CE21-Maryland High School Computer Science Survey (2012)



1. How many students attend your school?

	Sex:	Sex:	
	Female	Male	Response Totals
1-100	0.0%	0.0%	0.0%
101-250	5.3% (2)	0.0%	2.4% (2)
251-500	5.3% (2)	8.9% (4)	7.2% (6)
501-1000	23.7% (9)	13.3% (6)	18.1% (15)
1001-2000	47.4% (18)	68.9% (31)	59.0% (49)
2001+	18.4% (7)	8.9% (4)	13.3% (11)
answered question	38	45	83
		skipped question	1

2. What percentage of students at your school speak a language at home other than English?

	Sex:		
	Female	Male	Response Totals
0%	7.9% (3)	7.0% (3)	7.4% (6)
1-20%	55.3% (21)	74.4% (32)	65.4% (53)
21-40%	21.1% (8)	11.6% (5)	16.0% (13)
41-60%	5.3% (2)	2.3% (1)	3.7% (3)
61-80%	5.3% (2)	2.3% (1)	3.7% (3)
81-100%	5.3% (2)	2.3% (1)	3.7% (3)
answered question	38	43	81
		skipped question	3

3. What percentage of students at your school are African American?

	Sex:		
	Female	Male	Response Totals
0%	0.0%	0.0%	0.0%
1-20%	47.4% (18)	47.6% (20)	47.5% (38)
21-40%	23.7% (9)	28.6% (12)	26.3% (21)
41-60%	10.5% (4)	9.5% (4)	10.0%
61-80%	5.3% (2)	2.4% (1)	3.8%
81-100%	13.2% (5)	11.9% (5)	12.5% (10)
answered question	38	42	80
		skipped question	4

4. What percentage of students at your school are Hispanic/Latino?

	Sex:		
	Female	Male	Response Totals
0%	5.6% (2)	2.3% (1)	3.8%
1-20%	72.2% (26)	84.1% (37)	78.8% (63)
21-40%	16.7% (6)	9.1% (4)	12.5% (10)
41-60%	2.8% (1)	2.3% (1)	2.5% (2)
61-80%	2.8% (1)	0.0%	1.3%
81-100%	0.0% (0)	2.3% (1)	1.3% (1)
answered question	36	44	80
		skipped question	4

5. What percentage of students qualify for free or reduced lunch?

	Sex:		
	Female	Male	Response Totals
0%	0.0%	2.3% (1)	1.2% (1)
1-20%	28.9% (11)	39.5% (17)	34.6% (28)
21-40%	28.9% (11)	27.9% (12)	28.4% (23)
41-60%	31.6% (12)	23.3% (10)	27.2% (22)
61-80%	10.5% (4)	7.0% (3)	8.6% (7)
81-100%	0.0% (0)	0.0% (0)	0.0%
answered question	38	43	81
		skipped question	3

6. In which Maryland public school district is your high school located?

	Sex:		
	Female	Male	Response Totals
Allegany County	0.0%	0.0% (0)	0.0%
Anne Arundel County	7.7% (3)	4.4% (2)	6.0% (5)
Baltimore City	7.7% (3)	8.9% (4)	8.3% (7)
Baltimore County	2.6% (1)	17.8% (8)	10.7%
Calvert County	0.0%	0.0%	0.0%
Caroline County	0.0%	2.2%	1.2%
Carroll County	0.0%	2.2% (1)	1.2%
Cecil County	7.7% (3)	4.4% (2)	6.0%
Charles County	5.1% (2)	4.4% (2)	4.8% (4)
Dorchester County	2.6% (1)	0.0%	1.2%
Frederick County	10.3% (4)	8.9% (4)	9.5%
Garrett County	0.0%	0.0%	0.0%
Harford County	5.1% (2)	13.3% (6)	9.5%
Howard County	10.3% (4)	4.4% (2)	7.1% (6)

0.0% 1.2% (0) (1)	2.6% (1)	Kent County
15.6% 19.0% (7) (16)	23.1% (9)	Montgomery County
6.7% 7.1% (3) (6)	7.7% (3)	Prince Georges County
2.2% 1.2% (1) (1)	0.0%	Queen Anne's County
0.0%	0.0%	Somerset County
0.0% 2.4% (0) (2)	5.1% (2)	St. Mary's County
0.0%	0.0%	Talbot County
0.0% 1.2% (0) (1)	2.6% (1)	Washington County
4.4% 2.4% (2) (2)	0.0%	Wicomico County
0.0%	0.0%	Worcester County
45 84	39	answered question
skipped question 0		

