

**From Vision to Practice Fourth Annual Academy
Growing SySTEMic Literacy Across the Content Areas
Schedule at a Glance
July 8-10, 2008
8:30 a.m. – 4 p.m.
(Registration 7:30 a.m. - 8:30 a.m.)**

Tuesday, July 8, 2008

9 a.m. - 10:30 a.m. First Plenary Session
Dr. Yvonne Spicer
Assistant Director, Boston Museum of Science

Keynote: K-12 Engineering Education: A Global Imperative
Although technological literacy has become *essential* to informed participation in the democratic process and to our economic well-being, traditional instruction has not emphasized its application. Dr. Spicer will address the need to focus education on content in technology and engineering beginning with the primary grades and beyond.

10:30 a.m. - 10:45 a.m. Break

10:45 a.m. - 12:15 p.m. Breakout Sessions

Presenters	Sessions
Dr. Tim Rasinski	Teaching Essential Literacy Skills in the STEM Subjects All teachers are teachers of reading and all subject areas require reading. In its survey of empirical research on reading, the National Reading Panel has identified phonics or word decoding, vocabulary, reading fluency, and reading comprehension as essential components in any effective reading program. In this workshop, Dr. Rasinski will share proven and effective instructional strategies and methods for teaching word decoding, vocabulary, reading fluency, and reading comprehension to students at all grade levels and in all subject areas. Particular emphasis will be given to Science, Technology, Engineering, and Mathematics (STEM) subject areas.
Dr. Debby Deal	Content Reading Strategies: Tools for Learning Mathematics Are your students struggling with basic mathematics and Algebra concepts? In this session, middle school mathematics teachers will be introduced to research-based, practitioner-endorsed, hands-on reading and writing strategies that develop mathematical literacy.

<p>Dr. Mike McKenna</p>	<p>Teaching Technical Vocabulary in Science: Getting to the Roots of STEM This session will present research-based instructional methods for introducing and reinforcing science vocabulary. An extensive handout describing techniques, providing templates, and identifying online sources will be provided.</p>
<p>Dr. Robin Scarcella</p>	<p>The Development of Academic Language: Facilitating Connections Across Grades and Content Instruction This presentation will help K-12 teachers and administrators support the instruction of academic language. It will focus on facilitating connections across grades and content instruction with particular emphasis on science and mathematics. The session will focus on the critical literacy skills diverse learners require, the challenges they face, and the instructional practices that accelerate learning of academic language in science and mathematics.</p>
<p>David and Phyllis Whitin</p>	<p>Linking Literature and Mathematics In this interactive session, a range of strategies that teachers have used to integrate literature and mathematics will be shared. Participants will learn ways to use literature to inspire mathematics-related writing, including descriptive narratives, word problems, and poetry. A variety of books will be shared to show how they relate to key mathematical concepts and skills. Many examples of children's work will be shown to demonstrate how teachers have used these resources to meet grade-level objectives.</p>
<p>Dr. Yvonne Spicer</p>	<p>Making the Connection: Engineering in Your Students' Future A promising way to capture students' interests in science, mathematics, and engineering is to start their high school experience with an engaging engineering course. This hands-on workshop will take participants on a condensed journey through the newly published curriculum, <i>Engineering the Future: Science, Technology, and the Design Process</i>, developed and field-tested by the National Center for Technological Literacy® at the Museum of Science, Boston. <i>Engineering the Future</i> guides students through team activities mapped to challenging technology/engineering standards, encompassing the engineering design process, structures and materials, fluid power, heat engines, electric circuits, and communication systems. During this workshop participants will take on the roles of working engineers, exploring the science and technology involved, to design and build models and/or mechanisms to solve an assigned problem.</p>

