

Area 8 Report

1/09/10

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I. FAST Related Activities:

A. Area Reports:

Brevard K-6:

- The Elementary Science Leadership and Training Cadre, composed of ten exemplary science teachers, continues to be a strong presence in providing training, mentoring teachers, and implementing the NGSSS for Science K-6. The "Cadre" worked as a team during the summer to revise our District Required Assessments to align with the NGSSS and to create *Building Young Scientists - Resource Guides* for K-2. Six members of the Cadre presented four different sessions at the March 2009 NSTA Conference in New Orleans.
- Wendy Shelden, Florida PAEMST award winner, recently visited Washington and met President Obama as she was recognized for her outstanding science teaching.
- Awards presented at the Nov. NSTA Area Conference included Robin Robb, Indialantic Elementary, winner of the 2009-2010 Florida Association Science Teacher of the Year Award. Four Brevard teachers won \$500.00 FAST mini grant awards, and one teacher won a travel grant. Our teachers appreciate the support from FAST!
- In August, four elementary teachers were honored locally by the Space Coast Science Education Alliance with the Exemplary Science Teacher Award. Robin Robb was one of them and was then chosen to represent Brevard as our outstanding elementary science teacher at the Central Florida PRISM teacher recognition dinner on Sept. 24 at Sea World.
- Summer and fall teacher training has focused on implementation of the NGSSS for Science using our Pacing and Sequence Guide, newly revised district required assessments, PROMiSE Modules, Science Project Best Practices and Building Young Scientist Resource Guide (K-2).
- An upcoming *FCAT Science Blitz Training* for grade 5 teachers will feature presenter Les Gold, NASA Educator, *FCAT Lessons Learned*, and *FCAT Explorer - Science Station*.
- Our Harris Super Science Saturday program for the lowest performing elementary schools is underway again and has been expanded to include a total of seven schools. Exemplary Science Teacher award winners coordinate multiple weeks of three-hour hands-on sessions for grade 5 students based on annually assessed concepts. The Professional Development piece for science teachers from the host schools includes briefings, observing model lessons, data chats, and collegial discussion of instructional best practices employed.
- Elementary schools have started their Science Academic Support Program (ASP) for students who scored less than 300 on FCAT Science last year and for struggling fifth graders. ASP training was held at the Brevard Community College Planetarium and included each school receiving a telescope.
- Our 7th annual Space Week program, designed to inspire student in STEM courses and careers, is underway for every Brevard grade 6 student. The curriculum partnership with Kennedy Space Center, NASA, Brevard Schools Foundation and Brevard Chapter of the National Space Club included a full-day study trip to KSC from Dec. 1-11. Students had a Q & A with an Astronaut, viewed NASA Educator demonstrations, rode the Shuttle Launch Experience, viewed a 3-D IMAX show and completed a scavenger hunt in the Apollo Saturn V Rocket Center.
- Our 5th annual Lagoon Quest curriculum program has also taken place for every grade 4 student. The partnership with Brevard Zoo includes a special curriculum and a day-long study trip to the Indian River Lagoon where seine-netting is the highlight.

Brevard 7-12:

- Summer trainings were held to promote strategies for successfully aligning with the NGSSS
- BSEND (Brevard Science Educators Network Discussion board) is active, with nearly 1000 posts so far. All secondary science teachers are enrolled.
- Brevard is involved in the Florida STEM Project.
- Dr. Scott McCord was inducted into the Harris Science Teacher Hall of Fame on December 8, 2009.
- Several schools have held district-supported site based science collaboration sessions.
- Technology in science continues to be a supported focus area.
- More than 800 students are scheduled to participate in ISEF-affiliated regional science fairs.
- About 300 Secondary Science Teachers attended the Brevard Science Conference in September. The event featured more than 70 concurrent sessions and dozens of exhibits.
- Science Department Chairs met on October 28th to review issues and ideas in science.
- 12 secondary science teachers attended NSTA/FAST
- Brevard is involved in the Florida Middle School Science Initiative.
- 32 secondary science teachers have received United Launch Alliance Science Experience grants.
- All of Brevard's 5,000 7th grade students have participated in our hands-on BLAST program at KSC's ATX.