7. Which of the following best describes your school's location?

	Sex:		
	Female	Male	Response Totals
Urban	23.1% (9)	15.6% (7)	19.0% (16)
Suburban	46.2% (18)	64.4% (29)	56.0% (47)
Rural	30.8% (12)	20.0% (9)	25.0% (21)
Online	0.0%	0.0%	0.0%
answered question	39	45	84
		skipped question	0

8. Which of the following are offered at your high school? (Check all that apply.)

	Sex:		
	Female	Male	Response Totals
Keyboarding	35.9%	37.8%	36.9%
	(14)	(17)	(31)
An introductory computer science course (pre-AP)	66.7%	55.6%	60.7%
	(26)	(25)	(51)
Advanced Placement Computer Science (AP)	64.1%	51.1%	57.1%
	(25)	(23)	(48)
Oracle Academy	5.1% (2)	2.2% (1)	3.6%
Cisco Academy	23.1%	20.0%	21.4%
	(9)	(9)	(18)
Other CS/IT courses	48.7%	40.0%	44.0%
	(19)	(18)	(37)
None of the above; My school does not offer CS/IT courses	10.3%	8.9%	9.5%
	(4)	(4)	(8)
answered question	39	45	84
		skipped question	0

9. Which of the following best describes CS/IT your school?

	Sex:		
	Female	Male	Response Totals
CS/IT courses have never been offered at my school	25.0% (1)	75.0% (3)	50.0% (4)
CS/IT courses were offered in the past at my school, but have been discontinued	75.0% (3)	25.0% (1)	50.0% (4)
Comments:	1 reply	0 replies	1
answered question	4	4	8
		skipped question	76

10. What are some of the reasons why your school does not offer computer science courses? (Check all that apply.)

	Sex:		
	Female	Male	Response Totals
Insufficient student interest	75.0%	50.0%	62.5%
	(3)	(2)	(5)
Budget restrictions	75.0%	50.0%	62.5%
	(3)	(2)	(5)
Lack of qualified teachers	25.0%	25.0%	25.0%
	(1)	(1)	(2)
CS is not a graduation requirement	25.0%	25.0%	25.0%
	(1)	(1)	(2)
CS is not a priority for my high school	50.0%	25.0%	37.5%
	(2)	(1)	(3)
CS is not a priority for the school system	50.0%	0.0%	25.0%
	(2)	(0)	(2)
Other (please specify)	0 replies	1 reply	12.5%
	(0.0%)	(25.0%)	(1)
answered question	4	4	8
		skipped question	76

11. In your judgement, do you think that your school should offer CS courses?

	Sex:		
	Female	Male	Response Totals
Yes	75.0% (3)	100.0% (4)	87.5% (7)
No	25.0% (1)	0.0%	12.5% (1)
answered question	4	4	8
		skipped question	76

12. If your school offered CS/IT courses would you be interested in teaching them?

	Sex:		
	Female	Male	Response Totals
Yes	0.0% (0)	25.0% (1)	12.5% (1)
No	50.0% (2)	25.0% (1)	37.5% (3)
Maybe	50.0% (2)	50.0% (2)	50.0% (4)
answered question	4	4	8
		skipped question	76

13. Under what department(s) is CS offered in your school? (Check all that apply.)

	Sex:		
	Female	Male	Response Totals
Business	61.8% (21)	64.1% (25)	63.0% (46)
Technology	47.1% (16)	48.7% (19)	47.9% (35)
Computing	17.6% (6)	10.3% (4)	13.7% (10)
Math	11.8% (4)	7.7% (3)	9.6% (7)
Science	2.9% (1)	5.1% (2)	4.1%
Other (please specify)	4 replies (11.8%)	4 replies (10.3%)	11.0% (8)
answered question	34	39	73
		skipped question	11

14. Does your district or state require you to teach a specific computer science course curriculum that includes specific content and outcomes?