<p>Dr. Jeanne Paratore</p>	<p>Teaching Students to Read and Respond to Content-Area Texts: Learning from Research and Excellent Teachers In this session, participants will examine and discuss evidence related to effective instruction of content area texts. Through the use of videotapes, participants will visit classrooms and observe excellent teachers who make the evidence come alive. <i>Appropriate for grades 3-8 teachers.</i></p>
<p>Dr. William Bintz</p>	<p>Literature as Tools for Learning: Using High-Quality and Award-Winning Literature to Teach Mathematics and Science This session invites active engagement by participants. Its purpose is to provide a compelling rationale for using literacy across the curriculum. A variety of texts that can be used to teach important content standards in mathematics and science will be presented. Participants will be actively involved in how to implement effective classroom strategies with the award-winning texts.</p>
<p>Nick Boke</p>	<p>Integrating Math and Science into Content Instruction In this workshop, participants will examine some assumptions many mathematics and science teachers have about reading, text, and students. A variety of techniques for helping students become more effective and independent readers of STEM materials will be demonstrated. The goal of the session will be to enable teachers to use print materials as springboards for in-depth exploration of the material they teach. An electronic copy of <i>Reading To Learn: A Classroom Guide to Reading Strategy Instruction</i> will be provided to all participants.</p>
<p>Chris O’Neal</p>	<p>Leading the Digital Learners How do we ensure that technology across the content areas is meaningful? How do we manage the use of technology within the context of Standards of Learning (SOL) and accountability? What are our students doing outside school with technology that might have a role inside school? What tools exist that make technology easier to integrate than ever before? This session will address the above questions and discuss trends of today's learners. Connections between the MySpace generation and the classrooms of today will be made.</p>

<p>Dr. Tricia Easterling</p>	<p>SmartBoards: More Than Just Big Touch Screens and the Students Who Love Them This session will show specific ideas that teachers have implemented in a variety of grade-level settings with SmartBoards. A connection will be made to the positive influence SmartBoards have made in student participation and learning. Attendees will be encouraged to use the SmartBoard during the session.</p>
<p>Marlene Thier</p>	<p>Using Language Skills to Help Students Learn Science In this session, participants will look at <i>The New Science Literacy</i> to understand that both science and literacy call upon reciprocal sets of skills. Participants will learn that it is natural to combine mastery of science and language at the same time. The session will also provide detailed teaching strategies rooted in the principles of guided inquiry. Multiple examples of classroom-based activities that teachers can use to meld the two disciplines will be presented. Explicit performance expectations that teachers and students can use to guide and assess growth in the use of language through science activities will be demonstrated.</p>
<p>Dr. Russ Gersten</p>	<p>The National Mathematics Panel and Implications for Systemic Change in Mathematics Instruction The National Mathematics Panel report is scheduled to be released in early March 2008. The report provides broad recommendations in the areas of curriculum refinement, formative assessment, and instructional practice for struggling learners. The goal of this session is to provide a framework for taking these recommendations and creating specific plans for schools to use to assist students who struggle in mathematics. The presentation will include a discussion of the content of intervention classes for struggling students, the research-based teaching strategies to be used, and the types of screening measures that are valid. Participants will work in teams to develop a feasible plan for implementation of classes or programs for students who struggle with mathematics.</p>
<p>Dr. Joe Busby</p>	<p>Globalizing Education: Authentic Learning Activities That Link Students in Distant Classrooms The flattening of the world is happening in all aspects of the human experience including education. This session will introduce participants to globalization research in education and associated activities. Participants will also work in groups to recognize strategies and develop connections for implementation of globalization activities into their classrooms.</p>

12:15 p.m. - 1:30 p.m. Buffet Lunch and Keynote Speaker:
Dr. Chrystal Kuykendall, President and General Counsel
Kreative and Innovative Resources for Kids (K.I.R.K., Inc.)

SySTEMically Bringing Out the BEST in ALL Students
Dr. Kuykendall will share insight on the impact of illiteracy, alienation, apathy, anger and poor achievement in underperforming students with a special emphasis on Science, Technology, Engineering, and Mathematics. Dr. Kuykendall will provide insight, inspiration, information, and encouragement to improve teacher effectiveness in growing sySTEMic literacy.

