

AGENDA
2008 National Congress on Science Education (NCSE)
Transition to Transformation: Highly Qualified to Highly Effective
Indianapolis, Indiana
July 16-19, 2008

WEDNESDAY, JULY 16TH

MEETING ROOM

7:30am	Board/Council Breakfast	Marriott 9
8:30am – 2:30pm	Board and Council Retreat.....	Marriott 7/8
4:30 – 5:45pm	Focus Group Co-Facilitator Meeting	Columbus
3:00 – 7:00pm	Registration & HASTI Welcome.....	Monument
4:30 – 6:00pm	Alliance of Affiliates Meeting	Santa Fe
6:00 – 7:00pm	Welcome/Congress Overview	Indiana E
	<ul style="list-style-type: none"> • Welcome Address – Page Keeley, NSTA President • Introductions and Recognition of honored guests • Congress Overview • Plenary Session – Page Keeley, NSTA President <i>“Science Education –The Times They Are A Changin’”</i> • Speaker - Gerry Wheeler, NSTA Executive Director <i>Science Education–A Half-Century in Retrospect</i> • Introducing Dr. Francis Eberle, incoming NSTA Executive Director 	
7:15 – 8:00pm	Wine & Cheese Reception	Indiana F/G
	<i>(Hosted by the Hoosier Association of Science Teachers [HASTI])</i>	
8:00pm	Dinner on your own – Are you eating alone? You may wish to meet other Congress Attendees in the lobby to form optional dinner groups.	

THURSDAY, JULY 17TH

7:00am–5:00pm	Registration.....	Indiana E
7:15 – 8:00am	Breakfast - Seating by Districts	Indiana A-D
	<i>Drawing for Focus Group Scavenger Hunt Contest Winners</i>	
8:00 – 8:15am	Introductions – <ul style="list-style-type: none"> • District Director Roll Call of Delegates 	
8:15 – 8:30am	Credentials Committee Meeting	Indiana E Foyer
	<ul style="list-style-type: none"> • Chair: Page Keeley, NSTA President; Members: Mary Lightbody, District X Director, Jim Puckett - District XI Director, Laura Rutledge - District III Director Ken Rosenbaum – Chapter Relations Consultant 	

*NSTA wishes to acknowledge **CIM Audio Visual** for graciously supplying the Liquid Crystal Displays (LCD) projectors for this meeting. Thank you for helping to support the NSTA mission to promote excellence and innovation in science teaching and learning for all.*

8:30 – 9:15am **CONGRESS GENERAL SESSION I** Indiana E

- 1) Call To Order, Page Keeley, NSTA President
- 2) Adoption of Agenda
- 3) Report of Credentials Committee
- 4) Approval of Minutes 2007 Congress
(Approved by 2007 Planning Committee: Heidi Kellar, Jim Redmond, Adrienne Elder)
- 5) Orientation and Motion Matrix – President Page Keeley and NSTA Executive Director
- 6) Adoption of Operating Policies
- 7) Acknowledgment of Resolutions from Chapters and Associated Groups
- 8) Requests for Additional Focus Groups
- 9) Announcements

9:30 – 10:30am **FOCUS GROUP BREAKOUT SESSIONS** (choose one)

FOCUS GROUP #1 Elementary Science in the K-12 System..... Indiana A

Leader- Julie Taylor – Congress member of NCSE 08 Planning Committee

Facilitator – Kathy Renfrew – NSTA District II Director

Abstract: NCLB has brought about a transition in elementary classrooms where the focus on reading and mathematics has significantly short-changed students' opportunities to learn science. This transition has also affected opportunities for professional development in science for elementary teachers. A major transformation in understanding the critical role of elementary science in the K-12 continuum of learning and making science a core subject in all grades is needed. This transformation needs support from all levels of the system, including the advocacy of middle and high school teachers who are beginning to feel the effect of a short-changed K-12 science program. The focus of this session will be to explore ways for all science educators to be involved in and support the need for elementary science education in our schools, including highly effective elementary science teachers.

Guiding Questions and Issues to Consider:

1. What transitions, both positive and negative, have we seen in elementary science since the passage of NCLB?
2. Why is elementary science critical to the development of a science literate nation?
3. What are some ways K-12 educators in state chapters, affiliated groups, and NSTA can become better advocates for elementary science in the K-12 curriculum?
4. What transformation needs to happen in order for elementary science to be a core subject area in the K-12 curriculum?

