

44th NAWI Annual Conference – 2009

Scottsdale, Arizona

Building Tomorrow's Workforce through Career and Technical Education
April 15-17, 2009

Conference Program

TUESDAY, April 14

5:00 p.m. **NAWI Board Meeting** (Sahara Board Room) Doug Webster, NAWI President

WEDNESDAY, April 15

7:30–8:30 a.m. Registration and Continental Breakfast (Valley Ho Lobby)

8:30–9:30 a.m. **General Session I** (SoHo II)

Welcome

Margaret Dugan, Deputy Superintendent of Public Instruction
Arizona Department of Education

Bioindustry Panel

Xan Simonson, Biotechnology CTE Specialist, Mesa Public Schools
Mesa, AZ

Sandra Johnson, Vice President, Flinn Foundation, Phoenix, AZ

Ron King, President, Catapult Bio, Phoenix, AZ

Look at the future and learn of the collaborations of bioscience and biotechnology as they forge a pathway through research, investigation, and practice. Panelists will discuss options for students, employers, employees, and the community at large as we move forward. Explore the training options available in fields encompassing technical, medical, engineering, science, math, power generation, and investment in technology that moves us forward. A brief question-and-answer session will provide lively interactive discussion of the processes, procedures,

and ethics that challenge training programs for those individuals entering the workforce, developing new skills, or stretching to new heights.

9:30–9:45 a.m. Break

9:45–11:00 a.m. **Breakout Session I**

The Toothpick Factory – A Simulation Game to Teach the Soft Skills (Valley Ho I)

Marilyn Barger, Executive Director, Florida Advanced Technological Education Center, Hillsborough Community College, Tampa, FL

Materials: [PDF](#)

The Toothpick Factory© is a hands-on activity, set in a production context, that stimulates discussion and awareness about a wide range of soft skills essential in most of today’s work and personal relationships. Attendees will gain an overview of soft skills addressed in the simulation, learn how to facilitate the simulation in a classroom environment, and learn how to debrief the soft skills scorecard self-assessment. Time permitting, the attendees may experience a “short shift” in the Toothpick Factory with a hands-on activity.

Arizona Assessment System and Multi-state Assessment Consortium (Valley Ho II)

Barbara Border, Arizona Department of Education, Phoenix, AZ

Carolyn Warner, Founder and President, Corporate Education Consulting, Inc. (CECi), Phoenix, AZ

Ron McCage, Executive Director, VTECS

Maggie Mangini, Arizona State University, Tempe, AZ

Join this session for information and updates regarding the partnership of the Arizona Department of Education, Arizona State University, Corporate Education Consulting, Inc., Pitsco/TFI, and VTECS that establishes a statewide skill standards and assessment system. The system meets the needs of CTE and workforce development in Arizona and implements the major principles of a model developed and adopted by the VTECS Board of Directors to accomplish this work across state

lines. Additional information regarding the multi-state assessment project will be shared.

Assessment outcomes ensure industry-validated standards for all CTE programs and an online assessment delivery system to serve secondary comprehensive Joint Technical Education Districts, Community Colleges, and Department of Economic Security One-Stop Centers. The system addresses the provisions of the Carl D. Perkins IV legislation requirements as well as the recently enacted Arizona JTEDs Law relating to student technical skill attainment, industry-validated certification, and postsecondary articulation. Learn how Arizona is implementing the system and how others can benefit from this effort.

Teaching Higher-Level Workplace Skills in the Secondary and Postsecondary Classroom (Tropicana)

Judy Grace, Ph.D., Center for Learning and Teaching Excellence, Arizona State University, Tempe, AZ

Mary Grattan, Curriculum Editor/Librarian CTE Resource Center, Richmond, VA

Materials: [Powerpoint](#)

Nationally, there is increased demand on education, both secondary and postsecondary, to teach students workplace skills. Higher-level thinking is essential to career success, but how can it be taught successfully before the student enters the workplace? See how Arizona State University is helping faculty to teach critical-thinking skills in the classroom and through alternative delivery systems such as interactive tutorials and podcasts. Learn how Virginia is incorporating problem-solving instruction in the CTE classroom, and hear what's in the pipeline for secondary workplace readiness education at the state level.

11:00–11:15 a.m. Break

11:15 a.m. – 12:30 p.m. **Breakout Session II**

Measuring Creativity and Innovation in Scenario-based Learning (Valley Ho I)

Joyce Malyn-Smith, Ed.D., Education Development Center, Inc., Newton,

MA

Materials: [Powerpoint](#)

America's future depends on the creativity and innovation of its workforce. Are there learning environments that encourage creative and innovative thinking, and if so, how can we measure achievement? Learn about EDC's Creativity and Innovation Rubric and how you can assess your students' creativity and innovation in scenario-based learning.