	Sex:		
	Female	Male	Response Totals
Yes	68.6% (24)	58.5% (24)	63.2% (48)
No	31.4% (11)	41.5% (17)	36.8% (28)
Comments	3 replies	3 replies	6
answered question	35	41	76
		skipped question	8

15. Are these requirements enforced?

	Sex:		
	Female	Male	Response Totals
Yes	46.9% (15)	48.7% (19)	47.9% (34)
No	53.1% (17)	51.3% (20)	52.1% (37)
Comments	1 reply	4 replies	5
answered question	32	39	71
		skipped question	13

16. Does your school offer an introductory (pre-AP) Computer Science (CS) course?

	Sex:		
	Female	Male	Response Totals
Yes	74.3% (26)	46.3% (19)	59.2% (45)
No	25.7% (9)	53.7% (22)	40.8% (31)
answered question	35	41	76
		skipped question	8

17. What is the title of the introductory CS course, offered at your school?

	Sex:		
	Female	Male	Response Count
	25 replies	17 replies	42
answered question	25	17	42
		skipped question	42

18. Are students required to take introductory CS?

	Sex:		
	Female	Male	Response Totals
Yes	26.9% (7)	15.0% (3)	21.7% (10)
No	73.1% (19)	85.0% (17)	78.3% (36)
Comments	5 replies	3 replies	8
answered question	26	20	46
		skipped question	38

19. Does the CS introductory course offered in your school have prerequisites?

	Sex:		
	Female	Male	Response Totals
Yes	52.0% (13)	47.4% (9)	50.0% (22)
No	48.0% (12)	52.6% (10)	50.0% (22)
If yes, what are the prerequisites?	14 replies	8 replies	22
answered question	25	19	44
		skipped question	40

20. How many students enrolled in introductory CS this year at your high school?

	Sex:		
	Female	Male	Response Totals
1-10	7.7% (2)	0.0%	4.5% (2)
11-25	26.9% (7)	44.4% (8)	34.1% (15)
26-50	26.9% (7)	33.3% (6)	29.5% (13)
51-100	23.1% (6)	5.6% (1)	15.9% (7)
101+	15.4% (4)	16.7% (3)	15.9% (7)
answered question	26	18	44
		skipped question	40

21. What approximate percentage of students enrolled in introductory CS are female?

	Sex:		
	Female	Male	Response Totals
0%	7.7% (2)	11.1% (2)	9.1% (4)
1-20%	53.8% (14)	72.2% (13)	61.4% (27)
21-40%	38.5% (10)	5.6% (1)	25.0% (11)
41-60%	0.0%	11.1% (2)	4.5% (2)
61-80%	0.0%	0.0% (0)	0.0%
81-99%	0.0% (0)	0.0% (0)	0.0%
100%	0.0% (0)	0.0% (0)	0.0%
answered question	26	18	44
		skipped question	40

22. What approximate percentage of students enrolled in introductory CS are members of an ethnic minority?

	Sex:		
	Female	Male	Response Totals
0%	0.0%	5.6% (1)	2.3%
1-20%	50.0% (13)	55.6% (10)	52.3% (23)
21-40%	26.9% (7)	22.2% (4)	25.0% (11)
41-60%	11.5% (3)	11.1% (2)	11.4% (5)
61-80%	0.0%	0.0% (0)	0.0%
81-99%	11.5% (3)	5.6% (1)	9.1% (4)
100%	0.0%	0.0%	0.0%
answered question	26	18	44
		skipped question	40

23. What content is covered in introductory CS? (Check all that apply.)

	Sex:		
	Female	Male	Response Totals
Programming	100.0%	94.4%	97.7%
	(25)	(17)	(42)
Problem solving	92.0%	83.3%	88.4%
	(23)	(15)	(38)
Ethics and social issues	44.0%	61.1%	51.2%
	(11)	(11)	(22)
Hardware	52.0%	44.4%	48.8%
	(13)	(8)	(21)
Graphics	36.0%	16.7%	27.9%
	(9)	(3)	(12)
Web development	16.0%	16.7%	16.3%
	(4)	(3)	(7)
Computer security	16.0%	16.7%	16.3%
	(4)	(3)	(7)
Game programming	32.0%	22.2%	27.9%
	(8)	(4)	(12)
Productivity software	4.0% (1)	16.7% (3)	9.3%
Databases	0.0% (0)	5.6% (1)	2.3%
Networks	12.0%	5.6%	9.3%
	(3)	(1)	(4)
Logic	68.0%	61.1%	65.1%
	(17)	(11)	(28)
Information about computing/IT careers	52.0%	44.4%	48.8%
	(13)	(8)	(21)
Information about computing/IT majors/programs at 2-	8.0%	5.6%	7.0%
year colleges	(2)	(1)	

