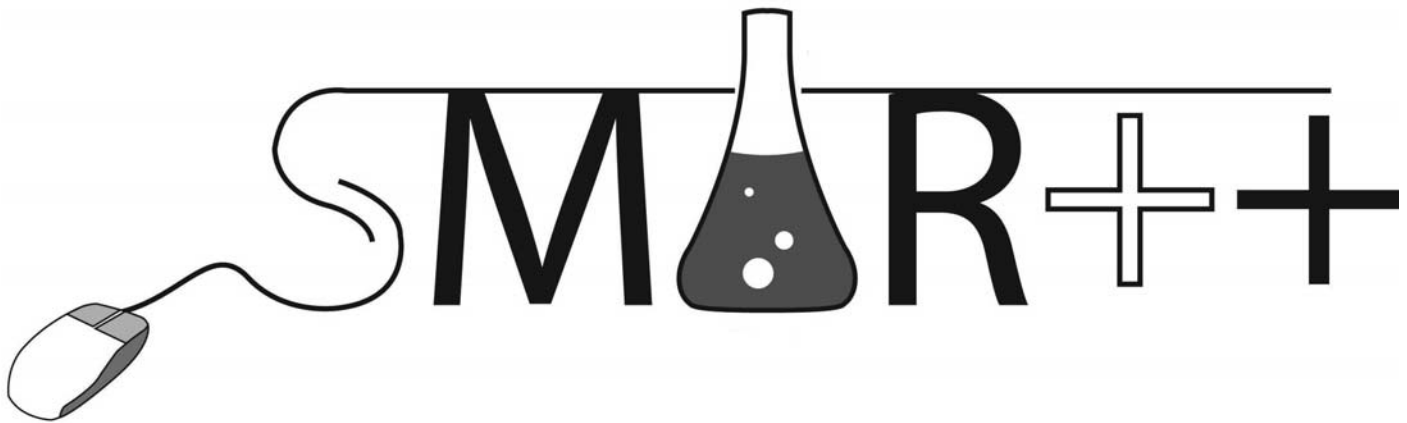


SCIENCE AND MATHEMATICS:

ASSESSMENT, RESEARCH AND TECHNOLOGY
TOGETHER WITH A
T³ CONFERENCE WITHIN A CONFERENCE



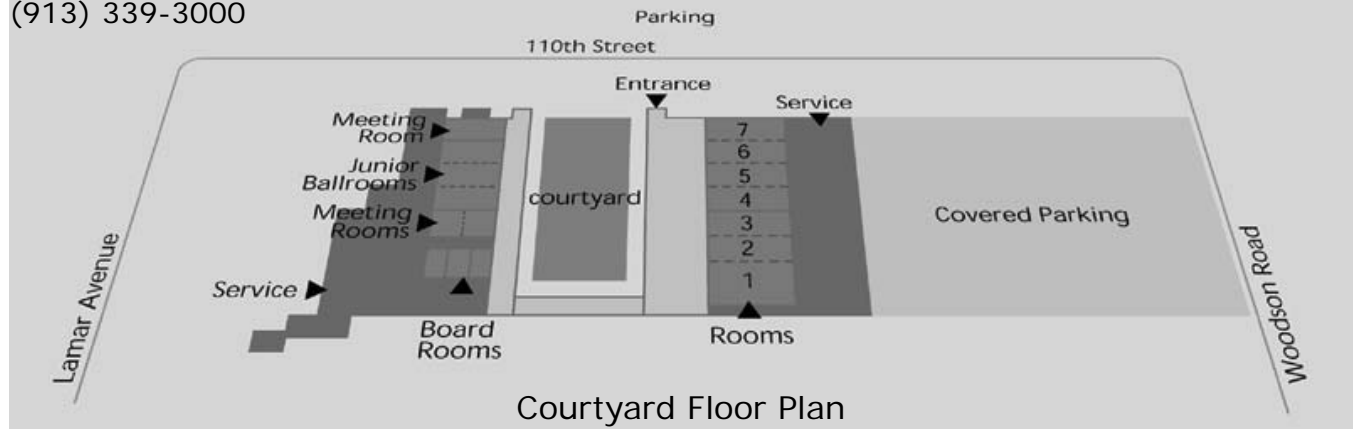
November 6-8, 2008
Overland Park Convention Center
Overland Park, Kansas

Co-sponsored by
Kansas Association of Teachers of Science(KATS)
and the *Kansas Association of Teachers of Mathematics(KATM)*

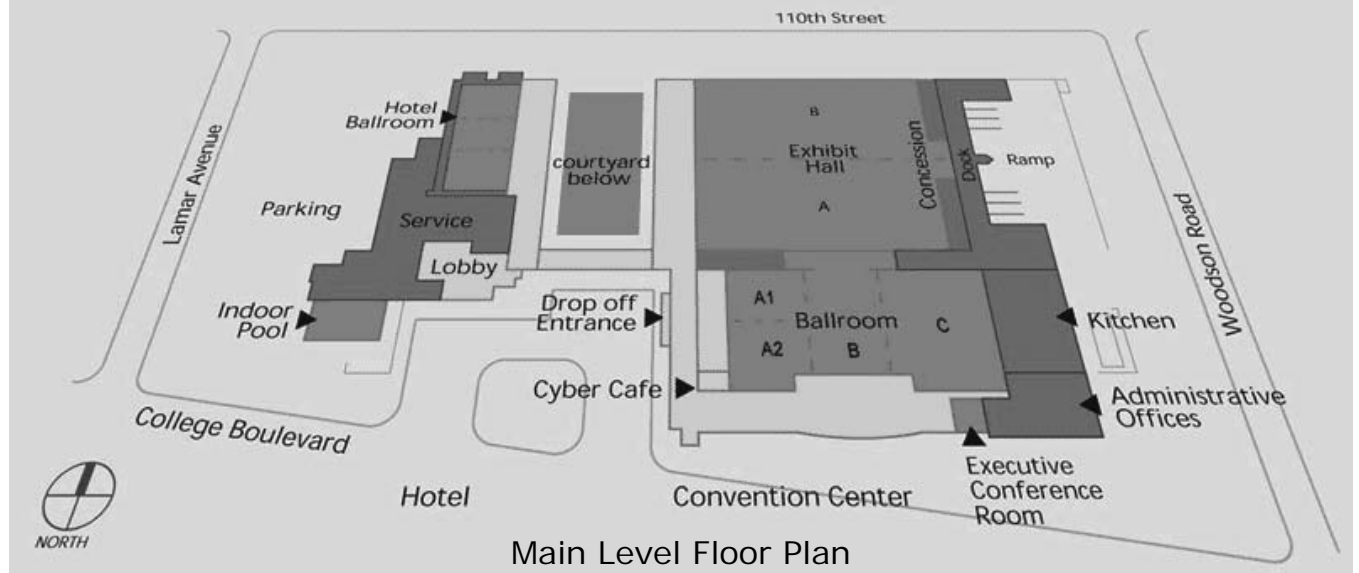
overland park convention center



6000 College Boulevard
Overland Park, KS 66211
(913) 339-3000



Courtyard Floor Plan



Main Level Floor Plan

TABLE OF CONTENTS

Welcome	4
Registration	5
Map of Greater Kansas City	6
Transportation	7
Hotel	7
Exhibits	8
Exhibit Hall	9
Conference Organizers	10
Conference Rooms Map	11
Conference Information	12
Conference Schedule - Thursday, November 6	14
Conference Schedule - Friday, November 7	18
Conference Schedule - Saturday, November 8	38
T3 Conference Schedule	48
Index of Speakers	50
Convergence Planner	Outside Back Cover

SHARE YOUR PAPERS AND HANDOUTS ELECTRONICALLY

Feel free to share electronically the paper(s) you presented at SMARTT 2008 by posting it and other handouts in the Resources Section found on at kats.org or katm.org. Not only can you refer individuals attending your session(s) to the site, but the entire membership of KATS or KATM can access your ideas.

HOSTS: KANSAS ASSOCIATION OF TEACHERS OF SCIENCE (KATS) AND KANSAS ASSOCIATION OF TEACHERS OF MATHEMATICS (KATM)

Welcome to the second SMARTT Conference. The first was held in Wichita, Kansas in 1997 and now eleven years later the Kansas Association of Teachers of Mathematics and the Kansas Association of Teachers of Science have again joined together to provide a professional development opportunity for the teachers from the Midwest. Additional funding and support is being provided by the Kauffman Foundation. We are excited to have outstanding speakers from both disciplines sharing their expertise with us. The program offers a variety of workshops and sessions geared to specific grade levels, subjects, and general-interest topics. The presenters represent a wide range of experience and expertise that will enable participants to get the most from their time at the conference. The committee chairs have been working hard the last three years to make sure this event is an opportunity worth repeating every decade. Be sure to look at the list of committee chairs and thank them for their hard work. A new feature has been added this year with the inclusion of the conference within the program. Additional partnerships and support have been provided from many organizations. We hope that you visit with our sponsors and let them know they are appreciated. Take the time to explore the area and take advantage of the attractions available.

Thank you for joining us this week in Overland Park. By attending the SMARTT Conference and Exposition you are helping to improve mathematics and science learning for all of our students.

Connie Schrock Mathematics Co-Chair



Kay Neill Science Co-Chair



REGISTRATION

Thursday, November 6

10:00 a.m.– 6:00 p.m.

(registration will be closed from 1:00-2:00 for the keynote speaker)

Friday, November 7

7:00 a.m.–4:00 p.m.

Saturday, November 8

7:15-9:30 AM

Registration will be located in the lobby of the Overland Park Convention Center

Pre-registered participants (including speakers) will receive their name badge, program and other materials at the registration table.

Lunch tickets will also be picked up at this location.

People may register on-site, as well. Onsite registration is \$125.

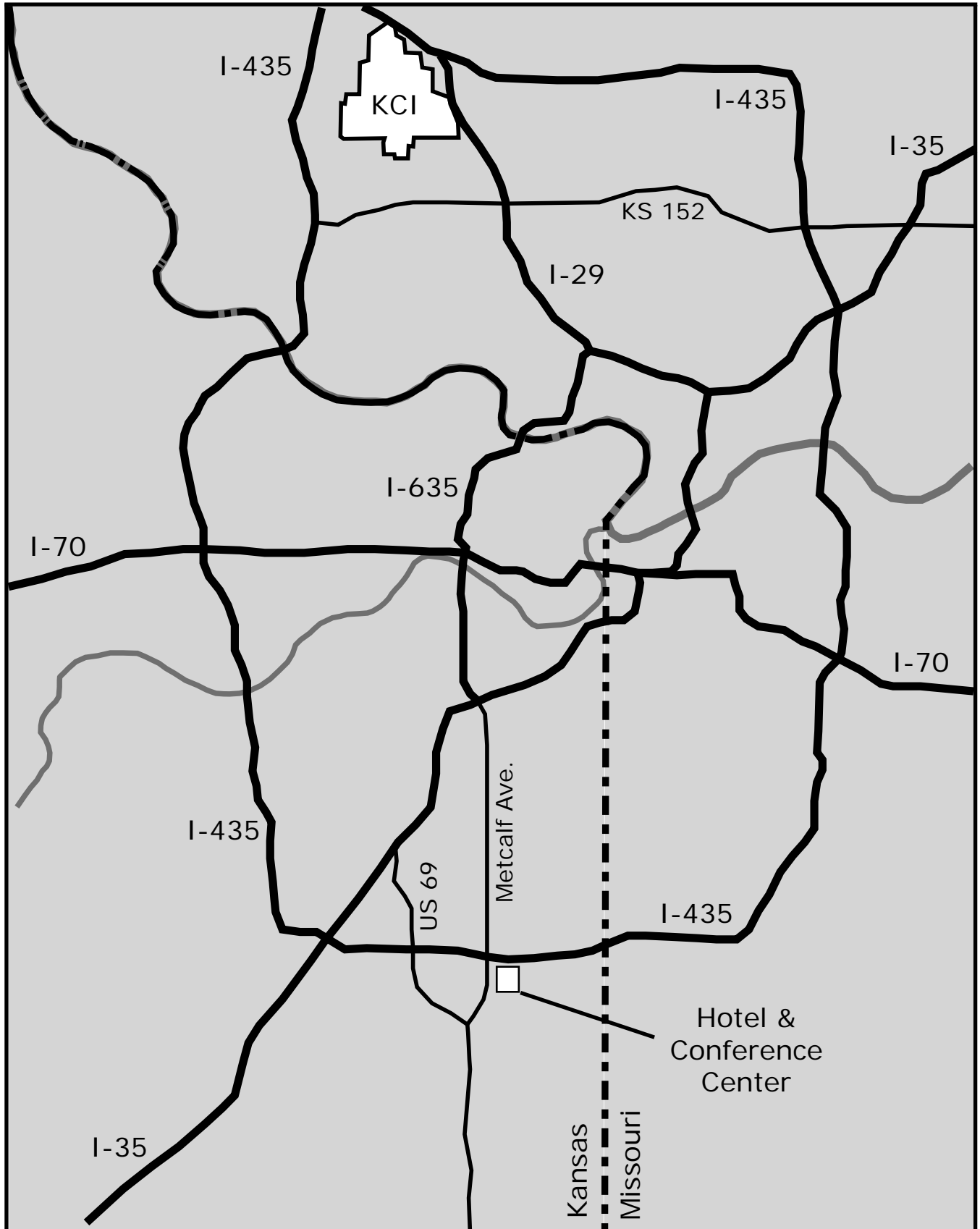
Both the KATM and KATS membership booths will be in close proximity to registration. Participants may pick up membership information at the booths.

