EETC 2011
EARLY EDUCATION AND TECHNOLOGY FOR CHILDREN

March 2-4, 2011 Salt Lake City, Utah

Conference Program


Beneficial Life
TRAX
LINE

WELCOME

On behalf of the Conference Organizing Committee, we wish to extend a warm welcome to all attendees of the first Early Education and Technology for Children™ (EETC) Conference.

EETC will be an annual meeting place for presenting and discussing research and developments in the areas of preschool and elementary education. This conference was created to provide a forum for researchers, policy makers, administrators, educators, and practitioners to discuss cutting-edge research, innovations, approaches, and developments in education for preschool through elementary school.

We believe you will find that the quality of the presentations and the range and depth of topics covered this year will establish EETC as the key conference in early education and technology for children. Keynote speakers Dr. Marilyn Jager Adams, Dr. Grover J. "Russ" Whitehurst, and Dr. Dustin "Dusty" Heuston will present three different approaches to early education based on their backgrounds. Featured speakers Dr. Warren Buckleitner, Jeff Herr, and Dr. John Dexter Fletcher will offer insight on early education and technology from their own experiences as teachers, designers, and reviewers.

In addition, conference sessions will explore new technological tools in the classroom, preschool practices around the world, literacy instruction through technology, impacts of technology on children and their education, improvement of classroom instruction, and much more.

We would like to personally thank all keynote and featured speakers as well as all presenting speakers for their contributions. We hope you enjoy the conference and your stay here in Salt Lake City.

EETC 2011 Conference Organizing Committee

A SPECIAL THANK YOU TO THE FOLLOWING SPONSORS

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CONFERENCE VENUE

Little America Hotel

500 South Main Street
Salt Lake City, UT 84101

Main phone line: 801-596-5700

Registration Desk

The EETC registration desk will be located in the entrance to Ballroom A. Please check in to receive your printed program, name badge, and additional relevant information. The registration desk will be open from 8:00 AM to 5:00 PM on Wednesday, 7:30 AM to 5:00 PM on Thursday, and 7:30 to 11:00 AM on Friday. Please direct any conference questions to the EETC registration desk.

Hotel Guest Amenities

Salt Lake's largest indoor/outdoor pool

Children's pool

Complimentary health club with sauna, whirlpool, and fitness center

Complimentary in-room wi-fi access

iHome clock radio

Complimentary parking and underground parking

Valet parking

Same-day dry cleaning service and laundry with one-hour pressing

24-hour shoe shine

In-room dining

Business center

Five retail shops

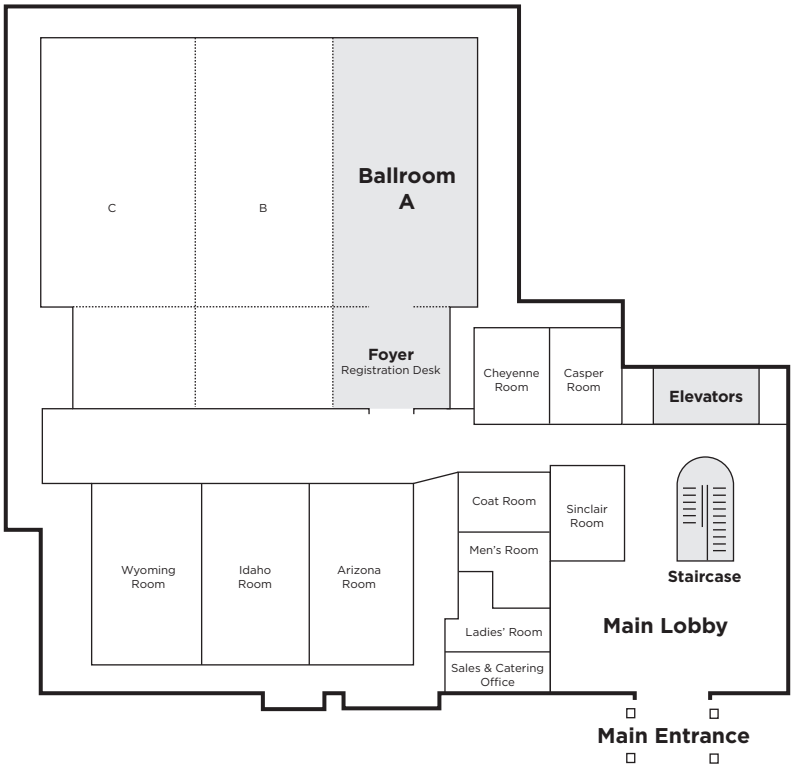
Two restaurants: Steakhouse and Coffee Shop

Private sports club

Coffee bar

Express check out

FIRST FLOOR



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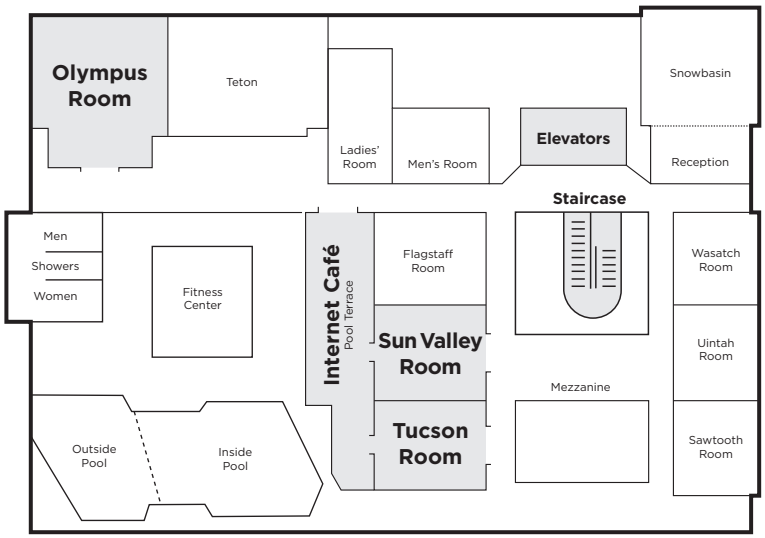

Meals

EETC registration includes most meals during your stay in Salt Lake City. Wednesday night will feature an opening reception with cash bar and hors d'oeuvres in the Olympus Room. Thursday and Friday breakfast will be served in Ballroom A between 6:30 and 8:00 AM, and Lunch will be served in Ballroom A between 12:00 and 1:00 PM on Thursday and between 11:15 AM and 12:45 PM on Friday.