16.3%	11.1%	20.0%	Information about computing/IT majors at 4-year
(7)	(2)	(5)	colleges
7.0%	5.6%	8.0%	Information about the Maryland computing/IT job
(3)	(1)	(2)	market
4.7%	0.0%	8.0%	Information about employers' commitment to
(2)	(0)	(2)	diversity in computing/IT
43	18	25	answered question
41	skipped question		

24. What programming languages/software tools are used in introductory CS? (Check all that apply.)

	Sex:		
	Female	Male	Response Totals
Java	88.0%	77.8%	83.7%
	(22)	(14)	(36)
Alice	36.0%	33.3%	34.9%
	(9)	(6)	(15)
Visual Basic	12.0%	16.7%	14.0%
	(3)	(3)	(6)
Scratch	20.0%	0.0%	11.6%
	(5)	(0)	(5)
java script	8.0%	5.6%	7.0%
	(2)	(1)	(3)
C++	28.0%	44.4%	34.9%
	(7)	(8)	(15)
Python	12.0%	11.1%	11.6%
	(3)	(2)	(5)
Greenfoot	0.0%	0.0% (0)	0.0%
C#	0.0%	0.0% (0)	0.0%
HTML	16.0%	16.7%	16.3%
	(4)	(3)	(7)
Other (please specify)	4 replies	2 replies	14.0%
	(16.0%)	(11.1%)	(6)
answered question	25	18	43
		skipped question	41

25. What type of credit is earned by the introductory CS (pre-AP) courses? (Check all that apply.)

	Sex:		
	Female	Male	Response Totals
Technology Education Credit	38.5% (10)	41.2% (7)	39.5% (17)
Computing Credit	3.8% (1)	5.9% (1)	4.7% (2)
Business Credit	7.7% (2)	11.8% (2)	9.3% (4)
Math Credit	11.5% (3)	0.0% (0)	7.0% (3)
Science Credit	0.0%	5.9% (1)	2.3% (1)
General Elective Credit	50.0% (13)	47.1% (8)	48.8% (21)
Other Credit	11.5% (3)	0.0%	7.0% (3)
Other (please specify)	3 replies	1 reply	4
answered question	26	17	43
		skipped question	41

26. Does your school offer AP Computer Science?

	Sex:		
	Female	Male	Response Totals
Yes	71.4% (25)	53.7% (22)	61.8% (47)
No	28.6% (10)	46.3% (19)	38.2% (29)
answered question	35	41	76
		skipped question	8

27. How many students take AP CS each year?

	Sex:	Sex:	
	Female	Male	Response Totals
1-10	24.0% (6)	28.6% (6)	26.1% (12)
11-25	44.0% (11)	61.9% (13)	52.2% (24)
26-50	12.0% (3)	9.5% (2)	10.9% (5)
51-100	20.0% (5)	0.0%	10.9% (5)
101+	0.0% (0)	0.0% (0)	0.0%
answered question	25	21	46
		skipped question	38

28. What percentage of students enrolled in AP CS are female?

	Sex:		
	Female	Male	Response Totals
0%	8.0% (2)	14.3% (3)	10.9% (5)
1-20%	72.0% (18)	81.0% (17)	76.1% (35)
21-40%	16.0% (4)	4.8% (1)	10.9% (5)
41-60%	4.0% (1)	0.0%	2.2%
61-80%	0.0%	0.0%	0.0%
81-99%	0.0%	0.0%	0.0%
100%	0.0% (0)	0.0% (0)	0.0%
answered question	25	21	46
		skipped question	38

