CREATIVE DIGITAL PROJECTS ACROSS THE CURRICULUM

And The Competition
Your Students Can Enter Them In

Thursday, November 4
9:45 a.m. Spanish
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GEORGIA EDUCATIONAL TECHNOLOGY CONSORTIUM

GEORGIA EDUCATIONAL TECHNOLOGY CONFERENCE

GEORGIA STUDENT TECHNOLOGY COMPETITION

TEACHER INNOVATION GRANTS
FIRST, LET'S TALK A LITTLE ABOUT THE REGIONAL COMPETITIONS
GEORGIA STUDENT TECHNOLOGY COMPETITION REGIONS

- Atlanta Public Schools
- Bulloch County
- Chattahoochee Valley
- Cobb County/Marietta City/Douglas
- Dekalb County
- East Atlanta
- Forsyth County
- Fulton County
- Independent and Homeschools
- Hall County
- Middle Georgia (Bibb)
- Northeast Georgia
- Northwest Georgia
- Oconee RESA
- Okefenokee
- Piedmont
- Southwest Georgia
- West Georgia

Don’t see a region for your students? Participate in the one nearest you. Or, ask about starting one in your area.
Some regions may not participate, or may participate virtually. Check the region closest to you for information by visiting GaSTC.org

Didn’t see your region? Talk to me!

The GaSTC will be virtual in 2022, and use the same virtual platform as last year.
WHY SHOULD YOUR STUDENTS ENTER A REGIONAL COMPETITION?

- Computer science drives innovation throughout the US economy, but remains marginalized in K-12 education.

- Technology affects every field of commerce: healthcare, in space, in our homes, on our roads, in entertainment and the trend grows every day.

Source: Code.org
Our country thrives on innovation.

Computing jobs are the #1 source of new wages in the US.

400,000 current openings

These jobs are in every industry and every state, and they’re projected to grow at twice the rate of all other jobs.

Source: Code.org
The competition encourages student interest and engagement in activities they may not have the opportunity to participate in school.

**Computer science is fundamental for every student’s success**

Six different studies show: children who study computer science...

- perform better in other subjects
- excel at problem-solving
- are 17% more likely to attend college

Source: Code.org
The most enjoyed subjects are core to creation of digital products, which are highlighted at the competitions.

Source: Code.org

What subjects do students like “a lot”?

- Art and Design
- Performing Arts
- **Computer Science and Engineering** 54%
- English
- History
- Science
- Foreign Language
- Math

Students enjoy computer science and the arts **the most**!
Computational thinking means thinking or solving problems like computer scientists. CT refers to thought processes required in understanding problems and formulating solutions. CT involves logic, assessment, patterns, automation, and generalization.
Computational Thinking Video

Many teachers may already be teaching these skills.
3D MODELING

Curriculum

Across the Curriculum. All Grade Levels 3+

Software

SketchUp
AutoCAD
Windows 3D Builder
Tinkercad Blender
ANIMATION

Code.Org

Curriculum

Across the Curriculum.
All Grade Levels.

Software

Powtoon
iFunFace
Code.org
AnticsScene

Across the Curriculum.
All Grade Levels.
Create and Perform a song or music for any standard

MuseScore
Bandicam
FL Studio
Device Modification

Curriculum
- Music
- Programming
- Math

Software
- Gimp
- Adobe
- Photoshop
- Picmonkey
DIGITAL GAME DESIGN

Curriculum

- All Content Areas

Software

- Scratch
- Minecraft
- Gamemaker
- Code.org
DIGITAL PHOTO PRODUCTION

Curriculum
- All Content Areas

Software
- Gimp
- Adobe Photoshop
- Picmonkey
GRAPHIC DESIGN

Curriculum

- Posters/Ads
- Show What You Know

Software

- Adobe Illustrator
- Canva
- Google Draw

Adobe
INTERNET APPLICATIONS

Curriculum

Across the Curriculum. All Grade Levels 3+

Weebly.com

Software

Websites
Blogs
(Weebly, Wix)
Multi-Player Server
(Minecraft)

Tucker’s Tug Toys
Multimedia Application - More than one tool

Curriculum: Across the Curriculum All Grades

Software: Google Slides, PowerPoint, PowToon

Google Slides
PRODUCTIVITY DESIGN

Curriculum
- Math
- Science
- Data
- Driven Lessons

Software
- Microsoft/Google
  - Word/Excel/
  - Docs/Sheets/Canva
  - Infographics

Lessons
Comments within computer programs are very important. For this Programming Challenge, you should include the following comments at the top of each of your coding solutions.

- Problem Number: Problem Title - your language choice
- Your name(s)

An example comment might look something like:
// Problem 1: Range Sum - Java
// Jesse Mercer

How to Submit your work for judging:
Use this Programming Challenge Submission form. It will ask for your name(s), grade level, and for each problem in the set it will ask for the repl.it link to your code, and a copy of your code.

Programming Challenge Problem Set

1. Everyone Counts
2. Fibonacci Search
PROJECT PROGRAMMING

Software

Java
Python
Code.org

Assesses Stroke Victim Brain Activity
ROBOTICS - No Remote Controls
Curriculum
Software

Math
Computer
Science

From a kit
Own Design
Lego
Sphero

Cha Cha
now y'all
VIDEO PRODUCTION

Curriculum Software

- All Content Areas
- iMovie
- PowToon
- Bandicam

Dawson M., 4th Grade
1st Place Regional
2nd Place State

Ninjago
Projects for the Competitions Do Not Need to Be School Assignments

They’re creating at school with PBL and at home for fun. Now they have a chance to show it off in an exciting, encouraging and safe environment.
Additional GaSTC Awards

$500 Lou Dewberry Scholarship to randomly selected Senior

$250 Scholarship for Seniors who place highest in their category

$100 Teach-Technology Award Best Overall 7|8
The State Competition will be virtual this year. Not all regions may participate. That doesn’t mean the students can’t. Check the GaSTC.org website regularly for updates.
Questions?

Thank you for attending my presentation!
Now, time to share with your students.