

**ASSOCIATION FOR CONSTRUCTIVIST
TEACHING CONFERENCE 2005**

The Sheraton Ferncroft Resort in Danvers, MA

November 4 - 5, 2005

ANNUAL CONFERENCE
ASSOCIATION FOR CONSTRUCTIVIST TEACHING
The Sheraton Ferncroft Resort in Danvers, MA

Friday, November 4, 2005

Breakfast 7:00 am - 8:30 am
Foyer outside
Northshore Ballroom B

Keynote Address
8:30 am - 10:00 am
Northshore Ballroom B

"Picture This: The Use of Representation in Early algebraic Thinking"
Deborah Schifter

My colleagues and I have been exploring the idea that students' early algebraic thinking is supported by reasoning about visual representations that embody the actions of the operations. In this talk, I will provide examples of how such representations provide children with access to generalizations about the number system and allow them to justify claims that apply to infinitely many numbers.

Deborah Schifter (senior scientist at EDC) has worked as an applied mathematician, has taught elementary, secondary, and college level mathematics, and since 1985 has worked as a mathematics teacher educator. She co-authored with Catherine Twomey Fosnot *Reconstructing Mathematics Education: Stories of Teachers Meeting the Challenge of Reform*, edited a two-volume anthology of teachers' writing, *What's Happening in Math Class?*, and is currently producing, with Virginia Bastable and Susan Jo Russell, the professional development curriculum series for elementary and middle-grade teachers, *Developing Mathematical Ideas*. The team is currently working on the final two modules: *Reasoning Algebraically about Operations and Patterns, Functions, and Change*.

Book Signing 10:00 - 10:30 am
Foyer outside
Northshore Ballroom B

Session One 10:45 am - 12:15 pm

Ipswich

Expedition in Calculations: One School's Journey to Help Children Construct Number Operations
Lisa Coffman, Newsome Park Elementary, Newport News, VA
Kelly Kent Johnson, Newsome Park Elementary, Newport News, VA

Six years ago Newsome Park Elementary School in Newport News, Virginia embarked on a journey toward constructivist teaching in mathematics. This session will take you down some of the routes and passage-

ways they crossed as individuals and as a school, the wonders they encountered, and the discoveries they are still making about how children learn to calculate. This session will highlight the positive influence constructivist practices have had on our students' dispositions about learning math, the teachers' attitudes towards teaching it, and the added benefit of improved state test scores.

Georgetown

Constructing Constructivism

Julie Rainer Dangel, Georgia State University, GA

Linda Kroll, Mills College, Oakland CA

Teresa Harris, James Madison University, Harrisonburg, VA

Joanne Falinski, Pace University, NY

Would you like to have a better understanding for constructivist teaching and learning? This workshop will explore some of the basic tenets of constructivism. Join us in the session as we interact and construct the meaning and application of constructivism.

Essex

Composing and Improvising Music with Young Children: A Constructivist Approach

Carolyn Hidebrandt, Regents' Center for Early Development Education, Cedar Falls, IA

Sonia Yoshizawa, Regents' Center for Early Development Education, Cedar Falls, IA

What is constructivist music education? How can we use constructivist principles to foster creativity in music? In this session we will show how kindergarten and early primary grade children at the Freeburg School learned to sing and play simple folk tunes, and then used those songs as a springboard for musical composition and improvisation. .

Topsfield

The Potential Impact of High-Stakes Consequences on Learning and Instruction:

What Does this Mean for Constructivist Educators?

Shelly Counsell, University of Northern Iowa, Cedar Falls, Iowa

This session will examine the effects of No Child Left Behind (2002) on learning and instruction by allowing ACT members to react to segments from conversations with four third-grade teachers who describe their first-hand experiences with standardized testing, mandatory retention and accountability in Iowa and Florida. Session participants will be challenged to explore their own beliefs and assumptions toward the standards movement and accountability systems and what it means for constructivist educators and parents nationwide

Hamilton

Let's Talk About It! Facilitating Discourse in Student Learning

Sharon Hooper, Berkmar Middle School, Atlanta, GA

Julie Rainer Dangel, Georgia State University, Atlanta, GA

In this presentation, we will discuss a study of student discourse in a third grade mathematics classroom and findings that indicate students' gains in computation and problem solving and how teacher facilitation skills change. Suggestions for classroom teachers interested in simulating mathematical discourse are included.

Manchester

*Inquiry-Based Early Childhood Curriculum Development:
Transferring Personal Representation to Experiences Working with Children*
Jane Tingle Broderick, East Tennessee State University, Johnson City, TN
Seong Bock Hong, University of Michigan-Dearborn, Dearborn, MI

This presentation shows our analysis of how teacher candidates transfer their adult experiences with inquiry-based curriculum, inquiry, and representations to their experiences in planning and implementing inquiry-based curriculum with children. This entire process focuses on visually interesting documentation of teacher candidates' and children's interactions with materials and peers, and includes a look at observation and planning forms that guide the inquiry practice.