29. What percentage of students enrolled in AP CS are members of an ethnic minority?

	Sex:		
	Female	Male	Response Totals
0%	12.0% (3)	0.0%	6.5% (3)
1-20%	60.0% (15)	76.2% (16)	67.4% (31)
21-40%	12.0% (3)	9.5% (2)	10.9% (5)
41-60%	8.0% (2)	9.5% (2)	8.7% (4)
61-80%	0.0%	0.0%	0.0%
81-99%	8.0% (2)	4.8% (1)	6.5% (3)
100%	0.0% (0)	0.0% (0)	0.0%
answered question	25	21	46
		skipped question	38

30. Does your school offer CS/IT courses other than introductory and AP Computer Science?

	Sex:		
	Female	Male	Response Totals
Yes	77.1% (27)	55.0% (22)	65.3% (49)
No	22.9% (8)	45.0% (18)	34.7% (26)
answered question	35	40	75
		skipped question	9

31. If your school offers other CS/IT courses, which of the following are offered? (Check all that apply.)

	Sex:		
	Female	Male	Response Totals
Keyboarding	36.4%	40.0%	38.1%
	(12)	(12)	(24)
Web design	63.6%	50.0%	57.1%
	(21)	(15)	(36)
Computer graphics	33.3%	46.7%	39.7%
	(11)	(14)	(25)
Computing communications/media	21.2%	13.3%	17.5%
	(7)	(4)	(11)
Programming	51.5%	33.3%	42.9%
	(17)	(10)	(27)
Networking	39.4%	33.3%	36.5%
	(13)	(10)	(23)
Game development	18.2%	16.7%	17.5%
	(6)	(5)	(11)
Computer security	12.1%	3.3%	7.9%
	(4)	(1)	(5)
Other (please specify)	5 replies	6 replies	17.5%
	(15.2%)	(20.0%)	(11)
answered question	33	30	63
		skipped question	21

32. How many years have you been teaching CS/IT?

	Sex:		
	Female	Male	Response Totals
0 years	5.7%	19.5%	13.2%
	(2)	(8)	(10)
1-3 years	20.0%	26.8%	23.7%
	(7)	(11)	(18)
4-7 years	22.9%	12.2%	17.1%
	(8)	(5)	(13)
8-14 years	20.0%	19.5%	19.7%
	(7)	(8)	(15)
15+ years	31.4%	22.0%	26.3%
	(11)	(9)	(20)
answered question	35	41	76
		skipped question	8

33. In a typical year, what percentage of the courses you teach are CS/IT courses?

	Sex:		
	Female	Male	Response Totals
0%-25%	23.5%	48.8%	37.3%
	(8)	(20)	(28)
26%-50%	11.8%	19.5%	16.0%
	(4)	(8)	(12)
51%-75%	17.6%	9.8%	13.3%
	(6)	(4)	(10)
76%-100%	47.1%	22.0%	33.3%
	(16)	(9)	(25)
answered question	34	41	75
		skipped question	9

34. Which of the following courses have you taught in the past three years? (Check all that apply.)

	Sex:		
	Female	Male	Response Totals
Keyboarding	14.7% (5)	9.4%	12.1% (8)
Introductory CS	61.8% (21)	50.0% (16)	56.1% (37)
AP CS	47.1% (16)	37.5% (12)	42.4% (28)
Web design	38.2% (13)	37.5% (12)	37.9% (25)
Computer graphics	11.8% (4)	9.4%	10.6% (7)
Computing communications/media	14.7% (5)	6.3% (2)	10.6%
Programming	58.8% (20)	31.3% (10)	45.5% (30)
Networking	8.8% (3)	21.9% (7)	15.2% (10)
Game development	14.7% (5)	6.3% (2)	10.6%
Computer security	5.9% (2)	3.1% (1)	4.5%
Other (please specify)	13 replies (38.2%)	9 replies (28.1%)	33.3% (22)
answered question	34	32	66
		skipped question	18

35. Do you use all or part of the standard curriculum as outlined in the ACM/CSTA Model Curriculum for K-12 Computer Science?