1:30 p.m. - 4 p.m. Breakout Sessions Repeated with Additional Sessions:

Presenters	Sessions
Dr. Tim Rasinski	Teaching Essential Literacy Skills in the STEM Subjects (Repeat of morning session)
Robin Scarcella	The Development of Academic Language: Facilitating Connections Across Grades and Content Instruction (Repeat of morning session)
Dr. Daniel Dickerson	Technology and Literacy in Elementary Science Education Science education serves as a wonderful context to engage in literacy teaching and learning, particularly when coupled with technology integration. This session will address the use of technological tools (e.g., tablet PCs and probeware) in an inquiry-based approach that enhances students' literacy. In this session, science teachers will have the opportunity to engage in hands-on activities that demonstrate the potential of these instructional tools. Participants will receive sample lessons, activities, software, and information on obtaining technology for their students. <i>Appropriate for grades 6-12 teachers; limited to 24 participants.</i>
Dr. Mike McKenna	Teaching Technical Vocabulary in Science: Getting to the Roots of STEM (Repeat of morning session)
David and Phyllis Whitin	Linking Literature and Mathematics (Repeat of morning session)
Dr. Debby Deal	Content Reading Strategies: Tools for Learning Mathematics (Repeat of morning session)

Dr. Jeanne Paratore	<p>Teaching Students to Read and Respond to Content-Area Texts: Learning from Research and Excellent Teachers (Repeat of morning session)</p>
Dr. William Bintz	<p>Literature as Tools for Learning: Using High-Quality and Award-Winning Literature to Teach Mathematics and Science (Repeat of morning session)</p>
Dr. William Brozo and Courtney Gaskins	<p>Expanding Academic Literacy in Mathematics and Science: Gender Appropriate Practices In this session, participants will learn how to incorporate a range of effective, evidence-based literacy strategies into their science and mathematics lessons. Participants will also discover how to use content literacy practices to maximize engagement and learning for students in mathematics and science classrooms. The session will be organized around the guiding principles of adolescent literacy and gender appropriate practice. This session will also include simulations, micro-teaching, and guided practice.</p>
Dr. Lynell Burmark	<p>Technology and Differentiated Instruction: New Tools for a Timeless Purpose Every child is different. What strategies can educators use to meet their needs and match their learning styles? What is their background knowledge and experience? What alternatives do educators have to text-based instruction? How can videos, software, digital cameras be effectively used? What about assessment? This session will provide insider tips for harnessing technology to enhance and accelerate student learning. Participants will learn how PowerPoint can customize games by grade-level and subject area. Participants will also learn how to use their LCD projectors to “unpack” images and create “progressive stories.” This session will encourage participants to experiment with different groupings of learners so every child has the chance to be seen as an expert by his peers.</p>
Dr. Barbara Palmer	<p>Research-based Comprehension Strategies for Content-Area Reading This action-oriented, hands-on session will feature several research-supported strategies for increasing comprehension in content-area reading. Of particular interest to educators working with diverse populations, including English Language Learners (ELLs), a model for using figurative language interpretation instruction as a vehicle for moving struggling readers to striving readers will be presented. The following assessment tool: <i>Figurative Language Interpretation Test (FLIT)</i> and <i>Teaching Students to Read and Respond to Content-Area Texts: Learning from Research and Excellent Teachers</i> will be used. <i>Appropriate for grades 5-12 teachers.</i></p>

Dr. Chrystal Kuykendall	Strategies to Enhance the STEM Success in ALL Students Building off her keynote presentation, Dr. Kuykendall will provide strategies, tips, ideas, and information that can be used to improve student achievement in science, technology, engineering, mathematics and other areas as well.
Miki Murray	Developing Mathematics Vocabulary in Context: A Key to Mathematical Proficiency This presentation will describe and demonstrate proven tools for incorporating rigorous vocabulary development into any mathematics program. Five categories of strategies: classroom management; classroom culture; assessment; routines and rituals; and differentiated vocabulary assignments will be shared. These categories of strategies will be experienced by participants in the context of several content strands such as problem-solving, geometry, and number operations.
Dr. Tricia Easterling	SmartBoards: More Than Just Big Touch Screens and the Students Who Love Them (Repeat of morning session)
Marlene Thier	Using Language Skills to Help Students Learn Science (Repeat of morning session)

July 9, 2008
 Full-Day Session Agenda
 (Pre-registration required)

These sessions are all-day sessions and require pre-registration and selection of a session. Go to: <http://www.cpe.vt.edu/reg/vtop> to register and select the session. Participants will be given tickets to the session of their choice on a first-come-first-served basis. Due to limited space availability and materials, participants will be expected to attend the seminar assigned for the day.

July 9: All-Day Sessions: Pre-Registration Required
8:30 a.m. – 4 p.m.

Registration - 7:30 a.m. - 8:30 a.m.

