STEAM Certification

Who, What, When, Where, Why, and How?

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Georgia Charter Schools Association Conference
Who: Drew Charter School EA, JA + SA

We are part of the Atlanta Public School System and were started in 2000. We are a Title 1 school, serving the revitalized community of East Lake in Atlanta. We self-identified as a STEAM school in 2010 and added Project Based Learning to the equation in 2012. Every student at Drew Participates in STEAM+PBL programming.

• 990 students in PreK-5th at the Elementary Academy
• 400 students in 6th-8th at the Junior Academy
• 600 students in 9th-12th at the Senior Academy
Who: Georgia Department of Education STEM/STEAM Program

Elementary School STEAM
Middle School STEAM
High School STEAM

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STEM/STEAM Program
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ALL public schools in Georgia are eligible to apply for certification.
Why Should Your School Pursue STEAM Certification?

- **Student Engagement**
  - Attendance
  - Test scores
  - Exploring Passions

- **Staff Engagement**
  - PBL passions
  - Professional Learning that is real world focused

- **Community Engagement [Goal focused]**
  - Organization
  - Documentation
  - Funding
What is STEAM Certification?

Georgia Department of Education: STEAM Certification for High School

Criteria

Pre-Implementation Continuum Full Implementation

1. STEAM Vision and Culture

No vision for STEAM education is in place and a STEAM culture is not evident in the school.

The vision for STEAM is clearly defined and an arts and design-focused culture has been established within the school. Students articulate and live this vision and culture through their actions, passions, and perceptions.

Required

- The STEAM vision for the program is written. Fine arts* are included in the vision for the program.
  *Note- In Georgia, “Fine arts” is defined as Dance, Media Arts, Music, Theatre, and Visual Arts. Schools are not required to implement all five areas, but Excellence for selected areas.
- High schools can choose between a whole-school model or program only certification. Program Certification is a school-
What: Establishing STEAM Vision + Culture

DREW seeks to fully integrate **Science, Technology, Engineering, Arts and Math (STEAM)** in a Project Based Learning environment so that students are equipped with the knowledge, skills, and passion to create positive change in the world.
What: STEAM Culture through STEAM Events

EVENTS
- Solar Eclipse
- STEAM Career Days
- Maker Nights
- MakerFaire
- STEAM Day
- Designorama
- Space is the Place
- PBL Nights
What: Drew’s STEAM Curriculum = PBL + STEAM
What: Hands-on + Content Knowledge/ PD
What: K-12 Schools + Universities–PD
What: Industry CTAE Connections–PD
What: Advanced Math + Science
What: STEAM Partnerships

Georgia Tech Center for Education Integrating Science, Mathematics & Computing

Uzun + Case

Perkins + Will

Delta Community Credit Union

Decatur Makers
What: Competitions & Clubs
What: Project Based Learning
What: STEAM Labs + Resources

MAKERSPACE
FALL 2017 OPEN HOURS

Our EA and JA+SA makerspaces are open to all students and families at the following times:

**TUESDAYS**
4:00-7:00PM
at the
ELEMENTARY ACADEMY

**THURSDAYS**
4:00-7:00PM
at the
JUNIOR + SENIOR ACADEMY

**SATURDAYS**
10:00AM-3:00PM
LOCATION VARIES

View the complete makerspace calendar at steamatdrew.weebly.com/makerspaces
STEAM Trunks

- Arts + Crafts
- Electronics
- 3d Printing
- Construction
- Coding, Gears, and Games
- Robotics
- Virtual Reality
- Podcasting
- Textile
What: Rigor and Relevance
What: Technology Integration

Engineering Concepts Students Create "Cop Cam":

Example Scenario
What: Investigative Research
What: Data (Accountability + Sustainability)

MAP Achievement Summary

- All grade and subject combinations above the national norm (black line); K, 1st and 3rd significantly exceeded the norm.
- Norms calculated in 2020 prior to the pandemic and are comprised of a nationally representative sample of more than 500K students from more than 3M scores representing nearly 6K school districts.
When does everything take place (Timeline)?

Involve Stakeholders
Build community interest in and investment with students, staff, parents, and partners. Join the DOE Community.

Pre-visit
Prepare students, staff, and partners. Receive feedback and address.

Artifact Review
Submit artifacts to GaDOE for review. Receive feedback and address feedback.

Reach out to GaDOE

Final Visit
Prepare students, staff, and partners. Receive feedback and address.

Artifact Review Feedback
School: Drew Charter ES
Submission file: [Google drive link]
Next Steps: Review feedback and re-submit artifacts by mid-May
FY23 Grants

<table>
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<tr>
<th>Area reviewed</th>
<th>Comments</th>
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<tr>
<td>STEM Framework (Culture)</td>
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<td>• Clearly defined vision and culture that includes the arts.</td>
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<td>• Culture established through professional learning, partnerships, project-based learning experiences, and more.</td>
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<td>• Consistent PD opportunities for teachers</td>
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<td>• School has established a culture for STEAM education through innovation and collaboration.</td>
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<td>• Students are involved in many STEAM opportunities offered by the school and community to share their learning experiences, for example robotics,</td>
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How do you know you are ready?
How do you prepare for the visit?

- Prepare documentation
- Make sure STEAM Journals and work samples are available.
- Ensure PBL and engaging integrated lessons are routine practice.
- Meet with staff, students, parents, and community partners (review talking points)--make sure stakeholders are invited to meet with the committee.
- Create a visitation schedule to show the best of STEAM that your school has to offer.
Follow STEAM Happenings + Conversations:
http://steamatdrew.weebly.com/
https://www.facebook.com/groups/1208965232503343/--STEAM@Drew
https://community.gadoe.org/

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