

FUTURE TECHNOLOGY AND ENGINEERING TEACHER



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

Two (2) individuals per chapter may participate.

TIME LIMITS

1. Semifinalists will make a presentation of no more than ten (10) minutes in length.
2. A maximum of three (3) minutes will be allowed for set-up.
3. After the presentation, the participant must remove all materials within two (2) minutes.
4. 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.
5. The LEAP interview will be conducted as part of the semifinalist presentation and will last a maximum of five (5) additional minutes following the participant's clean-up.

LEAP

An individual LEAP Report is required for this event and must be submitted at event check-in (see LEAP Program).

ATTIRE

TSA competition attire is required for this event.

PROCEDURE

PRELIMINARY ROUND

1. In preparation for this event, participants thoroughly research and select two (2) accredited colleges or universities that offer technology education teacher preparation programs.
2. Each participant will submit his/her portfolio and a LEAP Report at the time and place stated in the conference program.
3. Entries will be reviewed by judges. Neither students nor advisors are present at this time.
4. A list of twelve (12) semifinalists (in random order) is posted.

SEMIFINAL ROUND

1. Each semifinalist will sign up for a scheduled time to present his/her lesson plan/activity.
2. The event coordinator will introduce each participant by identification number only and in order of scheduled times.
3. Each time slot includes three (3) minutes for set up and two (2) minutes to remove materials/equipment.
4. The LEAP interview will be conducted as part of the semifinalist presentation.
5. Portfolios will be retrieved by the event coordinator and provided to the event semifinalists during semifinals. All other portfolios should be picked up at the time and location listed in the conference program.
6. The top ten (10) finalists will be announced during the awards ceremony.

REGULATIONS

PRELIMINARY ROUND

A. Research Summary

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

B. Essay

1. Each participant must complete an essay, one (1) page (single-sided), explaining why s/he is a good candidate to become a technology education teacher.
2. Personality traits, goals, and interests should be included in the essay.
3. The essay must be similar to a college application essay.
4. The essay must be typewritten and free of spelling and grammatical errors.

C. Lesson Plan

1. A lesson plan describing the rationale, goals and objectives, standards correlation, and a description of the lesson and activity—including assessment—must be submitted.
2. The lesson plan must be clearly labeled with the grade level for which it is intended.
3. The ITEEA Standards for Technological Literacy must be used. Available online at www.iteea.org/Publications/StandardsOverview.aspx

- D. 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.
- E. All parts of the entry must be contained in the documentation.
- F. 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. LEAP Report
 2. Title page with the event title, the conference city and state, the year, and the participant's identification number; one (1) page
 3. Table of contents; pages as needed
 4. College research summaries; one (1) page maximum for each college
 5. College essay; one (1) page
 6. Lesson plan/activity; pages as needed
 7. Copies of handouts; pages as needed
 8. References and resources; pages as needed

SEMIFINAL ROUND

- A. Topics for the lesson plan/activity must correlate to the ITEEA standards for technological literacy.
 1. Use the International Technology and Engineering Educators Association ITEEA website at www.iteea.org/Publications/StandardsOverview.aspx.
 2. Topics also must reflect Science, Technology, Engineering, and Mathematics (STEM) initiatives and integration.
 3. Lesson plans/activities that explore knowledge, creativity, and skills in the following areas are suggested:
 - a. Medical technology
 - b. Agricultural and biotechnology
 - c. Power and energy technology
 - d. Information and communication technology
 - e. Transportation technology
 - f. Manufacturing technology
 - g. Construction technology

- B. Copies of the lesson plan and of all handouts, materials, and resources must be prepared and distributed to the judges, who will act as students in the classroom.
- C. Audio-visual materials such as charts, graphs, posters, displays, flip charts, transparencies, and models may be included.
- D. Any audio visual equipment required for the presentation must be provided by the participant, including
 - 1. power strip with surge protector
 - 2. an extension cord
- E. Activities that typically would follow the teaching lesson will be described by the presenter near the conclusion of the ten (10)-minute lesson.
- F. Participants are not allowed to watch or hear the presentations of other participants.
- G. Participants are encouraged to interact with the judges, who will act as students in the classroom.
- H. 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.
- I. The LEAP Report
 - 1. Participants document the leadership skills they have developed and demonstrated while working on this event, and on a non-competitive event leadership experience.
 - 2. Semifinalists will respond to questions about the content of their LEAP Report as part of their event-specific presentation/interview.
 - 3. Specific LEAP Report regulations can be found in the LEAP Program section of this guide and on the TSA website.

EVALUATION

PRELIMINARY ROUND

1. The portfolio
2. The developed lesson plan/activity

SEMIFINAL ROUND

1. The presentation of the lesson
2. The appropriateness of the lesson/activity for the designated grade level
3. The poise of the participant during the presentation
4. The interaction of the participant with the students (judges acting as students)
5. The enthusiasm and motivation of the participant
6. The LEAP Report and interview

Refer to the official rating form for more information.

STEM INTEGRATION

This event aligns with the STEM educational standards of Science, Technology, Engineering, and Mathematics .

CAREERS RELATED TO THIS EVENT

- Technology education teacher
- STEM teacher
- University professor
- Professional development trainer

FUTURE TECHNOLOGY AND ENGINEERING TEACHER

2019 & 2020 OFFICIAL RATING FORM

HIGH SCHOOL

Judges: Using minimal (1-4 points), adequate (5-8 points), or exemplary (9-10 points) performance levels as a guideline in the rating form, 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.