	Sex:		
	Female	Male	Response Totals
Yes	23.5% (8)	13.2% (5)	18.1% (13)
No, but I know about the ACM/CSTA Model Curriculum	29.4% (10)	34.2% (13)	31.9% (23)
No, and I never heard of the ACM/CSTA Model Curriculum	47.1% (16)	52.6% (20)	50.0% (36)
answered question	34	38	72
		skipped question	12

36. Are the courses that you teach part of any of the following? (Check all that apply.)

	Sex:		
	Female	Male	Response Totals
Oracle Academy	4.5% (1)	0.0%	2.2% (1)
Cisco Academy	9.1% (2)	25.0% (6)	17.4% (8)
Other CTE IT courses	50.0% (11)	50.0% (12)	50.0% (23)
Locally developed CS/IT courses not part of CTE course offerings	54.5% (12)	45.8% (11)	50.0% (23)
answered question	22	24	46
		skipped question	38

37. How have the CS enrollments changes in your school over the past three (3) years?

	Sex:		
	Female	Male	Response Totals
Increased	39.4% (13)	25.6% (10)	31.9% (23)
Decreased	27.3% (9)	30.8% (12)	29.2% (21)
Stayed about the same	33.3% (11)	43.6% (17)	38.9% (28)
Comments:	7 replies	4 replies	11
answered question	33	39	72
		skipped question	12

38. In your judgement, do you think there are students who should be taking CS course(s) that your school offers, but who are not?

	Sex:		
	Female	Male	Response Totals
Yes	93.9% (31)	82.5% (33)	87.7% (64)
No	6.1% (2)	17.5% (7)	12.3% (9)
answered question	33	40	73
		skipped question	11

39. Why are these students not taking the CS courses your school offers? (Rate each reason.)

		Sex:		
		Female	Male	Response Totals
No room in timetable	Very common	62.5% (20)	52.9% (18)	
	Somewhat common	34.4% (11)	38.2% (13)	-
	Uncommon	3.1% (1)	8.8% (3)	
		32	34	66
Greater interest in other subjects	Very common	33.3% (10)	39.4% (13)	
	Somewhat common	66.7% (20)	42.4% (14)	
	Uncommon	0.0%	18.2% (6)	
		30	33	63
Elective courses are less important	Very common	59.4% (19)	44.1% (15)	
	Somewhat common	34.4% (11)	41.2% (14)	-
	Uncommon	6.3% (2)	14.7% (5)	
		32	34	66
Subject matter too difficult	Very common	30.3% (10)	17.6% (6)	
	Somewhat common	51.5% (17)	50.0% (17)	
		18.2%	32.4%	

	Uncommon	(6)	(11)	
		33	34	67
CS is perceived to be "geeky"	Very common	35.5% (11)	12.5% (4)	
	Somewhat common	45.2% (14)	53.1% (17)	
	Uncommon	19.4% (6)	34.4% (11)	
		31	32	63
Perceived as male-dominated	Very common	34.4% (11)	12.1% (4)	
	Somewhat common	46.9% (15)	45.5% (15)	
	Uncommon	18.8% (6)	42.4% (14)	
		32	33	65
Perception of limited job opportunities	Very common	3.1% (1)	0.0% (0)	
	Somewhat common	25.0% (8)	12.5% (4)	
	Uncommon	71.9% (23)	87.5% (28)	
		32	32	64
Lack of knowledge about careers in computing	Very common	18.2% (6)	39.4% (13)	
	Somewhat common	63.6% (21)	33.3% (11)	
	Uncommon	18.2% (6)	27.3% (9)	
		33	33	66
Unaware of CS courses being offered by school	Very common	22.6% (7)	39.4% (13)	

	Somewhat common	45.2% (14)	33.3% (11)	
	Uncommon	32.3% (10)	27.3% (9)	
		31	33	64
Don't understand importance of CS coursework	Very common	53.1% (17)	53.1% (17)	
	Somewhat common	40.6% (13)	34.4% (11)	
	Uncommon	6.3% (2)	12.5% (4)	
		32	32	64
Rather take other enrichment classes such as music	Very common	40.6% (13)	19.4% (6)	
	Somewhat common	40.6% (13)	54.8% (17)	
	Uncommon	18.8% (6)	25.8% (8)	
		32	31	63
Lack of knowledge about CTE programs of study	Very common	46.9% (15)	41.2% (14)	
	Somewhat common	34.4% (11)	44.1% (15)	
	Uncommon	18.8% (6)	14.7% (5)	
		32	34	66
CTE courses perceived as not rigorous enough for college-bound students	Very common	27.3% (9)	17.6% (6)	
	Somewhat common	33.3% (11)	32.4% (11)	
	Uncommon	39.4% (13)	50.0% (17)	

answered question	33	35	68
anonorea que en			

40. In your judgement, do you think that your school should offer more CS courses?

	Sex:		
	Female	Male	Response Totals
Yes	66.7% (22)	68.3% (28)	67.6% (50)
No	33.3% (11)	31.7% (13)	32.4% (24)
answered question	33	41	74
		skipped question	10

