



GASTC

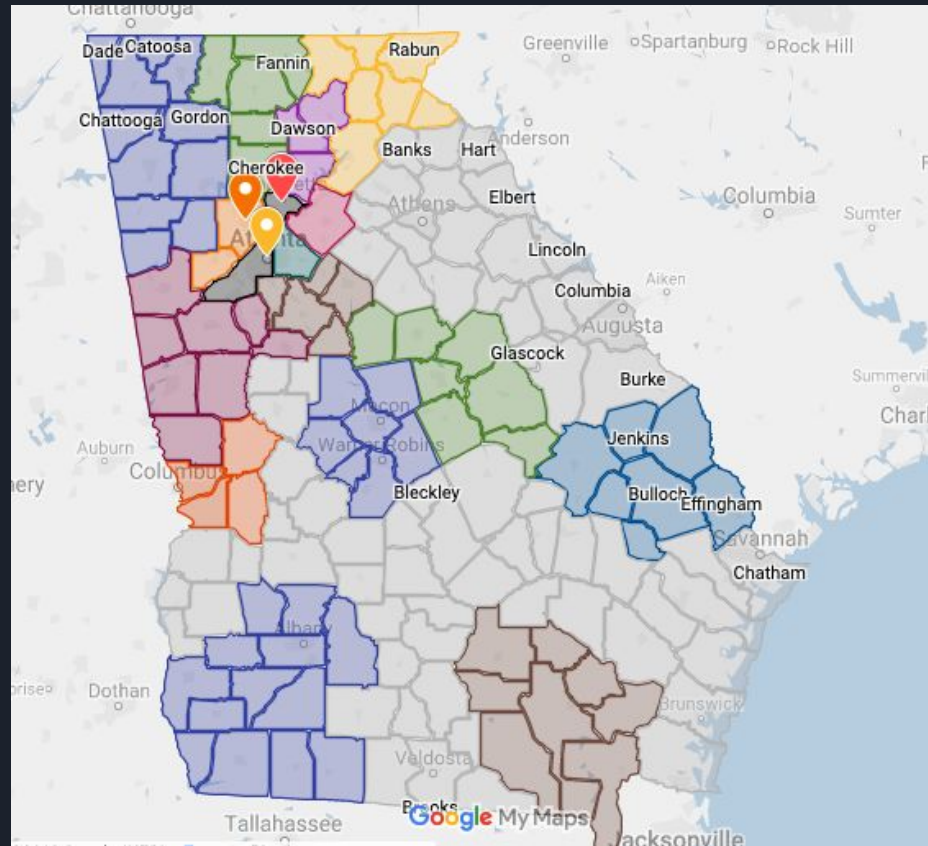
a project of the GA Educational Technology Consortium

# Georgia Student Technology Competition



## Overview

The Georgia Student Technology Competition (GASTC) is an annual student technology competition produced by the Georgia Educational Technology Consortium. The GASTC is the one the highest level of student technology competition in Georgia with over thousand projects, representing the work of 1000+ students. They are judged at the competition each March.





# Goals

To empower students to become skilled in the following areas:

- Technology
- Creativity and innovation
- Communication
- Confidence
- Advocacy
- Digital citizenship
- To provide a variety of technology strands in which students can demonstrate their interests
- To challenge students to expand their depth of understanding of technology utilization.



# Competition

Finalists who receive first place at recognized regional technology fairs may compete at state. Competition is open to all third thru twelfth grade students residing in the state. There are seventeen categories in the competition.



# 3D Modeling

This category is defined as any original artwork that had been created and can be modeled in three dimensions. Software may include, but not be limited to:

- Maya
- AutoCad
- Sketch Up
- GollyGeeBlocks
- Light Wave



# Animation

This category is defined as any original artwork digitally created and modeled in three dimensions using specialized software. Software may include, but not be limited to

- Maya
- AutoCad
- Sketch Up
- GollyGee Blocks
- Light Wave



# Audio Production

This category is defined as any original audio production that has been edited/produced with digital software. Projects may include speaking, singing, music, sounds effects, and other audio components. Software may include, but are not be limited to:

- Audacity
- Garage Band
- Wavosaur





# Device Modification

This category is for devices engineered and/or modified by students to serve a specific purpose or meet a specific goal. Device and parts do not have to be new. However, the device must be *fully functional*. Some examples include, but are not limited to:

- Arduino
- Raspberry Pi
- Makey



# Digital Game Design

Game Design should include original content, design, and rules of an interactive game. Students may use the software program of their choice in order to demonstrate **creativity, originality, organization, and interactivity**. Students should be able to explain to judges what inspired their game idea and how they programmed their game to achieve project *goals*.



# Digital Photo Production

This category is defined as any computer created original project using **original student photographs**. The project must be displayed on a computer in the program in which it was created. The student should be prepared to demonstrate to judges how the software was used to create the finished project. A hard copy of the finished project may be displayed but is not required.



# Graphic Design

This category is defined as any student created, computer-generated, non-animated graphic design project. Digital Photography and 3D Modeling are NOT part of this category. The student(s) must be able to display the content from the source project files using the program it was created in. Software may include, but not be limited to:

- ●Paint
- ●KidPix
- ●Photoshop
- ●Corel Draw
- ●Illustrator
- ●Free Hand



# Internet Application

Projects in this category have strength in their use on networks, either the **World Wide Web** or **LANs (Local Area Networks)**.