Indian River: No report given

Martin: No report given

St Lucie K-12:

- Training on the new NGSSS for all new K5 teachers to the district is underway .
- Training on the new standards for 6-12 is in process and will continue through the remaining of the school year and through summer 2010.
- On March 26th we have the privilege of having Page Keeley, 2008/09 NSTA president and 2009/10 retiring president, provide professional development on the subject of Curriculum Topics Study to our high school science teachers as well as Dr. William Robertson, NSTA published author of the series Stop Faking It!, will be providing professional development for our middle school science teachers to enhance their physical science content knowledge as we moved forward with the new standards in middle school integrated curriculum.
- Many of St. Lucie County teachers attended the NSTA regional conference in Fort Lauderdale .
- St. Lucie County has partnered with Indian River and Martin County to create a common curriculum map for science for K-12 grade. We will be having teams of teachers per grade level from all three districts to work on this endeavor.
- Our Treasure Coast Regional Science and Engineering Fair will be held during the first week of February for grades 6-12.
- Our Annual District Elementary Science Expo will be held the second week of May.
- We have incorporated a district wide forensic science investigative activity for our high school students to participate in during the week of the elementary science expo.
- Our district is working hard on implementing the 5E Model for science instruction.

Okeechobee K-12:

- We are planning our county science fair for January 20 and 21st. We anticipate 400 projects...from one high school, one freshman campus and two middle schools. We have been joined (the Heartland Region) by several other counties- Glades, Highlands, Hardee which used to be active, dropped out and now have rejoined. Our Regional Fair will be held February 16-18 at Pemayetv Emahakv Charter School which is located at the Brighton Indian Reservation.

Osceola K-5:

- The Elementary Science Leadership Team, composed of coaches, resource teachers and Assistant Principals from various schools in the district, continues to meet and provide professional development for implementing the NGSSS for Science.

- The Science Department is part of the "CSI" Team, Curriculum Support and Instruction. The purpose of the team is to identify teachers of science who need support and provide mentoring of these teachers.
- Formative Assessment Probes (from Page Keeley's Uncovering Student Ideas in Science Volume 1 and 2) have been provided for Professional Development at the Science Leadership Team meeting. These books are then used in Professional Learning Communities at each school.
- **AIMS e-activities** and district-wide copyright has been purchased for the Science Benchmarks and added to the Intranet site. **AIMS** trainings are presented prior to the teaching of each benchmark according to the content timelines.
- Assistant Principals are receiving training of the NGSSS for Science aligned to the Science Content Timeline.
- ScienceSaurus books have been purchased for all Title One teachers and several other teachers in the district. Reference sheets aligned to the content timelines are provided. Teachers use these reference sheets to increase content knowledge. These trainings continue monthly on the use of ScienceSaurus to build teacher background knowledge.
- **AIMS** Florida Core Curriculums for Kindergarten and Grade 1 have been purchased for all Title One teachers and other interested teachers. Training for implementation has begun.
- Every elementary school in Osceola County has a Missions Science Lab from Pitsco Corp. monitoring and support of the labs is ongoing.
- Formative Assessments have been implemented in grade 1-5. Data is collected and used to drive instruction.

Osceola 6-12: No report given

Area Teacher Concerns and Needs:

K-12:

- K-5 still need the issue of number of minutes to teach science to be address from a state level. We have a wide range from 15 minutes a day to 60 minutes a day for teaching science being utilized by schools. Since science is assessed at the 5th grade level the trend has been minimal science for grades K-4 and then overwhelming pressure on 5th grade to cover 6 years worth of knowledge in a few months.
- K-5 still working on how to integrate science in the other disciplines.
- 6-12 we are working on creating common labs to be infused in the curriculum.
- 6-12 need of funds for lab equipment
- K-12 need of in-service PD days the are equitably distributed throughout school year with additional time for collaboration and reflection.
- K-12 length of planning periods need to increase.

II. Address Changes/Names:

None

III. Summary of Expenditures:

None