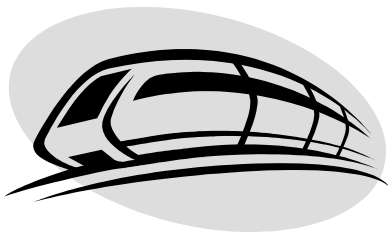
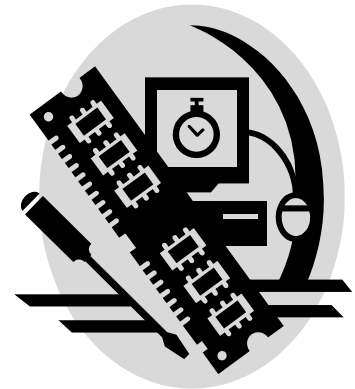
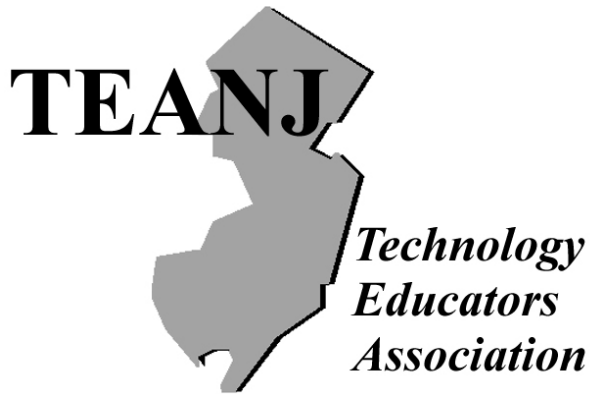
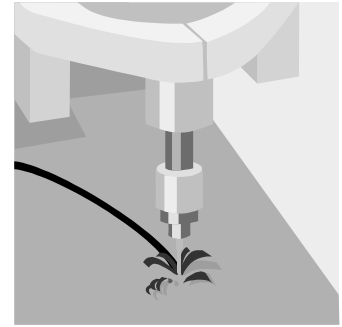
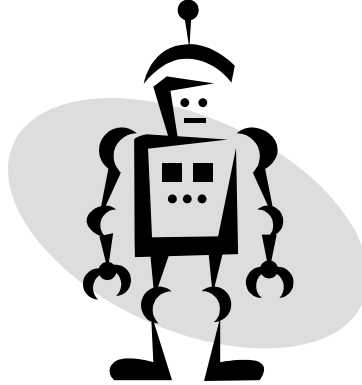


# **18th Annual Technology Conference & Expo**

presented by the Technology Educators Association of New Jersey (TEANJ)



## ***“Technological Literacy: Standards into Practice”***

May 6-7, 2004 – Teaneck Marriott at Glenpointe

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**presented by the Technology Educators Association of New Jersey (TEANJ)**

**“Technological Literacy: Standards into Practice”**

**May 6-7, 2004 – Teaneck Marriott at Glenpointe**

**Thursday, May 6, 2003**

**6:00 p.m. – 7:00 p.m.**

## ***Registration and Activity Sharing Reception***

All attendees are requested to bring twenty-five copies of their favorite classroom activity or other material for an open sharing/networking session.

**7:00 p.m. – 9:00 p.m.**

## ***Keynote Speaker***

### ***Dinner***

### ***Special Recognition Awards***

### ***Teacher and Program Excellence Awards***

### ***Innovative Technology Educator Awards***

## ***About the keynote speaker:***

***Jeffrey V. Osowski, Ph.D.***

***Vice-president, Education Policy, New Jersey Chamber of Commerce***



Jeff Osowski joined the New Jersey Chamber of Commerce as Vice President for Education Policy in February 2002. He is responsible for helping to guide the education policy initiatives of the business community to bring about meaningful and lasting improvements in the state's educational system. Prior to joining the State Chamber, Jeff served as Assistant Commissioner in the New Jersey Department of Education, where he worked in a variety of leadership roles since 1982. He has over thirty years experience in education as a teacher, district administrator, psychologist and school board member. Jeff holds a Ph.D. in psychology from Rutgers University, an M.A. in school psychology from Kean College and a B.A. in psychology from the University of Pennsylvania.

Dr. Osowski was instrumental in the development of the New Jersey Core Curriculum Content Standard 8: Technological Literacy. During his talk, he will give us some insight as to how we arrived where we are and the aspects of our programs that have given Technology Education more credibility statewide. He will continue into a discussion of where Technology Education can and should go in the near future within the state.

**Friday, May 7, 2003**

**7:30 a.m. – 1:00 p.m.**

***Exhibit Hall Is Open***

**7:30 a.m. – 8:30 a.m.**

***Registration***

***Coffee and refreshments will be available in the exhibit hall***

**8:30 a.m. – 10:00 a.m.**

***Session I***

**1. Technology in the Elementary World: Activities and Resources**

*Michele Harris, Wedgwood Elementary School*

The presenter will take time to share activities as well as web resources for the elementary level. Technology challenges from the Washington Township school district's annual technology meet will also be included.