Lunch on your own 12:30 pm - 1:30 pm

Session Two 1:45 pm - 3:15 pm

Ipswich

*Technology in the Constructivist Classroom:
How can educators authentically integrate technology into the curriculum?*
Kate Checkak, The School at Columbia University, New York, NY

Technology can help children to build on their own experiences, construct their own meanings, create products, and solve problems successfully. In this session participants will examine a variety of student work in a third grade classroom; such as, creating digital portfolios through blogging, doing research, creating music, editing movies and more

Georgetown

An experiment in constructing pedagogical content knowledge
Teresa Harris, Early Childhood Education, James Madison University, Harrisonburg, VA
Holly Pence, Early Childhood Education, James Madison University, Harrisonburg, VA

When using a workshop approach in methods courses with pre-service teachers, how do teacher educators facilitate the construction of pedagogical content knowledge? We'll share the challenges we've faced as we have attempted to help students move from seeing themselves as "student" to viewing classes as "teachers."

Essex

*Piaget's Theory of Intelligence and Knowledge: Educational
Credibility In Knowledge-Content Relationships*
Rheta DeVries, University of Northern Iowa, Cedar Falls, Iowa

The workshop will present a model for teaching ethical decision making from a constructivist perspective. After reporting the results of a survey of ethical complaints made to 46 state counseling licensing boards, we will provide a forum for discussing why certain complaints are made more frequently and how the teaching of ethical decision-making is best approached from a constructivist perspective. Time will be left for examining vignettes of ethical dilemmas and how they could best be approached from a constructivist point of view.

Topsfield

Science in the Shopping Cart: An Exploration of How Children Develop Understanding Of Complexity Through Simple Questions and Simple Materials
Jacqueline Grennon Brooks, Hofstra University

This session will engage participants in illustrative examples of problem based settings in which learners use everyday supplies from supermarkets to confront the nature of science. Intended for a diverse audience, this workshop offers participants the opportunity to engage, as adult learners, in solving open ended problems, and then to analyze the imaginative and social endeavors in which learners must engage in order to development hypotheses, collect evidence, craft arguments, and forge emergent theories.

Hamilton

Classroom Community and Cooperative Discipline in Middle School
Marilyn Watson, Developmental Studies Center, Oakland CA

The ideal constructivist approach to discipline is cooperative, and the ideal constructivist classroom is a caring, moral community. While these ideals are difficult to achieve in elementary school, they often seem impossible in middle school settings. This session will briefly outline aspects of attachment theory and research that explain the origins of children's disposition to be cooperative, discuss barriers to creating cooperative relationships with middle school children, and describe practical approaches to building classroom community and cooperative relationships in middle school. We will discuss and analyze a number of real-life classroom vignettes related to discipline and community building at the middle school level.

Manchester

Lesson Study: Constructivist Teachers as Constructivist Learners
Jane Gorman, Education Development Center, Newton, MA
Terry Leverich, Educational Development Center, Newton, MA

In this session participants will learn about lesson study - a professional development process practiced widely in Japan and recently emerging in the U.S. as a promising form of professional learning community. In lesson study, small groups of teachers collaborate around the development of a research lesson that they then observe and discuss to understand their students' learning processes and to improve the effectiveness of the lesson. Discussion will center on the connections between the lesson study model and constructivist teaching, with emphasis on the needs of constructivist teachers as learners.

Session Three 3:15 pm - 5:00 pm **Third Annual Research Roundtable** **Northshore Ballroom B**

Long-term Effects of a Caring Classroom Community in the Primary Grades on High School Sophomores
Marilyn Watson, Development Studies Center, Oakland, CA

Arithmetic for Low-Performing, Low-SES First Graders
Constance Kamii, University of Alabama-Birmingham

Using Inquiry to Construct and Reconstruct our Practice: Self-Study in the Teacher Education Classroom
Linda Kroll, Mills College, Oakland, CA

Meet the ACT Board Members Wine and Cheese 5:30 pm - 6:30 pm

Saturday, November 5, 2005

Breakfast 6:30 am - 8:00 am

Foyer outside

Northshore Ballroom B

Keynote Address

8:00 am - 9:30 am

Northshore Ballroom B

"When Theory Meets Practice in a Complex World"

Lucy West

In a high stakes, fast paced, complex, society, what is a constructivist to do? What does constructivism have to do with professional learning and how might professional learning impact student learning? This talk will explore how a high stakes political climate impacts instruction and what teachers can do to ensure that robust student understanding is at the heart of their practice.