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 next to the item 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.

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- Two (2) college Technology Education Teacher Training Programs research summaries are present.
 - A college essay is present.
 - An original, complete lesson plan is present.
 - Completed LEAP Report is present.
 - ENTRY NOT EVALUATED

DOCUMENTATION (70 points)				Record scores in the column spaces below.
CRITERIA	Minimal performance	Adequate performance	Exemplary performance	
	1-4 points	5-8 points	9-10 points	
Portfolio components (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 technology education programs are adequately summarized.	Two college technology education programs are documented, with excellent summaries.	
College essay (X1)	The essay is too short, and/or not typewritten and printed, and/or poorly written, and/or there are many spelling and grammatical errors.	The essay is generally well written, typewritten and printed, and the correct length, but it contains several spelling and grammatical errors.	The essay is well written, typewritten and printed, the correct length, and contains no spelling or grammatical errors.	
Lesson plan components (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.	
DOCUMENTATION SUBTOTAL (70 points)				

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

Indicate the rule violated: _____

PRELIMINARY SUBTOTAL (70 points)

SEMIFINAL PRESENTATION (85 points)

CRITERIA	Minimal performance	Adequate performance	Exemplary performance
	1-4 points	5-8 points	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 Report/Interview (15 points; 10% of total event points)	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 SLC Practices and Behaviors.	The individual's efforts are adequately communicated, include some detail, are clear, and/or are generally convincing; identification and/or incorporation of the SLC Practices and Behaviors is adequate.	The individual's efforts are clearly communicated, fully-detailed, and convincing; identification and/or incorporation of the SLC Practices and Behaviors excellent.

Record scores in the column spaces below.

SEMIFINAL PRESENTATION SUBTOTAL (85 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 for the above sections) must be initiated by the judge, coordinator, and manager of the event. Record the deduction in the space to the right. Indicate the rule violated: _____	

BONUS			
CRITERIA	Minimal performance	Adequate performance	Exemplary performance
	1-4 points	5-8 points	9-10 points
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.

Record scores in the column spaces below.

SEMIFINAL SUBTOTAL (85 points)

To arrive at the TOTAL score, add the PRELIMINARY SUBTOTAL and the SEMIFINAL SUBTOTAL. TOTAL (165 points)
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Comments:

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

JUDGE

Printed name: _____ Signature: _____

FUTURE TECHNOLOGY AND ENGINEERING TEACHER EVENT COORDINATOR INSTRUCTIONS

PERSONNEL

- A. Event coordinator
- B. Judges:
 1. Preliminary round, two (2) or more
 2. Semifinal round, 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 judge
 2. TSA Event Coordinator Report
 3. List of judges/assistants
 4. Pre-populated flash drives for judges
 5. Stick-on labels for entries, as needed
 6. Stopwatch
 7. Results envelope
 8. Envelope for LEAP Reports
 9. LEAP Interview Judging Protocol
- B. Tables and chairs for participants and judges
- C. Copy of ITEEA publication *Standards for Technological Literacy*

RESPONSIBILITIES

AT THE CONFERENCE

1. Attend the mandatory coordinator's meeting at the designated time and location.
2. Report to the CRC room and obtain the coordinator's packet; check the contents.
3. Review the event guidelines and check to see that enough judges/assistants have been scheduled.
4. 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.

5. At least one (1) hour before the event is scheduled to begin, meet judges/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.

EVENT CHECK-IN

1. Check in the entries at the time stated in the conference program.
2. Anyone reporting who is not on the entry list may check in only after official notification is received from the CRC.
3. Late entries are considered on a case-by-case basis and only when the delay is caused by events beyond participant control.
4. Participants check in portfolios. The entry number sticker should be placed in the upper right-hand corner of the portfolio's cover and LEAP Reports.

PRELIMINARY ROUND

1. Judges read, individually evaluate entries, and determine twelve (12) semifinalists.
2. Decisions about rules violations must be discussed and verified with the judges, event coordinator, and a CRC manager to determine either:
 - a. To deduct 20% of the total possible points or
 - b. To disqualify the entry
 - c. The event coordinator, judges, and CRC manager must all initial either of these actions on the rating form.
3. Review and submit semifinalist results to the CRC for posting.

SEMIFINAL ROUND

1. Semifinalists sign up for an interview at the time and place stated in the conference program.
2. Make sure the presentation room is set up correctly.
3. The coordinator will retrieve the semifinalists portfolios and provide them to the semifinalists during the semifinalist lesson/activity presentations.
4. Conduct the semifinalist presentations.
5. The LEAP interview will be conducted as part of the semifinalist presentation and will last a maximum of five (5) additional minutes.
6. Judges determine the ten (10) finalists and discuss and break any ties. (Determine the procedure for breaking ties before the onsite competition begins.)
7. Decisions about rules violations must be discussed and verified with the judges, event coordinator, and a CRC manager to determine either:
 - a. To deduct 20% of the total possible points or
 - b. To disqualify the entry
 - c. The event coordinator, judges, and CRC manager must all initial either of these actions on the rating form.
8. Review and submit the finalist results and all items/forms in the results envelope to the CRC room.
9. If necessary, manage security and the removal of materials from the event area.