- Grade 2 n=1508 Grade 3 n=1510
- Cluster randomized block design with matched pairs
- Effects on teacher and student outcome measures
- Sub-study involving ten schools

Lesson Study Toolkit Interface

- Dashboard
- Settings
- Export
- Share

Step 1. Establish your lesson study team and schedule planning time

Form a lesson study team which includes an external expert(s) in content and/or pedagogy.

| | | | |
|-------------------------------------|--|------|---|
| <input checked="" type="checkbox"/> | Manage Group Members | Open | ? |
| <input type="checkbox"/> | Orient to Lesson Study (locked by Jane Doe) | View | ? |
| <input type="checkbox"/> | Develop Group Norms | Open | ? |
| <input type="checkbox"/> | Schedule Planning Time | Open | ? |

- Step 2. Set your team's goals
- Step 3. Conduct background research
- Step 4. Plan your team's lesson
- Step 5. Teach your team's lesson
- Step 6. Debrief
- Step 7. Arhive/share your team's lesson study work

LESSON STUDY CYCLE



Lesson study is a form of long-term professional development in which teams of teachers systematically and collaboratively conduct research closely tied to lessons, and then use what they learn about student thinking to become more effective instructors.

Questions and Contact Information

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