

Communications Challenge 2019

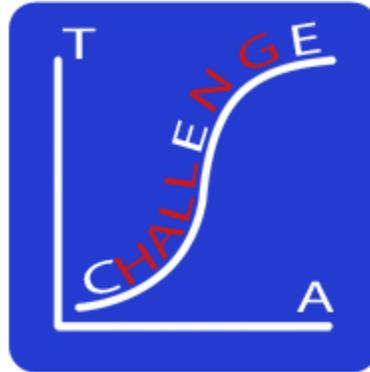


Table of Contents

<u>Communications Challenge 2019</u>	<u>1</u>
<u>Challenge Description</u>	<u>2</u>
<u>Theme 2</u>	
<u>Clients and Distribution</u>	<u>3</u>
<u>Audience</u>	<u>3</u>
<u>Team Composition</u>	<u>4</u>
<u>Standards and Benchmarks</u>	<u>4</u>
<u>International Technology And Engineering Educators Association (ITEEA)</u>	<u>4</u>
<u>Knowledge and Skills</u>	<u>5</u>
<u>Procedures and Timeline</u>	<u>6</u>
<u>Rules and Constraints</u>	<u>8</u>
<u>Equipment and Materials</u>	<u>11</u>
<u>Team</u>	<u>11</u>
<u>Event Coordinator</u>	<u>11</u>
<u>Evaluation and Judging</u>	<u>11</u>
<u>Learning and Resources</u>	<u>11</u>
<u>Learning</u>	<u>11</u>
<u>Resources</u>	<u>12</u>
<u>FAQ</u>	<u>12</u>
<u>References</u>	<u>12</u>

Note: Always refer to this online document instead of printing, in case there are any updates.

Challenge Description

Theme

In the Technology and Engineering Education (TEE) classroom students are often placed in student teams and assigned tasks like solving a design challenge, developing a prototype, mass producing a product, or creating a multimedia project. Many TEE teachers advocate that solving design challenges in a team context helps students learn teamwork skills. Students also compete, many times as “design” teams, in co- and extracurricular competitions in organizations such as [TEECA](#), [TSA](#), [VEX Robotics](#), [First Robotics](#), [SeaPerch](#), and the [Solar Decathlon](#). These organizations many times also promote that participation in their competitions leads to developing teamwork skills. For example, Vex Robotics (2018) states on their website:

VEX Competitions bring STEM skills to life by tasking teams of students with designing and building a robot to play against other teams in a game-based engineering challenge. Classroom STEM concepts are put to the test as students learn lifelong skills in teamwork, leadership, communications, and more.

The [Standards for Technological Literacy](#) (SfTL) includes the words *team*, *teams*, or *teamwork*, a total of seventy-four times. For example, in relation to design projects, the authors of the document state, “Students generally work in teams when building their design proposals ...” (ITEEA, 2007, p. 6). One vignette in the SfTL has an evaluation category of teamwork. The vignette states, “The students were evaluated in three categories: Teamwork—Did the team work together? Were they able to produce a completed product?” (TEEA, 2007, p. 122).



This year’s *TEECA Southwest Communication Challenge* is to create a 90-second multimedia video program that introduces student design teams in a TEE classroom to principles and practices that will assist them in learning to become dynamic, high functioning teams. The video must balance building excitement for participating in a team context and educating secondary-level students and teachers on several principles and/or practices that will help teams function better if they consistently follow them. The video must avoid stereotyping anyone and be in good taste.

Clients and Distribution

Your clients are TEECA Universities and ITEEA leadership who may make public school teachers in the TEE field aware of media produced as a part of the this year's TEECA Communication Challenge. The teachers would then share the promotional and instructional resources with their middle and high school students.

In the main portion of your media program, **avoid referencing specific universities, conferences, TEECA, ITEEA, or other organizations (VEX, TSA).** You will want to include Technology and Engineering education as a subject or discipline area.

In addition to the the media requirements (e.g., time requirements and credits) detailed later in this document, your clients have the following requirements:

- Develop a **slogan** for teamwork in Technology and Engineering Education and integrate the slogan into the media program and promotional poster.
- To build awareness of the field of **Technology and Engineering Education**, integrate TEECA Southwest, TEECA (www.teeca.org), ITEEA (www.iteea.org), and your university (www.youruniversity.edu) into your introduction and/or credits and promotional poster. Along with the [graphic IDs](#) for each, you will want to include the domain name (i.e., if not already a part of the Graphic ID) in case any viewer is interested in finding out more. If necessary for your design, you may use the Graphic ID shapes and change the fill (e.g., masking video/photos, a solid, or a texture). Note that if the image type supplied is not correct or the quality needed for your intended purpose (print or video), you can rasterize or vectorize as appropriate and resample the image size (i.e., for raster images) or resize (i.e., for vector based images).

Your media program and promotional poster may be displayed in locations, such as websites, video channels. Your university, ITEEA, TEECA, or TEECA Southwest may make your promotional poster available for TEE Teachers to print.