Wireless Access

The Little America Hotel offers free wireless Internet for all conference attendees. Access is available in all guest rooms and the lobby lounge. No password is necessary. Additional wireless access will be provided by EETC on the Pool Terrace and in both breakout rooms. The password for this wireless connection is EETC2011.

Internet Café

Conference attendees will have access to an Internet Café located in the Pool Terrace next to the Tucson and Sun Valley rooms. These computers are available for participants only during scheduled times (see below). If you are a guest at the Little America and need to use a computer in the evening, you may use the fully-equipped business center on the lobby level that can be accessed with your room key.

Wednesday: 1:30 – 7:00 PM

Thursday: 7:30 AM – 4:30 PM

Friday: 7:30 AM – 1:00 PM

Coat Rack

There will be a coat rack set up in the Ballroom A Foyer, next to the EETC registration desk. Coats may be left there until 5:00 PM on Wednesday and Thursday and until 2:00 PM on Friday.

Smoking

The Little America Hotel is a smoke-free venue. Smoking is only allowed outside the building and at least 25 feet away from doorways.

Parking

All conference attendees are welcome to park in the free lot underneath the lobby. This garage can be accessed from the west side of the Little America Tower. Please note that the ceiling height of the garage is seven feet.

Transportation

The Little America Hotel is located just 10 minutes from the Salt Lake International Airport. Guests of the hotel can arrange transportation from the airport and/or all local destinations. Contact the concierge at 801-596-5799.

Taxi service from the Salt Lake City International Airport to the Little America Hotel is approximately $20, not including gratuity. Taxis can be found outside of the baggage claim area of each terminal.

Driving Directions to the Hotel

Eastbound I-80 (from the airport):
Exit I-80 at 600 South/City Center exit.
Continue on 600 South, approximately 1 mile.
Turn left on Main Street (street with TRAX Light Rail).
Little America Hotel is on your left.

Westbound I-80:
Take the I-15 North exit at the I-15 and I-80 exchange.
Exit I-15 at 600 South/City Center exit.
Continue on 600 South, approximately 1 mile.
Turn left on Main Street (street with TRAX Light Rail).
Little America Hotel is on your left.

Southbound I-15:
Exit I-15 at 400 South/City Center (Exit 307).
Travel east on 400 South, approximately 1 mile.
Turn right on Main Street (street with TRAX Light Rail).
Little America Hotel is on your right.

Northbound I-15:
Exit I-15 at 600 South/City Center.
Continue on 600 South, approximately 1 mile.
Turn left on Main Street (street with TRAX Light Rail).
Little America Hotel is on your left.

SPEAKERS

Keynote Speakers

Dr. Grover J. "Russ" Whitehurst

Dr. Whitehurst is a widely respected and influential figure in education research and policy in the U.S. and around the world. His government appointments have included service as the Director of the Institute of Education Sciences at the U.S. Department of Education and as the U.S. Assistant Secretary for Educational Research and Improvement. He has also served as Chair of the Department of Psychology at the State University of New York at Stony Brook and as Academic Vice President of the Merrill-Palmer Institute. Currently, he is the Herman and George R. Brown Chair and Director of the Brown Center on Education Policy at the Brookings Institution. Dr. Whitehurst received his PhD in Experimental Child Psychology from the University of Illinois at Urbana-Champaign in 1970 and has conducted research in the areas of program evaluation, teacher quality, preschools, national and international student assessments, reading instruction, education technology, and education data systems.

Dr. Dustin "Dusty" Heuston

Dr. Heuston is the chairman, founder, and CEO of Waterford Institute,™ a nonprofit educational solutions company "dedicated to providing every child with the finest education through the development of high-quality educational models, programs, and software." Dr. Heuston received his PhD in American Literature and has taught at the college level as well as served as headmaster at the prestigious Spence School in New York City. With Waterford Institute, Dr. Heuston helped produce the world's first educational videodisc in 1978, among other computerized education and training products. Since, Waterford Institute's *Waterford Early Learning*™—a preschool through second-grade program encompassing reading, math, and science curricula—has won 2008 CODiE awards for Best Course/Classroom Management Solution and Best Science Instructional Solution. And *Waterford Assessment of Core Skills*™—a reading assessment program for preschool through second-grade students—was named Most Likely to Succeed in the Education Market by SIIA's Innovation Incubator program in 2009. Dr. Heuston is also the author of *The Third Source: A Message Of Hope For Education,* which will be available spring 2011.

Dr. Marilyn Jager Adams

Dr. Adams, author of *Beginning to Read: Thinking and Learning about Print* (MIT Press), is a Research Professor in the Cognitive and Linguistic Sciences Department at Brown University. Complementing her academic publications, she has been principal author on a number of research-validated reading resources and an advisor to several educational television initiatives, including *Sesame Street* (1990–1995) and *Between the Lions* (1995–). Dr. Adams chaired the Planning Committee and was a member of the Study Committee for the National Academy of Sciences' report *Preventing Reading Difficulties in Young Children*, and has served since 1992 on the Planning or Steering Committees for the National Assessment of Educational Progress (NAEP) in reading. She is currently on the English/Language Arts Development Team for the K–12 Common Core State Standards Initiative.

Featured Speakers

Jeff Herr

Mr. Herr, a former Fulbright Scholar to Brno, Czech Republic, studied secondary education in the Czech system, has a master's degree in educational administration from the University of Utah, and has just been accepted to law school in the University of London's International Program. He is entering his nineteenth year as an educator and fifteenth year as an administrator. Herr is currently the head of school for the Utah Virtual Academy (UTVA), the first virtual charter school in the state of Utah and the largest charter school in Utah with over 2,000 K–12 students in all corners of Utah and from all demographics. UTVA uses a completely virtual model, with a curriculum provided by K12 Inc. The school has passed Annual Yearly Progress (AYP) in each of its first two years, and all students in its first graduating class are currently enrolled in college.