Badges

Badges must be worn to enter all presentations and the Exhibit Hall. Please be aware that a \$5 fee will be charged for lost or replaced badges during the conference.



MAP OF GREATER KANSAS CITY



TRANSPORTATION

Directions from:

I-35 Northbound

- Take I-35 North
- I-435 East Exit
- Nall Avenue South Exit
- West on College Boulevard
- Right on Woodson
- Take I-35 South (through Kansas City)
- 69 South Exit
- College Blvd. East Exit
- Left on Woodson

Directions From I-70 Westbound

- Take I-70 West
- 435 South Exit (which turns into 435 West)
- Left on Metcalf Exit
- Left on College Boulevard
- Left on Woodson

Kansas City International Airport (Airport Code: MCI)

Approximately 30 miles

- Take 435 West
- Take 435 South (which turns into 435 East)
- Right on Metcalf Exit (#169)
- Left on College Boulevard
- Left on Woodson

Directions From I-70 Eastbound

- Take I-70 East
- 435 South Exit (which turns into 435 East)
- Right on Metcalf Exit (#169)
- Left on College Boulevard
- Left on Woodson

HOTEL

The SMARTT2008 Conference committee has reserved a block of hotel rooms at the Overland Park Sheraton hotel. If you are in need of an ADA-accessible hotel room, please let the Sheraton Reservation Center know when you call to book your reservation or indicate your needs on the Hotel Request Form.

To make your reservation or for more information, please contact us in one of the following ways:

Sheraton Overland Park Hotel
6100 College Boulevard
Overland Park, Kansas 66211
Fax: (913) 234-2111
Telephone: (913) 234-2100

No Show and Cancellations

Participants are responsible for their own hotel reservations. The Sheraton Overland Park Hotel has reserved a block of rooms at a conference rate through October 25. After that date, reservations are at the regular Sheraton rates.

Should you need to adjust your reservation, please contact the Sheraton Overland Park Hotel at least 72 hours before your scheduled arrival date. If you have a last minute change after this date, you will need to call the hotel directly. If you are staying at another hotel, please check for your hotel's cancellation policy.

Parking

Parking is FREE . The Overland Park Convention Center has 1,400 FREE parking spaces within our complex, 400 of which are covered.

EXHIBITS

The exhibit/ concessions schedule is:

Thursday, Nov. 6 2:00-5:00

Friday, Nov. 7 8:00-5:00

Saturday, Nov. 8 8:00-12:00

Bookstore

The NSTA and NCTM Bookstores offer one-stop shopping for all your professional needs. The bookstores will provide a wealth of publications written by science and mathematics educators for educators including books, videos, software, and specialty products. All conference attendees should check at the bookstore for the discount that you are eligible to receive.

Sales Tax Exemptions: In order to be considered exempt from sales tax in the NSTA or NCTM Bookstore, you must provide a copy of a Tax Exempt Letter (which cannot be returned to you) at the time of purchase, and payment must be made with a check, credit card, or purchase order from the school to which the Tax Exempt Letter is issued. Personal checks, cash, and personal credit cards cannot be accepted in conjunction with school exemption certificates.

Exhibitors, Alphabetical Listing

BoothNumber, Organization Name

410 ALEKS Corporation	205 Ken-A-Vision
203 America's Choice	418 Kendall/Hunt Publishing Company
310 Bedford, Freeman & Worth and W.H. Freeman & Co.	412 Key Curriculum Press
430 Common Sense Math	210 Macmillan/McGraw-Hill
329 CORD Communications	328 Nancy Larson Science
313 CPO Science	219 Nasco
315 Delta Education	305 National Council of Teachers of Mathematics Bookstore
308 Earth Foundation	311 National Geographic School Pub- lishing
326 Engineering Technology, Kansas State University at Salina	304 National Science Teachers Asso- ciation Bookstore
209 ETA/Cuisenaire	322 PASCO Scientific
422 Fisher Science Education	223 Pearson Scott Foresman
312 & 314 Frey Scientific	221 Pearson-Prentice Hall
212 Glencoe/McGraw-Hill	211 Qwizdom, Inc.
215 Great Source Education Group	428 Renaissance Learning
420 Holt McDougal	327 Sadlier-Oxford
323 It's About Time	426 Saxon Publishing
303 Kansas Association of Teachers of Mathematics	319 Science Pioneers
302 Kansas Association of Teachers of Science	204 Seela Science
213 Kansas Citizens for Science, MAIN- stream Coalition, Kansas Families for Education	318 Sopris West Educational Services
321 Kansas City Zoo	208 SRA McGraw Hill
202 Kansas Council on Economic Edu- cation	222 Ten80 Education
320 Kansas Wildlife Education Service	408 & 309 Texas Instruments
	220 Union Station/Science City
	414 Vernier Software & Technology
	218 WRG Education
	214 Wright Group/McGraw-Hill

SMARTT CONFERENCE EXHIBIT HALL

303 KATM
305 NCTM Bookstore

302 KATS	203 America's Choice
304 NSTA Bookstore	205 Ken-A-Vision

202 Kansas Council on Economic Education
204 Seela Science

408 & 309 Texas Instruments	
410 ALEKS Corporation	311 National Geographic School Publishing
412 Key Curriculum Press	313 CPO Science
414 Vernier Software & Technology	315 Delta Education

308 Earth Foundation	209 ETA/Cuisenaire
310 Bedford, Freeman and Worth Publishing & W.H. Freeman & Company	211 Qwizdom, Inc.
312 & 314 Frey Scientific	213 KCFS, MAINstream, KFE
	215 Great Source Educa- tion Group

208 SRA McGraw Hill
210 Macmillan/McGraw- Hill
212 Glencoe/McGraw-Hill
214 Wright Group/ McGraw-Hill

418 Kendall/Hunt Publishing Company	319 Science Pioneers, Inc.
420 Holt McDougal	321 Kansas City Zoo
422 Fisher Science Edu- cation	323 It's About Time

318 Sopris West Educa- tional Services	219 Nasco
320 Kansas Wildlife Education Service	221 Pearson Prentice Hall
322 PASCO Scientific	223 Pearson Scott Foresman

218 WRG Education
220 Union Station/ Science City
222 Ten80 Education

426 Saxon Publishing	327 Sadlier-Oxford
428 Renaissance Learning	329 CORD Communications
430 Common Sense Math	

326 Engineering Tech. KSU @ Salina
328 Nancy Larson Science

SMARTT CONFERENCE ORGANIZERS

Co-Chairs

Kay Neill
neillks@cableone.net

Connie S. Schrock
cschrock@emporia.edu

Exhibitor Chairs

Debbie Schluben
deborahschluben@smsd.org

Sharron Spence
sharronspence@smsd.org

Program Chairs

Dr. Germaine Taggart
gtaggart@fhsu.edu

Jean Morrow
jmorrow@emporia.edu

Registration Chairs

Marilyn McComber
mmccombe@usd253.org

Betsy Wiens
wienseli@usd437.net

Field Trip

Martha Nowak
mnowakcst@olatheschools.com

Administrative Assistant/Registration

Vicki Andersen
vanderkats@gmail

Publicity Chairs

Melisa Hancock
melisa@ksu.edu

Kay Neill
neillks@cableone.net

Hospitality Chairs

Georgia Smith
georgialenexa@hotmail.com

Margie Hill
marghill@ku.edu

Preservice/ New Teacher Chairs

David Allen
dallen@ksu.edu

Matt Seimears
cseimear@emporia.edu

Audiovisual Chairs

Brock Wenciker
brockwenciker@smsd.org

Pat Flynn
pglynnoe@olatheschools.com

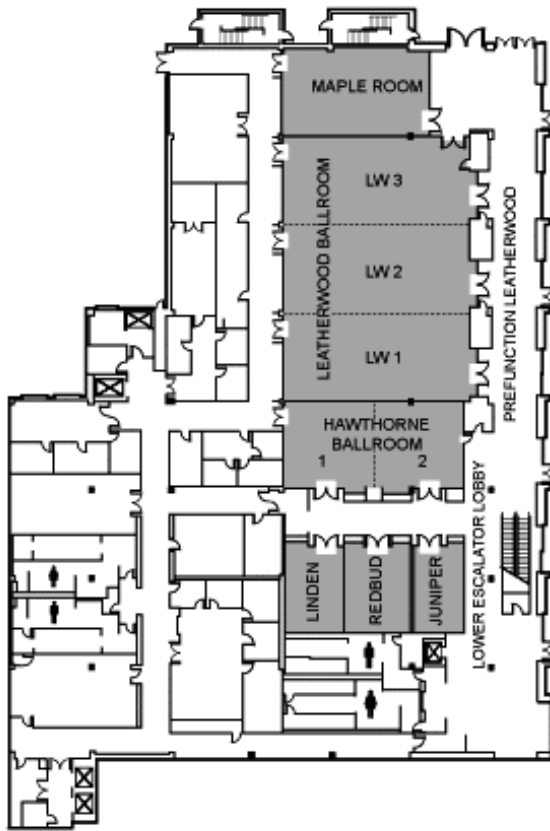
Treasurer

Margie Hill
marghill@ku.edu

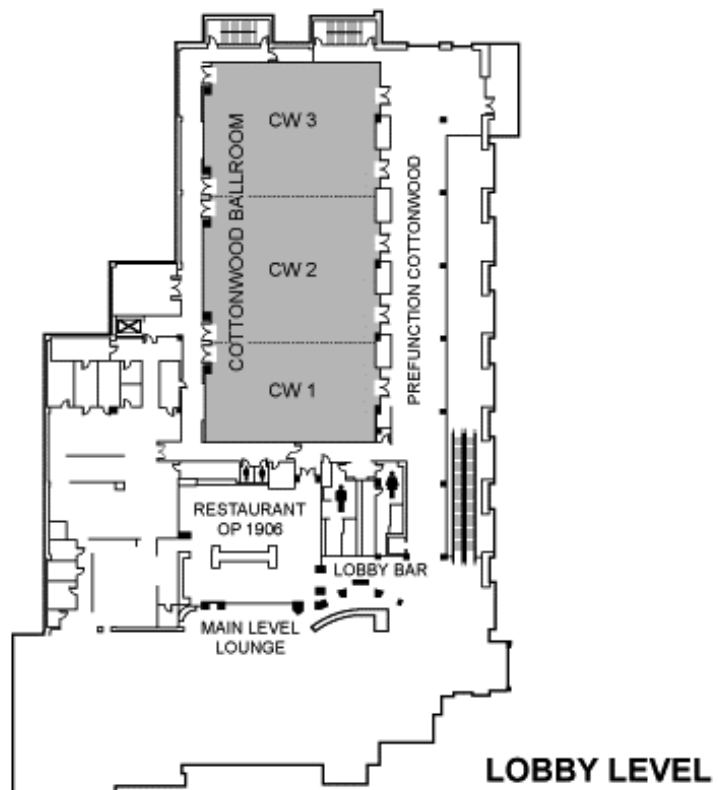
Kauffman Contact

Karen Norwood
knorwood@kauffman.org

SHERATON HOTEL CONFERENCE ROOMS



LOWER LEVEL



LOBBY LEVEL

SMARTT CONFERENCE INFORMATION

Cancellations

Registration Fee--Submit your request for a refund in writing by the close of business on November 1, and the SMARTT Conference will refund fifty percent (50%) of your registration fee. After this date, no refunds will be given. No telephone requests for refunds will be honored. Please include a brief note explaining the circumstances. Allow four to six weeks for you refund to be processed.

