



Winter 2002

# School Scene

Technology Student Association, 1914 Association Drive, Reston, VA. 20191-1540, [www.tsaweb.org](http://www.tsaweb.org)



## DIRECTIONS 2001 Participants "Survive" The Annual TSA Leadership Conference

by Meg Denny,  
National TSA  
Reporter

Imagine yourself traveling to Atlanta, GA to meet many different people from different chapters, different states, all with different backgrounds. The purpose of this trip: leadership building experiences, but most of all, the challenge of stepping out of your comfort zone and developing self growth. The "zero chief" has spoken and you are all divided up into eight competing tribes. As you sit among these fourteen other tribe members you may question your importance in this arrangement, but you are then informed that although you have a "zero chief," this person is not the commander. You are all of equal importance. With this new information you learn that this conference is no ordinary sit-down workshop; it now has a twist and becomes very interesting. Tribes create tribal names, posters and talking sticks. Some even create tribal chants to motivate each other. The tribes work closely in tribal challenges such as the human bridge, the technology leadership relay, human checkers, and the TSA scavenger hunt, just to name a few. Tribal challenges are spaced out by workshops. National Officers, advisors, and national office staff members hold workshops such as "What we do back home," "TSA 101," "The National TSA web site," and "PR Ideas." The workshops are beneficial to everyone and packed with information. Our night out on the town starts off at the famous food joint, The Varsity. Once we all have calmed the growl of our tummies, we are bused to the laser light show on historic Stone Mountain for a patriotic night of fun. When we wake up the next morning and meet for breakfast, we realize that Directions 2001 is almost over. Some think of how to repack all those clothes they brought, some work diligently on their last photos for the scavenger hunt, and some gather around the piano to share the joy of music. Yet, no matter what we are all doing, the majority of us are cherishing these moments of a "well-worth-it" trip to Atlanta. Tribes made of diversity, days made of leadership building, and an organization strengthened by those who hold it together. Directions 2001--a trip well worth your time.



## NEW COMPETITIVE EVENTS

### Medical Technology and Agriculture and Biotechnology Design

You don't have to look far to see how advancements in medical technology have vastly improved the length and quality of people's lives. Now TSA members can explore these advances by participating in the Medical Technology competitive events.

Advancements in technology also have had tremendous impact in agriculture and biotechnology. TSA members can explore technology's impact in the farmer's field or under the microscope by participating in the Agriculture and Biotechnology Design competitive events.

Interested in helping to demonstrate these new events at the national conference in Denver, CO? Please check TSA's website at [www.tsaweb.org](http://www.tsaweb.org) for further information.

#### Corrections:

*The Fall 2001 School Scene incorrectly stated that National TSA President, Casey Wiggins was from Checotah High School in Texas. Although Casey was born in Texas, he currently is a student at Checotah High School in Checotah, Oklahoma. Sorry Casey!*

*The Middle School Technology Activities: The Official TSA Competitive Events Guide 2002-2003 incorrectly states that Dragster Design Challenge entries are limited to one per chapter. Entries are limited to TWO individually-produced dragsters per chapter.*

# Mastercam

The CAD/CAM designed  
with success in mind.



Call 1-800-ASK - MCAM  
or visit [www.mastercamedu.com](http://www.mastercamedu.com)

## 2002 National TSA Conference in Denver, Colorado

The excitement is beginning to build and “all systems are go” as Colorado TSA prepares to welcome you to Denver for the 24th annual National TSA Conference, June 24 -28, 2002. This will be the first time TSA has ever held a national conference in the Mile High City. And, as hosts for the 2002 conference Colorado TSA is excited and anxious to make the 24th annual national conference a truly “mile high event” for members of TSA. So, as you begin to think about making plans for June, be sure to mark your calendar now for what promises to be a most memorable occasion and one you won’t want to miss. What better place to “Achieve and Succeed” in 2002 than in Denver, Colorado? Colorado TSA and National TSA hope to see you at the 24th Annual National TSA Conference in Denver!