Dr. John Dexter Fletcher

Dr. Fletcher is a research staff member at the Institute for Defense Analyses. He holds graduate degrees in computer science and educational psychology from Stanford University where, as a research associate, he directed numerous projects for the Institute for Mathematical Studies in the Social Sciences. While at Stanford, he was part of the team that developed the first computer-assisted instruction (CAI) programs for the deaf. He also developed the first CAI program for K-3 reading using digitized audio. Fletcher's research produced these and other CAI systems for use in public schools, as well as training devices used by the military. He has held academic positions in psychology, computer science, and systems engineering, and has held government positions as a research psychologist for the Navy, Army, Defense Advanced Research Projects Agency, and the White House Office of Science and Technology Policy. He is a fellow of the American Educational Research Association and three divisions of the American Psychological Association.

Dr. Warren Buckleitner

Dr. Buckleitner, a former preschool, elementary, and college teacher, is an expert on children and technology. He covers kid's technology for the popular Gadgetwise blog; contributes to the *New York Times*, *Scholastic Parent & Child*, *Parents*, and *KidScreen*; and is the founding editor of *Children's Technology Review*. Dr. Buckleitner holds a bachelor's degree in elementary education from Central Michigan University, a master's degree in early childhood education from Pacific Oaks College, and a PhD in educational psychology from Michigan State University. He is the founder of the Dust or Magic Institute on the Design of Children's Interactive Media and the Mediatech Foundation, a nonprofit community technology center. He is also the coordinator for Kids@Play, a one-day conference on children and technology.

SCHEDULE

Wednesday, March 2nd

TIME	ACTIVITY	LOCATION
9:00 AM – 5:00 PM	**Check-in Registration**	Ballroom A Foyer
1:30 – 2:30 PM	**Welcome:** Dr. Benjamin Heuston **Opening Speaker:** Jeff Herr Being Principal In My Pajamas	Ballroom A
2:30 – 4:30 PM	**Breakout Session 1**	
	Exploring the Impact of Preschool	Tucson
	Technology in Diverse Environments (2:30 – 4:00 PM)	Sun Valley
4:30 – 7:30 PM	**Evening Reception** **Keynote Speaker:** Dr. Grover "Russ" Whitehurst (5:00 – 6:00 PM) The Future of Curriculum in a Digital Age	Olympus

Thursday, March 3rd

TIME	ACTIVITY	LOCATION
6:30 – 8:00 AM	**Breakfast Buffet**	Ballroom A
8:00 – 9:00 AM	**Invited Speaker:** Dr. John Dexter Fletcher Technology and the Individualization Imperative	Ballroom A
9:00 – 9:15 AM	**Break**	Pool Terrace
9:15 – 10:45 AM	**Breakout Session 2**	
	Use of Technology for Early Literacy Instruction (Classroom Tools)	Tucson
	Foreign Language Learning	Sun Valley
10:45 – 11:00 AM	**Break**	Pool Terrace
11:00 AM – 12:00 PM	**Invited Speaker:** Dr. Warren Buckleitner The Children's eBook, Revisited	Ballroom A
12:00 – 1:00 PM	**Lunch Buffet**	Ballroom A
1:00 – 2:30 PM	**Breakout Session 3**	
	Early Literacy Instruction	Tucson
	Using Technology to Enhance Intervention and Assessment	Sun Valley
2:30 – 2:45 PM	**Break**	Pool Terrace
2:45 – 4:00 PM	**Keynote Speaker:** Dr. Dustin "Dusty" Heuston The Last Fifty and the Next Fifty; Musings on a Chess Game	Ballroom A
4:00 – 4:15 PM	**Wrap-up**	Ballroom A

Friday, March 4th

TIME	ACTIVITY	LOCATION
6:30 – 8:00 AM	**Breakfast Buffet**	Ballroom A
8:00 – 9:30 AM	**Breakout Session 4**	
	Interactive Learning Environments (Classroom Tools)	Tucson
	Research for Use of Technology in the Classroom	Sun Valley
9:30 – 11:00 AM	**Breakout Session 5**	
	Improving Classroom Instruction (Classroom Tools)	Tucson
	Design of Educational Technology Systems for Children	Sun Valley
11:00 – 11:15 AM	**Break**	Ballroom A
11:15 AM – 12:45 PM	**Luncheon** **Keynote Speaker:** Dr. Marilyn Jager Adams (11:30 AM – 12:45 PM) Technology, Literacy, and the Mind	Ballroom A
12:45 – 1:00 PM	**Conference Recap and Closing Words**	Ballroom A

Twitter

Follow and contribute to the EETC discussion on Twitter. Use ***#EETC2011*** to participate.

Concluding Notes

EETC Online
You can view all presentations online at ***www.eetcconference.org*** after the conference.

Conference Feedback
EETC has established a Website at ***www.surveymonkey.com/s/VHFP7K7*** to receive your feedback on the conference. You can also access the site through ***www.eetcconference.org***; click 2011 Feedback. Please take the time to let us know what you think so we can improve future events. All those completing the questionnaire (names will not be associated with survey responses) will be entered into a drawing to receive free conference registration for EETC 2012.

EETC 2012
Join us again next March in Salt Lake City. Be sure to register early; EETC 2012 registration is half off until May 1, 2011. Register at ***www.eetcconference.org***.

BREAKOUT SESSION 1

EXPLORING THE IMPACT OF PRESCHOOL

WEDNESDAY 2:30 – 4:30 PM | TUCSON ROOM

Impact of PreK Education on Children's Intelligence and Behavior

Antonia Baumeister and Heiner Rindermann

Educational and Developmental Psychology, Chemnitz University of Technology, Germany

Two studies conducted in Austria examined the short-term and longer-term effects that a preschool education has on children's cognitive, socio-emotional, and motor development skills at both the kindergarten level and at the end of primary school. The studies conclude that preschool education is associated with substantial developmental gains regarding overall development. However the studies also reveal that a preschool education has both positive and negative effects on secondary school recommendation.