ADA Services

The Kansas Association of Teachers of Science and the Kansas Association of Teachers of Mathematics are committed to ensuring that the SMARTT 2008 Conference is fully accessible to all persons.

Attire

Business casual attire is appropriate for all conference events. We recommend attendees dress in layers due to the variation in room temperatures. Comfortable shoes are essential.

Information/Hospitality Booth

There will be an Informational/Hospitality Booth located in the Exhibit Hall lobby. Please stop by if you need information about conference activities, meeting rooms locations, transportation, restaurants, entertainment, shopping, special events, and area maps. The Information/Hospitality Booth will manage a message board.

Lost-and-Found

Items for lost-and-found may be retrieved or turned in at the Information/Hospitality Booth. At the end of each day, all lost-and-found items brought to the Information Booth will be turned over to the Convention Center Security.

First Timers' Orientation

Friday, November 7

7:30 a.m.-7:45 a.m.

All first timer conference registrants are encouraged to attend the first timers' session. The session will discuss the format of the conference and help attendees make the most of their conference experience. Come join us on Friday morning at 7:30

Program Changes

For program changes, cancellations, and additions--be sure to pick up a copy of the conference's Program Updates.

Types of Presentations

Presentations provide participants with science, mathematics and technology concepts, activities, and teaching strategies that have proven successful in the classroom. All presentations are open to all conference participants. Admission will be on a first-come, first-served basis. Reserving spaces in line or saving seats is not

permitted.

Symposium (60 minutes)

Rooms are set theatre style and vary in size.

Workshops (90 minutes)

Rooms are set with tables for hands-on work.

Gallery Workshops (90 minutes)

Rooms are set with tables for hands-on work and additional seating around the perimeter of the room. The gallery participants will receive the print material and observe the workshop in a fashion similar to a classroom observer.

Minicourses (2 hours)

Rooms are set with tables for hands-on work. Minicourses allow for a more in-depth examination of a topic.

Copyrighted Materials/ Permission to Tape or Record

Written permission to tape or record programs must be obtained directly from the speaker involved at least thirty days before the SMARTT 2008 Conference. The SMARTT 2008 Conference committee prohibits the use of any copyrighted materials in sessions unless proper credit is given or prior permission has been granted by the holder of the copyright.



THURSDAY - 6 NOVEMBER

LIGHTHOUSES, ROCKETSHIPS, AND THE DREAMS OF BOYS

HOMER HICKAM

Master Story Teller and Best-Selling Author of "OCTOBER SKY"

Homer Hickam burst onto the national scene in 1999 when his memoir *Rocket Boys* (aka *October Sky*) reached #1 on the New York Times best-selling list. The story of his life growing up in the little mining town of Coalwood, West Virginia, and especially his high school years when he built high-flying rockets, the memoir has gone on to become a classic. *Rocket Boys/October Sky* is studied in hundreds of schools and colleges across the country as an important literary work, has been translated into eight languages, and picked by more American cities than any other book for their annual Community Reads. In short, Hickam's memoir, which was also adapted into the popular movie *October Sky* starring Jake Gyllenhaal as young Hickam, has become an absolute phenomenon. With the recent marking of the 50th Anniversary of Sputnik, the world's first earth satellite, now is an excellent time to be reminded of this important moment in history. Sputnik served as the inspiration for the *Rocket Boys* of Coalwood and their three years of passion, planning, and perseverance (Hickam's 3 "P's" of success), not to mention a few explosions.



Hickam's 2008 release, *Red Helmet*, takes an inside look at coal mining, from shoveling gobs to negotiating international trade deals, through the lens of modern romance. Love may conquer all, Hickam suggests, but in a coal mine you also need good engineering.

Hickam is a wonderful story-teller in the tradition of the people of the Appalachian mountains where he was raised. He tells gentle, humorous stories of the people of Coalwood and his days as the original *Rocket Boy*. His appreciative audiences are laughing one moment and brushing away a tear the next. Standing ovations are usually the norm for this talented speaker.

AT A GLANCE: Hickam is a decorated Vietnam combat veteran. He was once one of the nation's top scuba instructors and even taught David Letterman to dive! He was also a NASA engineer during the 1980's and 1990's, working on such important programs as the Hubble Space Telescope and training astronauts for Spacelab and Space Station missions. Today, he is an avid amateur paleontologist, having recently made a major find in Montana of a juvenile *Tyrannosaurus Rex*. And, of course, he continues to write. As sequels to *Rocket Boys/October Sky*, he wrote three more best-selling memoirs (*The Coalwood Way*, *Sky of Stone*, and *We Are Not Afraid*). His latest novels, *The Keeper's Son*, *The Ambassador's Son*, and *The Far Reaches*, are part of his popular "Josh Thurlow" series of wartime adventure and romance. But no matter what else he's accomplished, Hickam has never forgotten his boyhood rocket-building days. We invite you to join Hickam for an hour of fun and purpose to kick off the SMARTT 2008 conference. In these times of national uncertainty, his is a triumphant and welcome message of hope, challenge, and perseverance.

Homer Hickam is sponsored in part by The Ewing Marion Kauffman Foundation. The Ewing Marion Kauffman Foundation was established in the mid-1960s by the late entrepreneur and philanthropist Ewing Marion Kauffman. Based in Kansas City, Missouri, the Kauffman Foundation is the 30th largest foundation in the United States with an asset base of approximately \$2 billion. The vision of the Kauffman Foundation is to foster "a society of economically independent individuals who are engaged citizens, contributing to the improvement of their communities." In service of this vision, and in keeping with our founder's wishes, the Foundation focuses its grant making and operations on two areas: advancing entrepreneurship and improving the education of children and youth,

2:30 PM

Convention Center Room 1

Workshop

General

Real-World Resources from the KGS for Math, Science, & Tech Learning

Carol Williamson (williamc@olatheschools.com) and Rex Buchanan (rex@kgs.ku.edu)

Analyze real-world data from the Kansas Geological Survey (KGS) in this hands-on workshop. Participants will learn about KGS online and print resources to support K-12 math, science, and technology learning. Enjoy classroom-ready hands-on activities and get acquainted with 21st century resources such as Geographic Information Systems (GIS). Participants will receive a packet of activities, and have a chance to win a door prize.

Convention Center Room 2

Workshop

Elementary

Online Gaming in the Classroom: Engage & Educate with Arcademic Skill Builders

Melanie Bacon (mbacon@altec.org), Amber Rowland (amber@altec.org),
and Dave Scherrer (scherrer@altec.org)

Arcademic Skill Builders game lab has online resources for basic math, language arts, vocabulary, and thinking skills that can be played in single or multi-player formats, or on the Wii. Leave with great online resources to share with your colleagues.

2:30-3:30 PM

Ballroom ABC

Effective Science Instruction: What it is? How do we do it?

Anne L. Tweed
(atweed@mcrel.org)

This presentation will begin with the research about effective science instruction and the five features that should be part of every science lesson.

- What does effective science instruction look like?
- Are students motivated to learn science?
- Are they intellectually engaged with important science concepts?
- If research informs how we should teach, how should we do it?

Anne Tweed, a Principal Science Consultant with the Mid-continent Research for Education and Learning (McREL) in Aurora, Colorado, provides services in support of contracts that support the ongoing needs of teachers, schools and districts within the McREL region.



Tweed is a Past-President of the National Science Teachers Association (NSTA). A veteran high school science educator, Tweed has taught many subjects, including environmental science, biology, earth science, chemistry, marine science, AP Biology and AP Environmental Science. She has spent the majority of her 30-year teaching career with the Cherry Creek School District in Colorado. Tweed earned an M.S. degree in botany from the University of Minnesota, a B.A. degree in biology from Colorado College, and a teaching certificate from the University of Colorado. Tweed has held several leadership positions in NSTA, the Colorado Association of Science Teachers, and the Colorado Alliance for Science. She was on the review committee for the National Science Education Standards and a contributor to the Colorado Model Content Standards for Science. Tweed was also a contributor on both the Colorado and National New Standards Science Portfolio Pilot Project. In addition, Tweed served on the program planning team revising the 2009 NAEP Framework for Science. Tweed was a 1997 State Awardee for the prestigious Presidential Awards for Excellence in Science, the Distinguished High School Science Award from NSTA in 1997, and received the Outstanding Biology Teacher Award in 1992 by the National Association of Biology Teachers (NABT) for Colorado.

Convention Center Room 3

Workshop

Middle Level

Which Operation Comes First (T³ Conf)

Marlene Taylor

Be able to ask the questions a step at a time and know if your students are on the right track using the TI Navigator and graphing calculators. With this system you will know if every student is participating and at what level they are understanding the lesson. This will help you determine the amount of homework practice students need at the end of the class period.

4:00-5:00 PM

Ballroom ABC

Are Our Students Ready for the Global Economy of the 21st Century

John Whitsett



The students in school today will be the workers of the 21st Century. These students will need entirely different skills and attitudes than their predecessors in order to compete in the new technology driven world. This presentation will define the needs of 21st century workers and will provide information about the various programs curriculum initiatives that are designed to meet this need.

John Whitsett, coordinator of Curriculum for the Fond du Lac School District http://www.voanews.com/english/images/210CHIMES_Whitsett,John_076.jpg in Fond du Lac, Wisconsin, and a former physics teacher at Fond du Lac High School is retiring president of NSTA. For more than 30 years, Whitsett has been a leader in public schools in Wisconsin. Whitsett has been honored for his contributions to science education. He received a Presidential Award for Excellence in Mathematics and Science Teaching (1986), the Ron Gibbs Award for Lifetime Achievement in Science Education (2000), the Wisconsin Society of Science Teachers (WSST) Regional Award (1995), an Outstanding Chemistry Teacher Award from the American Chemical Society (1991), among others. Whitsett's involvement in these activities reflects his personal goal to be an active participant in the science education community and to work with fellow teachers to help them become better trained, more informed, and engaged in their profession.

Convention Center Room 2

Symposium

Middle Level

Graphically Organized Solutions to some Tricks and Puzzles

Alan Gilmore (algilmo@kckps.org)

"Cannibals & Missionaries"

"The 2000 lights"

"What number are you thinking?"

"How many cubes are there?"

"Virtual dice"

Are among those Tricks and Puzzles solved (or created) through the efficacious application of Microsoft Excel Compatible Worksheets. Middle school through High School Math students find these Mathematical Experiences stimulating and often leading them to making pattern discoveries. The presentation will highlight these and other tricks and puzzles.

Digital templates for the handouts (worksheets) will be available online and on-site for downloading or copying. Each activity will be structured (roughly) in a SIOP Lesson Plan which will accompany the handout.

Going Round In Circles (T³ Conf)

Marlene Taylor

Working with the TI Navigator and graphing calculators, discover ways to help your students discover the formula for the circumference of a circle. Help students understand the relationship between circumference and pi. Know all students are participating in your lesson. You will also have an idea of their understanding of the topic by the touch of a button.

5:00 PM***Reception******Provided by Space Pioneers and sponsored by:***

School Specialty Science offers innovative, standards-based teaching and learning solutions for every grade, every science topic, and every teaching and learning style. Three trusted brands have come together under School Specialty Science to provide inquiry-based curricula and supplemental materials.

Delta Education offers inquiry-based K-8 curriculum solutions and instructional resources that engage students through hands-on investigations. Widely adopted programs include FOSS, DSM, and Seeds of Science/Roots of Reading.

