

BLACKS IN GOVERNMENT®

2022 STEM

Student Competition

Competition General Rules

Provide these rules to all contestants

The official theme is: *"Creativity Inspired by Science and Technology."* Students must understand the rules and guidelines of the STEM Competition. They should also be made aware of the guidelines for scoring.

The Blacks In Government STEM Competition is divided into three competition levels—Chapter, regional, and national. You must compete at the Chapter and regional level to compete at the national level. If a chapter or region has only ONE entrant, the chapter president or the regional council president (as appropriate) must submit a written endorsement to the Regional Chair or National Program and Planning Committee Chair (as appropriate). Chapters and Regions must also provide the judge's score sheets and master score sheet to the Regional Chair and National Program and Planning Committee Chair, as appropriate.

NATIONAL FIRST PLACE WINNERS ARE INELIGIBLE FOR FUTURE CONTESTS.

1. Contestants must be in grades 9 through 12 and must be in good academic standing.
2. Contestants must build innovative projects with guidance from SMEs/mentors.
3. Contestants must give a 4- to the 6-minute oral presentation on how they developed their project during the competition at the local, regional, and national levels.
4. Contestants not providing a presentation will be disqualified.
5. Birth certificate and two (2) printed copies of an essay describing how students developed their project "MUST" be presented to the Chapter, Regional, and National Committee Chairs before the competition.

PROJECT

STEM Competition theme: *"Creativity Inspired by Science and Technology."* The requirements take into account the scope and spirit of the competition. Participants will use technology to create interactive animated projects that tell a story of a superpower character that addresses a "civil wrong" issue in society. The project will help students learn how to use logical and creative thinking skills and create narratives. They will get practical experience with science and technology while exploring their creativity simultaneously.

All submissions must have creative, artistic, and educational value and be interactive, exciting, and appealing visually.

1. All submissions will be evaluated for creativity, visual presentation, and technical implementation to develop the project.
2. Projects will be no longer than 3 minutes long.
3. A 4 – 6-minute oral presentation is required. Every 15 seconds under 4 minutes or over 6 minutes will incur deductions from the overall score.

BLACKS IN GOVERNMENT®

2022 STEM

Student Competition

7. Students will be provided with their workspace. Each team will have access to one electrical plug for charging.
8. Practice time will be available preceding the competition.

Project Construction

Animations will be interactive narratives that tell a story and build an environment. Entries to the animation category will be judged 0:

1. **Innovation and Uniqueness:** How creative and unique is the story being told or the presentation's approach?
2. **Visual Presentation:**
 - How immersive is the world that has been created? An "immersive experience" pulls individuals into a new, augmented, or more engaging reality via technology. Creation requires using one or more technologies together. (Attachment 2)
 - How complex or impactful is the flow of the visual representation, camera movements, and general composition?
3. **Technical Implementation:**
 - How detailed is the technical implementation?
 - Does the entry make use of technical concepts to create the project?
 - Is the creativity observed, making it easy to understand?
 - Does the project make use of audio, video, and other technical tools and special effects?
4. **Usefulness:** Does the narrative educate, inform, or entertain?
5. **Oral:** 4- to 6-minute presentation

Project Compliance

1. Each entry must be original in concept, design, and execution and may not violate U.S. copyright laws. Any entry copied from an existing project, narrative, or image created by someone other than the contestant violates the competition rules and will not be accepted.
2. All projects will be inspected for compliance with the rules before the competition.
3. Failure to comply with the guidelines will result in disqualification.
4. Individuals who advance to a regional/national competition are allowed to make improvements to their projects.

BLACKS IN GOVERNMENT®

2022 STEM

Student Competition

Penalties

Each student will be penalized 10 points for the following reasons:

1. If the student fails to provide a 1- to 2-page written narrative describing how his or her project was developed.
2. If the student required written entry document does not follow the national guidelines for entry.
3. If the student entry does not relate to the current STEM Competition theme: "*Creativity Inspired by Science and Technology.*"

Disqualification

Students will be immediately disqualified for the following reasons, and they will not be able to resubmit their entry for reconsideration.

1. If any of the projects appear to have inappropriate or *plagiarized* content.
2. If the contestants do not provide a demonstration.
3. If the student's paperwork was not received by the required submittal date.

