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Today's Google Doc: bit.ly/techchatcs



Computer Science and Coding

Tuesday, February 27, 2018

Today's Presenter:



Lisa Milenkovic

STEM and Computer Science Specialist
Broward County Schools



April Drennan

Instructional Technologist, FDOE

April.Drennan@fldoe.org

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Today's Agenda

February 27, 2018

2:00-2:05 – Opening Remarks

2:05-2:25 – Presentation and Q & A with Dr. Lisa Milenkovic

2:20-2:30 – Closing Announcements

Today's Google Doc: bit.ly/techchatcs



#FDOETECH

April's Twitter Handle: [@TechLadyApril](https://twitter.com/TechLadyApril)

This webinar is being recorded.

Lisa Milenkovic
STEM and Computer Science Specialist
Broward County



Lisa.Milenkovic@browardschools.com

Dr. Lisa Milenkovic is a STEM+Computer Science Curriculum Supervisor at Broward County Public Schools, the nation's sixth largest district. She has elementary classroom experience as a K-5 science resource teacher and 5th grade classroom teacher. She is a grant recipient and awardee for innovative programs, currently leading a National Science Foundation STEM+C project to develop a model for integrating STEM and computer science in K-5. Dr. Milenkovic served on the Florida Dept. of Education committee to frame and write computer science standards for K-12.

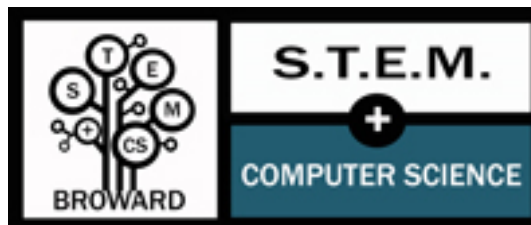


#BrowardCodes

Dr. Lisa Milenkovic, STEM+CS Supervisor

Department of Applied Learning, Office of Academics

lisa.milenkovic@browardschools.com



6th

Largest Public School System in the Nation

2nd

Largest Public School System in Florida

1st

Fully Accredited School System in Florida Since 1962

181

Different Languages Spoken by BCPS Students

236

Schools, Centers and Technical Colleges



Map image source: http://www.isaappraisersfl.org/_rsrc/1268064261871/appraisers-by-county-1/map_of_south_florida.gif.png