Social and Emotional Learning in Preschool: An Evaluation of the Strong Start Curriculum

Leslie Gunter, Paul Caldarella, Byran Korth, and Richard Young

Brigham Young University, USA

As a new social and emotional learning curriculum, Strong Start PreK was implemented and evaluated in a local Title 1 preschool program. The randomly selected teachers (two for the control group and two for the treatment group) evaluated their students on emotional regulation and internalizing behavior subscales before implementing the curriculum and following the conclusion of the ten core lessons. Social validity data was gathered from the teachers at the conclusion of the project. This presentation will discuss implications and directions for future research.

Words Children Need in Primary and Preschool Programs

Andrew Biemiller

Department of Human Development and Applied Psychology at University of Toronto, Ontario, Canada

If children are to succeed in upper elementary grades, they need to learn more of the early-learned vocabulary meanings by the end of the primary grades. This presentation discusses the word meanings that would be useful to teach to young children during preschool and primary grades. In addition, the presentation reports evidence that verbally-defined words are better predictors of reading comprehension a year later than concrete words, and may therefore be more important for preschool education.

Impact of a Full-day, Four-year-old Kindergarten Program throughout Elementary School

Yves Herry, Claire Maltais, and Catherine Mougeot

University of Ottawa, Canada

This presentation discusses the results of a study that addressed the question "Is a full-day preschool program more likely to enhance children's linguistic, academic, social-emotional, and psychomotor development than a half-day preschool program?" The study examined the impact of a full-time preschool program on the performance of children in fifth grade within a French minority setting in Ontario, Canada. The results show that a full-day preschool program had a positive effect on both oral reading and comprehension as well as on mathematics performance and behavior during homework time.

TECHNOLOGY IN DIVERSE ENVIRONMENTS

WEDNESDAY 2:30 – 4:00 PM | SUN VALLEY ROOM

The Effectiveness of Educational Software on Academic Skills in Young Children with ASC

Jessica Palilla, Mikle South, Tiffani Newton, Erin Johnson, Kim Brown, and Haya Shamir

Brigham Young University and Waterford Institute, USA

Research has shown that Autism Spectrum Conditions (ASC) children are willing to spend more time on reading material accessed through a computer than a book. This study was conducted to explore if ASC children using *Waterford Early Reading Program*™ would improve their basic reading skills after five months of consistent use more than children using *Waterford Early Math and Science*.™ Early results indicate that *Waterford Early Reading Program* offers tremendous potential as a tool for assisting early academic instruction in young children diagnosed with ASC.

The Effects of Young Children's Video Monitoring on Young Children's Magnetic Force Concepts

Youn Jung Huh and Nara Yun

Arizona State University, USA

A study performed in Seoul, Korea, examined the effects of young children's video monitoring on children's magnetic force concepts. The study compared understanding of magnetic force concepts in a control group (which received verbal instruction) and a test group (which received video instruction). The results indicate that the video monitoring group showed more positive results than the comparison group.

Kindles for Kids

Tammy Anderson

University of Tennessee, USA

The purpose of this study was to analyze elementary students' use of the Kindle® for recreational reading and the impact it may have on reading motivation and engagement. Each student in the study received a Kindle and was allowed to choose electronic books to load on it to read. Data from videotapes and transcripts of meetings, conversational interviews, annotations, and reading logs were used to create representations of young Kindle readers. The study illuminates the reading possibilities the Kindle offers to elementary students, including variety and choice of material to read, ability to read anywhere and anytime, and social interaction with others about reading.

BREAKOUT SESSION 2

USE OF TECHNOLOGY FOR EARLY LITERACY INSTRUCTION (CLASSROOM TOOLS)

THURSDAY 9:15 – 10:45 AM | TUCSON ROOM

Application of Interactive Early Literacy Lessons to a Mobile Device

Barbara Culatta, Daniela Frogley, and Brittney Davies

Brigham Young University, USA

Systematic and Engaging Early Literacy (SEEL) is a project that provides children with frequent and explicit encounters with literacy targets in meaningful and engaging activities. SEEL has proven effective in teaching children's performance in four literacy components: phonological awareness, letter knowledge, decoding, and word recognition. This presentation discusses the theoretical framework and instructional principles underlying SEEL instruction and illustrates its application to a mobile form of delivery.

Getting Ready to Learn: Using Digital Media to Enhance Dynamic Early Literacy Instruction

Eve Townsend

EDC – Center for Children and Technology, USA

UPDATE:
Presented by ***Erin Johnson***

EETC Planning Committee Meeting Member, USA

The Ready to Learn Initiative advocates trans-media storytelling, an approach to curriculum planning that uses various forms of media along with teacher-facilitated activities and hands-on materials to help children develop literacy skills. A recent study funded by the Ready to Learn Initiative found that pre-kindergarten and kindergarten students who received a media-rich literacy curriculum supplement outperformed peers who received a media-rich comparison curriculum. This presentation provides an overview of the Ready to Learn curriculum supplement study, a detailed description of the curriculum, and practical implications for early childhood teachers and administrators.

Motivating Writing in K-2 Classrooms with Online Publishing

Brad Wilcox

Brigham Young University, USA

Since the No Child Left Behind Act, there has been a dramatic decline in writing instruction at all grade levels as well as the amount of research focused on writing. One possible solution to this concern is the integration of technology and writing instruction. Research shows that technology can be used as a motivational tool for children. This presentation focuses on the lessons learned from experience and the work of students in classrooms where teachers have successfully integrated technology while providing their students with an opportunity to be an author.

FOREIGN LANGUAGE LEARNING

THURSDAY 9:15 – 10:45 AM | SUN VALLEY ROOM

The Role of Nonverbal Activities in Foreign Language Classrooms in Preschool

Nataliia Sharkova

National Metallurgical Academy of Ukraine, Ukraine

This study answers the question "Is there any difference in learning efficiency between preschoolers who are taught with the emphasis on imitative skills (control group) and those whose learning process is covered by nonverbal activities that are based on children's actual interests and needs (experimental group)?" 120 five-year-old Ukrainian-speaking learners were randomly divided into the two groups and given six experimental activities containing 10–12 new words for learners to remember. The study concluded that the nonverbal activities promote cognitive development of children and maintain children's learning motivation better than traditional methods for teaching foreign language.