Protests

Individuals may challenge/protest a decision or rule interpretation of the youth competition during the *Chapter and Regional* competitions using the following guidelines:

1. In chapter competitions, the protestor must challenge a decision within 72 hours by notifying the Chapter Program and Planning Chair (CPPC). Once an opposition is made, the CPPC shall notify the contestants potentially impacted by the challenge/protest immediately.
2. If the challenger does not receive the answers required, a written appeal request must be sent via email to the Regional Program and Planning Chair (RPPC) within seven (7) days of the chapter's decision. The written appeal should include all the facts and arguments that would support reversing the decision. The RPPC will make a decision and email a response to the challenger within seven (7) days of receipt of the appeal.
3. If the RPPC fails to comply within seven (7) days or the challenger is unsatisfied with the response, the challenger has seven (7) days to forward the appeal to the National Program and Planning Chair (NPPC). Once the appeal is submitted to the national level, the NPPC will determine the appropriate chapter, regional, and national officers required to vet the challenge/protest on a case-by-case basis.
4. Protests made at the national competitions must be submitted by the Regional Program and Planning Chair (RPPC). The protestor must challenge a decision within 72 hours by notifying the National Program and Planning Chair (NPPC) in writing via email. The protest must be based on facts with documentation.

BLACKS IN GOVERNMENT®

2022 STEM

Student Competition

5. The decision made at the national level will be the final and binding decision. The NPPC will provide a written justification for the final decision to the challenger, CPPC, and the RPPC within seven (7) days of receipt.

Pointer for Youth

This competition aims for students to have a good time creating, designing, and developing creative video projects. Also, students will learn many academic and life skills. They should expect to encounter a set of open-ended challenges that will require solving problems, inventing strategies, and testing their projects' performances. Students can expect to test multiple designs until they meet their objectives.

In the event of a Tie

In the event of a tie at the National Competition, the tied contestants will be re-judged by an additional judge who will serve as a tie-breaker using the scoring criteria. If the additional judge's scores do not break the tie, a drawing will determine the winner. The remaining name will be the subsequent placement.

STEM Competition Scoring Categories

Scoring procedures at all levels of the competition will be identical and based on a point system. Projects will be judged on five criteria: user interface design, creative interactivity, user experience, usefulness, and oral presentation. A team of three judges with technical and non-technical expertise will evaluate the demonstration. Before the presentations, judges will be allowed to interview each contestant for 10 minutes. The following point value of each category equals a possible 100 points:

| CATEGORY | EXPLANATION | POINTS |
|------------------------------|--|--------|
| 1. Innovation and Uniqueness | The story being told or the approach of the presentation is unique. Creative and engaging content Strategic uses of technology (interactive software/tools). | 30 |
| 2. Visual Presentation | The flow of the visual representation, camera movements, and general composition is impactful Connected events, actual or imaginary, presented in a logical sequence of moving images and special effects | 20 |
| 3. Technical Implementation | Technical implementation is intricate | 15 |

BLACKS IN GOVERNMENT®

2022 STEM

Student Competition

| CATEGORY | EXPLANATION | POINTS |
|--------------------------------|---|---------------|
| | Uses technology to simplify or structure the project Creativity makes it easy to understand the narrative/storyline Makes use of audio, video, and other technical features | |
| 4. Usefulness | Provides useful information (educational, informative, and entertaining) | 15 |
| 5. Project Development Journal | Evidence of a design process Professionally organized and easy to understand | 10 |
| 6. Oral presentation* | 4- to 6-minute presentation on how they researched and developed their project | 10 |
| TOTAL | | 100 |

***Calculations Committee will deduct three (3) points for every 15 seconds under four (4) minutes or over six (6) minutes.**

BLACKS IN GOVERNMENT®

2022 STEM

Student Competition

ATTACHMENT 1: BIG Oratorical and STEM Virtual Competition Guidelines

SCHEDULE YOUR COMPETITION

- Schedule your competition at a time that works for all involved.
- Determine if you need people to register to attend. Registering can help you track who will attend your competition before it starts, how many joined, and follow-up communications after the competition.
- Get help by enlisting a competition team who can help you with logistics while students focus on delivering their orations.
- Make sure you have a communication plan, including promoting your competition on webpages, social media, and email.
- It helps to contact primary attendees and send reminders leading to the competition, including an hour before, so people remember to join on the competition day.