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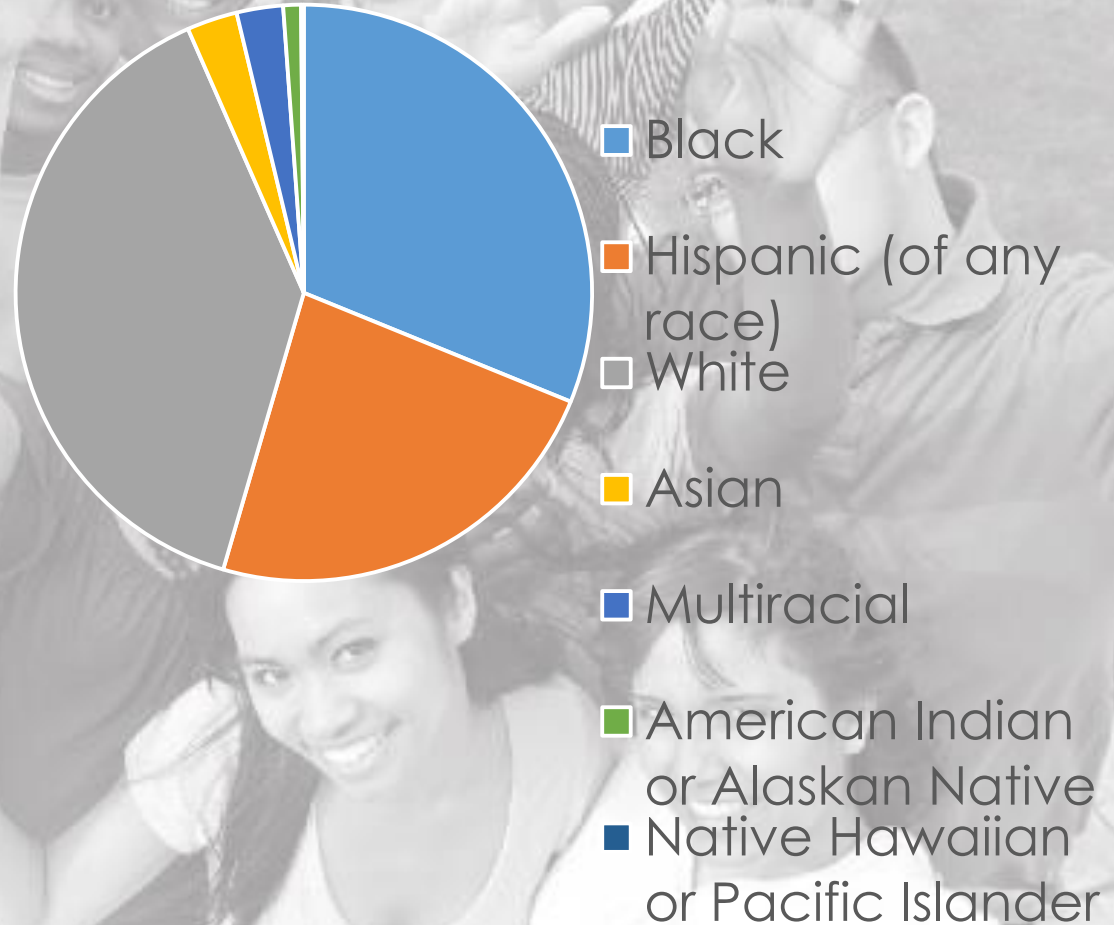
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2015/16 Enrollment



Pre-K	5,339
K - 5	97,359
6 - 8	47,113
9 - 12	70,468
Centers	5,275
Charter Schools	43,282
Total	268,836

Ethnic Breakdown - Students



"Computer Science" means the study of computers and algorithmic processes, including their principles, hardware and software designs, applications, and their impact on society, and includes computer coding and computer programming.

Definition from the current HB 1213 and the Florida Computer Science Standards



The image shows a screenshot of the CPALMS website navigation menu. The top bar is dark teal with the CPALMS logo and the tagline "Where Educators Go For Bright Ideas". To the right of the logo are links for "Not a member yet? SIGN UP", "SIGN IN", and "HELP". Below this is a main navigation bar with seven categories: HOME of CPALMS, STANDARDS Info. & Resources, COURSE Descriptions & Directory, RESOURCES Vetted by Peers & Experts, PD PROGRAMS Self-paced Training, ABOUT CPALMS Initiatives & Partnerships, and ICPALMS Florida's Platform. A secondary bar below the main navigation lists specific content: Standards, Access Points, Print/Export Standards, Computer Science Standards, Coding Scheme, and Content Complexity Rating. At the bottom of this bar, "Math Modeling Standards" and "Assessments" are also listed.



Computer Science Standards

The computer science standards are part of the Florida Standards for Science but this webpage allows you to download the computer science standards separately. Click on one of the following options to download the computer science standards as a Microsoft Word document or an Adobe PDF document.

Computer Science (Microsoft Word)

Click here to download this
version

Computer Science (Adobe PDF)

Click here to download this
version

Computer Science Progression (Microsoft Excel)