### CONFERENCE SITE

The Adam’s Mark Hotel, in the heart of downtown Denver, is the site for the 24th annual National TSA Conference. Located at 1550 Court Place on the 16th Street pedestrian mall, the Adam’s Mark Hotel is within walking distance to major attractions. It has three restaurants, a gift shop, a florist, a dry cleaner, and valet parking, as well as underground parking and concierge services.

*continued on page 3*

## TSA Competitive Events Subject of **TECH-know** Project

by Jerianne Taylor, Graduate Assistant  
North Carolina State University

North Carolina State University recently received a four-year grant from the National Science Foundation to develop standards-based instructional materials for twenty TSA Competitive Events. The **TECH-know** project represents a significant collaboration among selected state departments, universities, businesses, and TSA. Over the next four years, teachers from North Carolina, Virginia, Oklahoma, and Florida will have the opportunity to pilot modules that reflect the Standards for Technological Literacy, National Science Education Standards, the Principles and Standards for School Mathematics, and TSA Competitive Events.

The **TECH-know** project will develop publications based upon TSA competitive events, and a portion of the profits from the publications will be returned to TSA to fund the development of future instructional materials. Since the publication will be standards-based, they have the potential to encourage broader integration of TSA competitive events in the classroom. Receiving this grant confirms the value of using TSA events to implement standards based curriculum.

The projected outcomes of the **TECH-know** project include:

- The publication of high quality instructional materials that enhance the development of fundamental science, mathematics, and technology knowledge.
- The development of student creativity and critical thinking skills related to science, mathematics, and technology through the application of problem-based, inquiry-guided pedagogy.
- Positive student attitudes toward science, mathematics, and technology.

How TSA will benefit from the **TECH-know** project?

- Increased awareness of the TSA and its importance to technology education through research conducted during the **TECH-know** Project.
- Profits from the publication will go back to TSA to continue future curriculum development projects.



This is an exciting opportunity for NC State University, TSA, and technology education. For more information about the **TECH-know** project, you may contact [techknow@gw.ncsu.edu](mailto:techknow@gw.ncsu.edu).

# 2002 National TSA Conference in Denver, Colorado *continued*

TSA conference attendees will be happy to know that the Adam's Mark Hotel is the headquarters for the 2002 conference. Eight hundred rooms have been blocked for TSA and are available for reservations made by the deadline date of May 24th. Please note that after this date the standard hotel room rate will apply and the special rate for TSA will not be honored.

### TSA Room Rate

The flat rate of \$140.00 will apply to any type of room accommodation: single, double, triple, or quad. Reservation requests must be guaranteed by check, money order, or valid major credit card number equal to one (1) night's room rate, plus applicable occupancy tax. Reservations may be made by calling 1/800/444-ADAM or by fax to 303/623-0303.

**CONFERENCE REGISTRATION** Fees for the 2002 National TSA Conference, as set by the TSA, Inc. Board of Directors:

Attendee Category	Preregistration	On-Site
Advisor	\$75	\$85
Student	\$75	\$85*
Alumni	\$35	\$45
Guest	\$35	\$45
Child	\$15	\$15

\* This registration fee is for attendance only. Students may not register on site for participation in competitive events.

### CANCELLATION AND REFUNDS

Upon receipt of a chapter's registration by National TSA, no additions, substitutions or any other changes may be made. Also, no changes, substitutions or additions are allowed on site. Each student registered must be affiliated through the local chapter, the state delegation, and the national association in order to attend and participate in the national conference. For more information, refer to the *Conference Information Booklet*, available in early 2002.

**Please note:** Provided a written request is received at National TSA by June 1, 2002, 50% of registration fees are refundable. Please be advised that no exception to this policy will be made.