Resources:

1. Science Education's 'Overlooked Ingredient' by Harold Pratt
http://science.nsta.org/nstaexpress/nstaexpress_2007_10_29_pratt.htm
2. Science Instruction: An Endangered Species
http://findarticles.com/p/articles/mi_qa4009/is_200801/ai_n21186226/print
3. NSTA Position Statement on Elementary School Science
<http://www.nsta.org/about/positions/elementary.aspx>

FOCUS GROUP #2 21st Century Skills Indiana B

Leader – Ruth Ruud - NCSE 08 Planning Committee Member

Facilitator – Susan Van Gundy NSTA District XIV Director

Abstract: Every aspect of our lives, including education, has been affected by the digital age. With this transition has come the need to focus on new skills our students will need to function successfully in the 21st Century. The focus of this session will be to explore ways to incorporate 21st Century Skills in the science classroom, including transforming from generic skills to science specific skills in appropriate science contexts. The session will explore what needs to happen to make this transformation content-specific in the science classroom.

Guiding Questions and Issues to Consider:

1. What skills does the 21st Century Learner need to become a science literate citizen?
2. What needs to be done in order to transition science classrooms into 21st Century environments for learning?
3. What pivotal role should technology play in 21st century science education?
4. What transformation in science teaching and learning can occur with successful implementation of 21st Century skills into the science curriculum?

Resources:

1. Partnership for 21st Century Skills Web Site. A variety of articles, resources, and information on 21st Century Skills can be read or downloaded from this comprehensive site.
<http://www.21stcenturyskills.org/>

FOCUS GROUP #3 Teaching Science to Students of Poverty Florida

Leader – Gail Sinkule - NCSE 08 Planning Committee Member

Facilitator – Cherry Brewton Former, AMSE President

Abstract: Poverty is a national issue that knows no boundaries when it comes to race, culture, ethnicity, and geography. Poverty affects student learning in urban, suburban, and rural schools. Students' opportunities to learn and succeed in science are affected when they grow up in poverty. Students of poverty have fewer opportunities to experience science outside of school, access to fewer resources, lower aspirations, and immediate needs for day to day survival that often trump academic responsibilities. The focus of this session will be to explore the issues of poverty that affect science learning, ways science education can help students break through the poverty barrier, and how teachers and informal educators can be more effective in teaching students of poverty

Guiding Questions and Issues to Consider:

1. How can the actions of science educators improve opportunities for children of poverty to learn?
2. What factors do we need to be aware of that contribute to difficulties in learning science for children living in poverty?
3. How can opportunities to learn science help students break out of the cycle of poverty?
4. What can science educators, including state chapters, affiliates, and NSTA do to help transform the lives of children living in poverty?

Resources:

1. "The Impact of Poverty Upon Schools"
http://www.wcpss.net/evaluation-research/reports/1999/9920_poverty.pdf
2. "Poverty and Education - Overview, Children, and Adolescents"
<http://education.stateuniversity.com/pages/2330/Poverty-Education.html>
3. "The Effects of Poverty on Teaching and Learning"
<http://www.teach-nology.com/tutorials/teaching/poverty/6/>
4. Connecting Components of Scientific Inquiry and Instructional Strategies for Teaching Students in Urban Classrooms
http://novationsjournal.org/content/original_story.pl?story=14

**FOCUS GROUP #4 Transforming Science Teacher Practice Through..... Indiana D
Professional Learning Communities**

Leader – Linda Atkinson, NSELA President

Facilitator – Laura Rutledge – Council member of NCSE 08 Planning Committee

Abstract: Schools across the country are transitioning to forms of site-based, teacher-led professional development. One of the increasingly common forms of this type of embedded professional development is the professional learning community (PLC). PLC's are becoming more common in schools as well as in non-school settings (e.g. online). However, merely transitioning to this type of professional development does not ensure deep learning takes place. A transformation in the type of learning that happens in professional learning communities is needed. The focus of this session is on how to transform professional learning communities with the resources, science expertise, and structures needed so that PLC's can support highly effective teaching.

Guiding Questions and Issues to Consider:

1. What does it take to make the transition toward more embedded forms of professional development in science such as Science Professional Learning Communities (PLC's)?
2. What are the current impediments to the successful implementation of Science Professional Learning Communities?
3. What attitude and/or policy changes are needed at the school, district, state, and national levels to successfully support transformative professional development through Science Professional Learning Communities?
4. How can the Chapters and Associated Groups, Alliance of Affiliates, and NSTA promote Science Professional Learning Communities that are consistent with the NSTA Position Statement on Professional Development?