Click here to download this
version

Other Downloads

Click here for other
downloads



#BrowardCodes INITIATIVE

➔ GOALS

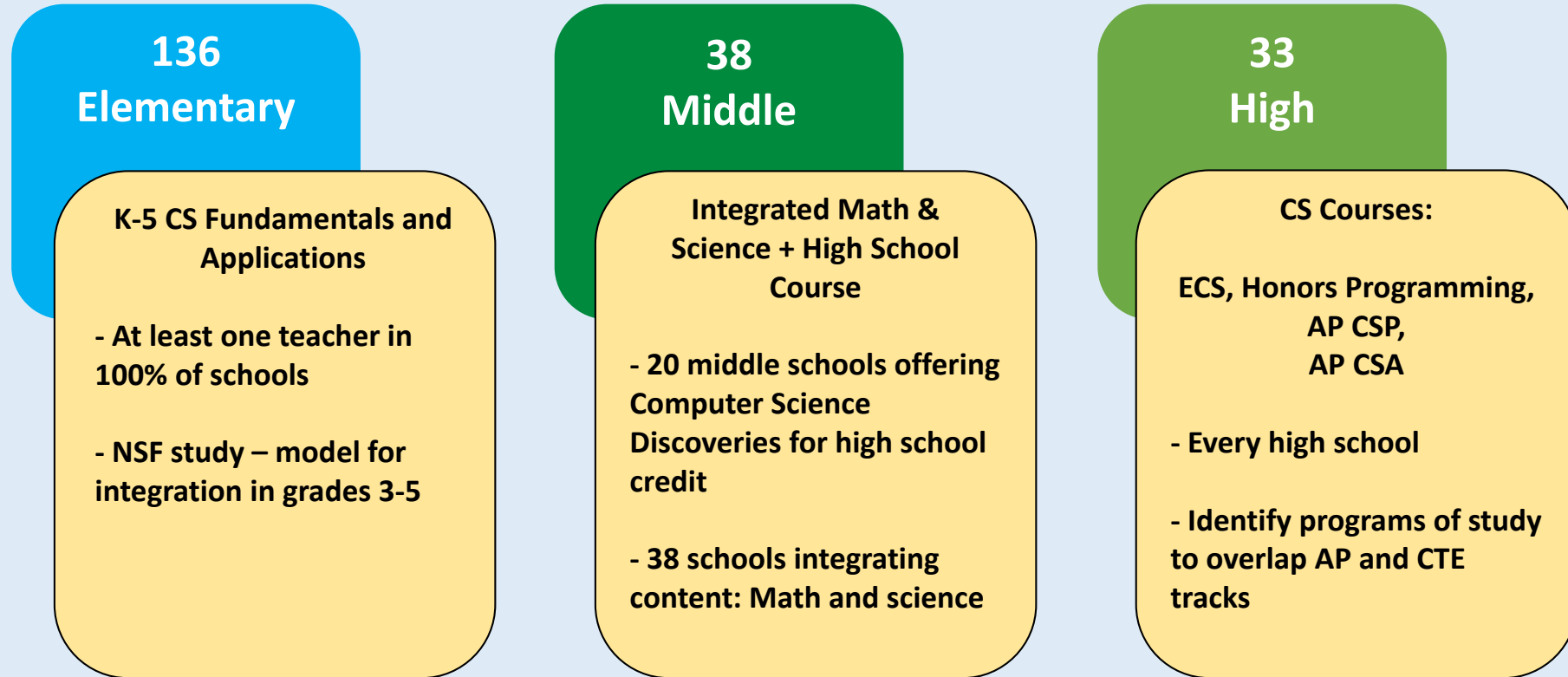
- **Educate** - provide students well-trained, supported teachers.
- **Advocate** - afford every student the opportunities provided by high-quality, rigorous Computer Science instruction.
- **Cultivate** - build a community of support for Computer Science that bridges and connects schools to careers.

➔ ACCOMPLISHMENTS

- In 2015/16, more than **38,000 BCPS students studied Computer Science.**
- By June 2017, **1,000 BCPS teachers will be trained in Computer Science.**
- In May 2016, through BCPS advocacy at the state level, **Florida passed academic Computer Science standards.**



ABOUT BROWARD COUNTY PUBLIC SCHOOLS



Recent article by Shuchi Grover:

<https://www.edsurge.com/news/2018-02-25-the-5th-c-of-21st-century-skills-try-computational-thinking-not-coding>



<http://outlier.uchicago.edu/TimeforCS/>

NSF Grant 1542842

Elementary Problem-based learning modules that incorporate CS in the context of science and social studies (grades 3-5)