41. If yes, what CS courses should be added?

	Se	Sex:	
	Female	Male	Response Count
	19 replies	25 replies	44
answered question	19	25	44
		skipped question	40

42. What are some of the reasons why your school does not offer more computer science courses? (Check all that apply.)

	Sex:		
	Female	Male	Response Totals
Insufficient student interest	44.1%	47.5%	45.9%
	(15)	(19)	(34)
Budget restrictions	58.8%	47.5%	52.7%
	(20)	(19)	(39)
Lack of qualified teachers	44.1%	40.0%	41.9%
	(15)	(16)	(31)
CS is not a graduation requirement	70.6%	57.5%	63.5%
	(24)	(23)	(47)
CS is not a priority for my high school	35.3%	47.5%	41.9%
	(12)	(19)	(31)
CS is not a priority for the school system	61.8%	42.5%	51.4%
	(21)	(17)	(38)
Other (please specify)	3 replies (8.8%)	6 replies (15.0%)	12.2%
answered question	34	40	74
		skipped question	10

43. What do you perceive as the greatest challenges in teaching CS? (Please rate each challenge.)

		Sex:	Sex:	
		Female	Male	Respons Totals
Lack of student interest/enrollment	Great Challenge	40.0% (14)	35.7% (15)	
	Moderate challenge	51.4% (18)	45.2% (19)	
	Minor/no challenge	8.6%	19.0% (8)	
		35	42	7
Rapidly changing technolgy	Great Challenge	42.9% (15)	24.4% (10)	
	Moderate challenge	37.1% (13)	61.0% (25)	_
	Minor/no challenge	20.0% (7)	14.6% (6)	
		35	41	7
Difficult subject matter	Great Challenge	31.4% (11)	25.0% (10)	
	Moderate challenge	42.9% (15)	52.5% (21)	
	Minor/no challenge	25.7% (9)	22.5% (9)	
		35	40	7
Lack of support/interest by school staff	Great Challenge	45.7% (16)	33.3% (14)	
	Moderate challenge	34.3% (12)	42.9% (18)	_
	Minor/no	20.0%	23.8%	_

	challenge	(7)	(10)	
		35	42	-
Lack of student subject knowledge	Great Challenge	38.2% (13)	19.5% (8)	
	Moderate challenge	44.1% (15)	63.4% (26)	'
	Minor/no challenge	17.6% (6)	17.1% (7)	'
		34	41	
Lack of curriculum resources	Great Challenge	39.4% (13)	31.7% (13)	
	Moderate challenge	39.4% (13)	29.3% (12)	
	Minor/no challenge	21.2% (7)	39.0% (16)	
		33	41	
Lack of hardware/software resources	Great Challenge	42.4% (14)	35.7% (15)	
	Moderate challenge	36.4% (12)	19.0% (8)	
	Minor/no challenge	21.2% (7)	45.2% (19)	'
		33	42	
Lack of teacher subject knowlege	Great Challenge	23.5% (8)	9.5% (4)	
	Moderate challenge	32.4% (11)	45.2% (19)	1
	Minor/no challenge	44.1% (15)	45.2% (19)	
		34	42	
а	nswered question	36	43	

44. Challenges continued. (Please rank each of the following.)

		Sex:		
		Female	Male	Response Totals
Lack of student math preparation	Great challenge	28.6% (10)	27.5% (11)	
	Moderate challenge	62.9% (22)	57.5% (23)	
	Minor/no challenge	8.6% (3)	15.0% (6)	'
		35	40	75
Lack of support/interest by school leadership	Great challenge	37.1% (13)	32.5% (13)	
	Moderate challenge	34.3% (12)	42.5% (17)	
	Minor/no challenge	28.6% (10)	25.0% (10)	
		35	40	75
Lack of computer lab space	Great challenge	29.4% (10)	19.5% (8)	
	Moderate challenge	26.5% (9)	29.3% (12)	
	Minor/no challenge	44.1% (15)	51.2% (21)	
		34	41	75
Lack of computer lab/IT support personnel	Great challenge	21.2% (7)	14.3% (6)	
	Moderate challenge	30.3% (10)	38.1% (16)	

