FUTURE TECHNOLOGY TEACHER

Technology education is the study of technology, in which students "learn about the processes and knowledge related to technology." As a field of study, it covers the human ability to shape and change the physical world to meet needs, by manipulating materials and tools with techniques.

http://en.wikipedia.org/wiki/Technology_education

OVERVIEW

While the need for student proficiency in technology (as one area of STEM) is increasing, the number of qualified technology education teachers is decreasing. To help address this imbalance, this event will encourage participants to 1) investigate technology education preparation programs in higher education, and 2) test their potential as a future technology educator.

ELIGIBILITY

Entries are limited to two (2) individuals per chapter.

TIME LIMITS

A. Entries must be started and completed during the current school year.

B. Semifinalists will make a presentation of no more than ten (10) minutes in length.

C. A maximum of four (4) minutes will be allowed for set-up.

D. At the conclusion of the presentation, the participant must remove all materials within three (3) minutes.

E. One (1) point will be deducted for each ten (10)-second interval over the allotted time for the presentation, set up, and/or clean-up.

F. The LEAP interview will be conducted as part of the semifinalist presentation/interview and will last a maximum of five (5) additional minutes.

LEAP LEADERSHIP RESUME/INTERVIEW

An Individual LEAP Leadership Resume is required for this event and must be submitted at event check-in. Semifinalists will respond to interview questions related to their submitted LEAP Resume for a maximum of five (5) minutes.

ATTIRE

Competition attire, as described in the National TSA Dress Code section of this guide, is required for this event.

PROCEDURE

A. In preparation for this event, participants thoroughly research and select two (2) accredited colleges or universities that offer technology teacher preparation programs. Participants should take into consideration geographic location and environment, academic requirements, cost, campus life, setting, and the size and housing facilities of each school. Advice from parents, family members, guidance counselors, and technology teachers is recommended, as is a search on the Internet of colleges and universities that offer technology education degree programs. Using no more than two (2) pages, one (1) side only, participants should summarize the information derived from the research about each of the colleges or universities and their respective programs.

B. Each participant should complete an essay, one (1) page (single-sided), explaining why s/he is a good candidate to become a technology teacher. Personality traits, goals, and interests should be included in the essay. The essay should be word processed and free of spelling and grammatical errors.

C. Each participant will provide one (1) letter of recommendation from a counselor, school official, or other individual (not a relative) on official letterhead. Any identifying information (school or participant) should be concealed.

D. A lesson plan describing the rationale, goals and objectives, standards correlation, and a description of the lesson and activity—including assessment—must be submitted. The lesson plan should be clearly labeled with the grade level for which it is intended.

E. Copies of the lesson plan, all handouts, and a list of resources and references used for the entry and in the presentation should be included in the documentation portfolio.

F. Participants report to the event area at the time and place stated in the conference program. Each participant will turn in his/her portfolio and submit a LEAP Leadership Resume to the coordinator to be judged.

G. Entries will be reviewed by evaluators. Neither students nor advisors are present at this time. A semifinalist list in random order is posted.

H. Each semifinalist will sign up for a scheduled time to present his/her lesson plan/activity.

I. The event coordinator will introduce each participant by identification number only and in order of scheduled times.

☑ STEM education is an approach to teaching and learning that integrates the content and skills of science, technology, engineering, and mathematics. The goal of STEM education is to prepare students for post-secondary study and the 21st century workforce. (Maryland State Department of Education - STEM education description)

Each time slot includes four (4) minutes for set up and three (3) minutes to pack up and remove materials/equipment.

J. Participants are encouraged to interact with the judges, who will act as students in the classroom.

K. The LEAP interview will be conducted as part of the semifinalist presentation and will last a maximum of five (5) additional minutes.

L. Portfolios should be picked up at the time and location listed in the conference program.

It is essential that students and advisors routinely check the TSA website (www.tsaweb.org) for updated information about TSA general rules and competitive events. This information is found on the website under Competitions/Updates. When students participate in any TSA competitive event, they are responsible for knowing of updates, changes, or clarification related to that event.