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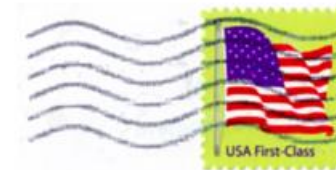
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- Implement 2 modules in each Grade, 3rd – 5th.
- Modules are interdisciplinary Science and Social Studies units that include problem-based learning, STEM, computational thinking, and Computer Science through “unplugged” & “plugged” lessons, especially from Code.org.
 - Aligned to Florida Standards for in all subject areas, including Computer Science
 - Integrated within the existing curriculum for use as Tier I instruction.
- Each modules has a problem that students will resolve by the end of the lessons.
- Provide 2-3 days of Professional Development per module for teachers teaching the curriculum.
- Identification of stake holders and support structures for successful



Sample ~ 3rd grade ~ Module 1



Hello,

I am currently at the only Great Lake that does not border the Midwest region of the United States.

I want to visit the state with a landmark that is both natural and man-made. At this landmark are some pretty famous faces, four presidents to be exact.

Can you figure out where I am and where I want to visit? Then can you write an algorithm, or set of directions, that I can follow to get there?



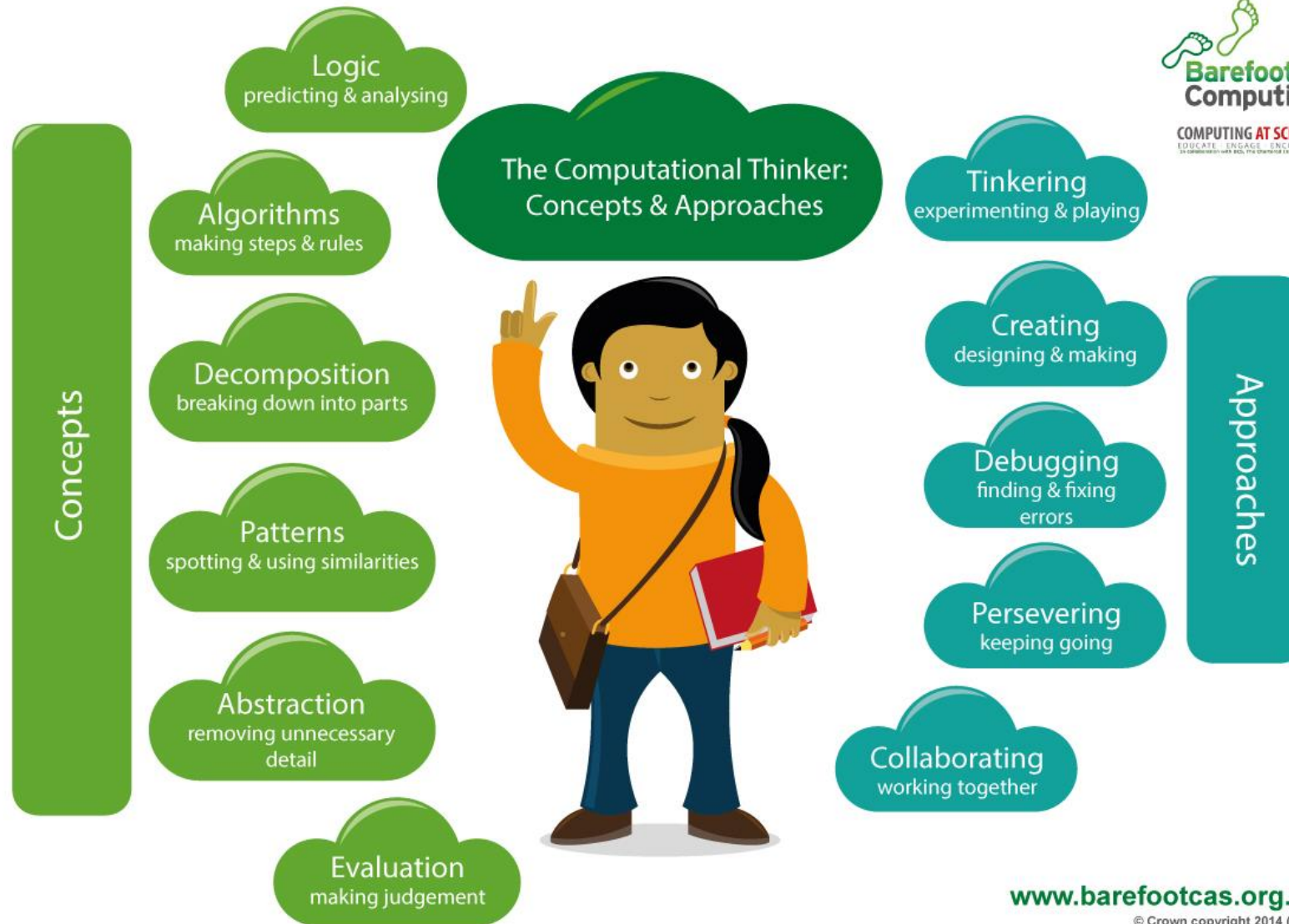
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Barefoot would like to acknowledge the work of Julia Briggs and the eLIM team at Somerset County Council for their contribution to this poster.



