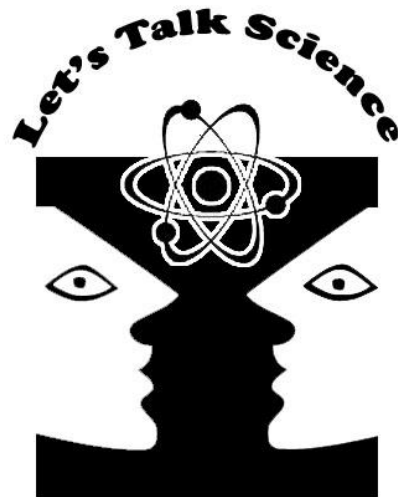
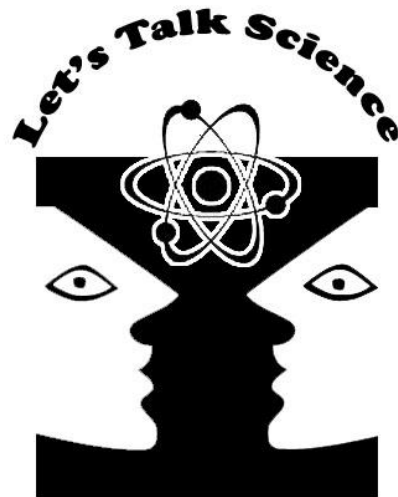


**Florida Department of Education
Office of the Commissioner/
Office of Mathematics and Science
Mathematics and Science Partnership
Florida Science Expert Teacher Program 2007-2008**





***A Professional Learning Community
Dedicated to Generating Teachers as
Learners & Leaders Engaged in
the Study of Science for the
New Millennium***



LeTaS! is designed to increase elementary teacher's science content expertise to better prepare them to implement an inquiry-based approach to student learning of Science SSS



LeTaS! Project Goals

- To increase elementary teacher science content knowledge in Union County and at P.K. Yonge Developmental Research School
- To enhance the quality of science learning and teaching strategies for engaging students in science in Union County and at P.K. Yonge Developmental Research School
- To create a professional development model that includes immersion, teacher collaboration, mentoring and coaching in elementary science teaching and learning
- To produce a tool for assessing teacher content knowledge in science





LeTaS! Project Objectives

- 90% of K-5 teachers in Union County and at P.K. Yonge Developmental Research School will increase their science content knowledge by 75% as measured by the LeTaS! teacher science content knowledge survey
- Union County and P.K. Yonge Developmental Research School 2008 FCAT Science District Mean Scale Scores for 5th grade will improve from 2007 FCAT Science
- Union County and P.K. Yonge Developmental Research School will increase the percentage of 5th grade students scoring Level 3+ on 2008 FCAT Science





LeTaS! Project Objectives

- Support teacher development and implementation of 2 four-week, grade-level specific, FCAT content strand, science unit plans that are inquiry-based
- Develop an on-line LeTaS! portal to facilitate teacher collaboration, science content knowledge growth, and access to teacher-developed SSS Content Strand science units





LeTaS! Project Partners

- Union County, P.K. Yonge Developmental Research School, & University of Florida
- Dr. Lynda Hayes (PI), PKY Director of Research & Outreach
- Dr. Rose Pringle (Co-PI), UF Associate Professor in Elementary Science Teacher Education
- Project Director: Michelle Klosterman, UF Doctoral Student in Science Education
- Union County: Jasmine Ulmer (LBES Science Coach) & Scott Woodall (Technology Coordinator)





LeTaS! Project Partners

■ University of Florida

- Science Education Graduate Assistants: Michelle Klosterman, Katie Milton, Jen Mesa
- Educational Technology: Jeff Boyer & Dr. Kara Dawson
- Educational Technology Graduate Assistant: Michael Kung
- Documentary Film Graduate Assistant: Michelle Friedline
- STEM Scientists as Reviewers & Resources





LeTaS! Project Partners

- **District Exemplary Secondary Science Teachers**
 - **Module developers**
 - **Immersion trainer/facilitators**
 - **District/school-based consultants**





LeTaS! Elementary Teachers

- **Grade Level Trios**
 - **Physical & Chemical**
 - **Earth & Space**
 - **Environmental & Life**