Computer-assisted Instruction Supports Reading Acquisition in English Language Learners

Paul Macaruso and Alyson Rodman

Community College of Rhode Island, USA

This presentation discusses the design and results of a research study that examined the effects of phonics-based computer-assisted instruction (CAI) on the development of emergent literacy skills in English Language Learner (ELL) students. Kindergarteners being taught in bilingual education classes in a Texas school were randomly selected for the study and divided into a treatment group and control group. Each group received identical core reading instruction while the treatment group also received practice using structured, phonics-based CAI programs. The results show that ELL kindergarteners can benefit from intensive practice in basic reading skills as provided by CAI support.

Using SMART Tables to Enhance Arabic Language Learning

Pantelis Papadopoulos, Andreas Karatsolis, Rana Khalil, Zeinab Ibrahim, Abbas Al-Tonsi, and Divakaran Liginlal

Carnegie Mellon University in Qatar, Qatar

UPDATED:
New Topic To Be Announced

As a solution to help children learn Modern Standard Arabic (MSA) in Qatar, a three-year project is currently underway to utilize technology-enhanced learning tools. The learning environment uses surface computers, specifically SMART Tables, to combine adapted short episodes from the Aladdin story with intervening learning activities that include appealing images, themed music, capturing voices, and collaboration games. This presentation will discuss (a) the theoretical underpinnings of the project's approach, (b) the design of our system, and (c) preliminary usage data derived from pilot testing in Arabic elementary schools.

BREAKOUT SESSION 3

EARLY LITERACY INSTRUCTION

THURSDAY 1:00 – 2:30 PM | TUCSON ROOM

Is Decoding Sufficient to Predict Reading Ability to Kindergarten through Second-grade Students?

Deborah Adkins

Northwest Evaluation Association, USA

The definition of reading has developed from a bottom up to a top down to an interactive approach. Using the interactive approach, reading can be defined as the process of constructing meaning as the reader interacts with various systems available within the text. Research within this area has been comparative in nature, focusing on specific skills within the domain and limiting the studies to phonics or phonemic awareness as measures of decoding. This presentation proposes a study to expand that focus and examine ten constructs measuring decoding that are a predictive measure of reading ability.

How Sixth-graders Assisted the First-graders in Learning Literacy and Producing Text with Computers

Riitta-Liisa Korkeamäki

University of Oulu, Department of Education, Finland

Although Finland is known for its high technology and excellent results in Programme for International Student Assessment (PISA), technology has rarely been used in literacy instruction. Additionally, teaching and learning literacy does not start until the first grade, where instruction treats children equally as beginners, despite the fact that many children have a basic knowledge coming into first grade. This presentation will discuss a qualitative case study that investigates how sixth-graders assisted and collaborated with first graders to give the first graders the opportunity to apply what they already know through use of technology. This presentation will discuss the results based on complete analyses of the data along with examples of the collaboration.

Involving Parents in Interactive Early Literacy Instruction

Byran Korth, Keri Allsop, Jamie Herron, Jolie Hill, and Beth Marshall

Brigham Young University, USA

The nurturing of young children's literacy is a shared responsibility between both a teacher and parents. In the project Systematic Engaging Early Literacy (SEEL), parents were encouraged to participate in their child's classroom literacy instruction by providing not only language input to their children through reading or storytelling, but also to encourage their children in two-sided conversations. This SEEL project evaluated the nature of the parent-child interactions during parent-led encounters. The presentation will provide examples of parent involvement and training in order to demonstrate the nature of parent participation in classroom instruction.

USING TECHNOLOGY TO ENHANCE INTERVENTION AND ASSESSMENT

THURSDAY 1:00 – 2:30 PM | SUN VALLEY ROOM

Early Intervention is Key: Greater Student Success through the Web Based Teaching Tool!

Cynthia Grundmann and Uzma Kapadya

WBTT Early Screening and Intervention Program (LDAO), Canada

Early screening and intervention is a critical step in increasing student achievement, closing the achievement gap, and reducing the strain on special education programs. The Web Based Teaching Tool (WBTT) is an online early screening and intervention program for primary educators (junior kindergarten through second grade) that helps teachers determine which of their students are struggling, what areas they are struggling with, and how these areas of need can be addressed in the classroom. This presentation will review current research in early intervention, along with a comprehensive early screening and intervention WBTT program.

Mathematics Education through Computer-assisted Instruction

Erin Johnson and Haya Shamir

Waterford Institute, USA

The purpose of this study is to test the efficacy of *Waterford Early Math and Science*™ compared to traditional preschool or kindergarten math education experience. The treatment group used the program for 40 minutes a week over a 28-week classroom session while the control group received traditional kindergarten mathematics instruction and did not use and technology. The study indicates that for students who use *Waterford Early Math and Science* for a minimum of 1000 minutes over the course of the school year, math knowledge increases more during the kindergarten year than for students in a traditional school.

The Development of a Computer-based Instrument for Studying Preschool Children's Views about Science and Scientists: Large Scale Study

Mia Dubosarsky

University of Minnesota, USA

The goal of the presented research project is (1) to develop a computer-based program for studying four- to five-year-old children's conceptions of science and scientists and (2) to provide data from diverse preschool populations to determine when children develop a concept of science and what stereotypes they hold. Early testing with the assessment shows that preschool children develop a concept of science as early as age four and associate scientists with a lab coat from a very early age. This presentation will lay out the process of instrument development and its design and function as well as present findings from pilot and large scale studies conducted with preschool children.