CPO Science offers 6-12 curriculum solutions through complete learning systems that integrate unique textbooks, durable equipment and technology.

Frey Scientific offers a complete line of science supplies and equipment for K-12 classrooms and science labs including virtual lab software and hands on activities. Frey also offers lab design services and furniture to ensure schools have the right environments to increase achievement.

Ken-A-Vision: A leader in digital presentation solutions, document cameras, microscopes and applications software, Ken-A-Vision provides high quality, cost-effective products. For over 60 years, Ken-A-Vision has created innovative products for the global market such as the Micro projector, the Cordless Microscope, the MVP (Multi Video Product) and the Video Flex Camera line. Based in Kansas City, Missouri, U.S.A., Ken-A-Vision helps students see more, do more and learn more. For more information, visit www.ken-a-vision.com or contact solutions@ken-a-vision.com.

FRIDAY - 7 NOVEMBER

7:30 AM

First Timers Session

Matt Seimears

All first timer conference registrants are encouraged to attend the first timers' session. The session will discuss the format of the conference and help attendees make the most of their conference experience.

8:00-9:00 AM

Ballroom B

Symposium

General

Five Steps to the Future: A Common Vision

Tom Foster

(tfoster@ksde.org)



The Kansas State Board of Education has embarked on an unprecedented set of initiatives creating innovative opportunities for Kansas students. Tom Foster, Director of Standards and Assessments at the Kansas State Department, will present five current Board initiatives impacting education.

[Dr. Tom Foster, Director of Standards and Assessments, oversees statewide education programs and services required for the implementation of all state and federal education legislation regarding curriculum and assessments. These include the No Child Left Behind Act (NCLB), the Individuals with Disabilities Education Act, and the Kansas Quality Performance Accreditation system. In addition, Dr. Foster oversees the state's assessed and non-assessed curricular standards; the state assessments; and research, data analysis and reporting requirements. Prior to this, he served as the Assistant Director and then the Director of the School Improvement and Accreditation Team. Dr. Foster has a Ph.D. in Educational Foundations with a minor in English Literature, a M.A. in Secondary Educational Administration and a B.A. in English.

Prior to joining KSDE, Dr. Foster was the curriculum supervisor for the Auburn-Washburn school district, and also served as the vocational education director and principal of the district's high school and middle school at-risk program. Dr. Foster also served as a high school language arts teacher. In 2004 he was presented with the Outstanding Educational Leader Award from the University of Kansas. In 2003 he received the Leadership for Learning Award from the American Association of School Administrators and the Outstanding Instructor Award, School or Professional and Graduate Studies, from Baker University.

Finally, Dr. Foster served as an adjunct professor for Washburn University and Baker University, as well as a visiting lecturer for the University of Kansas.

8:00-9:00 AM

Ballroom C

Symposium

General

The Neuroscience of Learning

Ken Wesson

Kenneth Wesson delivers keynote addresses on the neuroscience of learning. His presentations on "Brain-considerate" learning environments that address diversity in learning, curriculum considerations, and effective teaching strategies have been widely acclaimed by members of educational organizations around the globe. He is a frequent presenter for ASCD, NSTA, and brain-based learning conferences. Wesson has been profiled in "Who's Who in Science and Engineering," "Who's Who in American Education", and "Who's Who in America."



Kenneth Wesson's presentation is funded in part by Delta Education. Delta Education believes that by using inquiry-based methods, students assume the proactive role of scientists by observing the environment around them, asking questions, and conducting investigations to try out ideas and verify results. Their materials aid educators in achieving a learning climate that is inquiry-based. Delta Education encourages all teachers to incorporate inquiry-based methods into their curricula. Doing so will ensure students receive the best possible educational experience.

8:00-9:00 AM

Ballroom A2

Symposium

General

How to be "SMARTT" about problem solving

Connie Schrock (cschrock@emporia.edu)

Problem solving skills are critical for students to excel at any time of external assessments. Come to review the skills need to help your students be successful problem solvers. Activities and resources you can use next week will be shared.

Maple

Workshop

Secondary

Navigate Your Way Through Team Teaching

Matt Alonzo (malonzo@pkwy.k12.mo.us), Julie Parks (jparks2@pkwy.k12.mo.us),
and Wendy Freebersyser (wfreebersyser@pkwy.k12.mo.us)

This session will provide a typical day in a team taught navigator lab environment including tips and tricks on how to reach students on their level. We will also show how to effectively use daily assessments.

Ballroom A1

Workshop

Elementary

Don't Be a Square - Teach Geometry with Flare

Jennifer Weilert (jweilert@usd259.net) and Jamie Junker (jjunker@usd259.net)

This interactive session will keep 3rd - 5th grade teachers engaged in meaningful activities that promote conceptual understanding of plane and 3-dimensional geometry. Participants will learn effective instructional strategies that can be used in the classroom.

Convention Center Room 2

Workshop

Elementary

Elementary Science Experiences that Stick

Kay Neill (neillks@cableone.net)

SMARTT Weather Activities for Your Classroom, Excite your students about science by utilizing fun, relevant weather demos and activities. You will also discover how to create opportunities for learning using current weather data. Free materials and door prizes will be provided by NOAA and AMS.

Convention Center Room 4

Gallery Workshop

General

Elementary Science Experiences that Stick

Bentley Richert (bentleyr@essdack.org)

What could a guy named Jared, an urban legend, and a bucket of movie popcorn have in common with elementary science? Find ways to apply the concepts from the book "Made to Stick" to inquiry science to create learning that keeps on going and going and going just like the pink, drumming, battery-powered rabbit.

Convention Center Room 5

Workshop

Middle Level

Spacesuit Challenge

Mike McGlone (michael.a.mcglone@nasa.gov)

An astronaut's spacesuit is their personal spacecraft that allows them to work in the harsh environment of space. Find out the math and science behind NASA's spacesuits and a great activity for the classroom.

Convention Center Room 7

Workshop

Secondary

Data Collection with the TI-Nspire (T³ Conf)

David A Young (dayoung7@gmail.com)

Learn how to use the Nspire to collect data in the classroom. See how this new technology can be used to move data collection to another level.

Cottonwood 1

Symposium

Middle Level

Math, Your Students Can Do It!

Bill Hanlon (bill@hanlonmath.com)

This session emphasizes "linking" algebra to previously learned math and outside experiences. Bill brings his knowledge and insight of working with struggling students and students living in poverty with strategies to connect instruction, note-taking, homework, and assessments to increase achievement.

Cottonwood 3

Gallery Workshop

Middle Level

Experience ecology content through the JASON Project's Operation: Resilient Planet

Amy Strong (amy.strong@wichita.edu)

Participants will experience an overview of the JASON Project's ecology curriculum Operation: Resilient Planet through video, the student and teacher's edition of the print curriculum including an example of a hands-on Mission Lab and through the award-winning online content.

The JASON Project, a nonprofit subsidiary of the National Geographic Society, connects students with great explorers and great events to inspire and motivate them to learn science. JASON embeds the cutting-edge research of its partners - National Geographic Society, National Oceanic and Atmospheric Administration (NOAA), and National Aeronautics and Space Administration (NASA) - into core science curricula and professional development. Leading scientists work side by side with JASON students in the classroom and in an online global community, challenging them to apply their knowledge to the same real-world scenarios the scientists face every day. We have found that students approach science and scientific investigation with personal dedication when they connect with charismatic explorers and compelling, real-world events.

Hawthorne 2

Workshop

Middle Level

Which Operation Comes First (T³ Conf)

Marlene Taylor

Be able to ask the questions a step at a time and know if your students are on the right track using the TI Navigator and graphing calculators. With this system you will know if every student is participating and at what level they are understanding the lesson. This will help you determine the amount of homework practice students need at the end of the class period.

Spinning a New Web: Using YouTube (and other Internet sites) to supplement your Online Math Instruction at every level

Heather Benton

Come learn how you can go beyond the videos and presentations used in MyMathLab or MathZone to specifically teach according to your style or presentation, to vary presentations, or to cover additional topics not covered by your textbook materials. The presenter will share her experience in supplementing her online math course with free educational videos and demonstrations from internet sites such as "Youtube" and "Teachertube." She will show how to find, archive, embed, and use the videos in your online class or website. Attendees will receive a handout of "Top Ten Internet Sites for Math Videos" as well as detailed instructions on how to embed and archive videos.

9:30-11:30

Inquiry-Based Ground-water Science Instructional Materials for Middle and High School Science

Allen Macfarlane (dowser@kgs.ku.edu), Margaret A. Townsend, and Marcia Schulmeister (mschulme@emporia.edu)

The workshop consists of two, two-hour sessions, during which the participants will explore water cycle and ground-water science through inquiry-based, hands-on activities and demonstrations, many of which will feature the application of simple physical science, chemistry, and grade-appropriate mathematics concepts.

9:30-10:30

What if...? And What next?

Cathy Seeley

What will it take for every student to be prepared for full participation in a 21st century world? We'll look at the increasingly critical role of STEM fields (science-technology-engineering-mathematics) and talk about what lies ahead for educators as we try to fit all the pieces together.

Cathy Seeley is sponsored in part by The Ewing Marion Kauffman Foundation. The Ewing Marion Kauffman Foundation was established in the mid-1960s by the late entrepreneur and philanthropist Ewing Marion Kauffman. Based in Kansas City, Missouri, the Kauffman Foundation is the 30th largest foundation in the United States with an asset base of approximately \$2 billion.

The vision of the Kauffman Foundation is to foster "a society of economically independent individuals who are engaged citizens, contributing to the improvement of their communities." In service of this vision, and in keeping with our founder's wishes, the Foundation focuses its grant making and operations on two areas: advancing entrepreneurship and improving the education of children and youth



Teaching Alone in a Flat World: What's Wrong with this Picture?

Kathleen Fulton



Today's educators prepare students for a global economy requiring collaboration, teamwork, communications, and an ever-expanding knowledgebase. Yet teachers work alone, isolated in yesterday's factory-era classrooms. No wonder teacher dropout rates can equal student dropout rates. Time for 21st century solutions!

Kathleen Fulton is Director, Reinventing Schools for the 21st Century, at the National Commission on Teaching and America's Future (NCTAF). Fulton is the principal investigator for NCTAF's US Department of Education funded project Teachers Learning in Networked Communities (TLINC), (formerly funded by Microsoft). She is also Project Director for the recently funded National Science Foundation grant Knowledge Synthesis on STEM Teaching in Professional Learning Communities and the Wachovia Foundation funded Georgia State University Induction Project: Cross Career Learning Communities. Fulton has been lead author for a number of NCTAF's recent reports, including *No Dream Denied: A Pledge to America's Children* (2003); *Induction into Learning Communities* (2005); *Fifty Years After Brown v. Board of Education: A Two-Tiered Education System* (2004); and the 2007 NEA Foundation-sponsored report "Reducing the Achievement Gap Through District/Union Collaboration: The Tale of Two School Districts." Before joining NCTAF, Ms. Fulton was Project Director for the Congressional Web-based Education Commission, Associate Director of the Center for Learning and Educational Technology at the University of Maryland, and worked for ten years as a policy analyst for the U.S. Congressional Office of Technology Assessment (OTA). Fulton was recognized by E-School News as one of the 30 most influential people in educational technology for 2000. She received her B.A. in English from Smith College, and her Master's in Human Development from the University of Maryland.

Convention Center Room 1

Workshop

Primary, Middle, Secondary

All Aboard! A Lesson Activity in Data Analysis and Probability

Christina Gawlik (cgawlik@ksu.edu)

Learn how to facilitate probability, data collection, and analysis while playing a fun activity that can be modified for grades 3 – 12. Participants will individually take part in the activity

Convention Center Room 2

Workshop

Secondary

An Applet for the Teacher

Keith Dreiling (kdreilin@fhsu.edu)

Provide your students with interactive programs on the computer. These applets allow students to explore many mathematical concepts, and best of all, they are free. Please bring your laptop computer to actively participate in this session.

Convention Center Room 4

Symposium

Middle Level

Struggling Across Kansas

Shauna Zweifel (szweifel@usd489.com) and Lorey Dreiling (ldreiling@usd489.com)

Informal discussion of low level indicators on the Kansas state assessment at the 6th, 7th, and 8th grade levels.