☑ Read the General Rules and Regulations in the front of this guide for information that applies to all of TSA's competitive events.

REGULATIONS

A. The research summaries, essay, and lesson plan/activity must be the result of the participant's own efforts and not purchased or open source material. General content from either may be used, but it must be cited.

B. All parts of the entry must be contained in the documentation. Documentation materials (comprising "a portfolio") are required and should be secured in a clear front report cover. The report cover must include the following single-sided, 8½" x 11" pages, in this order:

1. Title page with the event title, the conference city and state, the year, and the participant's ID number; one (1) page
2. Table of contents; pages as needed
3. College research summaries; one (1) page maximum for each college
4. College essay; one (1) page
5. Letter of recommendation, with identifying information (school or participant) concealed; one (1) page
6. Lesson plan/activity; three (3) sets (for the judges and coordinator)
7. Copies of handouts; three (3) sets (for the judges and coordinator)
8. References and resources; pages as needed

C. Activities that typically would follow the teaching lesson will be described by the presenter near the conclusion of the ten (10)-minute lesson.

D. Topics for the lesson plan/activity should correlate to the standards for technological literacy. (Use the International Technology and Engineering Educators Association ITEEA website at www.iteea.org for more information about the technology standards.) Topics also should reflect Science, Technology, Engineering, and Mathematics (STEM) initiatives and integration. Lesson plans/activities that explore knowledge, creativity, and skills in the following areas are suggested:

1. Medical technology
2. Agricultural and biotechnology
3. Power and energy technology
4. Information and communication technology
5. Transportation technology
6. Manufacturing technology
7. Construction technology

E. Hazardous materials, chemicals, wet cell batteries, lighted flames, combustibles, and other substances are not allowed at the conference and cannot be part of the presentation.

F. Copies of the lesson plan and of all handouts, materials, and resources should be prepared and distributed to the judges, who will act as students in the classroom.

G. Audio-visual materials such as charts, graphs, posters, displays, flip charts, transparencies, and models may be included. Bonus points may be awarded for these materials. Any audio visual equipment required for the presentation must be provided by the participant; this includes a power strip with surge protector, and an extension cord, if needed.

H. Participants are not allowed to watch or hear the presentations of other participants.

I. One (1) point will be deducted for each ten (10)-second interval over the allotted time for the presentation, set up, and/or clean-up.

J. No school or individual names may be labeled on the entry; only participant identification numbers should be used.

K. LEAP Leadership Resume (see Forms Appendix or TSA website)/Interview — Students document, in the LEAP leadership resume (see resume template), the leadership skills that they have developed and demonstrated while working on this event. Semifinalists will respond to questions about the content of their resume as part of their LEAP interview. The LEAP Leadership Resume/Interview guidelines and other resources can be found on the TSA website.

EVALUATION

Evaluation is based on the portfolio, the developed lesson plan/activity, the presentation of the lesson, and the LEAP requirements. The appropriateness of the lesson/activity for the designated grade level, the poise of the participant during the presentation, the interaction of the participant with the students (judges acting as students), and the enthusiasm and motivation of the participant will be assessed in the semifinalist evaluation. Please refer to the official rating form for more information.

STEM INTEGRATION

This event aligns with the STEM educational standards noted below. Please refer to the STEM Integration section of this guide for more information.

Science, Technology, Engineering, Mathematics

TSA AND CAREERS

This competition connects to one or more of the career areas featured in the TSA AND CAREERS section of this guide. Use *The Career Clusters* chart and the *TSA Competitions and The Career Clusters* grid as resources for information about careers.