Be introduced to EDC's Creativity and Innovation Rubric and learn how to apply it to scenario-based learning using authentic problem-based scenario examples developed by EDC's IT Across Careers (ITAC), a National Science Foundation-funded project. Engage in a brainstorming discussion to explore additional ways the rubric can be used as a structure for learning and assessment in classes and programs of study.

Preparing Students and Families to Thrive in the Gene Age (Valley Ho II)

Xan Simonson, Biotechnology CTE Specialist, Mesa Public Schools, Mesa, AZ

Over the past five years, Xan Simonson has led a revolution in the way biotechnology is taught in the Mesa Public Schools through her unique combination of hands-on and high-tech learning. Mesa Public Schools' goal has been to produce confident scientists who can think critically, innovate experimentally, and communicate their ideas clearly. Her demonstrated success led to her being named the Bioscience Educator of the Year by the Arizona Bio-Industry Association in 2007.

CanDo: Virginia's Online Competency Tracking System (Tropicana)

David Welsh, CanDo Developer and Project Coordinator, TV Production Teacher

Dr. Jerry Caputo, Principal, Arlington Career Center, Arlington Public Schools, Arlington, VA

The Problem: Virginia Career & Technical Education programs require competency-tracking to monitor student achievement. But classroom instructors were overwhelmed with the sheer volume of data.

Furthermore, paper recordkeeping made it difficult for students to check their progress and made it virtually impossible to aggregate statistics in year-end reports.

The Solution: Teachers and computer science students in Arlington Public Schools worked alongside SchoolTool professional developers to write a skill-tracking module called CanDo. CanDo enables teachers to track state-mandated competencies, allows students to check their progress in real-time, and handles all local and state reports. CanDo is a product of grassroots innovation and a demonstration of the power of open source software to solve data problems in education.

12:30–1:30 p.m. Lunch (SoHo I)

1:30–2:24 p.m. **Breakout Session III**

**Information Communication Technology (ICT) Education—
Fragmented and Lagging** (Valley Ho I)

David Wilcox, President, GSX, Alexandria, VA

Materials: [Powerpoint](#)

There is a growing and dangerous disconnect between the needs of modern enterprise and the U.S. Information Communications Technology workforce preparation systems. The Information Technology and Innovation Foundation recently stated, “IT investment seems to be super capital that has a much greater impact on productivity than other forms of capital.”

These factors will benefit from a new model for the design of ICT curriculum/assessment that is both modular and framed in a common language. Participants will use a tool to assist them in evaluating their current programs of study. Because ICT is becoming ubiquitous across all work processes, this will apply to all programs of study and occupational categories.

An Inventors’ Camp for Creating Interest in Technical Careers (Valley Ho II)

Dorene Perez, Program Coordinator of Computer-Aided Design/

Computer-Aided Engineering

Jim Gibson, Program Coordinator of Electronics Sue Caley Opsal,
Anatomy and Physiology Instructor

Rose Marie Lynch, Communications Instructor, Illinois Valley Community
College, Oglesby, IL

Materials: [MS Word](#) ; [Powerpoint](#)

Experience an engaging inventors' camp designed to interest young people in technical careers, and learn to offer a similar camp resulting in a "make-and-take" product. The camp, currently being used in a recruiting project supported by the National Science Foundation, focuses on an electronic buzzer. The camp is organized into three modules: design, wiring, and assembly. You will complete one module and experience the fun students can have learning STEM concepts.

Each participant in this session will be provided with a buzzer kit, which includes all of the materials and instructions for a buzzer: instructions for each module of the project, sample assessments in hard copy and on CD/DVD, a plastic buzzer box, and electronic components. Participants, working in teams, will complete one module of the project.

Manufacturing and Math STEM (Tropicana)

Tony Maldonado

2:45–3:00 p.m. Break

3:00–4:15 p.m. **Breakout Session IV**

Will Your Woodworking Program Thrive in the 21st Century? (Valley Ho I)

Mark Roberts, Board Member, WoodLINKS USA, Tuscola, IL

Woodworking programs are closing all over the country. Will yours be next? Is the education system's perception of your program not what it should be? Does the public not perceive woodworking as a career, but as a hobby? Is No Child Left Behind using up your students' extra elective hours, and are high school counselors pushing everyone to go to college? This session will focus on how to overcome the obstacles that

woodworking teachers are facing today and how your program can not only survive, but thrive.

Driving Instruction Using the CTE Online Assessment

System (Tropicana)

Helen Bootsma, Director, Development & Innovations Group, Career & Technical Education Section, Arizona Department of Education, Phoenix, AZ

Kathy Prather, Director, Career and Technical Education, Tucson Unified School District, Tucson, AZ

Cathie Raymond, Director, Career and Technical Education, Marana Unified School District, Marana, AZ

Materials: [Powerpoint](#)

Gain insight on how Arizona is implementing the CTE Online Assessment System. Hear the panel of experts present a brief overview of the system developed in partnership with Technological Fluency Institute <<http://www.esess.org/>>. See how various assessment reports are immediately available for CTE students, as well as state and local CTE administrators. Learn how Arizona CTE administrators are using assessment reports to align curriculum, instruction, and assessment.