Teaching Science with 21st Century Technology

Jeff Arrigotti.

Find out how probeware can help high school students gain a solid understanding of a variety of scientific phenomena. No matter which science you're exploring, sensors, interfaces, software and lab manuals provide complete, standards-based units that are easy to integrate into your current curriculum and allow students to see scientific data in real-time.

Online Simulations to Create an Inquiry-Based Mathematics or Science Classroom

Becky Bird and Stacy Powell

Teachers in mathematics and/or science grades 3 and up will explore how the on-line simulations called GIZMOS© can enhance conceptual understanding. The leaders of this presentation have seen a transformation of student involvement, understanding, and manipulation of mathematics concepts in their classroom in the last year by using GIZMOS©

Brain-Based Strategies for Increasing Student Achievement & Performance in Mathematics

Tonji Stringfellow (stonji@aol.com)

This workshop is designed to allow teachers the opportunity to develop the knowledge of specific research "brain-based" strategies that will increase their students' academic performance and achievement through differentiated instruction and other brain based activities.

**When Are We Ever Going to Use This?
Answer That Question with Internet-Based Resources**

Christine Staab (president@katm.org)

Today's students want to know how mathematics and science applies to their lives. Many web-based resources spotlight the applications of mathematics and science. Come learn about the resources available. Create interest and make connections...all you need is a computer and a projector!

Kidspiration

Cindy Garwick and Ken Garwick

Come explore Kidspiration, a software program created for K-5 learners, that develops thinking, literacy and numeracy skills. Kidspiration engaged my first graders in math and science. Participants will receive a fully functional 30-day trial CD and information guide, and have a chance to win one of six door prizes from Inspiration Software, Inc.

Activities to Nspire Pre-Service Mathematics Teachers (T³ Conf)

Patsy Fagan.

Knowing the appropriate use of technology can help prepare your pre-service teachers for their first teaching job. Participate in hands-on activities with the TI-Nspire calculator that can be used in mathematics education courses. Give your students an advantage in their student teaching and first year.

Hawthorne 2

Workshop

Middle Level

Going Round In Circles (T³ Conf)

Marlene Taylor

Working with the TI Navigator and graphing calculators, discover ways to help your students discover the formula for the circumference of a circle. Help students understand the relationship between circumference and pi. Know all students are participating in your lesson. You will also have an idea of their understanding of the topic by the touch of a button.

Convention Center Room 3

Workshop

Middle Level

Literature & Math for 7th & 8th Graders from a Special Education Perspective

Jane Rejba

Using literature and math to teach patterns and the nth term for 7th and 8th grades. Extending patterns to the nth term is continually difficult for students. It is also a low indicator across the state of Kansas. Integrating literature and math will positively impact all students including those in Special Education. The goal will be to give participants some activities that will engage students in the process of concept development. A brief introduction will be given followed by a lesson and activities that will include participation from the attendees. The desired outcome is to provide lessons that can be used by the participants with their students.

11:00 AM-12:00 PM

Ballroom A1

Symposium

General

Challenge Activities for Assessment Readiness

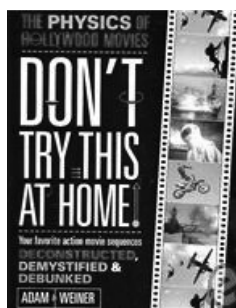
Nancy Edwards

Participants will learn about the challenge activities we have created for our courses in order to help prepare students for assessments in problem solving. Lessons learned and promising results will be shared.



Using Hollywood movies to teach physics

Adam Weiner (weinera@bishops.com)



Hollywood movies provide a unique opportunity for physics students to apply the principles they are learning. Deconstructing the physics in movie scenes is an engaging and entertaining way to learn and teach science.

Adam Weiner teaches physics, ap physics, (and occasionally a theater class) at the Bishops School in La Jolla, CA. As part of the physics curriculum Adam incorporates analysis of the physics (or lack thereof!) as represented in Hollywood movie scenes as a way of engaging the interest of students and promoting scientific literacy. Adam is the author of Don't Try This at Home! The Physics of Hollywood Movies. He has an M.S. in geophysics from the University of Hawaii, and an MFA in acting from SUNY Binghamton.

Adam's visit is funded in part by PASCO. PASCO proudly offers the newest and most innovative products as well as time-tested classics for educators. PASCO scientific's complete offerings cut across science curriculum for K-12 and college / university with genuine concern for teaching excellence and standards.

KATM Members Meeting

Join us to learn more about what is new with KATM. From book studies to mentoring, KATM wants to meet the needs of today's Kansas mathematics teachers. Two scholarships will be presented. One member will receive \$1000.00 from Captiol Federal. Another member will receive up to %500.00 from the Cecil Beougher Memorial Fund. All current and prospective members are encouraged to attend.

KS Academy of Math & Science

Paul Adams (padams@fhsu.edu)

This presentation will provide and overview of the goals, objectives, and expected outcomes of the Academy of Mathematics and Science scheduled to open in August 2009 at Fort Hays State University, Hays, Kansas.

Creating an Average Student

Carol Hewitt (chewitt_s@yahoo.com), Lori Coles (colesl@usd226.org),
and Pat Gleason (gleasonp@usd226.org)

Participants will use mathematical and scientidic skills to create an average student.

Developing Number Sense in Grades K-2 with Math Games

Nancy Smith and Marvin Harrell

Grades K-2 teachers will play a variety of number sense math games. These games are designed to help children develop a sense of whole numbers and represent and use them in flexible ways, including relating, composing, and decomposing numbers. Teachers will receive a packet of twenty games for developing number and operation sense, place value, basic facts, and whole number comparison and computation.

Leatherwood 2

Symposium

Elementary

Click Up Your Instruction with CPS and Science!

Andi Heiling (aheilingirc@olatheschools.com) and Risa Melton (rmeltonirc@olatheschools.com)

You will want to “click up” your instruction reviews and assessments after you see this presentation! Andi, Becky and Risa have learned how to make learning more fun for students while making student assessment data immediate, informative and convenient for the teacher using clickers. These ladies have taken the Olathe School District science reviews and assessments and made them “clicker compatible”, making learning more fun and efficient for Olathe teachers. They can show you how to do the same.

Leatherwood 3

Symposium

Middle Level

Technology in the Algebra Classroom

Shannon Molt (shannonmolt@usd475.org)

Learn how to use technology and virtual manipulatives to teach the following: slope and y-intercept, solving linear equations, factoring polynomials, expanding polynomials, combining like terms, graphing, commutative property, distributive property and MORE.

Ballroom C

Symposium

Secondary

Using Gizmos to promote science education

Tom Sherow and Jose Vigil

Providing examples of web-based instructional technology that engage students in the process of constructing their own understanding of science concepts in a technology-based learning environment.

Hawthorne 1

Symposium

Middle Level

Looking for ways to motivate students?

Ken Garwick (kcgarwick@cox.net) and Cindy Garwick

Come learn some magic activities, and then challenge your students to find the math or science that will allow them to perform these miracles too.

Convention Center Room 6

Workshop

Middle Level

Folding Your Way through Geometry

Kathleen Fick (fickkm@hotmail.com)

Participants will use paper folding activities to review and investigate geometric vocabulary and concepts. The activities shared can be used for grades 6 – 12 and methods of adapting and incorporating these activities for the different grade levels will be discussed. Handouts and materials will be provided.

12:30PM -1:30 PM

Ballroom A1

Workshop

General

The learning of fractions: How can it be built on the learning of whole numbers?

Liping Ma

There may be two approaches to teaching fractions: Teaching fractions “in parallel” with whole numbers or first teaching students about whole numbers, then building their understanding of fractions. The first is a well-known and widely used approach in U.S. elementary schools.

This talk will describe the second approach: How students’ understanding of the concept of fractions as well as their skill in computing with fractions may be built on their learning of whole numbers and how students’ learning of whole numbers may be carefully designed so that it serves as a sound foundation for learning fractions.

Dr. Liping Ma, author of *Knowing and Teaching Elementary Mathematics*, became an elementary school teacher courtesy of China’s Cultural Revolution. Eventually she earned a master’s degree at East China Normal University. In 1989, she began her advanced studies at Michigan State University and then earned her doctorate from Stanford University.



Leatherwood 3

Symposium

General

Doc Gizmo Science Theatre-Discrepant Event Science Demos to Make Students Think

Phil Arnold (doc_gizmo@hotmail.com) and Susan Arnold (arnold_sb@hotmail.com)

These demos are an extension of Susan Arnold’s Chemistry/Physics classrooms. Her 36 years of teaching has touched thousands of students and “Doc” has now extended that to over 152,000. Science Standards are included.

Convention Center Room 1

Workshop

Middle Level

How Does Your Body Measure Up?

Jeanine Haistings and Alison Wenhart

CCRM2

Symposium

General

Understanding Math

Marsha H. Ratzel (mratzel@bluevalleyk12.org) and Christie Purdon (cpurdon@bluevalleyk12.org)

Instead of getting bogged down in data collection, probes focus student attention on understanding what is happening. Students learn how to easily use math to express their scientific ideas, findings and conclusions.

Convention Center Room 3

Workshop

Middle Level

Welcome to Squaresville: Thinking Conceptually about Area Relationships

Martha Parrott (parrott@nsuok.edu)

During this interactive workshop, participants will explore through diverse modeling experiences ways to nurture the conceptual framework of middle school students as they investigate area relationships. How to meaningfully develop common area formulas will be a focus of the dialogue as well.

Convention Center Room 4

Symposium

General

Reading in Math Class! What do I do?

Jerry Braun (jbraun@usd489.com)

How can students succeed when they don't know what you are talking about? The key to success in math is building a strong essential content vocabulary. I'll show you how you can incorporate reading into your math class and still address you math standards.

Convention Center Room 6

Workshop

Elementary

Integrating Literacy into Inquiry Based Science Programs (FOSS emphasis)

Ellen Lesley Thompson (lesleyt@frii.com) and Linda Block-Gandy (linda@stevegandy.com)

Presenters will provide an introduction to inquiry based science techniques by modeling a hands-on lesson from the FOSS "Magnetism and Electricity" kit. They will demonstrate and provide a list of non-fiction books, and accompanying literacy activities that can be integrated into this kit. The format they will present for literacy infusion can be applied to all FOSS kits.

Convention Center Room 7

Workshop

Secondary

Become Nspired Using the New TI-Nspire (T³ Conf)

Patrick Flynn (pflynn@kc.rr.com)

Come learn and use the new TI-Nspire graphing calculator at this hands-on session. Participants will be guided through its use in classes from Algebra to Calculus as well as be given activities to be used in Monday's classroom.

Maple

Workshop

Secondary

Using Simulation with the TI-84 in the Teaching of AP Statistics (T³ Conf)

Mike Koehler (mkoehler@bluevalleyk12.org)

Simulation techniques that enhance the understanding of statistics will be examined using the TI-84 graphing calculator. Classroom ready hands-on activities needed to effectively use simulation as a tool in the teaching of statistics and that model effective classroom use of technology will be presented.

Cottonwood 1

Symposium

Middle Level

Teaching Statistics with EXCEL in the Middle School

Lanee Young (lyoung@fhsu.edu)

Teachers will be introduced to activities in which Excel can be used to enhance the teaching of statistics in the middle school classroom. Bring your laptops in order to actively participate in this session.

Cottonwood 2

Symposium

General

Cue-Up & Unpack: Effectively Teaching Elementary Science

Matt Seimears and Emily Eicke

The syntactic and semantic cuing systems impact student success in the science classroom; strategies will be presented on how to design successful science teaching at the pre-service, in-service K-9 level.

Cottonwood 3

Workshop

Elementary

The Integration of Elementary Standards Based Mathematics and Inquiry Science

Barbara Shoup

This session will begin with a brief introduction of how easily standards based mathematics and inquiry science can be integrated together. Participants will explore lessons of elementary standards based mathematics where science is integrated throughout the program.