**MECHANISMS\***  
**MECHANISMS\***  
**MECHANISMS\***  
**MECHANISMS\***  
**MECHANISMS\***  
**MECHANISMS\***  
**MECHANISMS\***

**Hands On!**

**SIMPLE MACHINES**

This 219 element set is a wide-ranging tool for exploring simple machines with the added concept of motorization! Students working in pairs develop a strong understanding of mechanical principles. Motorized Simple Machines is another of the many "Hands-on, Minds-on" solution from your partners in education.

*\*Request a complete catalog.*

**PITSCO dacta**  
PARTNERS IN INNOVATIVE EDUCATION

[www.pitsco-legodacta.com](http://www.pitsco-legodacta.com) • 800-362-4308

PITSCO PRINCIPLE #1

**We lead by caring about  
student & teacher success.**

**PITSCO**  
LEADERS IN EDUCATION

[www.pitsco.com](http://www.pitsco.com) • 800-835-0686



# What We Do Back Home...A Sharing of Ideas from Across the Country

by Jenniferanne Broido, National TSA Secretary

For those members who have attended a National Conference before, I'm sure you have noticed the diversity of individuals who come together as one membership in TSA. Being a member of TSA not only allows one to be exposed to cultures and ideas different to than those at home, but it also provides the opportunity to truly appreciate them. At the National TSA Leadership Conference, Directions 2001, students participated in a workshop entitled "What We Do Back Home...A Sharing of Ideas from Across the Country." The result was discussion forums in [Fundraising](#), [Public Relations](#), and [State Conference Activities](#) that produced ideas for members across the country. The state and contact information is listed if you would like to receive additional information. For any questions or to help our list grow, please contact Jenniferanne Broido at [NationalTSASecretary@yahoo.com](mailto:NationalTSASecretary@yahoo.com).


## Public Relations: Getting the word out about TSA!

- Sponsor charity events in partnership with our National Service Project, the Red Cross:
- Have a "Bike Race Marathon," <http://www.cotsa.org/cmmnty.htm>, Colorado TSA
- Hold a "Blanket Drive," <http://www.texastsa.org/TTSASTateCommserv.htm>, Texas TSA
- Set up a TSA booth at a county fair
- Government breakfast: Contact state or local legislators. Also works well in conjunction with other Career and Technical Student Organizations (CTSO) to improve communications. [tennesseetsapresident@yahoo.com](mailto:tennesseetsapresident@yahoo.com)
- Radio stations are required by law to air public service announcements. Take advantage of this free advertisement time to help promote TSA.
- Organize a Technology Fair for a local elementary school [GeorgiaTSA@aol.com](mailto:GeorgiaTSA@aol.com)
- TSA social function: Once a month, have a night out with TSA members and go out to dinner. Each member should bring one friend. When the conversation shifts to TSA, the 'guests' will hopefully like what they hear and ask how they can join. One 'dinner' grew from 5 to 25 people!
- Before attending a state conference, put articles in the school newspaper or local paper stating how many students are going, what competitions they will be in, where the conference is, and what TSA is about.
- Make your chapter be responsible for developing programs for school events (for example, football games) and have 'Printed by TSA' on it. [noahsta@hotmail.com](mailto:noahsta@hotmail.com)
- Create a website for your local or state delegation and use it! Make sure it is loaded with good content so that it can be a source for prospective members or corporate businesses.
- Take pride in your TSA official attire. Require your chapter members to wear the attire on a TSA meeting day! A lot of people will stop and ask you about TSA and your blazer. This will get the organization noticed!

*continued on page 6*

## IT2020


### Information Technology Program



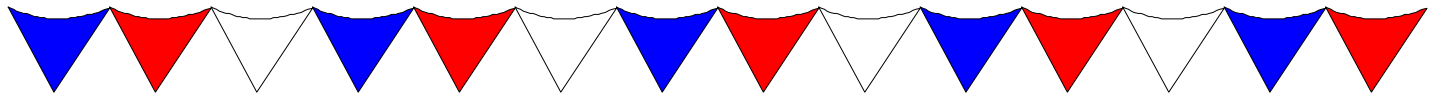
IT2020 is an integrated delivery system that provides your students with new and challenging learning opportunities in information technology. The modules available create an effective IT skills core program that can be expanded to address business driven certification such as A+, Net+, MCSE or CCSE.