Resources:

1. What Is a Professional Learning Community?
http://pdonline.ascd.org/pd_online/secondary_reading/el200405_dufour.html
2. Professional Learning Communities: Professional Development Strategies That Improve Instruction <http://www.annenberginstitute.org/pdf/proflerning.pdf>
3. Sustaining School Improvement: Professional Learning Community
http://www.mcrel.org/PDF/LeadershipOrganizationDevelopment/5031TG_proflrncommfoliopdf
4. NSTA Position Statement on Professional Development:
<http://www.nsta.org/about/positions/profdev.aspx>

FOCUS GROUP #5 STEM (Science, Technology, Engineering, and Mathematics) Indiana C

Critical to America's Prosperity

Leader – Linda Lacy, Science Teachers of Missouri

Facilitator – Jim Puckett – Council member of NCSE 08 Planning Committee

Abstract: In the past few years we have transitioned from a focus solely on science or mathematics to a focus on STEM. STEM issues, including K-12 education, higher education, the work force, and America's competitiveness in a global economy are at the forefront of public policy, media attention, and science educators' concerns. Increasing attention is focused on preparing our science students to enter America's pipeline for careers in science, engineering, and technology. With so much attention focused on STEM careers, we can't lose sight of the importance of basic STEM literacy- ensuring that every student, regardless of whether they go on to study science after high school or enter STEM careers, can function in society as a STEM literate adult. The focus of this session is to explore current STEM issues, including the balance between preparing our students for STEM careers and ensuring that our students who do not go on to STEM careers are "STEM literate".

Guiding Questions and Issues to Consider:

1. What obstacles currently impede the successful implementation of K-12+ STEM literacy programs?
2. What attitude and/or policy changes are needed at the district, state, and national levels to successfully transition from K-12+ science or mathematics literacy to STEM literacy?
3. What actions need to be taken by the various stakeholders (students, parents, teachers, school districts, business leaders, as well as the state and federal governments) to promote quality STEM literacy programs that include the "T" and "E" in K-12 science?
4. How can the Chapters and Associated Groups, Alliance of Affiliates, and/or National Science Teachers Association work to transform K-12+ STEM education?

Resources:

1. Nat. Governors Association: Building a Science, Technology, Engineering and Math Agenda (www.nga.org/Files/pdf/0702INNOVATIONSTEM.pdf)
2. Teaching Institute for Excellence in Stem: Attributes of STEM Education (www.tiesteach.org/documents/Attributes_of_STEM_Education.pdf)
3. Congressional Research Service: Science, Technology, Engineering, and Mathematics (STEM) Education Issues and Legislative Options (fas.org/sgp/crs/misc/RL33434.pdf)
4. Education Week: Where's the T and E in STEM Education? (<http://www.edweek.org/ew/articles/2008/03/27/30stemtech.h27.html?print=1>)

FOCUS GROUP #6 Bridging the Gap from Research to Practice Illinois

and from Practice to Research

Leader – Rick Duschl - NARST

Facilitator – Christine Royce NSTA District IV Director

Abstract: Since the release and implementation of national and state standards over a decade ago, the research base in science teaching, student learning, and professional development has expanded significantly. This research has the potential to transform teaching and learning when it becomes accessible to and used by practitioners. Likewise, practitioners should also inform the research agenda. The focus of this session is to explore the gap between research and practice in science education and consider how researchers and practitioners can inform each other.

Guiding Questions and Issues to Consider:

1. To what degree does (and should) research inform practice in science education in the United States?
2. How can the researchers and the practitioners make stronger connections with each other?
3. How can the science education community (including NSTA) help develop a structure for “research, development, and implementation in science education that will explicitly address problems of educational practice in schools while advancing fundamental understanding of children’s learning in science”?