BREAKOUT SESSION 4

INTERACTIVE LEARNING ENVIRONMENTS (CLASSROOM TOOLS)

FRIDAY 8:00 – 9:30 AM | TUCSON ROOM

The Efficacy of Virtual Education Models in Early Childhood Education

Jeff Herr and Lynn Black

Utah Virtual Academy, USA

Virtual education offers teachers material support to enhance students' nontraditional learning experience. This presentation will discuss the structures of virtual education and the accumulated data supporting its application to and effectiveness in early childhood education. Points will include the distinction between virtual education and other types of distance education, various virtual education models, advantages and disadvantages of virtual education, ratios, practices in early childhood education within the virtual model, etc.

Kindergarten Goes Virtual: Creating the Synchronous Kindergarten Program of the Future!

Darla S. Posney

Pennsylvania Virtual Charter School, USA

This study explores the best method for facilitating the educational journey of kindergarteners in a virtual school environment. The study assessed the performance of students who utilized only the standard curriculum with bi-weekly interventions from the teacher as well as those immersed in the virtual world with daily synchronous activities. The findings were the catalyst that brought about the development of a full-time synchronous kindergarten program that meets the needs of the youngest learners.

Using Parents to Support Technology-based Instruction

Vonda Jump Norman

Utah State University, USA

To succeed in today's world, children who are deaf or hard of hearing must achieve greater competence in mathematics. This presentation will describe a project to provide hand-held GPS devices to fourth- and fifth-grade children who are deaf or hard of hearing in order to give them hands-on experiences to help them grasp math concepts that are typically difficult for them. The presentation will also include a discussion on activities parents can do at home to augment technology-based instruction as well as barriers involving parents in such activities.

RESEARCH FOR USE OF TECHNOLOGY IN THE CLASSROOM

FRIDAY 8:00 – 9:30 AM | SUN VALLEY ROOM

The Effects of Multimedia on Early Literacy Development of Children at Risk: A Meta-analysis

Victor Van Daal and Jenny Miglis Sandvik

University of Stavanger, Norway

The advent of new technologies has necessitated a redefinition of literacy from the ability to simply read and write to the ability to communicate through multimedia. This study addresses two questions: (1) Can multimedia facilitate the early literacy development of young children at risk of literacy underachievement? (2) Which literacy-related learning outcomes are most influenced by the use of multimedia? This presentation will explore the medium to large effects found for phonological awareness, print concepts, non-word reading and comprehension as well as the lack of effect for alphabetic knowledge, vocabulary, and reading.

An eBook Instructional Model in Early Literacy: Findings on Functionality and Usability in Preschool

Kathleen Roskos, Karen Burstein, BK You, and Jeremy Brueck

University of Akron, USA

The role of the eBook in early literacy instruction remains ill defined, even as eBooks are proliferating. To address this gap, this study proposes an eBook instructional model that integrates the eBook into the preschool classroom. Investigating the design of an eBook with potential to enhance the literacy-learning environment for teachers and children, the authors determined criteria for the eBook and developed protocols for teacher-child engagement at-screen to increase participation and support motor skills for eBook reading.

Evaluating the Effects of *Word World* Viewing on Preschool Children's Pre-literacy Skills

Michael Cohen, Martha Hadley, Gerad O'Shea, and Craig Rosen

The Michael Cohen Group, USA

Given the increasingly high stakes nature of the educational system and the focus on pre-literacy skills in preschool, research needs to identify effective educational programming for children. This study describes the results from an evaluation of the effect of viewing *Word World* on children's acquisition of pre-literacy skills. Results suggest that viewing *Word World* may help support children's acquisition of specific vocabulary and word recognition. This presentation will discuss subgroup analysis, including age, parent education, and baseline literacy along with effects of watching *Word World* and the larger implication of programming for children.

BREAKOUT SESSION 5

IMPROVING CLASSROOM INSTRUCTION (CLASSROOM TOOLS)

FRIDAY 9:30 – 11:00 AM | TUCSON ROOM

Using Digital Video Technology to Tell Stories

Talitha Hudgins

Utah Valley University, USA

Many teachers believe that integration of technology in the classroom is difficult and more trouble than it's worth. This presentation will demonstrate the ease of applying digital video technology in the classroom to promote the curriculum through stories (i.e., digital storytelling). Digital storytelling is used to help support students' learning by encouraging them to organize and express their ideas and knowledge in an individual and meaningful way. This presentation will provide opportunities to experience both listening and telling digital stories using free software tools.

Tangible Mind Mapping and Analytic Thinking Methods for a Reformed Educational System

Sanja Bonic and Bartholomaeus Wloka

University of Vienna, Austria

In Austria's current educational system, a topic is conveyed to a child through vision and audition by an authoritative figure, without further possibilities of association. This presentation discusses a proposal to reform Austria's educational system with particular attention to equipment and didactic methods. Tangible mind maps in combination with developing analytic thinking skills via programming in Scratch—an authoring tool developed for learning basic principles of programming—allows creativity, individual associations, and thinking skills. This combination prepares children for a society where the identification and extraction of relevant information from reliable sources is of great value.

Leveraging Technology to Enhance Mathematics Teaching and Learning

Ngozi Kamau, Susan Troutman, and Carolyn L. White

Rice University School Mathematics Project, USA

The integration of technology has become both a tool to be mastered as well as a tool to facilitate effective instructions. This presentation will discuss the impact of technology infusion through the lenses of five classroom features that are critically impacted by technologically-infused instruction: (1) the nature of instructional tasks, (2) mathematics tools to support learning, (3) the teacher's role, (4) the social culture, and (5) accessibility and equity. Teachers' lesson plans with infused-technology will be presented with student products and teachers' reflections on the learning process.

DESIGN OF EDUCATIONAL TECHNOLOGY SYSTEMS FOR CHILDREN

FRIDAY 9:30 – 11:00 AM | SUN VALLEY ROOM

Curiosity Corner Interactive: Using Technology to Prepare Disadvantaged Children for School

Bette Chambers and Philip C. Abrami

University of York, United Kingdom

The project reported here makes extensive use of embedded multimedia teachers' lessons that will be designed for use with interactive whiteboards. This presentation describes the adaptation of a research-proven comprehensive preschool program, Curiosity Corner, enriching it with multimedia elements, and delivering it via interactive whiteboards. The desired result is that this enhanced classroom instruction, along with the home component, will improve children's learning over and above the regular Curiosity Corner program.