PROJECT GUTS

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The White House
Office of the Press Secretary
For Immediate Release

**FACT SHEET: President Obama
Announces Computer Science For
All Initiative**

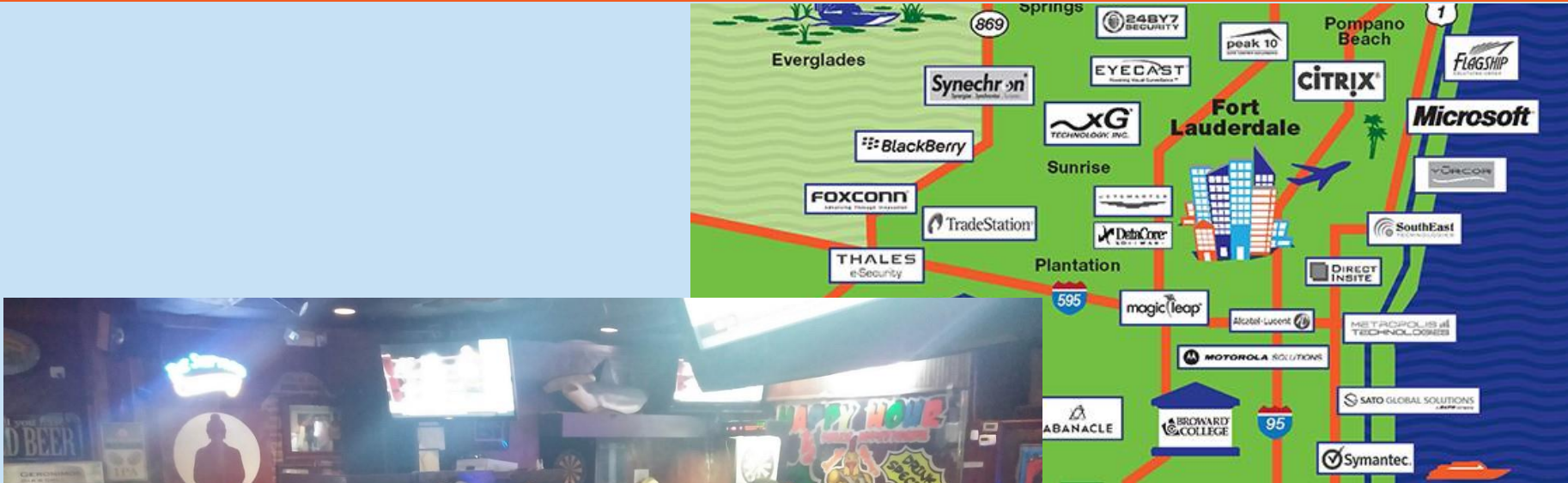
January 30, 2016



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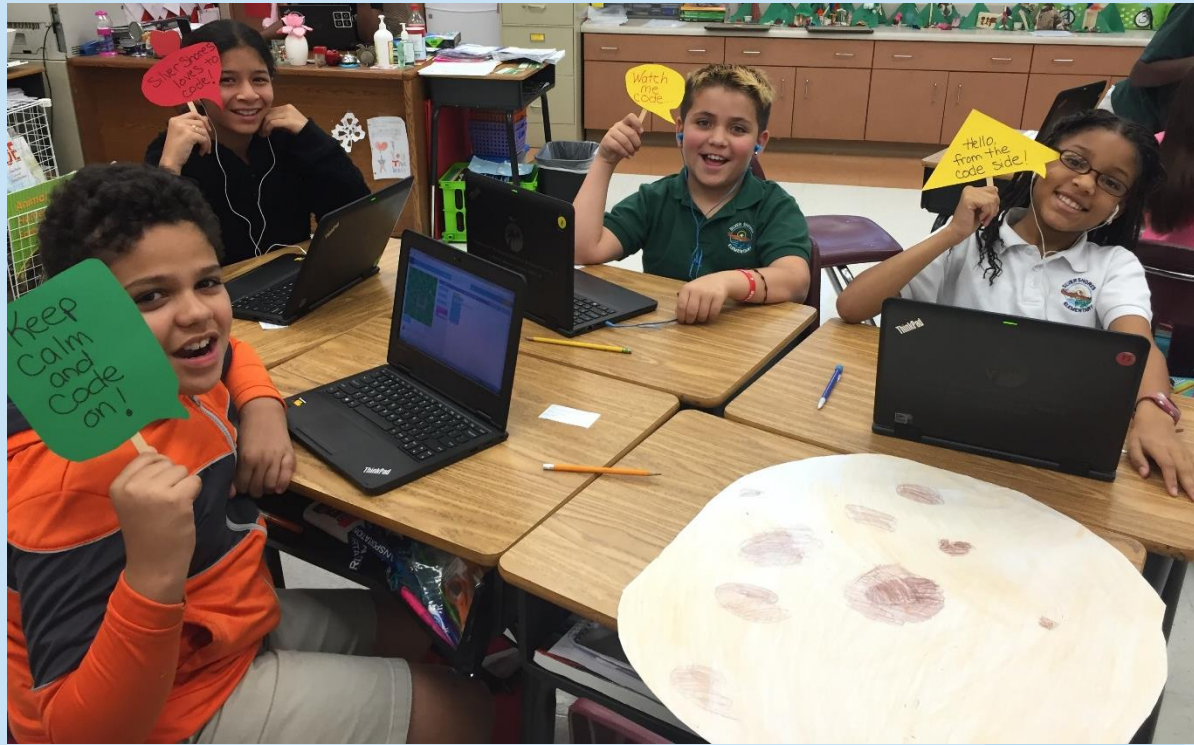
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<http://browardschools.com/browardcodes>

Dr. Lisa Milenkovic, lisa.milenkovic@browardschools.com



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Chris Summers
Computer Science Specialist
Florida Department of Education



Chris.Summers@fldoe.org

Chris Summers is the Computer Science Specialist for the Bureau of Standards and Instructional Support at the Florida Department of Education. He holds a bachelor's degree in Elementary & Exceptional Student Education from Flagler College. Chris works with districts across Florida to provide professional development and resources to assist in the implementation of the Florida Computer Science Standards.



#FDOETECH

April's Twitter Handle: [@TechLadyApril](https://twitter.com/TechLadyApril)

Closing Announcements



April Drennan
Instructional Technologist, FDOE
April.Drennan@fldoe.org

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- Add hashtag to display announcements, events, articles

March Tech Chat!

- Makerspaces (Date/Time TBA)

Send us your Students' Technology Exemplars!

- Link to a portfolio or project
- Proper permissions must be given

Send us your Teaching Exemplars!

Today's Google Doc: bit.ly/techchatcs

Send all questions, comments, or suggestions to April Drennan at April.Drennan@fldoe.org