Audience

The audience for your message consists of the following:

1. Middle and High School TEE student design teams.

Team Composition

- Each media production team will consist of three to six TEECA students from an affiliated university.
- **Teams must have a minimum of three team members registered/present at the conference, and the team *may* consist of three additional members who do not attend the conference.**
- The members may be either full-time undergraduate or graduate students, with no more than half of the members being graduate students.

Standards and Benchmarks

International Technology And Engineering Educators Association (ITEEA)

- Standards for Technological Literacy
 - **Standard 2:** Students will develop an understanding of the core concepts of technology.
 - **Benchmark W:** Systems thinking applies logic and creativity with appropriate compromises in complex real-life problems.
 - **Benchmark AA:** Requirements involve the identification of the criteria and constraints of a product or system and the determination of how they affect the final design and development.
 - **Standard 8:** Students will develop an understanding of the attributes of design.
 - **Benchmark D:** Requirements for a design include such factors as the desired elements and features of a product or system or the limits that are placed on the design.
 - **Benchmark E:** Design is a creative planning process that leads to useful products and systems.
 - **Benchmark F:** There is no perfect design.
 - **Benchmark H:** The design process includes defining a problem, brainstorming, researching and generating ideas, identifying criteria and specifying constraints, exploring possibilities, selecting an approach, developing a design proposal, making a model or prototype, testing and evaluating the design using specifications, refining the design, creating or making it, and communicating processes and results.
 - **Benchmark J:** The design needs to be continually checked and critiqued, and the ideas of the design must be redefined and improved.
 - **Standard 11:** Students will develop abilities to apply the design process.
 - **Benchmark E:** The process of designing involves presenting some possible solutions in visual form and then selecting the best solution(s) from many.
 - **Benchmark D:** Identify and collect information about everyday problems that can be solved by technology, and generate ideas and requirements for solving a problem.
 - **Benchmark H:** Apply a design process to solve problems in and beyond the laboratory-classroom.
 - **Benchmark N:** Identify criteria and constraints and determine how these will affect the design process.
 - **Benchmark Q:** Develop and produce a product or system using a design process.
 - **Standard 17:** Students will develop an understanding of and be able to select and use information and communication technologies.
 - **Benchmark E:** Information can be acquired and sent through a variety of technological sources, including print and electronic media.
 - **Benchmark F:** Communication technology is the transfer of messages among people and/or machines over distances through the use of technology.
 - **Benchmark L:** Information and communication technologies include the inputs, processes, and outputs associated with sending and receiving information.

- **Benchmark M:** Information and communication systems allow information to be transferred from human to human, human to machine, machine to human, and machine to machine.
- **Benchmark N:** Information and communication systems can be used to inform, persuade, entertain, control, manage, and educate.
- **Benchmark O:** Communication systems are made up of source, encoder, transmitter, receiver, decoder, storage, retrieval, and destination.
- **Benchmark P:** There are many ways to communicate information, such as graphic and electronic means.
- **Benchmark Q:** Technological knowledge and processes are communicated using symbols, measurement, conventions, icons, graphic images, and languages that incorporate a variety of visual, auditory, and tactile stimuli.

Knowledge and Skills

- Researching relevant issues and writing a coherent problem statement
- Multimedia planning and storyboarding
- Problem solving with constraints
- Video composition, editing, and publishing
- Operation of production equipment: camcorders, dollies/tripods, microphones, lighting, etc.
- Motion graphic planning and production
- Image editing, page layout, and ability to work with raster and vector-based images
- Video codecs, data rates, and compression
- Importing and exporting media/graphics at different resolutions for different purposes and with different file types
- Principles and elements of design
- Working productively in a multimedia team
- Ability to work with cloud-based documents to plan and submit items

Procedures and Timeline

1. Contest initiation and Google communication/production folder

- a. Each team participating in the Communication contest must email the coordinator to register their team and team member names (email below). You will need to include 1.) Names of members 2.) Emails of each member 3.) Contact Information for team leader 4.) Name of University. Email Trevor Maiserouille at tmaiserouille@vikingnet.net no later than September 29, 2019 by 11:59 pm.

2. Pre-production Deliverables Due Date: Saturday, November 9, 2019 by 11:59 pm.

a. Problem statement

i. Write a problem statement that analyzes the problem, audiences, and proposes a media solution that helps meet the needs of the client(s).

ii. The maximum number of words for the problem statement is 350.

b. Storyboard

.Using the template, develop a detailed storyboard. For the shot sketches, take photos of your sketches and add them to the storyboard. Photos of the sketches may be edited and cropped as needed.

1. View the [storyboard](#) template.
 2. Refer to the [storyboard instructions](#) in creating your storyboard.
- i. **The storyboard must also communicate how the credits will be produced (see below).**
- c. **Note:** After the deadline, do **NOT** make any changes to the above documents. Use the final production notes to describe any changes.
-

3. **Onsite Questions:** All day November 21, 2019 the coordinator will be available for any questions.