IT2020 will prepare your students for a career in the rapidly expanding world of information technology. Within the curriculum we ensure that each student makes connection with a career pathway most suited to his or her individual abilities and aspirations.

For more information about the IT program that has set the standard, send for your free IT2020 demonstration CD today.  
Call 1-800-227-2442, or email us at: [marketing@lj-tech.com](mailto:marketing@lj-tech.com)



**LJ Technical Systems**



# CHAPTER NEWS

## ALABAMA

Nicole McLaurine, presently a sophomore Vice-President for the **BrewTech TSA Chapter**, was selected as Alabama's Outstanding TSA Student for 2001. At the 2001 national conference, she received bronze and silver achievement awards for her



Nicole McLaurine

accomplishments in technology, leadership, service and career development. She went on to earn four 3rd place trophies in desktop publishing, technology bowl, research and report writing, and extemporaneous speaking. The BrewTech TSA Chapter was awarded the Chapter Excellence Award for Alabama at the conference. Nicole was inducted into the National Technology Honor Society.

*by Gayle Morrow  
Alabama TSA State Advisor*

## CONNECTICUT

Becky Sinosky is a first year teacher at **Rham Middle School** and has been an associate advisor for the Hall Memorial TSA chapter for the past 2 years. She, along with five other EMTs (Emergency Medical Technicians) from the Willington Hill Fire Department, traveled to New York at 4:00a.m. the day following the events of September 11 attacks. The group treated many victims and stayed at the World Trade Center site to assist for 24 hours. Becky is a past state officer (4 years) and was Distinguished Alumni at this year's national conference. She has been a TSA member for the past 16 years.

*by Phil Monty  
Connecticut TSA State Advisor*

**The Dodd Middle School** TSA Chapter in Cheshire has eighteen active students and still growing. The chapter's first activity was a "community" service project. Members formed two groups to mass-produce 100 mini-tool boxes used for sundries and 100 desktop pencil holders

that were given to the New England Association of Technology Teachers (NEATT) conference. **The Dodd TSA Chapter** also sold refreshments at the annual Dodd Cross Country Invitational meet at Cheshire Park in order to help our treasury. Dodd hosted 13 schools with approximately 325 boys and girls participating. Chapter members are now using CAD to design CO<sub>2</sub> powered racecars for our state competition in March. Our chapter will prepare for other state events, as well as run a concession stand at all home basketball games to help students learn more about being entrepreneurs.

*by Chris Mala,  
Chapter Reporter*

## FLORIDA

Polk County TSA members Alex Kagioglu, Kiara Hernandez, Casey Bass, Ryan Metcalf, and Jacob Marvin, from **Sleepy Hill Middle School, McKeel Academy, and Haines City High School** attended the state competition and the National TSA Conference in Richmond, VA. Alex Kagioglu placed 3rd in Graphic Design Challenge, Ryan Metcalf placed 10th in Flight Challenge, and Jacob Marvin placed 3rd in 3D Modeling in the national competitive events

*By Shawn Peterson*

## DELAWARE

**Hanby Middle School** TSA students, under the direction of their advisor, Mr. John Singer, have raised money from selling Ozark Delight lollipopsto donate to various charities. Hanby TSA has donated \$150 to the Food Bank of Delaware, Meals on Wheels Delaware, and America's Fund for Afghan Children during the holiday season. Hanby TSA president, Brandon Ignacio, vice president, Chris Carper, and adviser, Mr. Singer, recently made a presentation to the Hanby PTA explaining the purpose of TSA and the various activities the chapter will be participating in this year. Hanby TSA plans to send students to the state competition in Harrington, Delaware and the national competition in

TSA received 42 medals at the state competition and four top 10 finishers and one national champion at the national competition.

