

MORNING CONCURRENT SESSIONS



RICE

Math – Dependency Relationships: Connecting Language to Mathematics

Anne Papakonstantinou, Ed.D., Director, Rice University School Mathematics Project

Mathematics is a language whose syntax and semantics deserve careful attention if students are to be successful in learning the discipline. In this session, we will explore dependency relationships in a way to get students to think about the language that forms the basis of their studies in algebra and geometry.



Science – Project-Based Learning: Creating a STEM Culture that Works

Reagan Flowers, Ph.D., Founder and CEO, C-STEM

This session is designed to orient participants on Science Technology Engineering and Math (STEM) Pedagogy and its ability to engage all learners. Included in this session is a brief history of C-STEM, the benefits of STEM, and an exploration of the interdisciplinary aspects of STEM.



Policy – Reality Check: Counting our Dropouts & Facing the Costs

Bob Sanborn, Ph.D., President and CEO, CHILDREN AT RISK

Frances Deviney, Ph.D., Texas KIDS COUNT Director, The Center for Public Policy Priorities

Dr. Bob Sanborn will begin the session with a close look at the data reflecting Houston and Texas' graduation and dropout rates. Dr. Frances Deviney will present data on the economic and societal effect of dropouts on Texas, including the cost of keeping kids in school and our potential return on that investment.



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Experiential – Middle Schoolers: Their Voices, Their Lives, Their Needs

Judy Radigan, Ph.D., Visiting Assistant Professor, University of Houston

Come to this session prepared to take the role of a middle school student. Bring feelings about home and community. You may be a “tweenager” with a single parent. You may live in a rough neighborhood. You may be a gang member. You could be an affluent student with absent parents. You may be academically gifted or behind. What needs do you bring into the school, and how does a teacher meet your different needs when you are all in a classroom together? Who among you might drop out of school? Why? What should we do?

Research – Adolescent Brain Development

John Sargent, MD, Director of Child and Adolescent Psychiatry, Ben Taub General Hospital

Brain development continues throughout adolescence and into young adulthood. New neural connections are being formed, and unused connections are pruned. The areas that continue to develop during adolescence are the areas that direct abstract reasoning, lead to executive function development (including development of self monitoring, self soothing, organization and planning) and lead to affect regulation, impulse control and judgment. The timing of this development and variations in its process has significant implications for education, parenting and structuring activities for youth. This session will review these issues.



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Social & Emotional Learning – The 40 Developmental Assets Translated into Use

Patricia Rosenberg, Director of Houston Healthy Communities*Healthy Youth, Texas Association of Partners in Education

In this interactive session, participants will become familiar with Search Institute's 40 Developmental Assets, the research behind the Assets, and the relationship between Assets and healthy youth and communities. Practical strategies for increasing assets will be discussed.



Stakeholders in Education – An Open Discussion with Our Superintendents

Duncan Klussmann, Ed.D., Spring Branch ISD

David Anthony, Ed.D., Cy-Fair ISD

Moderated by Ann Stiles, Executive Director, Project GRAD Houston

Ann Stiles, Executive Director of Project GRAD Houston, will moderate a discussion with superintendents Duncan Klussmann (Spring Branch ISD) and David Anthony (Cy-Fair ISD) on public school reform efforts, the role of schools in students' social and emotional development, and Texas' graduation and drop out rates. Project GRAD is a nonprofit education reform model that has successfully increased high school graduation and college attendance rates for low-income students.



Up Close with Dr. Hess: *Challenging the Conventional Wisdom of School Reform*

Frederick M. Hess, Ph.D., Director of Education Policy Studies, American Enterprise Institute

Today, K-12 school reformers must recognize that machinery and assumptions that may have been sensible in the past are ill-suited given existing opportunities and challenges—and that merely tweaking familiar models is unlikely to deliver satisfying results. American Enterprise Institute’s Frederick M. Hess will argue that many of today’s “cutting-edge” efforts to improve teacher quality, turn around chronically underperforming schools, and promote data-driven decision making represent nothing more than repackaging outdated assumptions. Dr. Hess will explain that real improvement in K–12 schooling will require the emergence of new problem-solvers, and the number, scope, and success of these entrepreneurs will depend on the larger environment in which they are able to operate.



Up Close with Dr. Jackson: *21st Century Middle Schools: Excellence and Equity in a Global Era*

Anthony Jackson, Ph.D., CEO, International Studies Secondary Schools Network, Asia Society

Dr. Jackson will engage participants in an in depth look at how the globalization of the economy, new security challenges, and increased diversity in the U.S. and worldwide means that all students, including middle school students, must have greater international knowledge and skills to compete, connect, and cooperate in a global era. Dr. Jackson will describe the new skill set that students need and show examples of how schools are integrating international knowledge and skills in standards-based curriculum and throughout the school’s culture.