Examples of Internet application projects include **web pages, web sites, chat rooms, interactive games, bulletin boards, podcasts and blogs**.

\*Your computer is required to display this project. Internet access will not be available at the fair. All links must be captured one level deep. No tri-board displays.



# Mobile Apps

An entry in this category is an app that is specifically developed for a mobile device (phone, tablet, smart- device, etc.). This app can be developed for any operating system (Android, iOS, Windows Mobile, etc.) as long as the student has a device or simulator that can run the app on the day of the fair.

(This category does not include mobile-friendly web pages - please see the Internet Applications category).

\*Pre-planning documentation materials such as a storyboard and a flowchart are required.



# Multimedia Application

Multimedia projects are defined as computer-based reports or creative presentations using any combination of sound and/or images with text.

Possible software used for projects in this category include but are not limited to: **Power Point, KidPix, AppleWorks, Astound, Storybook Weaver and HyperStudio**. If appropriate to the project, a storyboard may be displayed to show sequencing of project creation.

Videos *do not go* in this category. Any hyperlinks need to be captured one level deep since Internet access will not be guaranteed. **NO** tri-boards are allowed.

Grade levels for this category are **3-4, 5-6, 7-8, 9-10, and 11-12**. The computer is required to display the project.



# Productivity Design

Formerly: *Non-Multimedia Applications*

This category is defined as any student created, computer-generated project that uses desktop publishing or general productivity software.

Entries can be developed from various non-multimedia application programs such as **word processing, spreadsheets, databases or any other non-multimedia software**. This category includes, but is not limited to, **desktop publishing projects**. Hard copies of projects may be displayed at original size to show the judges, but no large displays are allowed, including tri-board displays.





# Programming Challenge

This category is an **on-site event** in which one or two students are given a series of problems that they must solve during the two-hour competition time. Each team will be awarded points for each problem solved correctly. Programs will also be judged on **structure, design, and organization**.

Any questions regarding interpretation of the problems must be submitted in writing to the judges who may choose to answer or reject the question. The decisions of the judges are final.

Open **ONLY** to 7-12 graders. Younger students interested in programming may enter the Project Programming category.



# Project Programming

Projects in this category are **self-executing programs** created using recognizable programming languages such as **BASIC, C++, Pascal, LOGO, etc.** All parts of the program must be the author's own design. Programs must be identifiable in one of the three following categories:

- Computer-aided instruction or educational/learning games.
- Business or commercial applications.
- Personal applications that, with minor alterations, could be marketed for larger commercial audiences.



# Robotics

Projects may be constructed from kits or published drawings, modified from other devices to create new applications, or constructed from the student's own concepts and designs.

All entries must be a working and functional piece of electro-mechanical hardware in which movement and intent is controlled through student created programming.

Examples of commercially available kits are **robotic “arms” or robot movers, Lego and K'Nex style building kits, Capsella, VEX, and Technics style robotics kits**. Devices controlled through direct, real time remote control by the student are NOT appropriate (ie: remote controlled cars).

Once started, the robotics project should operate as a standalone independent machine without human interaction.



# Technology Literacy Challenge

Online exams will be given by regional proctors prior to the competition for each of the grade level categories. The exams will have 50 multiple-choice questions. Questions will be vocabulary and concept oriented. They will come from the following topic areas:

- •History of computers
- •Parts of the computer
- •Peripheral computer devices
- •Uses and limitations of computers
- •General uses of common computer applications software
- •New and emerging technologies
- •The Internet
- •Social implications of computers
- •General programming (Level III, Grades 9-12, only)



# Video Production

This category is defined as any original video project that has been edited on a computer with digital video editing software and exported into a digital video format. The project must be displayed for viewing on a computer.

A project may have a single member or a two person team, but teams and individuals will **compete against each other** within grade groupings.



# General Judging Info

All projects will be judged by the following:

- Originality—Was the entry original, creative, and imaginative in content and implementation?
- Clarity—Was the student presentation to the judge clear? (Nervousness will not count against the student)
- Documentation—Did the student receive and document all required permissions?
- Appropriateness—Was the technology/software used appropriately matched?
- Design—Does the overall design support the project purpose?



# General Judging Info

At the time of the judging, students will be required to:

- Demonstrate an understanding of the software as it relates to the project.
- Explain the various aspects of the creation of the project.
- Defend their choice of software for the project.
- Answer judges' questions about the project.



# Rules

You may have up to 2 people on a team but teams and individuals will compete against each other within each grade grouping.

## Grade groups

- **3rd& 4th Grades**
- **5th& 6th Grades**
- **7th& 8th Grades**
- **9th & 10th Grades**
- **11th& 12th Grades**

Projects for each category must be unique and cannot be entered in more than one category. Students can only participate in a maximum of 1 project, *excluding* the Technology Literacy Challenge and the Programming Challenge.

FSA Tech Fair Team students are responsible for all FSA and Computer Lab rules, otherwise discipline procedures will be applied.





# Club Times

Group

Day

Teacher

High School

Thursday

Ms.Erdem

Middle School

Thursdays

Ms. Erdem

Elementary

Friday

Mr. Mutcali



# Important Dates

**January 36th, 2020**

Regional Competition at FSAPS

**March 14th, 2019**

State Competition at Kennesaw State University