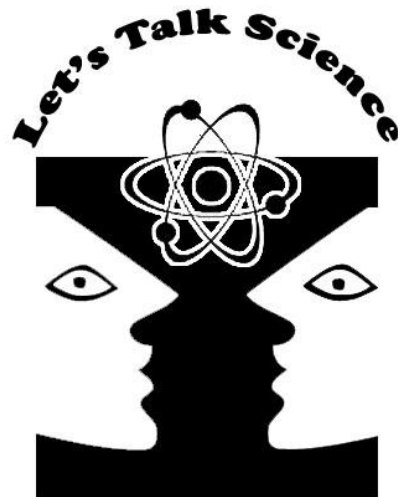




LeTaS! Elementary Teachers

- **Content Cohorts: LBES & PKY K-5**
 - **Physical & Chemical**
 - **Earth & Space**
 - **Environmental & Life**





LeTaS!

Professional Development



Immersion in Content & Inquiry

- Immersion to increase content knowledge
- Immersion to experience inquiry
- Immersion to apply and experience journaling to support science learning





LeTaS! Academies & Camps

- **Summer Academy: August 6-10, 2007**
 - Physical OR Environmental OR Earth
- **Winter Camp: Nov 2007-Jan 2008**
 - Chemical OR Life OR Space
- **Summer Academy July 2008**
 - Training in remaining two strands
(adapted to new standards)





LeTaS! Academies & Camps: Teacher Collaboration

- Collaborative review of SSS & GLE's following training immersion
- Collaboration & support to develop grade level specific, 4-week unit plan





LeTaS! Videoconferencing

■ Goal

- Provide a forum to monitor, focus, and continue teachers' development of science content knowledge, inquiry-based pedagogy, and journaling as a tool to support science learning





LeTaS! Videoconferencing

- **Objectives: Participants will**
 - Share best practices in teaching inquiry-based science
 - Critique non-exemplars of effective practice and offer alternatives
 - Collaborate and provide feedback on issues and concerns related to teaching inquiry-based science in their classrooms
 - Investigate GLE's related to specific strands and across all 5 grades
 - Discuss inquiry and journaling at the different grade levels





Ongoing, On-site Support

- PKY & LBES active administrator involvement
- LBES Science Coach
- Secondary Science Teachers
- UF Science Education Graduate Assistants
- Teacher-generated science lesson videos
- LeTaS! Videoconferencing
- LeTaS! Project website





Project Website

- Promotes asynchronous online collaboration
- Discussion board
- Database of resources
- “Ask a Scientist”
- Teachers’ best practices
 - Unit plans
 - Lesson videos





Teacher Knowledge Survey

- Draft based on high school science SSS
- Initial design review by Dr. Dave Miller (UF Educational Measurement)
- Administered during LeTaS! Summer Academy August 2007
- UF STEM scientists item review (ongoing)
- Pilot with UF elementary education students in science methods courses
- Post-test with PKY & LBES teachers

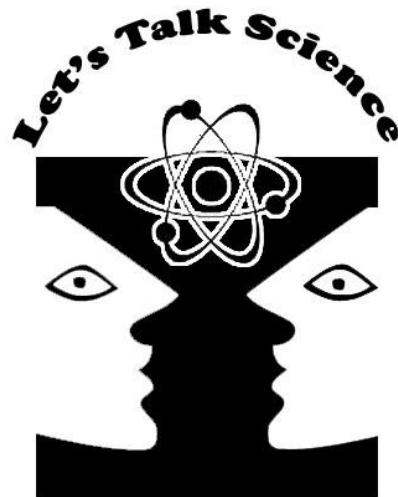




LeTaS! Leadership Team Evaluation Plan

- Content Interest Survey (Pre/Post)
- LeTaS! Science Content Knowledge Survey (Pre/Post)
- Teachers' daily feedback during LeTaS! Academies & Camps
- Mid/end of program evaluation survey
- On-site classroom observations
- Observations of videoconferencing
- FCAT Science Outcomes (2007; 2008)
- Triad Study & Focus Group Interviews





We must not only teach science, but ignite children's passion for science!