Up Close with Dr. O’Brien: *Bringing Social and Emotional Learning to Life in Middle Grades Today*

Mary Utne O’Brien, Ph.D., Vice President for Strategic Initiatives, Collaborative for Academic, Social, and Emotional Learning

Dr. O’Brien explains the “nuts and bolts” of a school wide commitment to foster social and emotional learning among all middle school students, and describes the roles of policy (state, district and school-level), administrators, teachers, student support personnel, families, and communities in this work. Middle school education today requires the development of the whole person, extending beyond intellect to include the domains of emotion, social skills, and ethics. In order for young people to achieve academically and develop into productive, healthy individuals, they must be engaged, interested, and excited by school, and they must be able to:

- focus attention on their work
- continue applying themselves even in the face of setbacks
- work well with other students and adults
- communicate effectively
- solve problems creatively

When children do these things well, they succeed as today’s students, friends and family members, and as tomorrow’s loving parents, productive workers, and effective community leaders.

AFTERNOON CONCURRENT SESSIONS



**Experiencing an After-School Program – Citizen Schools
*Learning by Doing: Feed Me Better and Solar Car Engineering***

Kathryn Nash, Director of Volunteers – Texas, Citizen Schools

Citizen Schools, a national after-school provider and leader in education reform, has designed an innovative volunteer-based model to address the needs of middle school students. By demonstrating the apprenticeship model of “learning by doing” business volunteers will illustrate two interactive units: Feed Me Better and Solar Car Engineering. See how real learning, real excitement, and real connections can provide real opportunities for young adults.



Experiencing an After-School Program – Prepared 4 Life

Assets in Action: Activities that Promote Social & Emotional Learning

Misha Lesley, Program Director, Prepared 4 Life

Prepared 4 Life Youth Advisory Committee

The *Developmental Assets* have been proven to affect youth in positive ways.

Adults who work with kids often comment that the *Developmental Assets* are great, but wonder what it means to “do” them. In this hands-on workshop facilitated by youth from seven Prepared 4 Life schools, participants will learn how an asset-based approach can impact middle school youth and make a positive difference in their lives.



Science – Addressing Different Learning Styles:

Hypotheses and Predictions with UV Man

Stephanie Shipp, Ph.D., Education and Public Outreach Manager

Christine Shupla, Education Specialist

Lunar and Planetary Institute, Universities Space Research Association

The Lunar and Planetary Institute will explicitly address best practices in science education, as they model a hands-on activity where all participants will build and test their own UV Man to demonstrate the sun's characteristics and light. Exciting science activities for all students, but particularly targeted to engage and spark creativity in those from at-risk populations, will be discussed. These activities address a variety of learning styles, model the nature of science, incorporate initial assessments of and connections to prior knowledge, and evaluation. Physical, visual, and kinetic activities can be followed by English language learners.



Math – Exploring Linear Functions through Multiple Representations

Anne Papakonstantinou, Ed.D., Director, Rice University School Mathematics Project

Linear functions make more sense to students when they explore them in a variety of representations. In this session, we will collect data; represent the data verbally, numerically, graphically, and symbolically to make sense of the functional relationships. This session builds upon the morning's lesson on “*Dependency Relationships: Connecting Language to Mathematics.*”

Policy – How to Fix Our School Finance System

Scott Hochberg, Texas State Representative, House Committee on Public Education

During this in-depth discussion, Representative Scott Hochberg will highlight the inner workings of Texas' education finance system. In particular, Rep. Hochberg will emphasize the problems associated with the current system and what solutions are necessary to remedy it.



raise your hand
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Policy – Engaging the Business Community in Supporting Education Reform

Anne Foster, Executive Director, Raise Your Hand Texas

Successful, high-achieving public schools must have the support of every part of the community, including businesses. Businesses should have an active interest in the education of Texas students as these students are their future workforce. Learn how to challenge the business world to become vested and involved in public education, and learn how both schools and business can benefit.

Social and Emotional Learning – Creating Safe and Civil Schools

Karen Smith, Prevention and Safe School Specialist, Alief ISD

The session will discuss ideas and strategies for promoting Social and Emotional Learning (SEL) school-wide. The objective is to help educators gain an understanding of how to create a positive and proactive behavior management system that can be tailored to each classroom, school, and district. Alief ISD has successfully embraced this behavior management philosophy to assist teachers in fostering respect and responsibility in their students and create a safe and civil environment for all.



Stakeholders in Education – An Open Discussion with Our Superintendents

Abelardo Saavedra, Ph.D., Superintendent, Houston ISD

Guy Sconzo, Ph.D., Superintendent, Humble ISD

Moderated by Scott Van Beck, Executive Director, Houston A+ Challenge

Houston A+ Challenge, a nonprofit dedicated to public school improvement and leadership development, will moderate a discussion with superintendents Abelardo Saavedra (Houston ISD) and Guy Sconzo (Humble ISD) on student-focused public school reform efforts, the role of schools in students' social and emotional development, and the teaching of 21st century workforce skills in schools.