CAREERS RELATED TO THIS EVENT

Technology (and other STEM areas) teacher

FUTURE TECHNOLOGY TEACHER
EVENT COORDINATOR INSTRUCTIONS

PERSONNEL

A. Event coordinator

B. Evaluators, two (2) or more

C. Assistants, two (2)

MATERIALS

A. Coordinator's packet, containing:
    1. Event guidelines, one (1) copy for the coordinator and for each evaluator
    2. TSA Event Coordinator Report
    3. List of evaluators/assistants
    4. Pre-populated flash drives for evaluators
    5. Stick-on labels for entries, as needed
    6. Stopwatch
    7. Tables and chairs for participants and evaluators
    8. Copy of ITEEA publication *Standards for Technological Literacy*
    9. Results envelope
    10. Envelope for LEAP Leadership Resumes
    11. LEAP Interview Judging Protocol

RESPONSIBILITIES

A. Upon arrival at the conference, report to the CRC room and check the contents of the coordinator's packet. Review the event guidelines and check to see that enough evaluators/assistants have been scheduled.

B. Inspect the area or room in which the event is being held for appropriate set-up, including room size, chairs, tables, outlets, etc. Notify the event manager of any potential problems.

C. One (1) hour before the event is scheduled to begin, meet evaluators/assistants to review time limits, procedures, regulations, and all other details related to the event. If questions arise that cannot be answered, speak to the event manager before the event begins.

D. Participants check in portfolios. The entry number sticker should be placed in the lower right corner of the portfolio's cover and LEAP Leadership Resumes.

E. Evaluators read, individually evaluate entries, and determine twelve (12) semifinalists.

F. For participants who violate the rules, the decision either to deduct 20% of the total possible points or to disqualify the entry must be discussed and verified with the evaluators, event coordinator, and a CRC manager.

G. Submit semifinalist results to the CRC for posting.

H. Semifinalists sign up for an interview at the time and place stated in the conference program.

I. Make sure the presentation room is set up correctly.

J. Conduct the semifinalist presentations. The LEAP interview will be conducted as part of the semifinalist presentation and will last a maximum of five (5) additional minutes.

K. Evaluators determine the ten (10) finalists and discuss and break any ties.

L. Review and submit the finalist results and all items/forms in the results envelope to the CRC room.

M. If necessary, manage security and the removal of materials from the event area.

Participant/Team ID# _____

FUTURE TECHNOLOGY TEACHER

2017 & 2018 OFFICIAL RATING FORM	HIGH SCHOOL

Go/No Go Specifications

Before judging the entry, ensure that the items below are present; indicate presence with a check mark in the box. If an item is missing, leave the box blank and place a check mark in the box labeled ENTRY NOT EVALUATED. If a check mark is placed in the ENTRY NOT EVALUATED box, the entry is not to be judged.

☐ Two (2) college research summaries are present.

☐ A college essay is present.

☐ A lesson plan is present.

☐ Completed LEAP Leadership Resume is present.

☐ ENTRY NOT EVALUATED

Documentation (70 points)

CRITERIA	Minimal performance 1-4 points	Adequate performance 5-8 points	Exemplary performance 9-10 points	
Evaluators: Using minimal (1-4 points), adequate (5-8 points), or exemplary (9-10 points) performance levels as a guideline, record the scores earned for the event criteria in the column spaces to the right. The X1 or X2 notation in the criteria column is a multiplier factor for determining the points earned. (Example: an "adequate" score of 7 for an X1 criterion = 7 points; an "adequate" score of 7 for an X2 criterion = 14 points.) A score of zero (0) is acceptable if the minimal performance for any criterion is not met.				
Portfolio components See Regulation B (X1)	The portfolio is unorganized and/or is missing a number of components.	The portfolio is adequate, with most components included.	The portfolio is completely organized and contains all components.	
College search summaries (X1)	Only one (1) college technology education program is identified; the summary is inadequate.	Two college programs are adequately summarized.	Two college programs are documented, with excellent summaries.	
College essay (X1)	The essay is too short, and/or not typed, and/or poorly written, and and/or there are many spelling and grammatical errors.	The essay is generally well written, typed and the correct length, but it contains several spelling and grammatical errors.	The essay is well written, typed, the correct length, and contains no spelling or grammatical errors.	
Lesson plan components See Procedure D (X2)	The lesson plan is missing several of the stated components, including the standards correlation and/or instructional design focus; it is not creative or unique.	The lesson plan includes all of the stated components, and it is adequately organized, with an instructional design focus; it has some unique and creative aspects.	The lesson plan includes all of the stated components; it is well organized and has an instructional design focus; it is creative and unique.	
Handouts (X1)	Handouts are poorly developed and do not have an impact on the lesson and activity.	Handouts are relatively well developed and have some impact on the lesson and activity.	The handouts are effective and greatly impact the lesson and activity.	
Resources and references (X1)	A minor attempt is made to document resources and references.	Several resources and references are documented.	There is clear evidence of many applicable resources and references.	
			SUBTOTAL (70 points)	