9 a.m. - 10:30 a.m. First Plenary Session
 Byron Pitts, CBS News Correspondent

Literacy: Unlocking the Miracle of Words

Now a national news correspondent for CBS, Byron Pitts was illiterate until the age of twelve and had a constant stutter. His mother tapped into his love of football to help him learn to do well in school. By staying focused, setting simple and achievable goals, and finding strength in faith, Pitts overcame powerful odds. He will share his incredible story of turning his struggle into strength through the power of literacy.

10:30 a.m. - 10:45 a.m. Break

10:45 a.m. - 12:15 p.m. Breakout Sessions

Presenters	Sessions
Dr. Lynell Burmark	<p>Reaching Every Learner This session will demonstrate how participants can use multiple intelligences, differentiated instruction, cooperative and project-based learning, and an image-based approach to instruction to guarantee student success. Participants will experience replicable classroom activities that can be adapted across the curriculum. This full-day workshop will engage both gray cells and laughing muscles. It will give new meaning (and uses for) Snickers bars and No. 2 pencils, and take koosh balls and video clips to new heights. An extensive handout with references and resources will be provided.</p>

Dr. Joan Kindig	<p>Adolescent Reading: Books for the Middle and High School Student from Reluctant to Eager Readers</p> <p>This workshop will focus on the wide range of books for adolescent readers that reflect their developmental stage and far-ranging interests. Specific books for reluctant adolescent readers will be presented. Activities will be shared that are designed to deepen students' understanding of text. A bibliography will be available. <i>Appropriate for middle and high school teachers.</i></p>
John Golden	<p>Reading in the Reel World</p> <p>In a culture overwhelmed with news, information, and images, students need to be aware of the ways that nonfiction media - newspapers, documentaries, research studies, opinion pieces - seek to influence their personal, social, and political decisions. Because students need to read in the classroom and also in the real world, the session will examine how to use documentaries in the classroom as a way to teach critical thinking and literacy skills. The goal of this session will be to help teachers become comfortable in using film to practice practical, classroom-ready reading strategies essential for teaching nonfiction print texts.</p>
Dr. Daniel Dickerson	<p>Technology and Literacy in Elementary Science Education</p> <p>Science education serves as a wonderful context in which to engage in literacy teaching and learning, particularly when coupled with technology integration. This session will address the use of technological tools (e.g., tablet PCs and probeware) in an inquiry-based approach that enhances students' literacy. In this session, elementary science teachers will have the opportunity to engage in hands-on activities that demonstrate the potential of these instructional tools. Participants will also have the opportunity to develop and facilitate a mini-lesson using the technology. Participants will receive example lessons, activities, software, and information on obtaining technology for their students. <i>Limited to 24 participants. Appropriate for grades K-6 teachers.</i></p>
Dr. Janet Allen	<p>Where Do Great Lessons Begin? Creating Reading and Writing Foundations that Lead to Learning</p> <p>Great lessons begin with student engagement and the right text. Great lessons continue with effective strategy instruction that includes modeled learning, guided practice, and independent application. This interactive workshop will include a demonstration, the use of instructional tools, and resources that help build students' background knowledge and vocabulary as the foundation for reading and writing success.</p>
Dr. William Bintz	<p>Using an Interdisciplinary Text Cluster and Paired Texts to Teach Mathematics and Science</p> <p>This session invites active engagement by participants. Its purpose is three-fold: 1) provide an overview, rationale, and example of an interdisciplinary learning cluster, 2) invite participants to actively</p>