Resources:

1. Excerpts from: Engaging teachers in research on science learning and teaching. Van Zee, E. & Roberts, D. (2008). www.nsta.org/congressFG6/teacher_research.pdf
2. Integrating educational research and practice: Reconceptualizing the goals and process of research to improve educational practice. Sabelli, N. and Dede, C. (1998). http://www.virtual.gmu.edu/SS_research/cdpapers/integrating.htm
3. National Academies Press: Taking science to School: Learning and teaching science in grades K-8. Washington, DC Executive Summary available online at: http://www.nap.edu/nap-cgi/execsumm.cgi?record_id=11625

10:30 – 10:45am	BREAK.....	Indiana Foyer
10:45 – 11:45am	FOCUS GROUP BREAKOUTS (continued)	
11:45am -1:15pm	LUNCH ON YOUR OWN	
11:45am -1:15pm	Alliance of Affiliates working lunch Chair: John Whitsett, NSTA Retiring President	Hospitality 1520
1:15 – 2:45pm	FOCUS GROUP BREAKOUTS (continued)	
2:45 – 3:45pm	PowerPoint Presentations – Focus Group Sharing (Snacks provided)	Indiana E
3:45 – 5:15pm	Alliance of Affiliates Meeting John Whitsett, NSTA Retiring President, Presiding (NSTA Board/Council Directors may attend)	Hospitality 1520
3:45 – 4:30pm	Focus Groups write report summaries and prepare resolutions for submission to the Congress. (Note: Please use jump drives or other portable media for submissions)	
4:30pm	Resolutions to be turned in to Michelle Butler.....	Indiana E
5:30pm	Gather in lobby to board buses	
5:50pm	Bus departs for Indianapolis Children’s Museum (Ticketed event, \$55 includes transportation & dinner - casual attire.)	Missouri St.
9:30pm	Buses depart to return to hotel	

FRIDAY, JULY 18TH

7:30AM –5:00pm	Registration	Indiana Foyer
7:30 – 8:30am	Breakfast (Seating by District)..... <i>(Resolutions distributed and discussed within Districts)</i>	Indiana F-G
8:30 – 11:30am	CONGRESS GENERAL SESSION II 1) Remarks from Page Keeley, NSTA President 2) Vote on resolutions 3) Election of 2009 Congress Planning Committee 4) 2009 NCSE Announcement, Pat Shane, NSTA President-Elect	Indiana E
11:30am–5:00pm	Open NSTA Council Meeting	Indiana F-G
12:30am–1:15pm	Lunch for Board & Council	Marriott 10
1:30 – 2:30pm	CONGRESS WORKSHOP SESSION I (choose one)	
	A) Fund Raising for Your Chapter	Indiana A Get tips and a back-to-basics lesson on the role of non-profit boards in fundraising. Larry Rzepka —Assistant Executive Director, Development and Corporate Relations
	B) Getting Published in NSTA Books and Journals	Indiana B Books, journals, online: The content our readers are looking for (this year anyway) and the most efficient ways to submit your work. David Beacom – NSTA Associate Executive Director and Publisher
	C) Parliamentary Procedure 101	Indiana C Learn how to run an efficient and productive board meeting. You will actively participate in a model board meeting. (This session is repeated in Workshop Session III) Ed Frazier —Executive Director HASTI
	D) Chapter Budgeting and Financial Advice	Indiana D What are the fiduciary responsibilities of your board and the impact of the financial management of your association? Get some tips about Chapter budgeting and financial advice for those responsible for your organization’s finances. Randy Johnson —NSTA Treasurer
	E) Round Table Discussion	Florida Topic: Involving Parents in Science Education Come share your views, success stories, and needs with fellow congress attendees. Gail Sinkule —Congress member of NCSE 08 Planning Committee
	F) Open Council Meeting	Indiana F-G
2:30 – 3:00pm	BREAK (with networking opportunity and snack)	Indiana Foyer

3:00 – 4:00pm

CONGRESS WORKSHOP SESSION II (choose one)

- A) **Marketing Your Chapter for Success** Indiana A
Learn how to market your association in discussions of marketing activities and how to manage mailings and mailing lists.
Ed Rock—NSTA Associate Executive Director, Marketing

- B) **Using Electronic Resources to Increase Science Content Knowledge** Indiana B
Raise your awareness as you learn about the NSTA Electronic professional development portal: The NSTA Learning Center, its tools and its resources. This is information you will want to take home to your Chapter’s Professional Development Committee.
Al Byers—NSTA Assistant Executive Director, E-Learning & Government Partnerships

- C) **Enhancing Membership in Science Professional Organizations** Indiana C
Learn strategies to recruit and retain members and how to keep your association “front-of-mind” for your members using social networking tools, and other engagement tactics.
Howard Wahlberg—NSTA Assistant Executive Director, Membership