Leatherwood 1

Symposium

General

***iSucceed Math TM - an Innovative Data Driven Intervention
for Accelerated Math Achievement***

Peggy Brendel (pbrendel@ymail.com)

Marilyn Burns suggests "Nine Ways to Catch Kids Up" in the November 2007 issue of Educational Leadership. iSucceed MathTM combines Print and Courseware in a multimedia, multisensory approach that addresses the 9 Essential Strategies in Burns' article as well as the NCTM guidelines for selecting an intervention program.

Leatherwood 3

Symposium

Middle Level

Grab 'em with Math Games: Way More Fun Than Your Ordinary Math Class

Michelle Fleming (michellef@essdack.org) and Renee' Smith (renees@essdack.org)

Have you been looking for ways to engage and motivate the students in your math classroom. Grab 'em with games. Games provide an enjoyable venue for the repeated practice necessary for mastering basic skills. They can highlight specific mathematics concepts, activate strategic thinking, help develop logical reasoning skills and provide opportunities to review.

Hawthorne 1

Workshop

Elementary

Let's Make a Kaleidoscope

Dennis Newell (dnewell@usd253.org)

Using simple materials, and a few recycled ones, we will interweave the world of light, reflection, trigonometry, creativity, and just plain fun as we build a simple but sturdy kaleidoscope for you to take home.

Convention Center Room 3

Workshop

Middle Level

101 (Well almost) Ideas for Teaching Fractions, Decimals, and Percent

LeeAnne Coester

Make these concepts fun while encouraging deeper understanding and good attitudes toward math. Ideas for games, manipulatives, activities, math-related literature, and inexpensive materials to make will be incorporated with ways to effectively manage a hands-on teaching environment.

1:00-3:00 PM

Leatherwood 2

Workshop

Middle, Secondary

***Inquiry-Based Ground-water Science Instructional Materials
for Middle and High School Science***

Allen Macfarlane (dowser@kgs.ku.edu), Margaret A. Townsend, and Marcia Schulmeister (mschulme@emporia.edu)

The workshop consists of two, two-hour sessions, during which the participants will explore water cycle and ground-water science through inquiry-based, hands-on activities and demonstrations, many of which will feature the application of simple physical science, chemistry, and grade-appropriate mathematics concepts.

2:00-3:00PM

Ballroom B

Symposium

Pre-Service Teachers Session

David Allen (dallen@ksu.edu) and Melisa Hancock (melisa@ksu.edu)

The transition from pre-service teacher to in-service teacher can be difficult. This session will address challenges, opportunities, and rewards associated with teaching math and science in today's schools. The presenters will provide tips and strategies for this time of transition and address concerns expressed by the audience. This session is designed to be interactive so come prepared to ask and answer questions. Door prizes will be available.

Ballroom C

Symposium

General

Finding and Keeping great STEM Teachers: It's not rocket science.

Kathleen Fulton



STEM teacher turnover is bad and doomed to get worse when Baby Boomers teachers retire. We can't fix the problem with yesterday's recruitment and staffing. This session describes new models for staffing schools with second career professionals in cross generational learning teams. Kathleen Fulton is Director, Re-inventing Schools for the 21st Century, at the National Commission on Teaching and America's Future (NCTAF). Fulton is the principal investigator for NCTAF's US Department of Education funded project Teachers Learning in Networked Communities (TLINC), (formerly funded by Microsoft). She is also Project Director for the recently funded National Science Foundation grant Knowledge Synthesis on STEM Teaching in Professional Learning Communities and the Wachovia Foundation funded Georgia State University Induction Project: Cross Career Learning Communities. Fulton has been lead author for a number of NCTAF's recent reports, including No Dream Denied: A Pledge to America's Children (2003); Induction into Learning Communities (2005); Fifty Years After Brown v. Board of Education: A Two-Tiered Education System (2004); and the 2007 NEA Foundation-sponsored report "Reducing the Achievement Gap Through District/Union Collaboration: The Tale of Two School Districts." Before joining NCTAF, Ms. Fulton was Project Director for the Congressional Web-based Education Commission, Associate Director of the Center for Learning and Educational Technology at the University of Maryland, and worked for ten years as a policy analyst for the U.S. Congressional Office of Technology Assessment (OTA). Fulton was recognized by E-School News as one of the 30 most influential people in educational technology for 2000. She received her B.A. in English from Smith College, and her Master's in Human Development from the University of Maryland.

Ballroom A1

Symposium

Primary

Turn Munchkins into Math Machines with Vocabulary

Shelly Turner (shelly.turner@usd428.net)

In this session you will understand why it is so critical to include vocabulary into your daily math lessons. You will leave with practical examples to use in your primary classrooms.

Convention Center Room 1

Symposium

Elementary

Integrate Dynamic Geometry Software into Geometry, Algebra, & Measurement

Christine Gawlik (cgawlik@ksu.edu)

Learn to incorporate dynamic geometry software into mathematics. This session will demonstrate activities used to enhance geometry, algebra, and measurement lessons for grades 3 – 5 while using Geometer's Sketchpad Software. Learn how to easily incorporate NCTM's Process Standards into math lessons while students and the classroom teacher use technology.

Scientific Discourse in the Classroom

Anne L. Tweed (atweed@mcrel.org)

To learn science concepts, students need to talk about their ideas to clarify their thinking. Learn how to use inquiry questioning strategies to get students to discuss in class and make sense of their learning experiences. Participants will practice using question stems provided.



Leatherwood 1

Symposium

Middle Level

Classroom management and teaching strategies. Bring a sense of humor.

Lorey Dreiling (ldreiling@usd489.com) and Shauna Zweifel (szweifel@usd489.com)

This session demonstrates classroom management techniques that help make math comprehensible for middle level students. The session includes demonstrations of assessment appropriate warm-ups, vocabulary structures, kinesthetic approaches to curriculum, and teacher friendly time savers. Engaging students in their own learning is the focus of this presentation.

Leatherwood 3

Symposium

General

Build a Standards Based Math and Science CurriculumCharlotte MacDonald (cmcdonald54@comcast.net)
and Barbara Attivo (barb.attivo@greenbush.org)

Southwest Kansas Educational Service Center's on-line curriculum alignment tool will enable educators to develop standards based math and science curriculum K-12 including developing High School Course curriculum. This tool will also provide guidance for clarifying each indicator in which educators can specify what to teach, how to teach it and assessments.

Convention Center Room 2

Symposium

Middle Level

Graphically Organized Solutions to some Tricks and Puzzles

Alan Gilmore (algilmo@kckps.org)

"Cannibals & Missionaries"

"The 2000 lights"

"What number are you thinking?"

"How many cubes are there?"

"Virtual dice"

Are among those Tricks and Puzzles solved (or created) through the efficacious application of Microsoft Excel Compatible Worksheets. Middle school through High School Math students find these Mathematical Experiences stimulating and often leading them to making pattern discoveries. The presentation will highlight these and other tricks and puzzles. Digital templates for the handouts (worksheets) will be available online and on-site for downloading or copying. Each activity will be structured (roughly) in a SIOP Lesson Plan which will accompany the handout.

Convention Center Room 4

Workshop

General

Colorful Patterns in Pascal's Triangle

Cynthia Woodburn (cwoodbur@pittstate.edu)

There is an abundance of patterns within Pascal's triangle. In this workshop, we'll focus on beautiful patterns that arise when modular addition is used to color Pascal's Triangle. Activities can be modified for use with students from elementary through college.

Convention Center Room 1

Workshop

General

Eyebrow-Burning Demonstrations

Scott McQuerry (scott@eequalsmcq.com) and Betty Paulsell (bpaulsell@sciencepioneers.org)

Come learn the tips and tricks of using demonstrations to spice up your routine and to enhance student learning. These demos are quick and easy to perform with few materials necessary. Lot's of smelly, slimy and explosive handouts!

Convention Center Room 2

Workshop

Elementary

Integrating Real Life Contexts into Math through Children's Literature

Marvin Harrell and Nancy Smith

This workshop will engage K-5 teachers in hands-on activities using children's literature as a basis for introducing, teaching, and reinforcing mathematical concepts. Participants will receive a handout that includes classroom-tested activities for Number and Operation, Algebra, Geometry, Measurement, and Data Analysis.

Convention Center Room 3

Workshop

Middle Level

Middle School Students Play Physics with Marble Launchers

David Beier (dbeier@barstowschool.org)

YOU be the student in this hands-on interactive session on Projectile Motion. Manipulate variables by changing the launch angle and force. Measure launch distance, graph data and analyze results. Estimate the distance the marble will travel by interpreting graphs & test your predictions. A fun and elegant way to integrate math & science.

Convention Center Room 5

Workshop

Elementary

I Want to Read More Science!

Linda Landis, Malonne Davies, and Art Landis

Reading embellished with simple hands-on science activities will fire up your students' imaginations. They'll be begging to "read more science."

Convention Center Room 7

Workshop

Secondary

Overwhelmed? Tips and tricks to integrating the Navigator into "everyday" teaching (T³ Conf)

Wendy Freebersyser (Wfreebersyser@gmail.com)

This action packed 60 minute hands on session will take you from bell to bell of a typical day in a navigator classroom. Experience lesson openers using note folio and quick polls, all contributes of activity center and closing activities including a post exam student survey.

Highlights include note folio, activity center, multiple seating charts, smartview and saving multiple states and "client surveys via learn check and note folio.

Maple Workshop Secondary
Using the TI-Nspire in the Pre-Calculus & Algebra 2 Classrooms (T³ Conf)

Patrick Flynn

This builds upon the first TI-Nspire session given by the presenter. The focus will be integrating the use of the TI-Nspire in the Algebra 2 & Pre-Calculus classrooms. Participants will also be given activities to be used in Monday's classroom.

Cottonwood 1 Symposium Elementary
Using Distributive Practice to Enhance Student Achievement

Steve Amthauer (evets1948@att.net)

Learn about a research based daily math supplemental program with problem solving, tables, graphs and computation strands with a proven track record for use in grades K-6.

Cottonwood 2 Symposium Elementary
Building number sense and computation with ten frames

Debby Thompson (dthompson1@usd259.net)

Experience activities that you can use immediately in your classroom to help your primary students build a foundation for our number system. Ten Frames are a fabulous tool to be used with kids from Prekindergarten to fourth grade.

Cottonwood 3 Workshop Secondary
Analyzing Black Holes and Supernovae through International X-ray Eyes

A. Marie Pool

Leather1 Symposium Elementary
Elementary GLOBE

Kathy Rome (kjrome@gmail.com) and Paul Adams (padams@fhsu.edu)

This session is for the elementary and pre-service teachers that want to learn more about the GLOBE (Global Learning Observations to Benefit the Environment) program and what it has to offer for elementary students. Come and join us for an introduction to GLOBE and to find out what elementary GLOBE is all about!

Leatherwood 3 Symposium General
Come Wii with Mii! Using Video Games in Multidisciplinary Lessons

Christina Gawlik (cgawlik@ksu.edu)

Engaging students in meaningful and fun mathematics can be accomplished through using the Nintendo Wii in a multidisciplinary unit using differentiated instruction for all grades. Watch your students transform into researchers who design unique experiments, collect and analyze data, and then professionally report their findings.

SATURDAY- 8 NOVEMBER

Saturday 8:00 - 9:00 AM

Ballroom C

Symposium

General

More than Just Pretty Pictures: Polar Science from Satellites

John Heinrichs



Over the past 40-plus years, images and other data from satellites have become a primary way in which scientists study the Earth. The Earth's polar regions (collectively called the "cryosphere") are places that fascinate us with unique ecosystems and peoples, stir our imagination with stories of intrepid exploration, and concern us because of the speed at which they are changing in response to human activity. Because the polar regions are so harsh and inaccessible, satellites are often the only way to get information about the state of the ice, snow, permafrost, and ecology. Each type of surface in the polar regions is studied with a particular combination of sensors. Visible and infrared wavelengths are used for basic mapping, feature identification, temperature measurement, snow cover, and more. However, the polar regions are dark a large part of the year and are often cloud covered. Furthermore, snow, clouds, and ice are all white (high-albedo) and all cold, making them difficult to detect. Sensors operating at microwave wavelengths, like radars, are often used to supplement more traditional imagery. Exciting new work is underway using laser altimeters to measure changes in the great ice sheets on Greenland and Antarctica. This presentation will outline all of the techniques used to study the cryosphere from space, and give examples of important discoveries (as well as beautiful images). The impact of changes in the polar regions will be discussed, and related to both natural and anthropogenic influences. Finally, International Polar Year will be covered as a global focus for research and education, and useful links and resources for more information will be provided. [Dr. John Heinrichs received his B.S. and M.S. degrees in Mathematics from the University of Wisconsin – Milwaukee in 1983 and 1985. He worked for Hughes Aircraft Company as a remote sensing software and systems engineer from 1986 until 1992, when he started graduate study at the University of Colorado from which he received a Ph. D. in Geography in 1996. In 1998, Dr. Heinrichs accepted a faculty position in the Department of Geosciences at Fort Hays State University, where he now serves as chair of the Department. Dr. Heinrichs teaches Physical Geography, World Geography, Remote Sensing, GIS, Climatology, and Geostatistics at FHSU, and his main research interest is in the use of satellites to study sea ice in both the Arctic and Antarctic. He spent summer 2008 as a visiting scientist at the NASA Goddard Space Flight Center in Maryland, where he applied data from the ICESat mission to investigate how long-period ocean waves interact with sea ice.