	<p>experience how this cluster can be used to teach important content standards in mathematics and science, and 3) demonstrate the power and potential of using "paired texts" as an instructional strategy across the curriculum.</p>
Dr. William Brozo and Courtney Gaskins	<p>Expanding Academic Literacy in Math and Science: Gender Appropriate Practices (Repeat and expansion of Tuesday's session.)</p>
Dr. Asha Jitendra	<p>Solving Mathematics Word Problems: Teaching Students with Learning Disabilities Using Schema-based Instruction This session will provide participants with a brief overview of research on mathematics for students with disabilities. A recently tested problem-solving curriculum using schema-based instruction (SBI) will be presented to demonstrate the teaching and learning of mathematical word problems. Examples from elementary and middle school mathematics will be provided to illustrate the application of SBI. Participants will have an opportunity to model the problem situation using schematic diagrams and discuss how to scaffold instruction for students with learning disabilities to access the general education curriculum.</p>
Dr. Connie Schrock	<p>Using Literacy Strategies to Improve Mathematical Understanding Writing promotes ownership and helps students to process learning. Writing also helps students commit learning to long-term memory and helps limit re-teaching. Reading is often left out of the mathematics classrooms and many strategies can increase mathematical understanding. This session will present many different literacy activities that can enhance students' mathematical learning. <i>Appropriate for grades 5-12 teachers.</i></p>
Dr. June Scobee Rodgers	<p>Experience STEM through a Hands-on Simulation at the Challenger Learning Center, Richmond Math/Science Innovation Center This session will take place at the Richmond Mathematics/Science Innovation Center's Challenger Learning Center. Participants will experience first-hand the components of teamwork, problem-solving, communication and decision-making in a realistic space station and mission control. During the morning portion of the session, participants will experience hands-on flight preparation with a focus on the literacy components of space flight. During the afternoon, participants will put their newly learned skills into practice by flying a simulated space mission in the Challenger Learning Center. STEM core objectives will be internalized as the hands-on tasks are experienced. Participants will have fun while engaged in mathematics, science, engineering, technology and literacy skills. <i>Limited to 32 participants. When registering, please indicate if you will take the group bus or use your own transportation.</i></p>

<p>Dr. Sheila Tobias</p>	<p>Mathematics and Science Anxiety: They Beat It, So Can You This workshop will present teachers in grades 4-12 with ways of managing a classroom for students with multiple ways of knowing. The workshop is designed to be useful to teachers of mathematics, science and teachers of other subjects.</p> <p>The morning portion of this session will focus on the theory of “mathematics anxiety” and the practice of dealing with it in the classroom. Participants will do an exercise intended to ferret out the elements in their own avoidance/anxiety. Helpful strategies to assist with reading mathematics textbooks, word problem solving, everyday mathematics, “Sunday” mathematics, and countering mathematics anxiety will be demonstrated. The film “Math Anxiety: We Beat It, So Can You” will be shown in segments for discussion.</p> <p>The afternoon session will explore why learning science is “hard” for otherwise able students. Learning style inventories, the “Tier Analysis,” “Cognitive Comfort Zones” and their applications to the science classroom will be covered. <i>Appropriate for grades 4-12 teachers.</i></p>
<p>Dr. Chris O’Neal</p>	<p>Web 2.0 for Educators This session will focus on what every educator should know about how the Web is changing, and the impact these changes have on new opportunities for teaching and learning. This hands-on workshop is fast, lots of fun, and very productive. Participants will learn all they need to know about Web 2.0, including Blogs, Wikis, Social Software, Tagging, and much more. Attendees must bring their own laptop to this session. <i>Limited to 34 participants.</i></p>
<p>Dr. Tricia Easterling</p>	<p>Using What You've Got! How to Ask Excellent Questions and Get Even Better Answers from All Students Everyday toys and games make fantastic opportunities to get students thinking about difficult ideas. Using fun, concrete items allows students to explain their understanding of scientific concepts while giving teachers a glimpse into potential misconceptions.</p> <p>The morning portion of this session will demonstrate how to ask progressively higher order thinking questions and encourage responses from students.</p> <p>The afternoon portion of this session will demonstrate and provide methods used to teach students the meanings of difficult words and abstract concepts often encountered in science and mathematics classrooms. Attendees will learn how and why specific formats teach complicated concepts effectively.</p>

<p>Marcia Hickey and Ginger Whiting</p>	<p>Children’s Engineering: Building Literacy Participants will gain a basic understanding of Children’s Engineering: Design, and Technology. Using literature from across the curriculum, participants will be involved in a variety of hands-on techniques and strategies for incorporating Children’s Engineering into their daily lessons.</p>
<p>Marlene Thier</p>	<p>Science, Media and Language: Accomplishing the STEM Objectives Skills that combine knowledge of science facts, concepts, and processes with the ability to use language clearly and precisely to comprehend, articulate, and communicate about scientific issues and ideas are required for today’s students. In this session, participants will look at <i>The New Science Literacy</i> to understand that both science and literacy call upon reciprocal sets of skills. Participants will learn that it is natural to combine skills and facts to strengthen students’ mastery of science and language at the same time. The session will also provide detailed teaching strategies rooted in the principles of guided inquiry. Multiple examples of the kinds of classroom-based activities that teachers can use to meld the two disciplines will be presented. Explicit performance expectations that teachers and students can use to guide and assess growth in the use of language through science activities will be demonstrated. Teachers will learn how to effectively embed literacy strategies into their own science program using specific strategies provided in <i>The New Science Literacy</i>. <i>Note: Teachers should try to bring examples of their own science lesson plans.</i> <i>(Repeat and expansion of Tuesday’s session.)</i></p>

