

Connecting the Dots

Preparing and Building the Future of Computer Science Education in Your District



Please Sign In

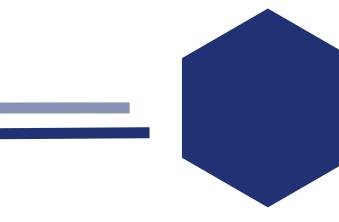
Please scan the QR code on the screen to access the sign-in form.

FOIL Fall Conference 2024-Computer Science Check In



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Welcome and Session Overview



Icon Guide





Agenda

- Welcome and Introduction
- The Value of Computer Science Education
- Overview of Funding Opportunities
- Computer Science Courses Overview



Session Objectives

1. Understand the Impact

Participants will identify how computer science education contributes to improved student outcomes, including academic performance and career readiness.

2. Recognize Benefits

Participants will articulate the benefits of computer science education, such as enhanced problem-solving skills and increased career opportunities in highdemand fields.

3. Understand Funding Opportunities

Participants will gain a comprehensive understanding of how to utilize grant funds, with a focus on Section (s.) 1007.2616, Florida Statutes (F.S.).

4. Discuss Implementation

Participants will engage in discussions on how to leverage the benefits of computer science education to address districtspecific challenges and opportunities.





The Value of Computer Science (CS) Education

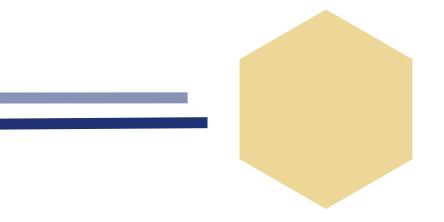
FLORIDA DEPARTMENT OF EDUCATION fldoe.org

Why CS Education Matters

- Empowering Future Innovators:
 - CS equips students with critical thinking, problem-solving and technical skills needed in today's digital world.
- High-Demand Careers:
 - CS education directly addresses workforce gaps and boosts career readiness.







CS Course Enrollment

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CS Education Enrollment Predictions

Directions:

- 1. Read the information on the following slides.
- 2. Make your prediction by moving to the left or right side of the room.
- 3. Find a partner and discuss your choice.



CS Education Enrollment Predictions

Left

Move to the left side of the room if you think the total number of students enrolled in computer science courses in Florida is greater than 200,000.

Right

Move to the right side of the room if you think the total number of students enrolled in computer science courses in Florida is **less than or equal to** 200,000.



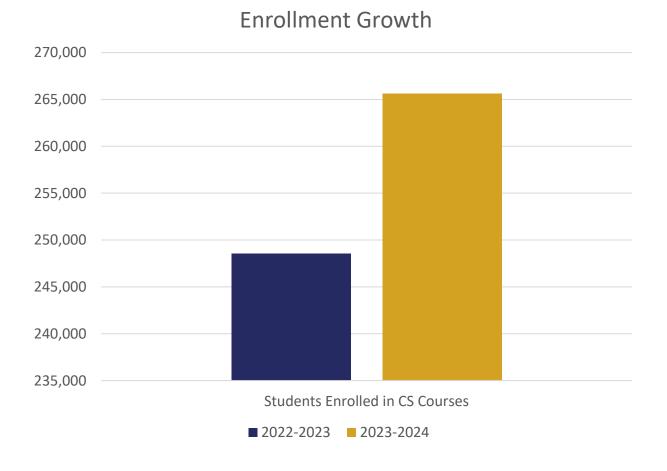


CS Student Enrollment Growth

- In the 2022-2023 academic year, there were 248,544 students enrolled in CS courses.
- In the 2023-2024 academic year, there were 265,639 students enrolled in CS courses.
- That is 6.9% growth.



CS Student Enrollment Growth



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CS Education Enrollment Predictions

Left

Move to the left side of the room if you think there are more students enrolled in computer science courses in **Grades K-5**.

Right

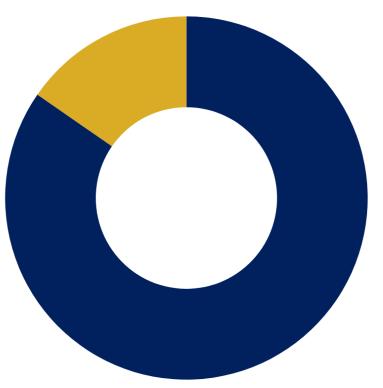
Move to the right side of the room if you think there are more students enrolled in **Grades 6-12**.