**2. New Jersey: The Invention State**

*Harry Roman, PSE&G*

In this atmosphere of integrated curricula, the subject of invention is emerging as an entertaining and effective way to show the interconnectedness of subjects. Mixing history, technology, math, science, the arts, communications, and invention, this session will discuss New Jersey's great inventors past and present, their accomplishments, and how the New Jersey Inventors Hall of Fame has honored them over the years. Classroom techniques that promote creativity and invention will also be presented.

**3. Linking Physics and Technology: An Interdisciplinary Approach**

*P. Erik Gunderson, Pascack Valley Regional School District*

*Rob Maier, Randolph Public Schools*

Student's and teacher's knowledge of how to apply appropriate science and physics principles can go a long way toward improving student performance in the classroom and perhaps even on standardized assessments. The speakers in this session are experienced science educators and supervisors and will discuss their extensive experience connecting with technology education at the high school level.

**4. 'Reshaping' Woods Programs**

*James McIntyre, Bob Jensen, Mark Teshkoyan, and Greg Paulick, James Caldwell High School*

The staff from JCHS will demonstrate how even the most traditional shop facilities can be used to teach the contemporary technology standards. Topics to be covered include project selection, research methods, machine safety, and electronic portfolios, and how students may follow the problem solving process to design and construct projects.

**5. Web Design in Technology Education**

*Joanne Reddan, Cedar Grove Public Schools*

Use of the World Wide Web for student and teacher presentation and documentation can be a powerful teaching tool. This session will demonstrate strategies for including design of web pages in technology education activities as well as how teachers can effectively use the web to present material to their students.

## **6. Robotics & Control Activities for the Technology Education Classroom**

*Don Knepler and Mike Hudock, Washington Township High School*

Various activities dealing with robotic and control devices will be presented in this session. Robots that utilize “basic stamp” microprocessors will be demonstrated along with some non-programmable devices. Handouts of all activities highlighted will be available.

## **7. Teaching Problem Solving With Spy Gadgets**

*Sherry Roses, Howell High School*

In a time when our country’s first line of defense is information, fictional spies like James Bond and Ethan Hunt and their spy gadgets have become extremely popular. Several technology learning activities will be presented based on popular spy movies including *Mission Impossible 2*, *XXX* and *The Recruit*. Ideas for designing concealment devices, secret codes and disguises will be presented in a multimedia format. The moral, ethical and legal decisions of designing spy gadgets will also be discussed. Handouts will be provided to all participants.

## **8. Five Star Facilities**

*Phil Hammel and Michael McFadden, Hunterdon Central Regional High School*

Set your sights on the facilities and equipment of Hunterdon Central Regional High School’s five star technology education program. This session will highlight facility and equipment needs for a design and applied technology program. Through a tag team approach, and a “share it all” attitude, the presenters will utilize handouts and visuals to describe their program planning and facility design, including software and hardware needs.

## **9. Technical Presentation and Documentation**

*Wendy Green, Marine Academy of Science and Technology*

Documentation of the technological design process and presentation of solutions to technological problems are very important to the academic rigor of technology education, yet these items are often overlooked by students and classroom teachers. This workshop will emphasize strategies for improving your student’s documentation and presentation skills and also will discuss assessment methods.

## **10. Bringing Diverse Communities Together Through Technology Education**

*Colleen Walsh Barnes, Livingston High School*

*Nicole Walsh, East Orange Community Charter School*

The special project presented in this session teamed students in a high school Electronic Systems course with third grade students to explore topics in electricity and simple machines. Activities included high school students designing experiments for their younger counterparts, the third graders designing their own devices, and a culminating activity in which the two groups met at the Liberty Science Center to explore exhibits on energy, electricity, and simple machines.

**10:00 a.m. – 11:00 a.m.**

***Vendor Exhibits***

***Coffee and refreshments will be available in the exhibit hall***

**11:00 a.m. – 12:30 p.m.**

***Session II***

**11. Biotechnology Activities for the Elementary Classroom**

*Pat Hutchinson, The College of New Jersey*

The College of New Jersey has taken the lead on many projects in the area of Elementary Technology Education. This workshop will focus on work created for the Children Designing and Engineering project and will showcase design and technology activities that relate to or integrate biology and chemistry.

**12. Paper: It's Not Just for Writing**

*Harry Roman, PSE&G*

*Doug Gorham, Ed.D., Institute of Electrical & Electronics Engineers*

This session will feature a hands-on activity that utilizes everyday materials and will illustrate how engineering design processes and concepts can be integrated into the pre-college classroom. Attendees will receive additional resources to assist in enhancing technological literacy in their schools, districts, and classrooms.

