Bondurant-Farrar Computer Science Plan

Overview

We should teach computer science because....

- It promotes 21st century skills like creativity, collaboration and communication.
- Being involved in creating technologies can give **confidence in dealing with complex, open-ended problems and persistence in the face of challenges.**
- There are major disparities in young women's engagement in STEM fields and universal CSed is part of addressing that.
- It will **level the playing field** and help close the "digital divide" and "participation gap" around tech for lower income youth and students of color.
- Teaching CS is a compelling new area that teachers are interested in and is a place where they can experiment with pedagogy
- CSed often uses project-based approaches that can enhance school pedagogy and move away from sage on the stage approaches

It promotes skills like creativity, collaboration and communication and builds confidence in dealing with complex, open-ended problems and persistence in the face of challenges. CS instruction will level the playing field and enhance school pedagogy.

Bondurant-Farrar Computer Science Plan

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1 - Materials and Curriculum Selection and Content Refinement

Rubric Topic	Novice	Emerging	Developing	Highly Developed	Notes from Discussion	What would it take to get to the next level? Possible Next Steps		
	Materials and Curriculum Selection and Content Refinement							
Curricular Selection		2			Elementary is emerging, MS and HS would be developing	Discussing with Morris Elementary which curriculums they have access to and setting essential standards		
K-12 Alignment and Progression	1				Elementary does more one-off activities, MS and HS have more of a sequence in CS instruction	Continue to have more collaborative conversations across buildings to ensure sequencing		
Ancillary Materials			3		We are doing a great job!			
Assessment	1				K-5 we are not assessing. MS and HS are assessed within classes	Identify K-12 sequence to determine assessments		
Lesson Development Support		2			Opportunities are provided K-12 for teachers to develop lessons on CS			
Integrated or Multidisciplinary Activities	1				Elementary is more interdisciplinary with CS than secondary	Provide teachers more time and opportunities to plan with CS		
Materials for Diverse Learners	1				This isn't happening, we are providing the same materials to all	Identify how we can target diverse learners. Utilize resources on Code.org and other CS resources.		
On	Once you have scored each subcategory, be sure to complete the Materials & Curriculum Rubric for CS for All							
	Identify 1-3 goals for this topic and record them in the table below (using this link)							

2 - Leadership

Rubric Topic	Novice	Emerging	Developing	Highly Developed	Notes from Discussion	What would it take to get to the next level? Possible Next Steps
Leadership	-			-	-	
District Leadership		2			Communication is made from district leadership about CS opportunities	Develop PLC team devoted to CS
School Leadership	1				STEM Teacher Leader initiates CS conversations and opportunities	Create awareness of CS efforts going on in each building
School Personnel (support teachers and staff)	1					Create a CS team, a rep from each building
Planning		2			A plan has been created, school personnel are not aware of it	Share plan with school personnel
Implementation		2			Electives offered, no official data collected	Align standards K-12 to ensure progression
Outcomes	1				No defined outcomes	When district goals are solidified, we will be able to identify clearer outcomes
Once you have scored	Once you have scored each subcategory, be sure to complete the Leadership Rubric for CS for All					
dentify 1-3 goals for this topic and record them in the table below (using this link)						

3 - Teacher Capacity and Development

Rubric Topic	Novice	Emerging	Developing	Highly Developed	Notes from Discussion	What would it take to get to the next level? Possible Next Steps
			Т	eacher Capac	city and Development	
Initial Teacher Professional Development		2			Teachers have had opportunities to participate in professional development during the summer and school year	Giving teachers more opportunities to become confident in CS and making them more aware of CSTA.
Teacher Working Groups	1				Teachers are working independently on CS curriculum	Creating CS groups within the district.
Advanced Teacher Development		2			Many teachers from all buildings are currently enrolled in CS professional development	Continue to provide awareness of CS opportunities with teacher stipend for more motivation
Teacher Feedback		2			Admin has limited awareness of and resources to help provide feedback.	Provide more awareness and resources to admin and teachers.
Once you have scored each subcategory, be sure to complete the Teacher Capacity & Development Rubric for CS for All						
	Identify 1-3 goals for this topic and record them in the table below (using this link)					