5:30 p.m. Reception (Skyline Rooftop)

THURSDAY, April 16

7:30 a.m. Continental Breakfast (SoHo II)

8:30–9:30 a.m. General Session II (SoHo II)

Keynote Speaker

Carolyn Warner, Founder and President, Corporate Education Consulting, Inc. (CECi), Phoenix, AZ

9:30–9:45 a.m. Break

9:45–10:45 a.m. **Breakout Session V**

Learning Recovery and Technical Certification in an Online School Environment (Valley Ho I)

Keith Bland, Instructional Leader, Florida Virtual School

Have you ever wondered how to tap into the wonderful world of the Internet to promote learning? Come to this session to hear what students are learning in the great state of Florida and beyond. Hear how technical certification programs are becoming part of the online school climate and how teachers are developing these programs and using brain-based research to store information in long-term memory.

View examples of technical certification training conducted via the Internet, including, but not limited to, webinars, blogs, and games. Hear the successes and challenges of conducting learning recovery in an online setting. Identify ways to use the Internet to promote technical certification and to train teachers to maximize student success in this environment.

CTE and Academic Skills Integration: Where We Have Been, Where We Are, And Opportunities (Valley Ho II)

Charles Losh, Ph.D., Workforce Education and Development Office, Arizona State University, Tempe, AZ

Materials: [Powerpoint](#)

This presentation will provide a brief look at the past 25 years of academic/CTE/VocEd integration efforts. A snapshot of the activities of selected states' on-going initiatives will be provided, and strategies identified for meeting the challenge of continuing increases in high school graduation requirements.

10:45–11:00 a.m. Break

11:00 a.m. – 12:15 p.m. **Breakout Session VI**

Vermont's Industry and Education Centers of Excellence (Valley Ho I)

Doug Webster, Industry Skill Standards Coordinator, Division of Life Long Learning, Vermont Department of Education, Montpelier, VT

The Vermont Department of Education initiated a partnership with the Vermont Department of Labor (DOL) and the State Workforce Development Council to establish Industry and Education Centers of Excellence (IECE). The goals of IECE are to strengthen the state's career education and training programs, to provide Vermonters incentives to pursue careers in Vermont, and to support sustainable economic and socially responsible commerce. This effort is modeled after the NSF-funded FLATE program, Florida Advanced Technological Education Center led by NAWI Board member, Marilyn Barger. The presentation will discuss the formation and facilitation of the partnership by Vermont government agencies, the creation of an industry-led effort (initial focus in Hospitality and Green Building), the program of study development, the integration of skill standards and assessments, and the formation of a comprehensive outreach program.

The 3 Es: Engaging Underrepresented Students in Technology and Engineering Careers (Valley Ho II)

Mary deManbey, Program Manager, CBIA Education Foundation,
Hartford, CT

Dayl Walker, Connecticut Business & Industry Association (CBIA),
Hartford, CT

How can educators inspire and prepare underrepresented students for careers in engineering and technology? The Connecticut Business and Industry Association (CBIA), a statewide business association with nearly 10,000 members, is the primary business partner for the Connecticut Community College's College of Technology Regional Center for Next Generation Manufacturing, which is funded through the National Science Foundation. CBIA participates in unique outreach educational programs specifically geared toward helping urban youth achieve success in STEM-related academics and careers. These programs offer urban youth opportunities to Engage in work-related projects, to be Exposed to industry, and to provide support and Encouragement to help them believe they can succeed.

12:15–1:15 p.m. **Lunch** (SoHo I)

Greetings

Lillie Sly, Associate Superintendent Educational Services and Resources,
Arizona Department of Education, Phoenix, AZ

1:30 p.m. **Buses Depart for Business-Industry Tours** (choose one)

Sign up at registration for workforce education and training tours at the following locations. Buses will depart at approximately 1:30 p.m. and return to the hotel at approximately 4:30 p.m.

Tour 1: Scottsdale Culinary Institute

Tour 2: East Valley Institute of Technology (EVIT) [Joint Technological Education District-JTED]

Tour 3: Translational Genomics Research Institute (T-Gen) and Phoenix Union HS District Bioscience High School

FRIDAY, April 17

8:00–9:00 a.m. Full Breakfast (Tropicana Courtyard)

9:00–10:30 a.m. **General Session III** (Tropicana)

Keynote Speaker

Kimberly Green, Executive Director, National Association of State Directors of Career Technical Education Consortium (NASDCTEc), Washington, DC

Materials: [Powerpoint](#)

10:30 a.m. **NAWI Business Meeting** (Tropicana)

All NAWI members/conference participants are urged to participate. Conference registration includes a one-year membership in NAWI.

11:30 a.m. **Adjournment**

NAWI is grateful to its conference sponsors: VTECS and Global Skills Exchange