**13. Technology Education: Where We've Been and Where We're Going**

*Rick Ambacher, Washington Township High School*

This workshop will explore the evolution of technology education philosophy from its early days to the present. Participants will also take part in a brief discussion regarding the direction technology education should take in the future.

**14. Manufacturing Technology**

*Winfield Parsons, Ph.D., Montclair State University*

This workshop will include discussion and demonstrations on the topics of cutting edge materials and manufacturing processes. How teachers can attempt to match their practices to those of business and industry will be stressed.

**15. Five Star Middle School Program Focus**

*Steve Scanlon, Marlton Middle School*

TEANJ has identified several schools throughout the state that have exemplary technology education programs. This session will highlight the activities, curriculum, and philosophy of Marlton Middle School's program. The program includes an interdisciplinary unit that integrates art, music, and consumer science in the seventh grade, and a Creative Engineering elective class in the eighth grade.

**16. Implementing a Power, Energy, and Transportation Technology Curriculum**

*Brian Drelick and Dan Muller, High Point Regional High School*

Student knowledge of the ever-changing power, energy, and transportation systems in our society is a necessity. This presentation will discuss how students can use design and problem solving to address changes in alternative fuels, transportation, and energy awareness. Copies of the curriculum and course work will be available for distribution and discussion.

**17. TEANJ Curriculum Project**

*Phil Paspalas, Pascack Valley Regional School District*

This workshop will explore moving the New Jersey Technological Literacy and National Standards for Technological Literacy into practice through a discussion of curriculum and programs on all grade levels from kindergarten through twelfth.

**18. Recruiting and Retaining Girls in Science, Technology, Engineering, and Mathematics**

*Dianne Mills McKay, Council on Gender Parity in Labor and Education*

*Terri Boyer, Ed.D., Nontraditional Career Resource Center*

This interactive workshop will begin with an overview of women's participation in STEM fields and connect it with girl's participation in associated classes in middle and high school. Participants will discuss video clips of women's experiences in those fields, as well as case studies of classroom interactions. Attendees will also work on a list of equitable recruitment and teaching strategies in their classes.

**19. Student Competitions for Technology Education**

*Henry Harms, TSA State Advisor*

*Donna Prawetz, Panasonic Industrial Company*

*Randy Schaeffer, FIRST*

This session will highlight student competitions for middle and high school students including Technology Student Association competitive events, the Panasonic Creative Design Challenge, FIRST LEGO League, and the FIRST Robotics competition.

**20. Five Star High School Program Focus**

*Mark Wallace, High Point Regional High School*

TEANJ has identified several schools throughout the state that have exemplary technology education programs. This session will highlight the activities, curriculum, and philosophy of High Point Regional High School's program.

**12:30 p.m. – 1:00 p.m.**

***Vendor Exhibits***

***Door Prizes in the exhibit hall***

**1:00 p.m. – 2:30 p.m.**

***Luncheon and Association Reorganization***

**Room Reservations:**

Call Marriott Teaneck at Glenpointe, 1-800-228-9290 or 201-836-0600. Mention "Technology Educators Association of New Jersey" for conference rates of \$159 (Single/Double) prior to April 19, 2004.

**Directions to Teaneck Marriott at Glenpointe:**

100 Frank W Burr Boulevard  
Teaneck, NJ 07666

**From Route 80 Eastbound:**

Take the I-95 N exit number 68B toward G WASHINGTON BR/NEW YORK. Take the exit number 70 toward RT-93/LEONIA/TEANECK. Take the exit number 70B- toward TEANECK. Turn SLIGHT RIGHT onto FRANK W BURR BLVD.

**From Turnpike Northbound:**

NEW JERSEY TURNPIKE N becomes I-95 N. Take the exit number 70 toward RT-93/LEONIA/TEANECK. Take the exit number 70B- toward TEANECK. Turn SLIGHT RIGHT onto FRANK W BURR BLVD.



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This conference, presented by TEANJ, will keep attendees apprised of various changes in the state within the past year relating to Core Curriculum Content Standards, high school graduation requirements, and teacher licensing in Technology Education. All NJ teachers, counselors, supervisors, administrators and other professionals are welcome to attend. Program highlights include:

<b>Elementary Technology</b>	<b>Problem Solving</b>	<b>Web Design</b>	<b>Gender Equity</b>
<b>Manufacturing</b>	<b>Facilities</b>	<b>Student Competitions</b>	<b>NJ Inventors</b>
<b>Interdisciplinary Studies</b>	<b>Biotechnology</b>	<b>Exemplary Programs</b>	<b>Power &amp; Energy</b>
<b>Robotics/Control</b>	<b>Project Documentation</b>	<b>Engineering</b>	<b>Curriculum</b>
<b>Vendor Exhibits</b>	<b>Keynote Speaker</b>	<b>Activity Sharing</b>	<b>Awards Presentations</b>



Technology Conference & Expo 2004  
Technology Educators Association of New Jersey  
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Fair Lawn, NJ 07410-0718