CS Student Enrollment

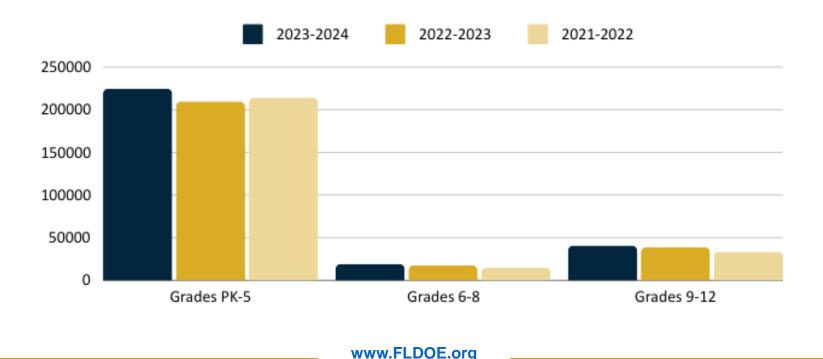
- Grades 6-12: 40,797 students
 - 15.4% of CS students
- Grades K-5: 244,842 students
 - 84.6% of CS students





CS Student Enrollment

• This graph illustrates the distribution of CS enrollment across different grade levels (PK-5, 6-8, 9-12) over three academic years: 2021-2022, 2022-2023 and 2023-2024.





Know Your Data

- Access the Data:
 - Go to <u>https://edudata.fldoe.org/AdvancedReports.html</u>.
 - Select Your District:
 - Navigate to the Computer Education section.
 - Choose your district to view the latest enrollment data and trends in CS education.

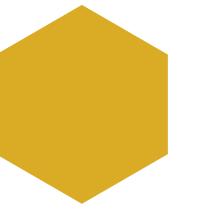


Discussion

- After reviewing the data:
 - What did you find surprising or interesting about your district's data?
 - How does your district compare to state averages or neighboring districts?
 - What strategies could help increase CS participation in your district?







Updated CS Courses





Updated CS Courses

- The new courses are designed to align with new standards.
- The new courses are designed to provide students with foundational and advanced knowledge in CS; fostering critical thinking, creativity and real-world problem-solving skills.
- Each course is tailored to specific grade levels or a grade band and connects to other content areas like math and science.



Grade K-5 CS Courses

- Kindergarten Foundations of Computer Science
- Grade 1 Foundations of Computer Science
- Grade 2 Foundations of Computer Science
- Grade 3 Foundations of Computer Science
- Grade 4 Foundations of Computer Science
- Grade 5 Foundations of Computer Science
- 3-5 Unplugged Computer Science



Grade 6-8 CS Courses

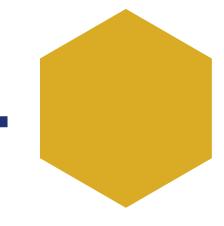
- M/J Grade 6 Digital Discoveries
- M/J Grade 7 Digital Discoveries
- M/J Grade 8 Digital Discoveries
- M/J Navigating Technology: Digital Literacy and Digital Citizenship
- M/J Introduction to Cybersecurity



Grade 9-12 CS Courses

- 9-12 Conceptual Cybersecurity
- 9-12 Computer Programming Fundamentals
- 9-12 Principles of Computer Science
- 9-12 Discovering Computer Science





CS Funding Opportunities Overview



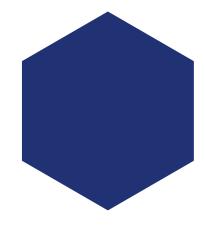


Funding Opportunities

- Key Points
 - Explore CS Grant Funding
 - CS Teacher Certification Grant
 - CS Teacher Bonus Grant
 - Connection to s. 1007.2616, F.S.
 - Review how this statute provides the framework for funding allocation and usage.







CS Teacher Certification Grant



CS Teacher Certification Grant

- This grant allows Florida school districts or consortium to apply for funding to support CS certification.
- The funding can be used for training classroom teachers to earn an educator certificate in CS or engage in professional learning to teach CS content.
- Funds can be allocated for training, exam fees for CS certification or professional learning.
- Allocations are determined by Full-time Equivalent (FTE) student enrollment data.
 - Charter schools are included in these allocations.