Rules violations (a deduction of 20% of the total possible points in the section above) must be initialed by the evaluator, coordinator, and manager of the event. Record the deduction in the space to the right.

Indicate the rule violated: _____

Semifinalist Presentation (90 points)

CRITERIA	Minimal performance 1-4 points	Adequate performance 5-8 points	Exemplary performance 9-10 points	
Organization (X1)	The presentation lacks organization; it is difficult to follow or understand.	The presentation is somewhat organized.	The presentation is clearly organized and easy to follow; it flows smoothly to the conclusion.	
Introduction (X1)	The introduction is weak, with little effort made to emphasize the topic and/or to generate interest and enthusiasm for the topic.	Sufficient effort is evident in the introduction, which somewhat creates a level of interest.	The introduction is effective, stimulating, and creates interest on the part of observers.	
Instructional competence (X2)	The presenter's delivery of content lacks confidence.	The presenter's delivery of content is generally professional and enthusiastic.	The presenter's delivery of content is professional, enthusiastic, confident, and full of personality.	
Voice/language (X1)	The participant conveys an inconsistent use of proper grammar, word pronunciation, and acceptable pitch and tone.	The participant generally uses proper grammar and pronunciation, and varies the use of tone and pitch.	The participant uses smooth and effective articulation, proper grammar, correct pronunciation, and varied tone and pitch throughout the presentation.	
Innovation/creativity (X1)	The presentation fails to convey innovation or originality.	The presentation is somewhat original and innovative in its delivery and topic development.	The presentation is imaginative and innovative in its delivery and topic development.	
Knowledge (X1)	Minimal knowledge of the subject is evident in the presentation; the content does not relate to the topic, and/or the participant does not convey an understanding of the topic.	Knowledge of the subject is evident, and the presenter relates and conveys a somewhat clear understanding of the topic.	Complete knowledge and understanding of the subject and relationship to the topic are conveyed throughout the introduction.	
LEAP Leadership Resume/Interview See Regulation K and instructions on TSA website (X2)	The individual's efforts are not clearly communicated, lack detail, and/or are unconvincing. Few, if any, attempts are made to identify and/or incorporate the LEAP Be. Know. Do. criteria.	The individual's efforts are adequately communicated, include some detail, are clear, and/or are generally convincing. Identification and/or incorporation of the LEAP Be. Know. Do. criteria is adequate.	The individual's efforts are clearly communicated, fully-detailed, and convincing. Identification and/or incorporation of the LEAP Be. Know. Do. criteria is excellent.	
			SUBTOTAL (90 points)	

Time Deductions

A one (1)-point deduction will be incurred for each ten (10)-second interval over the allotted times for set up, presentation, or clean up.	
Total time for presentation	
Total time for set-up	
Total time for clean up	
Presentation deduction	
Set-up deduction	
Clean up deduction	
TOTAL TIME DEDUCTION	

Rules violations (a deduction of 20% of the total possible points in the semifinalist section) must be initialed by the evaluator, coordinator, and manager of the event. Record the deduction in the space to the right. Indicate the rule violated: _____	

BONUS For the inclusion of audio/visual materials in the presentation (X1)	Audio/visuals are included, but they only slightly enhance the presentation.	Audio/visual materials are varied and moderately enhance the presentation.	Appropriate materials and audiovisuals are used and effectively enhance the presentation.	
(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)			**TOTAL (170 points)**	

Comments:

I certify these results to be true and accurate to the best of my knowledge.

Evaluator

Printed name: _____   Signature: _____