NASA/ NSTA Symposium: Successful Strategies for Involving Parents in Education
Thursday, November 8, 2007

1:30 PM
Welcome, Introductions, Goals for the Symposium
Al Byers, Assistant Executive Director of Government Partnerships and e-Learning, NSTA
Flavio Mendez, Symposia and Web Seminars Director, NSTA
- About NSTA Symposia
- Agenda/Goals/Forms/Logistics/Introductions
Laura Tucker, Workshop Coordinator, GEMS, Lawrence Hall of Science
Joan Sanders, NASA Explorer Schools Coordinator, NASA Johnson Space Center

1:50 PM
Introduction
Laura Tucker

2:05 PM
How Students Learn Best from the Parents Partners Handbook
Laura Tucker
Learning Outcomes:
- After participating in the presentation,
  - Participants will describe different teaching approaches and their strengths in helping students learn.
  - Participants will list key points in what research says about how students learn.

3:40 PM
Break

3:55 PM
Early Indicators and Parent Support Have Encouraged NASA Scientists and Engineers
Joan Sanders
Learning Outcomes:
- After participating in the presentation,
  - Participants will describe one example of how parent involvement can play a role in a child’s career.
  - Participants will list careers at NASA other than scientists and engineers.

4:15 PM
Build It! Festival Teacher’s Guide
Laura Tucker
Learning Outcomes:
- After participating in the activity,
  - Participants will describe how a “Build It! Festival” type of activity can be used successfully for family math events at their school.
Final Words

- Post-assessment form
- Evaluation form/Survey/Credit info
- NSTA Web Seminars
- Raffle of door prizes

National Science Education Standards Addressed:
Professional Development Standards

Professional Development Standard B:
Professional development for teachers of science requires integrating knowledge of science, learning, pedagogy, and students; it also requires applying that knowledge to science teaching. Learning experiences for teachers of science must:

- Connect and integrate all pertinent aspects of science and science education.
- Occur in a variety of places where effective science teaching can be illustrated and modeled, permitting teachers to struggle with real situations and expand their knowledge and skills in appropriate contexts.
- Address teachers' needs as learners and build on their current knowledge of science content, teaching, and learning.
- Use inquiry, reflection, interpretation of research, modeling and guided practice to build understanding and skill in science teaching.

Professional Development Standard C:
Professional development for teachers of science requires building understanding and ability for lifelong learning. Professional development activities must:

- Provide opportunities to know and have access to existing research and experiential knowledge.
- Provide opportunities to learn and use the skills of research to generate new knowledge about science and the teaching and learning of science.

Professional Development Standard D:
Professional development programs for teachers of science must be coherent and integrated. Quality pre-service and in-service programs are characterized by:

- Clear, shared goals based on a vision of science learning, teaching, and teacher development congruent with the NSES.
- Options that recognize the developmental nature of teacher professional growth and individual and group interests, as well as the needs of teachers who have varying degrees of experience, professional expertise, and proficiency.
- Collaboration among the people involved in programs, including teachers, teacher educators, teacher unions, scientists, administrators, policy makers, member of professional and scientific organizations, parents, and business people, with clear respect for the perspectives and expertise of each.
- Recognition of the history, culture, and organization of the school environment.