*by Vincent Delucca, Reporter  
and Chris Carper, Vice President*

## GERMANY

On October 19, 2001, **Germany's TSA chapter, Wilhem-Ostwald-Gymnasium** placed third at the SiemensMint-EC



Award contest. The Mint-EC is a non-profit organization of German industry that recognizes schools with a focus in math and science. Awards are given based on innovative school concepts, future focused projects and practical learning. Reinhard Holl, chapter president, was named as the special motivated Mint-EC student. Awards were presented by the president of Germany, Joannes Rau.

*by Reinhard Holl*

## TEXAS

**Burges High School Technology Club** (BHSTC) has been working on a mural for a local air show, and now is working on a web page for the Far West Texas Technology Education Association. The chapter also is also preparing for a Tech Day competition, that has events such as Tech Bowl, Manual Drafting, and 21 or Bust (robot-like contraptions are built and made it go exactly 21 feet). Chapter officers have been elected and some community service projects are underway, one of which includes formatting computers for another computer lab.

*by Jay Wright, Chapter Reporter*

## VIRGINIA

The TSA chapter at **L. Douglas Wilder Middle School** has begun its second year proclaiming its new motto, "The Best of the Best". During the chapter's first year, students from L. Douglas Wilder placed in the top ten finalists in three categories at the 2001 National Conference. Students also placed first, second and third at the Regional Competitions held in their hometown of Richmond, VA.

*by Kierra Tate, Chapter Reporter*

# National Officer Candidate Applications



## Do You Have What It Takes???

The 2002/2003 national officer candidate applications are now available. Qualified members must personally contact Dr. Rosanne White, Executive Director, TSA, to request the application.

Contact Dr. White at [rwhite@tsaweb.org](mailto:rwhite@tsaweb.org) or call 703-860-9000.

*The deadline for filing the completed application at the national office is May 3, 2002.*

continued from page 4

## What We Do Back Home...

### Fundraising:

- TSA pageant: contestants (both male/female) do not have to be a member of TSA, but it is a fun event, raises money for your chapter and gets the word out about TSA. [noah TSA@hotmail.com](mailto:noah TSA@hotmail.com).
- Golf tournament: Have companies sponsor each hole, and also charge players. [Angel120186@aol.com](mailto:Angel120186@aol.com)
- Basketball tournament
- Coffee/smoothie/root-beer float sales during lunch.
- 'Free' car washes: Don't have a set price, but ask for donations, sometimes people will donate as much as \$10!
- Donut sales during exam week
- Mystery dinner: everything on the menu is named for something that goes along with the theme, but does not describe the food. When students receive their food it may be pork & beans, green onions with lifesavers on it, or a hot-dog bun and ketchup but no hot-dog. It's a fun event, and it gets the word about TSA out to the community. [Valeried\\_30@hotmail.com](mailto:Valeried_30@hotmail.com)
- Design a 'hip' and new look for a school spirit T-shirt.

### State Conferences:

- Have a conference theme (Hawaiian, Mardi Gras, Sports) and incorporate that theme into conference activities: Dances, spirit events, etc. [lyndzee\\_03@hotmail.com](mailto:lyndzee_03@hotmail.com), [peach\\_shampoo@hotmail.com](mailto:peach_shampoo@hotmail.com)
- Invite local officers and prospective State Officers to help organize the State Conference [president@wtsaweb.org](mailto:president@wtsaweb.org)
- Hold a talent show during sessions. The waiting period when votes are tallied for the incoming state officer team can be a bore for some, but holding something a little more entertaining lightens the mood and also motivates more students to get up early and attend the session![lyndzee\\_03@hotmail.com](mailto:lyndzee_03@hotmail.com)
- Karaoke Night: If you can find a member who has a karaoke machine, make use of it! Having this activity the first night of the conference serves as a great icebreaker! [Shortee324@aol.com](mailto:Shortee324@aol.com)
- Have an alumni coordinator who will be responsible for creating a contact list of all seniors who would like to return as Alumni, and who possibly can organize an Alumni Breakfast, where seniors can attend as well. [tsamichael@hotmail.com](mailto:tsamichael@hotmail.com)  
Hold special interest sessions, lead by State Officers: 'Getting your chapter to Nationals' or invite local businesses to talk about the latest wave of technology.
- Involve students in trust-building activities. [tsamichael@hotmail.com](mailto:tsamichael@hotmail.com), [noah TSA@hotmail.com](mailto:noah TSA@hotmail.com). These activities should be undertaken only with the approval of the state and/or chapter advisor.