4 - Partner

Rubric Topic	Novice	Emerging	Developing	Highly Developed	Notes from Discussion	What would it take to get to the next level? Possible Next Steps
					Partner	
Local Partners (including Informal Education)			3		STEM teacher leader frequently communicates with AEA and Facebook to provide enrichment activities	Involve local partners in the planning and revision process
Professional Learning Partners	1					Involve and/or make local partners aware of memberships
tate and National 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2						
Once you have scored each subcategory, be sure to complete the Partner Rubric for CS for All						
Identify 1-3 goals for this topic and record them in the table below (using this link)						

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5 - Community

Rubric Topic	Novice	Emerging	Developing	Highly Developed	Notes from Discussion	What would it take to get to the next level? Possible Next Steps	
Community	iommunity						
Families				4	Information is provided on the district website of CS resources and opportunities to be involved. STEM camps and after school clubs are provided. We have hosted STEM nights. Parents are involved in communication regularly.	Continue communicating to families and Bondurant - Farrar Community	
Local Workforce Efforts	1				We currently do not have goals set for CS	Create goals to align between community workforce	
Local Diversity Efforts		2			We are currently taking steps to be more inclusive through our DEI committee. Grade level bands are taking on initiatives to increase diversity	Continue local diversity efforts and engage more learners of all backgrounds	
Area Schools and Educational Institutions (Private schools, etc.)		2			No coordinated involvement - more here and there when it's needed	Reach out to surrounding schools to better have insight on what they are doing - Singletons can then have a true PLC	

Identify 1-3 goals for this topic and record them in the table below (using this link)

6 - Goal Setting

SMA	RT Formula		
		of the	
(Mea	surable: percent, number, measure)		(Who: students, families, teachers, etc.)
will		by	
	(Specific action: what, where, how)		(Time)

Rubric Component	1-3 Goals for each topic- record them here
<u>Materials &</u> <u>Curriculum</u>	Score: 11 - Developing Goal 1: Create a CS Team Goal 2: Focus on K-12 alignment and progression by finding out what we are currently doing at each grade band. Goal 3: Meet with the CS Team
<u>Leadership</u>	Score: 10 - Developing Goal 1: Communicate and create awareness in all buildings through BLT meetings. Goal 2: Create a CS Team with district and school representation. Goal 3: Share CS plan with school personnel share with School Board
<u>Teacher</u> <u>Capacity</u>	Score: 7 - Emerging Goal 1: Make a CS team within each building level. Goal 2: Have a member of each CS building team join CSTA or CSforALL to stay up to date on CS developments Goal 3: Provide more PD opportunities for staff.
<u>Partners</u>	Score 6 - Emerging Goal 1: Connect local partners with MS and HS CS Teachers Goal 2: Create a CS Advisory Council similar to CTE Goal 3: Meet with the CS Advisory Council
Community	Score 9 - Developing Goal 1: Create CS advisory council Goal 2: Meet with the CS Advisory Council Goal 3: Continue diversity efforts

	Prioritized List of Goals	Who is leading this charge?					
Fall 2022	Create CS Team	Molly Rockefeller					
Evidence of Goals Met	By October 2022, the CS team will have met at least once and set up norms.						
Winter 2023	K-5 teachers complete the CSTA standards comfortability check-list.	Molly Rockefeller					
Evidence of Goals Met	By February 2023, K-5 teachers will have completed the CSTA comfortability check-list to collect data on what future professional development needs to take place.						
Spring 2023	Look at the overlap of standards. IE Math and CSTA overlapping - what are we already doing in our classrooms that meet CSTA standards	Molly Rockefeller and CS Team					
Evidence of Goals Met	Completing the document "Unpacking CSTA Standards"						

7 - Planning for Next Steps

When will your team reconvene next? 4/19/22

How will you check-in on goals?

2 CS team reps will share with the school board in May.

Is there anyone missing from your CS Education working group?

4/12 - Chet Adams 4/19 - No one

Who do you need to consult with to accomplish your goals? $\ensuremath{\mathsf{AEA}}$

How can the AEA help support your work?

Continue to provide resources and training for our teachers