Designing Mobile Gaming to Help Hearing-impaired Children Learn Math

Jon Scoresby, Brett E. Shelton, and Mary Ann Parlin

Utah State University, USA

The linguistic components of word problems create significant difficulties for deaf or heard-of-hearing students that are based on the variability of syntax in word problems, lack of knowledge of key terms, and passive forms of expression in word problems. To address this problem, mobile location-based games are being designed to help fourth- and fifth-grade deaf and hard-of-hearing students learn math. This presentation will describe the process used to design this game that teaches addition and subtraction skills to deaf and hard-of-hearing students.

See-Word Reading Tool: Using Digital Tools to Visualize Phonemic Sounds

Renee Seward, Beth O'Brien, Allison Breit-Smith, and Pamela Williamson

University of Cincinnati, USA

This presentation introduces a new design for educational technology to assist educators with teaching decoding to children at risk of reading failure. See-Word Reading Tools is a new approach to teaching decoding that enhances reading through visualizing the relationship of phonemic sounds to alphabetic letterforms. The potential contribution of this tool to early prevention will be discussed in line with a Response to Intervention perspective. The goal of this interactive tool is to develop an approach for teaching reading that allows at-risk students to learn to read using his or her learning strengths.

YOUR VISIT TO UTAH

SALT LAKE CITY

Nestled between the Wasatch and Oquirrh mountains, Salt Lake City offers a multitude of activities that are perfect for a March visit. During your stay, take advantage of the city's attractions: museums, galleries, restaurants, shopping, history, and more.

Photo: Adam Barker

Ski the "Greatest Snow on Earth"

Discover for yourself why Utah is recognized for its world-class snow. Each resort offers both ski and snowboard lessons for a variety of skill levels. And if you're not up to skiing, take along a camera and capture the stunning canyon views.

For information about Utah ski resorts please see page 22 for the 2010–2011 Utah Resort Facts provided by *skiutah.com*. The closest ski areas to downtown Salt Lake City include:

Nearby Resorts	Minutes from Little America
Canyons	33
Park City	38
Solitude	43
Deer Valley	45
Brighton	45
Snowbird	46
Alta	48

Discover Utah's Unique History

At This is the Place Heritage Park see how Utah settlers lived in the early 19th century. Walk the streets and interact with history as you never have before: ride the replica train, watch the blacksmiths demonstrate how to make tools, and take a stroll around Sanctuary Walk to view the various monuments and sculptures.

Uncover Rich Heritage

In the heart of Salt Lake City is the most visited place in Utah: Temple Square, the headquarters for The Church of Jesus Christ of Latter-day Saints and home of the world-famous Mormon Tabernacle Choir. Take a tour of the beautiful gardens, religious buildings, Church History Museum, and more.

Close by, you'll also find the Family History Library—the largest genealogical records library in the world. Let one of the library's full-time staff members or volunteers help you find your family stories.

Photo: Brent Schumann

Photo: Adam Barker

Photo by: Salt Lake Convention & Visitors Bureau

Shop and Dine at Salt Lake's Finest

Visit the Gateway, an outside mall featuring not only shopping, dining, and entertainment, but also the Olympic Legacy Plaza, Clark Planetarium, and Discover Gateway (a children's museum).

Salt Lake City's dining options feature a variety of cuisines: Mexican, Italian, Cajun, Greek, Thai, and more. Try the Log Haven, a log cabin restaurant nestled among the pine trees, featuring breath-taking scenery and award-winning fare.

Visit the Websites below to find what else Salt Lake City and its surrounding areas have to offer during your stay.

www.visitsaltlake.com

www.utah.travel

www.utah.com

ADDITIONAL UTAH ATTRACTIONS

Although known for its desert landscape and great powder, Utah is home to many stunning nature parks that offer a lifetime of scenery, hiking, and more. Plus, nearby towns make Salt Lake City the ideal location for day-tripping.

Experience Scenery and City

Just a short drive away is the historic silver-mining town of Park City, now best known for its annual Sundance Film Festival. Park City has plenty of activities to keep you busy: spas, recreation (including golf), galleries, theater, and city events. Try some shopping at Main Street Park City or Tanger Outlet Mall. Or tour the Utah Olympic Park where some of the 2002 Olympic Winter Games were held.

www.parkcityinfo.com

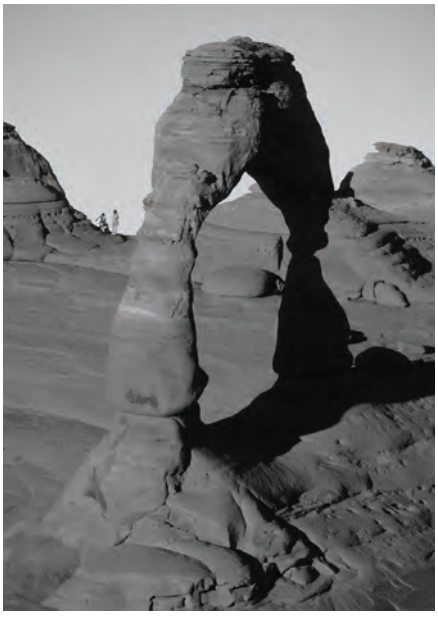

Photo: Utah Office of Tourism

Photo: Adam Barker

See What All the "Awe" is About

Visit one of Utah's many national parks, such as Zion, Arches, Canyonlands, Capital Reef, and Bryce. With March's moderate temperatures, it's the perfect time to hike to the top of Chimney Rock, photograph the wildlife and flowers, or do some bird watching.

www.utah.com/nationalparks

Discover the Trails

The mythical city in the red rocks, also known as Moab, contains the perfect trails for biking and jeeping. Discover for yourself why these trails are consistently ranked among the best in the world by renting a jeep, a bike, or an ATV. And if you're not into blazing the trails, try a balloon tour or river rafting.

www.discovermoab.com

Unwind on the Green

St. George is a vacationer's paradise with its great weather—especially in March—and ten golf courses surrounded by gorgeous red rock. After a day on the golf course, you can relax and get pampered at one of St. George's spas.

