Technology Challenge Guide 2024

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Event Overview

The purpose of the TEECA Technology Challenge Contest is to provide a means for TEECA members to demonstrate their knowledge about the core concepts of technology, the profession of technology education, and pedagogical concepts such as curriculum, instruction, and assessment. During the 2021 competition season, the Technology Challenge Contest changed to also highlight cooperation and networking as important outcomes for the event.



Team Composition

1. Teams will be assigned by the event coordinator during the event, consisting of members from various participating schools and education levels.
2. Each team may have up to five members, all registered participants.
3. All TEECA Technology Challenge team members must be currently enrolled in the university they represent and be registered participants in the conference.

Content Standards

International Technology And Engineering Educators Association (ITEEA)

- Standards for Technological and Engineering Literacy
    - The Technology Challenge Questions come from each of the core disciplinary standards and benchmarks along with the practices, and contexts in which thay are applied. Because the list is extensive, see https://www.iteea.org/downloadpurchase-stel for a full summary of the standards and benchmarks.



Related Competitions

Technology Student Association (TSA)

- Middle School: *Tech Bowl Participants (one team of three individuals per chapter) are required to complete a written objective examination to qualify for the oral question/response, head-to-head team competition phase of the event (http://www.tsaweb.org/Middle-School-Competitions).*
- High School: *Participants (one team of three members per chapter) complete a written, objective test in order to qualify for oral question/response, head-to-head team competition (http://www.tsaweb.org/High-School-Competitions).*

Event Description

The Technology Challenge is a cooperative quiz event. The purpose of the TEECA Technology Challenge is to provide a means for TEECA members to demonstrate their knowledge about the core concepts of technology, the profession of technology education, and pedagogical concepts such as curriculum, instruction, and assessment. During the 2021 competition season, the Technology Challenge Contest changed to also highlight cooperation and networking as important outcomes for the event. The challenge uses an online quiz platform to display questions for a period of time that each team will respond to using a digital device in a synchronous, collaborative, hybrid environment. As a note, placing in the Technology Challenge DOES NOT contribute points towards team Conference rankings. Event procedures are described below:

Joining the online quiz platform

To pariticipate teams will need one digital device that can access the online digital quiz.

- This may involve scanning a QR code or going to a link.

Challenge Protocol

1. Teams
    a. Teams will be assigned by the event coordinator during the event, consisting of members from various schools and education levels.
    b. Each team may have up to five members, all registered participants.
    c. All TEECA Technology Challenge team members must be currently enrolled in the university they represent and be registered participants in the conference.
2. Questions
    a. Questions will be created before the TEECA East Competition.
    b. The Technology Challenge Team will create questions and verify the accuracy.
        i. Members may not share any questions or answers with student or faculty involved or related (i.e., participating) in the Technology Challenge.
    c. Questions will come from the middle/jr. high and high school benchmarks of the Standards for Technological and Engineering Literacy and the involved practices and contexts.
3. Competition Play
    a. At the time of the event, students will need to join a Kahoot or similar platform created by the TEECA East Technology Challenge Team. Once in the lobby **with an appropriate username**, the Technology Challenge will begin. The number of teams and the number of people per team depends on how many people are in the lobby.

b. There will be ten (10) rounds of questions with each round consisting of 8 questions. Teams will all have 15 seconds to answer the question. Students must work together to answer questions appearing on the front screen.
c. After all rounds of questions have passed, the top teams will be announced. As a note, placing in the Technology Challenge DOES NOT contribute points towards team Conference rankings, however the winning team does receive bragging rights.

Equipment and Materials

Participants

1. Internet Browser
2. Internet Connection
3. Computer, Smart Phone, or Tablet

Event Coordinator

1. Administrative Online Quiz (Kahoot, Quizlet, etc…) access
2. Internet Browser
3. Internet Connection
4. Computer, Smart Phone, or Tablet
5. Projector
6. Cord for Projector to Computer
7. Microphone
8. Mouse or Clicker

Learning Resources

- The primary resource for this event are the standards, benchmarks, practices, and contexts found in the Standards for Technological and Engineering Literacy (STEL) published by ITEEA. Note: Because the STEL were not designed as curriculum, the questions are not always directly listed, but will be connected to the topics. For example, a question such as the following might be asked: “What does MRI stand for?” This question is not discussed in the STEL, but it is directly connected to TEC-7: Medical and Health-Related Technologies. Additionally, questions relating to pedagogy will be included as one of the primary quiz question categories. For example: “Which educational philosopher is considered to be the father of a democratic classroom?” Answer: John Dewey.

References

International Technology and Engineering Educators Association (2020). *Standards for technological and engineering literacy: Content for the study of technology*. Reston, VA: Author. http://www.iteea.org/TAA/Publications/TAA_Publications.html