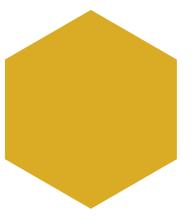


Goals

- What do you think is the goal of this grant?
- Considerations
 - Is the goal to increase the number of certified CS teachers?
 - How might this grant support professional learning and training for current teachers in your district?
 - How can this funding help expand CS course offerings in your district?







CS Teacher Bonus Grant





CS Teacher Bonus Grant

- This grant provides bonuses for eligible classroom teachers in Florida who are teaching CS courses.
 - A **\$1,000 bonus** can be awarded to teachers who hold an educator certificate in CS.
 - This bonus is available for up to three years, after each year of teaching an approved CS course.
 - A \$500 bonus can be awarded to teachers who hold an industry certification related to an approved CS course, also for up to three years.



Goals

- What do you think is the goal of this grant?
- Considerations
 - What impact could these bonuses have on recruiting and retaining qualified CS educators?
 - How do you think this grant could influence the quality of CS education in your district?
 - In what ways could this grant help incentivize teacher investment in CS?





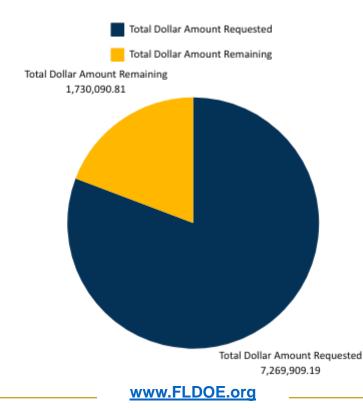


Grant Utilization



CS Certification Grant Allocations

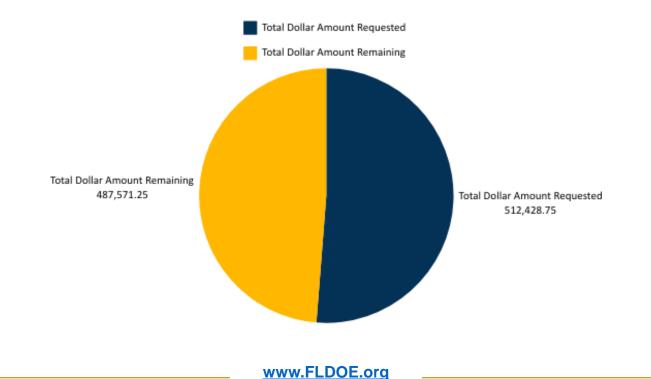
 In 2023-2024, \$9,000,000 was allocated for the computer science certification grant. Of this amount, \$7,269,909.19 was requested, leaving \$1,730,090.81 unused.



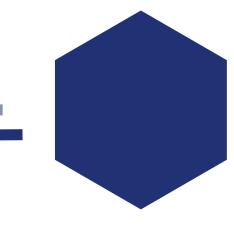


CS Teacher Bonus Grant Allocations

 In 2023-2024, \$1,000,000 was allocated for computer science teacher bonuses. Of this amount, \$512,428.75 has been requested, leaving \$487,571.25 unused.







CS Instructional Materials

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2026-2027 Computer Science Adoption Timeline

- Specifications and Criteria Available: January 2025
- Adoption Process: June 2025 July 2026
- Initial Publication List: July 31, 2026
- District Review: 2026-2027



Computer Science Instructional Materials

- With this timeline in mind, instructional materials that are aligned with the new CS standards will be implemented in the 2027-2028 school year.
- Please email <u>IMStaff@fldoe.org</u> with any questions regarding instructional materials.





Thank you!

We greatly appreciate your dedication to advancing CS education in your district.

If you have any questions, please don't hesitate to ask. We're here to support and collaborate with you.



Questions? Contact Us!

Bureau of Standards and Instructional Support | Office of Mathematics and Science

- Courtney Starling, Director
 - <u>Courtney.Starling@fldoe.org</u>
- Barbie Hartsfield, K-5 Mathematics Specialist
 - Barbie.Hartsfield@fldoe.org
- Natalie Alday, 6-8 Mathematics Specialist
 - <u>Natalie.Alday@fldoe.org</u>
- Anthony Severson, 9-12 Mathematics Specialist
 - <u>William.Severson@fldoe.org</u>
- Whitney Gaddis, K-12 Computer Science Specialist
 - <u>Whitney.Gaddis@fldoe.org</u>
- Steve Walker, K-12 Science Specialist
 - <u>Steve.Walker@fldoe.org</u>



We Want Your Feedback!

Access the Bureau of Standards and Instructional Support (BSIS) professional learning feedback survey using the QR code below.





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