www.utah.com/stgeorge

2010-11 UTAH RESORT FACTS

Steve Lloyd

	Alta 801-359-1078	Beaver Mountain 435-753-0921	Brian Head 435-677-2035	Brighton 801-532-4731	The Canyons 435-649-5400	Deer Valley 435-649-1000	Park City Mtn. Resort 435-649-8111	Powder Mountain 801-745-3772	Snowbasin 801-620-1000	Snowbird 801-933-2222	Solitude 801-534-1400	Sundance 801-225-4107	Wolf Creek Utah 801-745-3511
Average Annual Snowfall	545"	400"	350"	500+"	355"	300"	360"	500"	400"	500"	500"	300"	300"
Vertical Drop Serviced by Lift	2,020'	1,600'	1,320'	1,745'	3,190'	3,000'	3,100'	2,200'	3,000'	3,240'	2,047'	2,150'	1,000'
Base Elevation	8,530'	7,200'	9,600'	8,755'	6,910'	6,570'	6,900'	6,895'	6,400'	7,760'	8,000'	6,100'	5,400'
Top Elevation	10,550'	8,800'	10,500'	10,500'	9,990'	9,570'	10,000'	9,105'	9,350'	11,000'	10,035'	8,250'	6,400'
Hours of Operation	9:15am 4:30pm	9:00am 4:00pm	9:30am 4:30pm	9:00am 9:00pm±	8:45am 4:00pm	9:00am 4:15pm	9:00am 9:00pm±	9:00am 9:00pm	9:00am 4:00pm	9:00am 4:30pm	9:00am 4:00pm	9:00am 4:30pm✷	9:00am 9:00pm
Lifts	2Q-3D 2T	2D-2T 2Sur	1D-7T 1Sur	5Q-1T 1Sur	2G-1❐-11Q 2T-2D-2Sur	13Q-2D 5T-1G	4❐-3Q 5T-3D	2Q-1D 1T-3Sur	1D-4T-1Q 2G-1Tm-2Sr	1Tram 4Q-6D	5Q-2D 1T	1Q-2T 1Sur	1T-2D 1Sur
Skiable Acres	2,200	664	640	1,050	4,000	2,026	3,300	7,000✰	3,000	2,500	1,200	450	110
% Beginner Terrain	25%	25%	40%	21%	10%	27%	17%	25%	20%	27%	20%	20%	35%
% Intermediate Terrain	40%	40%	40%	40%	44%	41%	51%	40%	50%	38%	50%	40%	45%
% Advanced Terrain	35%	35%	20%	39%	46%	32%	32%	35%	30%	35%	30%	40%	20%
Number of Runs	115	47	63+	66+	176	100	108	135	113	85	65	42	15
Adult All-Day Lift Pass	$69	$40	$45	$62	-	$90	variable	$59	$66	$66* $74**	$68	$47	$35
Holiday Price (Adult)	$69	$40	$52	$62	-	$94	variable	$59	$66	$66* $74**	$68	$52	$38
Half-Day a.m. Lift Pass (Adult)	-	$30	$40	$55	-	-	variable	$49	-	$56* $64**	-	-	$30
Half-Day p.m. Lift Pass (Adult)	$58	$30	$40	$55	-	$63 holiday $67	variable	$50❖	$55	$56* $64**	$56	$43	$30
Child All-Day Lift Pass	12+Under $36	$30	5 Under Free 6-12 $32	7 Under Free 8-12 $29	6 under Free	4-12 $56 3+under $21	variable	6 Under Free 7-12 $31	6 Under Free 7-12 $40	6 Under Free* 7-12 * $30	6 Under Free 7-13 $42	$25	$22
Senior Citizens Age	80+	65+	65+	70+	65-69 70+	65+	65+	62-69/ 70-79	65-74 75+	65+	70+	65+	65+
Senior Citizens Lift Pass	FREE	$30	$32	$35	-	$65 half day $45	variable	$47/$26 80+ free	$53 75+ free	$54* $62**	$45	$15	$30
Night Skiing	-	XP	$15 3:30-9pm	$34✦ 4-9pm	-	-	variable~ 4-9pm	$15 3-9pm	-	limited	-	$30✷ 4:30-9pm	4-9pm
Snowboarding Allowed	no	yes	yes	yes	yes	no	yes	yes	yes	yes	yes	yes	yes
Acres of Snowmaking	50	-	215	200+	600	660	500	-	600+	525	150	112	55
Nursery/Child Care on Premise	yes	no	yes	no	yes	yes	no	no	yes	yes	yes	XP	no
Number of Terrain Parks	-	2	3	3	2	-	3	2	3	1	1	-	1
Number of Halfpipes	-	-	-	1	6 natural	-	1	1	1 halfpipe 1 natural	-	-	-	-
Adaptive Skiing Program	-	yes	yes	no	XP	call	yes ❁	call	yes	yes	-	XP	call
Disabled Assistant Pass	1/2 off	-	no	1/2 off	XP	call	yes ❁	call	1/2 off	N/A	call	free	call
Lift-Served Snowtubing	-	-	yes	-	-	-	yes	-	yes	-	-	-	-
Miles to Closest Major Airport	32 SLC	114 SLC	210 LAS	35 SLC	32 SLC	36 SLC	36 SLC	55 SLC	36 SLC	29 SLC	33 SLC	55 SLC	51 SLC

all rates subject to change
~ Payday, Three Kings & First Time lifts only
XP - by prior arrangement
❐ - high speed six passenger chair
* - chair lifts only
± - night skiing early December - March
❁ - partnership with the National Ability Center
** - all area including tram
D - double chairlift
T - triple chairlift
Q - quad chairlift
G - gondola
❖ - includes afternoon and night skiing
✷ - Night Skiing M, W, F, Sat. 4:30 p.m.-9 p.m.
✦ - Tuesday - Saturday
▼ - with paying adult
SLC - Salt Lake City Int'l Airport
LAS - Las Vegas' McCarren Int'l Airport
✰ - acreage includes snow cat service, guided touring area, shuttle bus service and lift service

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