4. **Production Deliverables Due Date:** Friday, November 22th at 8:30 am. Files are submitted via email: UniversityName **Final Video MP4**.

a. **Final Multimedia Program**

i. **Published Video File:** Submit a .MP4 file that is full HD: 1080p (i.e., 1,920 x 1,080 pixels).

1. **Distribution requirements:** During publishing or exporting from your video editor, use an appropriate codec (compressor - decompressor) format to play the video container file on a high-speed Internet connection. Consider an appropriate data rate in making your decision that does not unnecessarily drive up file size.
2. Do **not** submit an uncompressed raw video. Simply adding a MP4 file extension, does not compress the video.
3. See rules and constraints for the video length requirements.

ii. **Credits:** Modern credits often include additional information to support and enhance the video message. Some viewers may watch the credits, while others may not. Regardless, this year, teams must include credits that introduce the members of your **TEECA Southwest Comm team** from your university, and you may give additional credits in the video if appropriate (e.g., participants and acting staff).

The credits may be opening, introductory and/or trailing, ending credits, or a combination of both, whatever your team thinks is more effective for your entire message. The photos *and/or* video *and/or* created animation in the introductory and/or ending credits will be your production team, *possibly* involved in teamwork producing the media program, and may also include your acting staff if any. The maximum total time for the introductory and/or ending credits may not exceed 30 seconds (e.g., 20 seconds introductory and 10 seconds ending, or any other combination less than 30 seconds). See rules and constraints for the maximum length of credits. See also the [Clients and Distribution](#) section for Graphic IDs to include.

iii. **Animation:** Unlike competitions in recent years, motion graphics are **not** required. However, teams may create motion graphics and video animation as they think *will* enhance their media program message. *If* animation(s) enhances the message significantly, that would improve related rubric ratings.

b. **Final Production Notes**

1. Using the template in your team Google folder, provide all production notes and technical details requested.
2. In their final production notes, teams must identify the time code where their main program starts, so the judges are clear what is the main program and what portion is the credits.
3. View the [final production notes](#) template.

Rules and Constraints

1. Constraints

a. Time requirements for the media program

- i. The multimedia program must be **90 seconds** in length, not including the credits (see below).
- ii. The multimedia program must include a **minimum of 60 seconds** of video clips. The video clips can be included at any point and as many points as desired. Video clips with integrated motion graphics counts toward the 60 seconds minimum.
- iii. The multimedia program must include **at least 30 seconds** of video clips obtained during the 2019 TEECA Southwest conference. This can be live clips or staged ones.
- iv. **Credits:** The media program must include video credits *after* the 90 second multimedia program, but must be limited to *no more* than 30 additional seconds, and may include additional video clips, photos, and animations. The quality and effectiveness of the credits will be included in the evaluation criteria.

2. Music: Teams are encouraged to use music as part of their communications contest entry. If music is used it must be royalty free or the original work of the team. One of the intended purposes of these video is advertising to local students, guidance counselors, and educational faculty, so it is unknown all the venues where these videos could be viewed. Teams are encouraged to create their own music (using GarageBand, Audacity, etc.) or use royalty free music (creative commons). A guide to Creative Commons Music can be found [here](#). The work must **not** include the following **CC attributions**:

- . ND - NoDerivs
 - a. NC - NonCommercial
 - b. In the final production notes, make sure to specify the exact CC license if you used CC audio, and where you found the license attribution.
 - c. Where can I find CC-licensed music?
- Several sites offer music published under Creative Commons' flexible copyright licenses. Here are some possible sites for music (make sure you filter by the above constraints):

1. [ccMixer](#)
2. [Free Music Archive](#)
3. [Jamendo](#)
4. [Magnatune](#)
5. [BeatPick](#)
6. [CASH Music](#)
7. [Opsound](#)
8. [AudioFarm](#)
9. [Internet Archive's Netlabels Collection](#)

3. Photo, Video, and Media Sources

. **All** video clips, photos, titling, animations and slogan must be original work produced by members of your team **after October 10, 2019**. The exceptions to this are Graphic IDs (i.e., ITEEA, TEECA, TEECA East, Your University). Work used in previous conferences, contests, or assignments must **not** be used as part of this challenge. **Additional video clips (at least 30 seconds) must be obtained onsite at the 2019 TEECA Southwest conference.** You may use an existing university logo or department logo for the credits portion of the video.

4. Critiquing and Feedback: Before the Pre-production Deliverables Due Date, teams **are** allowed to receive constructive feedback on their problem statement, storyboard, and draft of their poster from any students or faculty from their university. However, this feedback should be from a questioning, learning viewpoint. For example:

- . Is there any other information that you might collect that would be helpful in informing your design of the media program?
- a. What might you add or delete from your message so it is clearer and more exciting for your target audience?
- b. Are your shots toward the end building towards your intended message?
- c. Is your program answering questions that your intended audience may have?
- d. Is your pacing too slow at the middle, beginning or end?
- e. How might you change those planned shots for greater continuity?
- f. Are there better resolutions images or can you recreate that one graphic so it is more consistent with your other poster elements?

The final decision to incorporate any feedback must be the decision of the team members.