Ballroom A1

Symposium

General

Stamping across Mathematical History

Cynthia Woodburn (cwoodbur@pittstate.edu)

A visual journey through the history of mathematics via postage stamps.

Ballroom A2

Symposium

Middle level

Making TV games work for Math & Science

Greg Butler (gregorilla@sbcglobal.net)

The workshop will extend the reading strategy of using games to reinforce knowledge level and application level concepts to math and science instruction. Examples will include the games: "Jeopardy", "Password", "Million Dollar Pyramid", and "Who Needs to Know."

Use Hollywood to teach science

Matt Seimears

This presentation will demonstrate how to bring Hollywood and DVDs into your classroom using a backwards design to teach science to students at the K-16 grade levels. Attendees will walk away with innovative ideas on how to transfer movies and videos into a backwards design teaching process to increase student understanding of the concepts being taught.

Overwhelmed? Tips and tricks to integrating the Navigator into "everyday" teaching (T³ Conf)

Wendy Freebersyser (Wfreebersyser@gmail.com)

This action packed 60 minute hands on session will take you from bell to bell of a typical day in a navigator classroom. Experience lesson openers using note folio and quick polls, all contributes of activity center and closing activities including a post exam student survey.

Highlights include note folio, activity center, multiple seating charts, smartview and saving multiple states and "client surveys via learn check and note folio.

9:30- 10:30***What You Know for Sure.***

Lee Stiff



Data is often used to make decisions about the future of young people. But what data is used to decide the mathematics students should take? How does what we know about students affect their future success in mathematics...and in school?

Lee Stiff is sponsored in part by The Ewing Marion Kauffman Foundation. The Ewing Marion Kauffman Foundation was established in the mid-1960s by the late entrepreneur and philanthropist Ewing Marion Kauffman. Based in Kansas City, Missouri, the Kauffman Foundation is the 30th largest foundation in the United States with an asset base of approximately \$2 billion.

The vision of the Kauffman Foundation is to foster "a society of economically independent individuals who are engaged citizens, contributing to the improvement of their communities." In service of this vision, and in keeping with our founder's wishes, the Foundation focuses its grant making and operations on two areas: advancing entrepreneurship and improving the education of children and youth.

NASA Resources for the Elementary Classroom

Michael McGlone (michael.a.mcglone@nasa.gov)

NASA is not just rocket science and there are many resources available specifically for the elementary classroom on science, math, reading, geography, and technology. Come find out about how space can help make your classroom out of this world.

It's SHOWTIME! - Using Music, Movies, & Media to Promote Engaged Student Learning

Daniel Bergman (daniel.bergman@wichita.edu)

Action! This session presents ideas for connecting science and math concepts to music, movies, TV, and other media that students experience daily. Make learning come alive using examples from "The Matrix," "James Bond," "Looney Tunes," and more!

Convention Center Room 2	Workshop	Middle Level
Composite Figures: Area & Perimeter Games		
Connie Peters (cpeters66440@gmail.com), Steve Hardesty (hardestys@rv337.k12.ks.us), and Scott McBurney (mcburneys@rv337.k12.ks.us)		
Helpful games to reinforce concepts related to composite figures. Go back to school on Monday ready to play games. Games will include Formulas and Finding Perimeter and Area of Composite Figures games		
Convention Center Room 3	Workshop	Secondary
The Mechanics of Understanding Physics & Chemistry - Using Data Collection Probes to Collect Real-Time Data		
Theresa Kennedy (tkennedy@bluevalleyk12.org) and Nanet Sula (nsula@bluevalleyk12.org)		
Through a hands-on experience, you will learn how to use data collection probes to collect real-time data and create real-time graphs. You will collect data through a variety of lab activities and then analyze the data to find mathematical relationships.		
Convention Center Room 4	Workshop	Middle Level
Meeting the Challenge: Students Doing Technology		
Malonne Davies (mdavies@emporia.edu), Art Landis (alandis@emporia.edu), and Linda Landis (llandis@emporia.edu)		
This workshop will explore engaging students by offering challenges that reinforce inquiry skills, solidify science content knowledge, and broaden student awareness of connections between and science/technology and society. Participants will enjoy adding a technique to help meet science standards.		
Convention Center Room 5	Workshop	Elementary
Science is "Variable" When It Comes to Math		
Linda Block-Gandy (linda@stevegandy.com) and Ellen Thompson (lesleyt@frii.com)		
Participants investigate "Swingers" (pendulums) as they learn how students in the Variables Module apply the use of different types of graphs in the context of science. How students develop the concept of a controlled experiment is also explored.		
Convention Center Room 6	Symposium	Elementary
Germinating Science Minds		
Karen Heins (heinsk@usd251.org) and Jennifer Richmond (richmondj@usd251.org)		
Observe, classify, measure, and sing your way into scientific methods with seeds. Simple, inexpensive activities will be shared that will keep students interested in science. Inquiry and life science standards will be addressed.		
Convention Center Room 7	Workshop	Secondary
Nspire Your Students to Discover Mathematics (T³ Conf)		
Wendy Freebersyser		
Maple	Workshop	Secondary
Become Nspired Using the New TI-Nspire (T³ Conf)		
Patrick Flynn (pflynn@kc.rr.com)		
Come learn and use the new TI-Nspire graphing calculator at this hands-on session. Participants will be guided through its use in classes from Algebra to Calculus as well as be given activities to be used in Monday's classroom.		

Leatherwood 2

Workshop

Middle Level, Secondary

DOE Academies Creating Teacher Scientists

Dennis Newell

Do you promote every student in your class to think about being future scientists? Let's talk about what working side by side with scientists in real world experiences offered to you by the US Dept of Energy, and get you an application.

Leatherwood 2

Symposium

General

***Assessing Project-Based Learning Activities
in Middle School Math & Science Classrooms***

Doug Adams (doug@altec.org)

Participants will learn about an online rubric generator (RubiStar) and quizzing environment (Quiz-Star) to plan and assess student performance in science and math projects. Sample evaluation plans and the use of graphics, diagrams, and symbols in quizzes will be demonstrated.

Hawthorne 1

Symposium

Middle Level

Math Magic

Ken Garwick (kcgarwick@cox.net) and Cindy Garwick

Looking for ways to motivate students? Come learn some magic activities, and then challenge your students to find the math or science that will allow them to perform these miracles too.

11:00 AM-12:00 PM

Ballroom B

Symposium

General

Challenge Activities for Assessment Readiness

Nancy Edwards



Participants will learn about the challenge activities we have created for our courses in order to help prepare students for assessments in problem solving. Lessons learned and promising results will be shared.

Ballroom A1

Symposium

General

A Christmas Science Show: A Student NSTA Outreach

Eryn Norton (eanorton@scatcat.fhsu.edu) and Paul Adams (padams@fhsu.edu)

The FHSU Student NSTA Chapter will share ideas and demonstrations from our annual community science program linking science concepts to Christmas books.

Convention Center Room 2

Symposium

General

Using Science Probeware to Integrate Math

Marsha Ratzel (mratzel@bluevalleyk12.org) and Christie Purdon (cpurdon@bluevalleyk12.org)

Instead of getting bogged down in data collection, probes focus student attention on understanding what is happening. Students learn how to easily use math to express their scientific ideas, findings and conclusions.

Ballroom C

Symposium

General

The Wendell G. Mohling Foundation Teacher Award

Kay Neill (neillks@cableone.net) and Carol Mohling (cmohling@aol.com)

Learn about the history of The Wendell G. Mohling Foundation, and its contributions to science education, and find out who can win the Mohling Foundation Award, and how to apply?

Convention Center Room 6

Workshop

Secondary

Activities to Nspire Pre-Service Mathematics Teachers (T³ Conf)

Patsy Fagan

Knowing the appropriate use of technology can help prepare your pre-service teachers for their first teaching job. Participate in hands-on activities with the TI-Nspire calculator that can be used in mathematics education courses. Give your students an advantage in their student teaching and first year.

Maple

Workshop

Secondary

Using the TI-Nspire in the Pre-Calculus & Algebra 2 Classrooms (T³ Conf)

Patrick Flynn

Come learn and use the new TI-Nspire graphing calculator at this hands-on session. Participants will be guided through its use in classes from Algebra to Calculus as well as be given activities to be used in Monday's classroom.

Convention Center Room 2

Workshop

Elementary

"Let's Rock" with Data & Probability

Joan Carrol Purkey (purkeyJ@newmanu.edu)

This session will enhance teachers' content knowledge and promote the use of instructional strategies for teaching probability and statistics. They will learn ways to gather, represent, analyze, and interpret data through many hands-on experiences. Participants will have the opportunity to interact and will receive a great resource to take with them.

Convention Center Room 3

Workshop

Middle Level

Movin' with Middle School Math - Fresh Approaches for Making the Learning Last

Kathleen Ann Zigeler (KathyZigeler@smsd.org) and Holly Ann Nelson (HollyNelson@smsd.org)

Hook your students with rhymes, raps, cards, and metaphors. Learn new strategies for presenting order of operations, perimeter and area, properties, algebraic expressions, the real number systems, and solving equations through active participation. Time for a "share session" is included.

Convention Center Room 4

Workshop

Secondary

Carding Your Way Through Chemistry: Self-Checking System for Writing Formulas

Art Landis (alandis@emporia.edu), Malonne Davies (mdavies@emporia.edu),
and Linda Landis (llandis@emporia.edu)

Chemistry ion-cards provide students with flashcards for learning names and formulas of common ions while providing a self-checking system for generating correct chemical formulas. Participants will produce a limited set of ion-cards. They will then experience the self-checking system.

Ballroom B

Symposium

Middle Level

Western Kansas Primary Math Academy

Amanda Hopkins ahopkins@fhsu.edu

Western Kansas Primary Mathematics Academy participants will share content and pedagogical strategies from the conference sessions, discuss classroom use and taping of SIOP lessons, and discuss follow-up activities for the grant. This session is open only to those who have been engaged in the WKPMA project.

Convention Center Room 2

Workshop

Middle Level

Flying High with Math and Science

Mike McGlone (michael.a.mcglone@nasa.gov)

NASA Smart Skies is a set of hands-on activities based on the aeronautical research at NASA. Students have the opportunity to conduct experiments and apply math and science skills as air traffic controllers. Participants are encouraged to bring a laptop for the session.

Convention Center Room 6

Workshop

Middle Level

Music and Math: Fun Connections (T³ Conf)

Martha Haehl (martha.haehl@mckck.edu)

Participants will measure musical instruments and perhaps sing a math song or two to explore connections between math and music. Participants are also encouraged to bring an instrument to mathematically analyze.

Convention Center Room 4

Workshop

Elementary

Data and Probability Lessons for K and 1st Graders

Amanda Hopkins (ahopkins@fhsu.edu), Mandy Juenemann, Tanya Hamel, Karen Thompson, Cheri Simpson, Kim Simon, Amber O'Neal, and Kathy Desaire

Kindergarten and first grade elementary teachers will demonstrate data and probability lessons they created as participants in the Western Kansas Primary Mathematics Academy. Presentation will be hands-on with lesson plans and materials to share.