# Business Partner Profiles



## DuPont Shares TSA Philosophy

DuPont began a long tradition of educational support in 1918 when we recognized the shortage of Ph.D. chemists. Since that time, DuPont has continued its investment in education, supporting numerous science, math, environmental and technology initiatives. These programs have an impact kindergarten through high school, many colleges and universities and a large number of minority programs.

Our partnership with the Technology Student Association began in 1993 when we assisted with the printed material for the *Great Technology Adventure Program*. We have become one of TSA's largest corporate supporters, providing \$135,000 to National TSA since 1996. We believe that technology education is vital to understanding, living, and working in the 21<sup>st</sup> century, as it provides the skills necessary to adapt to an increasingly ever-changing technological world.

DuPont and TSA share many of the same goals: to provide young people with critical thinking and listening skills, to help students become responsible decisions makers, to develop leadership and communication skills for future engineers and technologists, and to help students realize systematic technological problem-solving abilities.

The evolution of technology is one of the single most important factors in the course of our history. An understanding of this evolution provides the foundation for decisions regarding future technological developments and their impact on society. Our future will need a global citizenry who is knowledgeable about technology: information technology, physical technology and biotechnology. We believe our investment in TSA helps develop that potential in young people and we look forward to continuing our relationship with the organization.



## Tech Ed Concepts Provides Real-World Software to TSA Students

Tech Ed Concepts, Inc. (TEC, Inc.) is the exclusive North American Academic Distributor of CADKEY®, DataCAD® and SURFCAM® software. TEC, Inc. provides state-of-the-art 3D products needed to teach students about the fields of engineering, design, manufacturing, and architecture. Through our academic dealers, TEC makes local on-site service available and works to provide superior post-sales customer support. TEC also offers educational programs for all levels of study as well as progressive learning courses designed specifically for technical instructors.

TEC's history with TSA includes judging and presenting awards at local and regional competitions, and major involvement in the annual National TSA Conference. Our company has been proud to present free industrial-strength software to all participants, as well as multi-software suites to event finalists. In 2001, TEC achieved Benefactor Sponsor status as it donated more than \$25,000 of CADKEY and DataCAD software to TSA C.A.D. participants.

Richard Amarosa, president and founder of TEC, Inc., incorporated the private company in 1988 with the goal of closing the technology gap between industry and education through low cost, highly effective solutions for tight school budgets. Mr. Amarosa has more than 17 years of instructional and administration experience in technology education. "Our TEC team's focus is to provide educators and their students with low-cost, high-performance real-world tools to experience creativity, problem solving, technology research, and most importantly, the opportunity to communicate and heighten the thought process. We want to help your students to go beyond the normal technology classroom experience," Amarosa affirmed.

TEC, Inc. is also recognized for its annual TEC Summer Camp for Instructors. The TEC Summer Camp is a series of training seminars that involve more than 40 hours of hands-on instructional learning, including 3D mechanical CAD with CADKEY, 3D architectural CAD with DataCAD, and computer-aided machining with SURFCAM. The Camp typically takes place in July; instructors from around the nation gather to learn the latest in CAD and CAM technology, and the integration of CAD in science, math and technology education in the classroom.

Visit [www.TECedu.com](http://www.TECedu.com) to read about success stories in schools that use CADKEY, DataCAD or SURFCAM. You can also download sample review chapters from textbooks and be amazed by the unbeatable academic pricing on the latest releases of CAD and CAM software and curriculum materials used by hundreds of thousands of industries worldwide!