Lucy West has served New York City Schools in a variety of roles: as classroom teacher, mentor teacher, teacher supervisor with a Columbia University Professional Development School, teacher of mathematics instruction within Bank Street College, curriculum developer, assistant principal, Director of Mathematics Community School District 2, and Deputy Superintendent of Region 9. In 1998, she became the principal investigator in a National Science Foundation Teacher Enhancement Grant: *RECONCEPTUALIZING MATHEMATICS EDUCATION THROUGH PROFESSIONAL DEVELOPMENT*, and is studying and developing the concept of coaching as a professional development practice. She has worked with the nation's leading experts on Japanese Lesson Study and designed and implemented effective American versions of this practice. Ms. West's particular expertise is effective instruction and the thoughtful approaches to professional development that foster and sustain it, have earned her recognition and professional partnerships beyond New York City. Ms. West's book, *CONTENT-FOCUSED COACHING: TRANSFORMING MATHEMATICS LESSONS*, is a result of the collaboration between Community School District 2 and the Institute for Learning. Since 1993, she has been an instructor for the Math Solutions series of professional development courses for Marilyn Burns Education Associates. Ms. West's most recent project includes designing and teaching a mathematics course for New Leaders for New Schools, a national organization dedicated to the development of principals. She has presented at conferences and institutes internationally, including EARLI, ICME, ASCD, NSDC, NCSM, NCTM.

Session One 9:45 am - 11:15 am

Ipswich

Implementing a science and art integrated activity into a 3-8 multiage classroom in a rural village in Alaska: Applying Reggio Emilia approach
Seon Chun, Pacific Oaks College, Pasadena, CA
Noele Weemes. Kokhanok School, Kokhanok, AK

The purposes of this project are (a) to compare how Alaska Native children respond to the same activities that previously have been implemented into a classroom of children from a Midwestern city, and (b) to

provide early childhood educators in Alaska an example of how to facilitate the successful implementation of a science and art integrated activity, making mobiles, in a multiage early childhood classroom in a rural Alaskan village.

Georgetown

Encouraging Algebraic Reasoning for Computation Fluency
Margie Riddle, Bridge Street School, Northampton, MA
Marta Garcia Johnson, Haw Creek Elementary School, Asheville, NC

When students are encouraged to generalize and reason algebraically, they develop computation strategies that lead to fluency. We will examine classroom practice, including discussion and student work, that highlights this connection. The focus will be on strategies for subtraction and multiplication that include beginning understanding of the commutative, distributive, and associative properties.

Essex

Cooking in Constructivist Classrooms: What Can Children Learn?
Christina Sales, Freeburg School, Regents' Center for Early Developmental
Education, University of Northern Iowa, Waterloo, IA

The purpose of this presentation is to describe a variety of cooking activities in constructivist classrooms. The presentation will begin with a theoretical foundation including the necessity of error-informed experimentation and specific mental relationships children have the possibility to construct when they cook. Photos and videos of children cooking the classrooms from 3-years-old through second grade will be presented. Participants will examine recipes and discuss their educational value in terms of the construction of mental relationships.

Topsfield

*A Self-Regulated Learning Approach for Children with
Learning/Behavior Disorders*
Joan Benevento, retired from St. John's University, Queens, NY; adjunct,
St. Joseph's College, Long Island, NY

Constructivism sees all children as biological systems consisting of gradually developing internal structures that form the architecture for decoding, recoding, and encoding information. These self-regulated systems are active meaning-making adaptations built upon a sequential unfolding of emerging capacities. An intervention model based on the concepts of Piaget's concepts of constructivism, designed to help children with learning/behavior disorders actively participate in a fuller integration of their own psychomotor, cognitive, and affective self-regulating, meaning making processes, will be described. A self-regulated learning cycle that proceeds through the problem-solving sequence of arousal to task demands, scanning information, making choices, taking action, and evaluating solutions will be outlined.

Hamilton

*Who was Pocahontas? Constructing Knowledge in an Undergraduate
Multicultural Education Class*
Susan Redditt, Westfield State College, Westfield, MA
Magdalena Pasiut, Westfield State College, Westfield, MA
Kristen Gianchetti, Westfield State College, Westfield, MA
Rebekah Demarsico, Westfield State College, Westfield, MA

Undergraduate pre-service teachers and the Multicultural Education course instructor will lead workshop participants through a series of activities designed to facilitate elementary students' constructed knowledge of the historical figure, Pocahontas. This interactive session will help teachers and teacher educators bridge the gap between constructivist learning theory and the elementary classroom using James Bank's description of the knowledge construction process and a modified constructivist model for teaching science.

Manchester

Reader Response and Construction of Meaning
Joanne Falinski, Pace University, NY

This session will focus on the use of reader response to support students' construction of meaning when faced with challenging texts. Participants will actively participate in reader response activities using texts from literature and film. Samples of student response logs from different grade levels (Elementary - College) will be shared and analyzed for levels of comprehension.