July 10, 2008

8 a.m. - 8:45 a.m. Breakfast
9 a.m. - 10:30 a.m. Breakout Sessions

Presenters	Sessions
Dr. Lynell Burmark	<p>Visual Literacy: Get the Picture, Ace the Test What is “Visual Literacy” and why is it critical in our visual world? How does brain wiring and life experience influence how we see things? Of the 30 million PowerPoints given every day, how many are a waste of time? How can you make sure that yours (and your students’) have the desired impact? Boost test scores by 42% and learning by 89%? Speed up comprehension 60,000 times? Increase willingness to read by 80%? This session will present the latest research on images and their critical role in instruction, retention, and application of content. An extensive handout including resources will be shared.</p>
John Golden	<p>Reading in the Reel World <i>(Repeat of Wednesday’s session in a condensed format.)</i></p>
Dr. Asha Jitendra	<p>Using Schema-based Instruction to Improve Middle School Students’ Learning of Ratio and Proportion This session will focus on the concepts of ratio and proportion. Participants will learn how to use schema-based instruction to improve their understanding of ratio and proportion. Intervention materials, measures to evaluate student performance, and findings from a recent design study will be shared. <i>Appropriate for middle school teachers.</i></p>
Dr. Elfrieda “Freddy” Hiebert	<p>Choosing Vocabulary: Differences with Narrative and Informational Texts This workshop will provide strategies for choosing the vocabulary that requires instructional focus. The strategies of vocabulary selection have some important distinctions in narrative and informational texts. The distinctiveness of the new and unfamiliar vocabulary in these two types of text will be the focus of the seminar, as well as strategies for selecting vocabulary. The workshop will develop the implications of these differences for instructional activities and student practice, and support teachers in distinguishing between the differences in vocabulary curricula for narrative and informational texts. <i>Appropriate for grades K-9 teachers.</i></p>
Dr. Cheryl Lemke	<p>A Differentiator: Critical Thinking in STEM through Effective Use of Technology Innovation is the differentiator in today’s global, high-tech, connected society. In order to thrive, students will need to be critical and innovative thinkers. Today’s adolescents have experienced a coming of age through a lens on the world that is</p>

	<p>digital, highly social, and extremely interactive. This session will provide participants with information about 21st century skills, how they translate to the STEM classroom, and how schools might engage in the systems thinking. Technology-rich examples of critical thinking in STEM classes will be demonstrated. Digital content and student technology-enhanced productivity tools will be reviewed. The session will be grounded in theoretical and empirical research. <i>Appropriate for middle and high school teachers.</i></p>
Dr. Lois Williams	<p>Children's Literature and the 4-8 Mathematics SOL: Are They Compatible? During this workshop, participants will review various pieces of children's literature and explore their relationship to the grades 4-8 mathematics Standards of Learning (SOL). Participants will leave with a set of activities/lesson starters that relate to specific SOL.</p>
Ruth Harbin Miles	<p>Learn Mathematics the Write Way In this session, participants will experience 3rd-8th grade mathematics journals with <i>RSVP</i>. Participants will learn how to help students <u>r</u>eflect, <u>s</u>ummarize, learn <u>v</u>ocabulary, and <u>p</u>rocess problem-solving the write way.</p>
Dr. Sheila Tobias	<p>Mathematics Anxiety: They Beat It, So Can You This workshop will convey the theory of "mathematics anxiety" and the practice of dealing with it in the classroom. Participants will do an exercise intended to ferret out the elements in their own avoidance/anxiety. Helpful strategies to assist with reading math textbooks, word problem solving, everyday math, "Sunday" math, and countering math anxiety will be demonstrated. The film "Math Anxiety: We Beat It, So Can You" will be shown in segments for discussion. <i>(This session will present a repeat of Wednesday's session in a condensed format.)</i> <i>Appropriate for grades 4-12 teachers.</i></p>
Dr. Joan Rhodes and Tammy Milby	<p>Using Electronic Books to Promote Achievement in the Content Areas This interactive session will provide participants with the knowledge and skills necessary to design and use electronic books in primary and elementary classrooms. Participants will use content-area trade books as a foundation for developing engaging and motivational instruction. <i>Appropriate for primary grade teachers.</i></p>