- D) **Strategic Planning—Getting Started** Indiana D
Feel that you are struggling to survive from one conference to another? Learn how a strategic plan can allow your Chapter to move forward and plan for the future beyond the next annual conference.
Ken Rosenbaum—NSTA Chapter Relations Consultant

- E) **Round Table Discussion** Florida
Topic: Resources for Hot Button Issues (may include Nutrition and Obesity; Health; Evolution; Global Warming; etc)
Come share your views, success stories, and needs with fellow congress attendees.
Ruth Ruud—Congress member of NCSE 08 Planning Committee

- F) **Open Council Meeting** Indiana F-G

5:00 - 6:00pm

The Great Gift Give Away Indiana E
Come to this pre-dinner networking opportunity and perhaps your number will be drawn and you will receive a great gift! Chapters in attendance will bring and present their special gifts from their state at this exciting social event. Bring an item or items from your chapters or groups, a product from your state, or other unique gifts associated with your role. All attendees are welcome to share in the fun whether you bring a gift or not!

6:00pm

Dinner on Your Own

SATURDAY, JULY 19th

- 7:00AM–3:00pm Registration Indiana Foyer
- 7:30 – 8:30am Breakfast Indiana A-D
Report of the President—Challenges, Goals, and Plans, Page Keeley, NSTA President

8:45 – 9:45am **CONGRESS WORKSHOP SESSION III** (choose one)

- A) **Financial Responsibilities of Nonprofit Associations** Florida
Learn the ins and outs of budgeting, 501 C3 tax status, financial reports, and fiscal planning.
Moira Fathy-Baker—NSTA CFO and COO

- B) **Parliamentary Procedure 101** Illinois
Learn how to run an efficient and productive board meeting. You will actively participate in a model board meeting.
(This session is a repeat of a session in Workshop Session I)
Ed Frazier —NSTA Parliamentarian

- C) **Fund Raising for Your Chapter** Santa Fe
Get tips and a back-to-basics lesson on the role of non-profit boards in fundraising.
Larry Rzepka—Assistant NSTA Executive Director, Development and Corporate Relations

- D) **Round Table Discussion –** Lincoln
Topic: English Language Learners
Come share your views, success stories, and needs with fellow congress attendees.
Julie Taylor— Congress member of NCSE 08 Planning Committee

- E) **Open Board Meeting**..... Indiana F-G

10:00 – 11:00 am **CONGRESS WORKSHOP SESSION IV** (choose one).

- A) **Using Marketing Focus Groups to Inform Your Chapter**..... Santa Fe
Learn how local leaders can use marketing focus groups to get your members involved and identify science education and organizational issues.
Tyson Brown —NSTA Director of SciLinks
David Beacom—NSTA Associate Executive Director and Publisher

- B) **State Chapter Conferences Tips for Success**..... Lincoln
Meet chapter leaders who have had successful conferences and get tips and strategies that you may wish to use to make your Chapter conference a greater success
Gail Sinkule—Past President Georgia Science Teachers Association
Mike Mansour—Past President Metropolitan Detroit Science Teachers Association

- C) **Math Science Partnerships** Florida
Learn more about the state Math-Science Partnership grants and how you can get involved. Are you part of a state MSP? Learn how NSTA resources can support MSP professional development.
Kelly Price—District V Director and MSP Project Director

- D) **Round Table Discussion** Illinois
Topic: Balancing Summative Assessment with Formative Assessment
Come share your views, your success stories, resources, and needs with fellow Congress attendees on formative assessment. This session will explore the need to move beyond a focus on testing and include formative assessment as part of a

balanced assessment system that includes professional development in formative assessment.

Charlotte Bihm —Louisiana Science Teachers Association President

E) **Open Board Meeting**..... Indiana F-G

11:15am–12:30pm **CONGRESS CLOSING SESSION AND LUNCHEON** Indiana A-E
(Lunch provided)

- Election results for NCSE '09 Planning Committee
- Report on Resolutions sent to Council and Board
- Collection of Evaluation Forms

Afternoon/Evening—On Your Own

12:45 – 2:15pm 2008 & 2009 Planning Committee Members Illinois
After Action Review (Facilitator – Ken Rosenbaum)

12:45 – 5:00pm **Board Meeting**..... Indiana F-G

SUNDAY, JULY 20th

7:00am–9:00am Board Meeting (closed session) Indiana F-G

9:00am–11:00am Board Meeting (open session) Indiana F-G