SCHEDULE A REHEARSAL

- Invite committee POCs, students, mentors, timekeeper, calculators, and judges to the **rehearsal**. Have someone act as an attendee to assess the experience.
- Have students and committee members connect in the same manner from the same location and device used for the live event.
- Test everyone's audio. Assign someone to control muting.
- Videotape the rehearsal. Share video in the rehearsal to ensure participants can be seen and heard clearly. Adjust lighting if needed, and have them remove distracting items from their background.
- Have all students test content sharing and any multi-media sharing from the same device they will use in the competition.
- Check the timing, transitions, and interactive features you will use.

BLACKS IN GOVERNMENT®

2022 STEM

Student Competition

AFTER THE COMPETITION

- Plan to stay in the virtual competition after the scheduled time has concluded to answer additional questions and save chat panels for post-competition follow-up.
- Make available the recording links or shared content from the competition.

ATTACHMENT 2: Technology Suggestions

An "immersive experience" pulls a person into a new or augmented reality, enhancing everyday life (making it more engaging or satisfying) via technology. They often use one or more technologies linked together. The technologies available to us today make it easier than ever to create immersive experiences that people love. Here are some of the most common types and examples of how brands have used them successfully.

Augmented Reality

Augmented reality (AR) uses technology (like a camera and screen on a smartphone) to add a computer-simulated layer of information on top of the real world. AR can be considered an enhancement of the world around you – rather than creating a new virtual world like VR, it simply adds (or subtracts) information already there. The Skyview app is a great example of AR in action, allowing you to see where constellations are in the sky in real-time as you move your phone around:

Virtual Reality

Virtual reality (VR) immerses the user inside a digital simulation they can interact with. Stimulating as many senses as possible is key to ensuring the user feels like they are in that virtual environment. Furthermore, most VR experiences (but not all) will use special hardware to do so. Google's Expeditions is a great example of mobile VR in action, offering users the opportunity to explore imaginary worlds:

Mixed Reality

Mixed reality (MR) is an enhanced version of AR, tying in VR elements as well. It often integrates entire virtual objects into the real world vs. simply adding information to create an even more immersive experience than AR could alone. Time's Immersive app mixes the virtual world and the real world with objects in your home (like your kitchen table) to bring experiences to life:

Digital Twins

Digital twins are near-exact virtual models of real-life objects, processes, or systems. They are most commonly used in manufacturing or engineering to simulate physical things to optimize or study how they behave before building them. For example, NASA uses digital twins to monitor and optimize satellites in space from the ground, and Mercedes uses a digital twin to optimize its F1 cars' performance.⁷

360° Content

360° content is a photo or a video you can "explore." As the name suggests, 360° photos and videos are shot in every direction at the same time and let you rotate the viewing angle to see what's "around you" as you view the video/picture. A great example of 360° content is how Expedia created a series of videos on different travel destinations, immersing the viewer in each location:

Excerpt from: [What is an Immersive Experience And How Do You Create One? | CleverTap](#)

BLACKS IN GOVERNMENT®

2022 STEM

Student Competition

Types of Software

| NAME | DESCRIPTION | URL | COST |
|--|--|---|------|
| NCH Software | YouTube Video Media | https://www.nchsoftware.com/software/video.html | Free |
| Storyblocks | Includes libraries of already existing videos with opportunities to combine and create own unique project | https://www.storyblocks.com/video - | Free |
| Vimeo | Similar to YouTube | https://vimeo.com/ | Free |
| Filmora Video Editor | Create & edit your videos just in minutes | https://www.iskysoft.us/lp/filmora-video-editor/bing.html?msclkid=1e6df033507a196e98daafee36765845&utm_source=bing&utm_medium=cpc&utm_campaign=FilmoraWin_SS_US_pid(1598)%2BRlsa_Bing&utm_term=video%20creator%20free%20download&utm_content=video%20creator-Windows | Free |
| Video Editor | Video and audio editor | http://www.videosoftdev.com/ | Free |
| SKETCHAR's | SketchAR is an AI-based mobile app and a platform for developing people's creativity through the unique interactive approach of AR drawing, photo editing, and gamification. | Enhance your creativity using AI+AR (sketchar.tech) | Free |
| The 9 Best Coding Games to Build Your Programming Skills | Coding games help you learn faster with hands-on practice and experience. Plus, they are a fun way to test your programming skills! | The 9 Best Coding Games to Build Your Programming Skills (makeuseof.com) | Free |
| Adobe Premiere Pro | Turn raw footage into flawless productions with the industry-leading video editing software. | https://www.adobe.com/products/premiere.html | Cost |

NOTE: This list is not all-inclusive. Participants are encouraged to use whatever technology will bring their superpower character to life in an immersive environment.