<p>Dr. Betty Sturtevant</p>	<p>Developing an Effective Schoolwide Middle or High School Literacy Program: Principled Practices and Strategies for Literacy Leaders</p> <p>This presentation will provide principles for developing an effective schoolwide literacy program as well as practical strategies literacy leaders can use to improve learning in mathematics, science, social science, and the humanities. Specific ideas for creating motivating professional development programs for teachers will also be provided.</p>
<p>Dr. Tammy McGraw and Cheri Kelleher</p>	<p>Share the Skies</p> <p>Share the Skies is the nation's first statewide initiative that enables students to study astronomy in real time during the daytime without leaving the classroom. Using the Internet and a standard Web browser, students can access and control a research-grade telescope to explore the night skies of Australia. CCD imaging enables students to capture images of deep space for further study. Scientific inquiry, technology literacy, cross-curricular applications, and communication skills are at the center of this project. Participants will learn how they and their students can access and integrate this unique resource.</p>
<p>Dr. Sara Kajder</p>	<p>Promise into Practice: Using 21st Century Tools and New Tasks with Adolescent Readers and Writers</p> <p>From Wikis to Podcasts, and from social networking to digital storytelling, this workshop explores emerging technological tools and how they can help "move" the literacy skills of all students. Participants will be challenged to "reinvent" these ideas within their own classrooms in an attempt to consider the spaces in which our students work as readers and writers outside of the classroom, and to bring interesting options into our class discourse. Throughout the session, participants will critically examine these "new" strategies and tools in terms of what they bring to the curriculum, as well as the ways in which they can be effective in a range of classrooms.</p>
<p>Chris O'Neal</p>	<p>Leading the Digital Learners <i>(Repeat of Tuesday session.)</i></p>
<p>Patti Curtis</p>	<p>Engineering is Elementary: An Industrial Engineering Challenge</p> <p>The <i>Engineering is Elementary</i> series, created by the National Center for Technological Literacy at the Museum of Science, Boston, is a curricular program that integrates engineering with popular science topics and makes connections with literacy, social studies, and mathematics. Each unit, which meets national technology/engineering standards, includes: a children's storybook; four lesson plans including a design challenge; student worksheets with advanced and basic variations; and, assessment tools. The required materials are typically inexpensive and easy to obtain. This workshop will introduce the series and focus on the industrial engineering unit, <u>Aisha Makes Work Easier</u>, and how it relates to</p>

	simple machines. Participants will engage in an industrial engineering challenge and receive instructions for classroom activities.
Janice Churchill	<p>The Many Adventures of Frog and Toad</p> <p>This presentation will demonstrate how you and your students can be engineers while reading about Frog and Toad. Be ready to work with your hands and be creative problem solvers. Other literature and engineering activities will be shared as well.</p>

10:30 a.m. - 10:45 a.m. Break

10:45 a.m. - 12:15 p.m. Breakout Sessions Continued

12:15 p.m. - 1:30 p.m. Buffet Lunch and Closing Keynote Speaker:
 Dr. June Scobee-Rodgers

“The Phoenix Rises from the Ashes” – Dr. June Scobee-Rodgers, widow of *Challenger 51-L* Commander, Richard Scobee

June Kent Scobee-Rodgers was raised in poverty and told she could never be a teacher because she was too poor. This is her story of growing up, marrying a young pilot, becoming a master teacher and a lifelong achiever. It is also a documentary of living through a national tragedy and transforming that tragedy into a network of educational centers that inspire teachers and students to reach for the stars. The Challenger Learning Center embraces STEM objectives while it raises self-esteem and self-worth in the students who experience a “mission.”

1:30 p.m. Closing Remarks