Students at the 2001 Washington TSA State Conference held at Eastern Washington University



The mission of the Technology Student Association is to prepare our membership for the challenges of a dynamic world by promoting technological literacy, leadership, and problem solving, resulting in personal growth and opportunities.

School Scene (ISSN 1066-341X) is published by the Technology Student Association  
1914 Association Drive  
Reston, Virginia 20191-1540  
Phone 703/860-9000 Fax 703/758-4852  
www.tsaweb.org

Editorial material is welcomed and encouraged.  
Copyright 2002 by the Technology Student Association

**Executive Director**

Rosanne T. White

**National Officers and Advisors**

- Casey Wiggins, OK, President
- Morgan Maddox, VA, Vice President
- Jenniferanne Broido, FL, Secretary
- Jeremy Roberts, KS, Treasurer
- Megan Denny, IA, Reporter
- Lavoncia McGee, MS, Sergeant-At-Arms
- Sara Reynolds, TN, Advisor
- Tonya Vandergriff-Williams, TN, Advisor

**Board of Directors**

- Richard Grimsley, President/Chairman
- Donovan Bowers, President Elect
- Rick Schmidt, Immediate Past President
- Tom Shown, Secretary/Treasurer
- Mike Ribelin, Corporate Member
- Doug Miller, Corporate Member
- Susan Barnes, Elementary School Rep
- Bill Smith, Middle School Representative
- Joe Nelson, High School Representative
- Dr. Len Litowitz, University Representative
- Casey Wiggins, National TSA President
- Rosanne T. White, Executive Director

**National Staff**

- Donna Andrews, Conference Program Coordinator
- Pat Caffrey, Membership Program Coordinator
- Pauline Cratty, Administrative Assistant
- Lynda Haitz, Communications Coordinator
- Jill M. Landsman, Marketing Manager
- Hillary Lee, Project Manager
- Rosanne T. White, Executive Director
- Virginia Williams, Business Manager

# TSA, Inc. board of directors ACTION PLAN 2001-2002

At its fall meeting the TSA, Inc. 2001/2002 Board of Directors developed the action plan. Four priorities with objectives were identified, as were board members responsible for attention to each priority:

**Elementary Level Program** (Susan Barnes, Joe Nelson, Tom Shown)

Grow the existing program through new publications and the website. Develop related products on CD Rom and establish an elementary CRC.

**Membership** (Len Litowitz, Donovan Bowers)

Increase membership through various programs including improved technology teacher recruitment, improved chapter recruitment in states with low TSA participation, and continued alumni services and recognition.

**Non-Dues Revenue** (Mike Ribelin, Bill Smith, Richard Grimsley)

Explore the possibility of publishing a student manual that would complement the curricular resource guides, as well as offer additional items for sale (such as banners, officer symbols, bumper stickers, etc.). Research virtual membership programs and consider creating an on-line TSA virtual membership (with contests, activities and the sale of a virtual TSA membership pin).

**Web Site Enhancement** (Rick Schmidt, Doug Miller, Casey Wiggins)

Allocate funds for the development of new web site components. Implement a "tips and suggestions" page for leadership and chapter operations as well as page to recognize exemplary TSA students/advisors. Develop an ethics policy for all web site forums.

what student software should be



Develop your skills to a professional level with the latest release of the world's leading CAD software. AutoCAD 2002 Student Portfolio is a fully upgradeable two-year license with all the features and functionality of the professional package.

Only  
\$189.00



www.studica.com/tsa



Develop your skills to a professional level with the latest release of the world's leading animation software. 3DS MAX 4 is a fully upgradeable unlimited license with all the features and functionality of the professional package. Includes Character Studio 3 and Reactor.

Only  
\$849.00

440 Ridge St  
Lewiston NY 14092  
www.torcomp.com/tsa  
888.361.7321 v - 716.734.2807 f