Book Signing 11:15 - 11:45 am
Foyer outside
Northshore Ballroom B

Keynote Luncheon
12:00 pm - 1:30 pm
Northshore Ballroom B

"How to stay true to your constructivist principles in a world obsessed with testing"
Dennis Littky

This past year, the state of Rhode Island rejected a national trend towards high stakes testing in favor of a new graduation by proficiency program. Inspired by Dennis Littky's award-winning *Met* School in Providence, the policy emphasizes student work, internships, and Senior Thesis Projects, not standardized tests. Hear from Littky how *The Met*, as a national test-case, offers a window into authentic assessment on a larger scale. Learn how *The Met* has stayed true to its constructivist roots of assessing proficiency one student at a time and in so doing, has influenced the broader educational system.

Dennis Littky is Director of *The Met* high schools in Providence, RI, and Co-director of *The Big Picture Company*, a nonprofit education design organization that creates and supports small, personalized, public schools nation-wide that educate students "one kid at a time."

Nationally known for his more than 35 years of innovative educational leadership, Dennis was awarded the Harold W. McGraw Jr. Prize in Education in 2002. While he was principal of Thayer Junior/Senior High School in Winchester, NH, it was selected as the first member of the Coalition of Essential Schools. His work at Thayer was later featured in an NBC movie, "A Town Torn Apart," based on the book, *Doc: The Story of Dennis Littky and His Fight for a Better School* (Contemporary Books, 1989).

Dennis received his double Ph.D. in psychology and education from the University of Michigan. In September 2004, his book (along with Samantha Grabelle) *The Big Picture: Education is Everyone's Business* was published by ASCD Press.

Session Two 1:45 PM - 3:15 PM

Ipswich

Constructing Connections with Culturally Responsive Children's Literature
Jean Roth Hawk, Eastern Mennonite University, Harrisonburg, VA

This session will introduce participants to multicultural children's literature that can become an integral part of a literacy program with the goal of being not only *representative* of a variety of cultures, but responsive in ways that can help students make the kinds of connections that are necessary for learning. Examples across elementary grade levels and from a variety of cultures will show how principles of constructivism can be met through introduction of literature.

Georgetown

Developing a Practice that Supports Improved Reading Comprehension
Margie Riddle, Bridge Street School, Northampton, MA
Jan Szymaszek, Smith College Campus School, Northampton, MA Northampton, MA

In the middle grades comprehension becomes the focus of a reading program. Considering ourselves as readers we will consider strategies that enhance reading comprehension. We will analyze how various activities in our reading classrooms specifically offer our students the opportunity to develop the strategies that will improve their comprehension.

Essex

*Physics in Early Childhood and Elementary Classrooms:
A Constructivist Approach to Air Dynamics*
Shelly Bromwich, Malcolm Price Laboratory School, University of Northern Iowa
Beth Dykstra Van Meeteren, Freeburg School, University of Northern Iowa

We will share recent work on physics education in early childhood and elementary classrooms. We will observe children's interactions with air dynamics (i.e., movement of air and its ability to move objects). In addition, we will discuss the possibilities for scientific, mathematics and literacy development.

Topsfield

Why is Length x Width So Hard?
Constance Kamii, University of Alabama-Birmingham

Evidence will be presented to show that most students in grades 4 - 8 (a) do not think that a square is a unit of measuring an area and (b) do not understand why two lengths become an area when they are multiplied. Piaget's explanation of these problems and educational implications will be presented.

Hamilton

Bead Frames and the Days-of-School Chart: Tools for Developing an Understanding of Number in Kindergarten and First Grade Classrooms
Melissa Post, Springfield School District, VT.

This workshop describes the daily use of bead frames (2 rows of ten beads) and a 10x18 grid for recording the number of days of school in a kindergarten classroom and first grade. Participants will observe a video of kindergarten children sharing their observations about the day's attendance on the

bead frame and their comments about number patterns in the days of school chart. The evolution of the use of these tools throughout the school year will be described.

Session Three 3:15 pm - 5:00 pm
Meeting of the Minds Panel Discussion
Northshore Ballroom B

"Constructivist teaching and learning in an era of NCLB"

Alice Wakefield, Old Dominion University, Norfolk, VA
Lucy West, Metamorphosis: Teaching Learning Communities
Rheta DeVries, Regents' Center for Early Developmental Education,
University of Northern Iowa
Cathy Fosnot, Mathematics in the City, City College of New York, NY
Dennis Littky, Metropolitan Regional and Technical Center, Providence, RI

Book Signing 5:00 - 5:30 pm
Foyer outside
Northshore Ballroom B

Association for Constructivist Teaching

Visit us on-line at

<http://www.odu.edu/act>

View the ACT journal, *The Constructivist*, on-line at
<http://www.odu.edu/educ/act/journal/vol16no1/index.html>