Ballroom A2

Symposium

Elementary

Doc Gizmo Science Theatre-Discrepant Event Science Demonstrations to Make Students "THINK"

Phil Arnold (doc_gizmo@hotmail.com) and Susan Arnold (arnold_sb@hotmail.com)

These demos are an extension of Susan Arnold's Chemistry/Physics classrooms. Her 36 years of teaching has touched thousands of students and "Doc" has now extended that to over 152,000. Science Standards are included.

Leatherwood 1

Symposium

Secondary

Using Educational Technology & Formative Assessments to Empower Teachers & Students

James Morgan (jmorgan@usd260.com)

Use multiple technological resources to quickly gather data through formative assessments to guide your instruction and engage your students. Learn best practices for these resources and for the use of formative assessments. Opportunities to use the technology will be provided.

Maple

Gallery Workshop

Middle Level

Experience ecology content through the Jason Project's Operation: Resilient Plant

Amy Strong (amy.strong@wichita.edu)

Participants will experience an overview of the JASON Project's ecology curriculum operation: Resilient Planet through video, the student and teacher's edition of the print curriculum including an example of a hands-on Mission Lab and through the award-winning online content.

The JASON Project, a nonprofit subsidiary of the National Geographic Society, connects students with great explorers and great events to inspire and motivate them to learn science. JASON embeds the cutting-edge research of its partners - National Geographic Society, National Oceanic and Atmospheric Administration (NOAA), and National Aeronautics and Space Administration (NASA) - into core science curricula and professional development. Leading scientists work side by side with JASON students in the classroom and in an online global community, challenging them to apply their knowledge to the same real-world scenarios the scientists face every day. We have found that students approach science and scientific investigation with personal dedication when they connect with charismatic explorers and compelling, real-world events.

Convention Center Room 3

Workshop

Middle Level

NASA Brings You Newton's Laws of Motion

David Beier (dbeier@barstowschool.org)

YOU be the student and learn more about Newton's Laws of Motion by participating in 25 different activities that demonstrate motion. These easy to replicate activities use toys and common science equipment such as toys, marbles, cups and coins, and even Barbie. Follow up with a discussion & the activities then take home the new free NASA posters we developed for this workshop to reinforce these concepts in your classroom.

2:00-3:00 PM

Ballroom B

Symposium

General

Seven Habits for an Effective Teacher

Paul Adams (padams@fhsu.edu)



Teaching, whether an art or science, requires time and experience to become proficient. I will share with you my 7 rules for teaching that I have adopted through the years. The presentation will use a mix of anecdotes and demonstrations.

Paul Adams, PH. D., is professor of physics and Anschutz professor of education at Fort Hays State University in Hays, Kansas. He received his B.S. degrees in physics and mathematics at Heidelberg College in Tiffin, Ohio; his M.S. degree in physics at Washington State

University; and his doctoral degree in science education with an emphasis in physics and earth science from Purdue University. Paul was the 2008 Recipient of the NSTA Distinguished Teaching Award.

Convention Center Room 1

Workshop

Secondary

Internalizing Mathematics: Bacteria, Exponential Growth, and Food Poisoning

Elizabeth Applebaum (eappelbaum@kc.rr.com)

Bacteria growing in a petrie dish are a common example of exponential growth. They do more harm in a dish of potato salad, possibly poisoning those who eat it. We present formulas and graphs and model growth with a dice game.

Oceanography - Shallow water waves

Dwayne Beckford (dwayne_beckford@usd368.org)

The Maury Project's Shallow Water Waves Module is a presentation that offers hands-on activities and information for teacher's to take home to their class rooms. Participating teachers will perform a hands-on activity and receive a module at the end of the presentation. The presentation is suited for all levels.

T³ CONFERENCE SCHEDULE

THURSDAY

1:00-5:00pm

Which Operation Comes First

Marlene Taylor

Going Round In Circles

Marlene Taylor

FRIDAY

7:30-9:30am

Data Collection with the TI-Nspire

David A Young (dayoung7@gmail.com)

Learn how to use the Nspire to collect data in the classroom. See how this new technology can be used to move data collection to another level.

T³ Conference

Connie Schrock

10:30-11:00am

Navigator & Data Analysis

Anne Schroeder

Introduction to Statistics on the TI-Nspire

Mike Koehler (mkoehler@bluevalleyk12.org)

This workshop will give participants the opportunity to have hands-on experience with the dynamic capabilities of TI-Nspire technology. This session will cover the statistics capabilities of the Nspire including the lists and spreadsheet application and the data and statistics application.

Activities to Nspire Pre-Service Mathematics Teachers

Patsy Fagan

Going Round In Circles

Marlene Taylor

Navigator & Data Analysis

Anne Schroeder (anne.schroeder@leesummit.k12.mo.us)

The Case for CAS

David A Young (dayoung7@gmail.com)

What is the role of CAS in teaching children Algebra? Can we meet the State requirements without it? See samples of how CAS can allow ALL children to learn Algebra. Discuss the possibilities.

1:00-2:00pm

Become Nspired Using the New TI-Nspire

Patrick Flynn (pflynn@kc.rr.com)

Come learn and use the new TI-Nspire graphing calculator at this hands-on session. Participants will be guided through its use in classes from Algebra to Calculus as well as be given activities to be used in Monday's classroom.

Using Simulation with the TI-84 in the Teaching of AP Statistics

Mike Koehler (mkoehler@bluevalleyk12.org)

Simulation techniques that enhance the understanding of statistics will be examined using the TI-84 graphing calculator. Classroom ready hands-on activities needed to effectively use simulation as a tool in the teaching of statistics and that model effective classroom use of technology will be presented.

2:00-3:00pm

Nspire Your Students to Discover Mathematics

Wendy Freebersyser

Calculus Activities Using the TI-Nspire

Mike Koehler (mkoehler@bluevalleyk12.org)

This workshop will give teachers the opportunity to have hands-on experience with the dynamic capabilities of TI-Nspire technology. This session will cover two constructions on the Nspire that will further the understanding of the Fundamental Theorem of Calculus and the derivative of a function.

4:00pm-End

Overwhelmed? Tips and tricks to integrating the Navigator into "everyday" teaching

Wendy Freebersyser (Wfreebersyser@gmail.com)

This action packed 60 minute hands on session will take you from bell to bell of a typical day in a navigator classroom. Experience lesson openers using note folio and quick polls, all contributes of activity center and closing activities including a post exam student survey. Highlights include note folio, activity center, multiple seating charts, smartview and saving multiple states and "client surveys via learn check and note folio.

Using the TI-Nspire in the Pre-Calculus & Algebra 2 Classrooms

Patrick Flynn

SATURDAY

9:00-9:30am

Overwhelmed? Tips and tricks to integrating the Navigator into "everyday" teaching

Wendy Freebersyser (Wfreebersyser@gmail.com)

This action packed 60 minute hands on session will take you from bell to bell of a typical day in a navigator classroom. Experience lesson openers using note folio and quick polls, all contributes of activity center and closing activities including a post exam student survey. Highlights include note folio, activity center, multiple seating charts, smartview and saving multiple states and "client surveys via learn check and note folio.

10:30-11:00am

Nspire Your Students to Discover Mathematics

Wendy Freebersyser

Become Nspired Using the New TI-Nspire

Patrick Flynn (pflynn@kc.rr.com)

Come learn and use the new TI-Nspire graphing calculator at this hands-on session. Participants will be guided through its use in classes from Algebra to Calculus as well as be given activities to be used in Monday's classroom.

12:30pm

Activities to Nspire Pre-Service Mathematics Teachers

Patsy Fagan

Using the TI-Nspire in the Pre-Calculus & Algebra 2 Classrooms

Patrick Flynn

1:30pm

Music and Math: Fun Connections

Martha Haehl (martha.haehl@mcckc.edu) and Rita Barger (bargerr@umkc.edu)

Participants will measure musical instruments and perhaps sing a math song or two to explore connections between math and music. Participants are also encouraged to bring an instrument to mathematically analyze.

INDEX OF SPEAKERS

A		Freesbersyser, Wendy Lynn	33, 36, 40, 41, 44
Adams, Doug.....	42	Fulton, Kathleen.....	22, 32
Adams, Paul E.....	26, 37, 42, 46	G	
Alanzo, Matt.....	19, 44	Garwick, Cindy.....	24, 28, 42, 44
Allen, David.....	32	Garwick, Ken.....	24, 28, 42, 44
Amthouer, Steve.....	37	Gawlik, Christina L.....	22, 32, 37
Appelbaum, Elizabeth B.....	33, 46	Gillette, Brandon.....	39
Arnold, Phil (Doc Gizmo).....	29, 45	Gilmore, Alan M.....	16, 35
Arnold, Susan B.....	29, 45	Gleason, Patrick.....	26
Arrigotti, Jeff.....	24	Groff, Jane Ann.....	27
Attivo, Barbarea.....	35	Guy, Penny.....	34
B		H	
Baumchen, Joe.....	39	Haehl, Martha.....	45
Bean, Alice.....	23	Hamel, Tonya.....	45
Beckford, Dwayne C.....	44, 47	Hamilton, Cheri.....	33
Beier, David.....	46	Hancock, Melisa.....	32
Beier, Paul D.....	36	Hanlon, Bill.....	20
Benton, Heather.....	21	Hardesty, Steve.....	41
Bergman, Daniel J.....	40	Harrell, Marvin.....	26, 36
Bird, Becky.....	24	Haistings, Jeanine.....	29
Block-Gandy, Linda.....	30, 41	Heiling, Andi.....	28
Bogdon, Ollie.....	33	Heinrichs, John.....	38
Bolen, Emily.....	44	Henis, Karen.....	41
Bowman, Ryan.....	33	Hewitt, Carol Sue.....	26
Braun, Jerry.....	30	Hickam, Homer.....	14
Brender, Peggy.....	31	Hopkins, Amanda,.....	44, 45
Broaddus, Angela.....	27	J	
Buchanan, Rex.....	15	Johnson, Danielle.....	44
Butler, Greg.....	38	Juenemann, Mandy.....	45
C		K	
Clouston, Kathy.....	34	Keith, Charlotte.....	23
Coester, Lee Anne.....	31	Kennedy, Theresa.....	41
Coles, Lori.....	26	Kirchner, Dawn.....	23
Cook, Sarah.....	34	Koehler, Mike.....	23, 30, 33
Corwine, Angela.....	34	L	
Curts, Gary.....	34	Landis, Arthur M.....	36, 41, 43
D		Landis, Linda.....	36, 41, 43
Daicoff, Julie A.....	27	Lalonde, Donna.....	34
Davies, Malonne I.....	36, 41, 43	Lyon, Kim.....	44
Desaire, Kathy.....	45	M	
Dreiling, Keith M.....	22	Ma, Liping.....	29
Dreiling, Lorey.....	22, 35	MacDonald, Charolette.....	35
E		MacDonald, Teresa, P.....	23
Eberle, Marilyn.....	44	Macfarlane, Allen.....	21, 31
Edgell, John James Jr.....	23	Maneth, David Scott.....	23
Edwards, Nancy.....	25, 42	Mayo, Amy.....	44
Eicke, Emily.....	30	McBurney, Scott.....	41
Engel, Barb.....	34	McGlone, Mike.....	20, 27, 40, 45
F		McLain, Elizabeth.....	39
Fagan, Patsy.....	24, 43	McQuerry, Scott.....	36, 39
Fick, Kathleen M.....	28	Melton, Risa.....	28
Fleming, Michelle.....	31	Miller, Julie.....	39
Flynn, Patrick.....	30, 37, 41, 43	Mohling, Carol.....	43
Foster, Tom.....	18		

Schedule

(Plan your conference activities here.)

THURSDAY

<i>Time</i>	<i>Author</i>	<i>Location</i>	<i>Notes</i>
2:30			
4:00			

FRIDAY

<i>Time</i>	<i>Author</i>	<i>Location</i>	<i>Notes</i>
7:30			
8:00			
9:30			
11:00			
12:30			
1:00			
2:00			
3:30			

SATURDAY

<i>Time</i>	<i>Author</i>	<i>Location</i>	<i>Notes</i>
8:00			
9:30			
11:00			
12:30			
12:30			