	Minor/no challenge	48.5% (16)	47.6% (20)	
		33	42	75
Lack of guidance staff knowledge about importance of CS	Great challenge	48.6% (17)	41.5% (17)	
	Moderate challenge	40.0% (14)	46.3% (19)	
	Minor/no challenge	11.4% (4)	12.2% (5)	
		35	41	76
Lack of parental encouragement for students to take CS	Great challenge	44.4% (16)	33.3% (14)	
	Moderate challenge	47.2% (17)	52.4% (22)	
	Minor/no challenge	8.3% (3)	14.3% (6)	-
		36	42	78
Lack of parental knowlege about the importance of CS	Great challenge	42.9% (15)	47.6% (20)	
	Moderate challenge	45.7% (16)	38.1% (16)	
	Minor/no challenge	11.4% (4)	14.3% (6)	
		35	42	77
Lack of a professional community of other CS instructors	Great challenge	28.6% (10)	19.5% (8)	
	Moderate challenge	42.9% (15)	51.2% (21)	
	Minor/no challenge	28.6% (10)	29.3% (12)	
		35	41	76
Lack of professional development	Great	24.2%	9.8%	

opportunities	challenge	(8)	(4)	
	Moderate challenge	45.5% (15)	51.2% (21)	
	Minor/no challenge	30.3% (10)	39.0% (16)	
		33	41	74
Understanding state curriculum standards	Great challenge	17.6% (6)	12.2% (5)	
	Moderate challenge	41.2% (14)	43.9% (18)	
	Minor/no challenge	41.2% (14)	43.9% (18)	
		34	41	75
Creating a curriculum that satisfies district and state standards	Great challenge	20.6% (7)	19.5% (8)	
	Moderate challenge	47.1% (16)	41.5% (17)	
	Minor/no challenge	32.4% (11)	39.0% (16)	
		34	41	75
Being asked to teach multiple CS related courses in the same classroom at the same time	Great challenge	41.2% (14)	31.7% (13)	
came time	Moderate challenge	44.1% (15)	31.7% (13)	
	Minor/no challenge	14.7% (5)	36.6% (15)	
		34	41	75
Teacher lack of knowledge of Maryland job market	Great challenge	8.8% (3)	7.3% (3)	
	Moderate challenge	35.3% (12)	36.6% (15)	
	Minor/no	55.9%	56.1%	

	challenge	(19)	(23)	
		34	41	75
Teacher lack of knowledge of CS career paths	Great challenge	2.9% (1)	9.8% (4)	
	Moderate challenge	29.4% (10)	31.7% (13)	
	Minor/no challenge	67.6% (23)	58.5% (24)	
		34	41	75
Inability to attact women and minorities to CS classes	Great challenge	35.3% (12)	19.5% (8)	
	Moderate challenge	52.9% (18)	43.9% (18)	
	Minor/no challenge	11.8% (4)	36.6% (15)	
		34	41	75
Lack of internships for students	Great challenge	27.3% (9)	14.3% (6)	
	Moderate challenge	45.5% (15)	50.0% (21)	
	Minor/no challenge	27.3% (9)	35.7% (15)	
		33	42	75
answere	ed question	36	42	78
			skipped question	6

45. What do you perceive as the greatest professional development needs?

		Sex:		
		Female	Male	Response Totals
Time for training	Great need	66.7% (24)	59.0% (23)	
	Moderate need	25.0% (9)	28.2% (11)	
	Minor/no need	8.3% (3)	12.8% (5)	
		36	39	75
Sufficient training opportunities	Great need	67.6% (23)	42.5% (17)	
	Moderate need	20.6% (7)	42.5% (17)	
	Minor/no need	11.8% (4)	15.0% (6)	
		34	40	74
Training cost (and lack of reimbursement)	Great need	60.0% (21)	60.0% (24)	
	Moderate need	28.6% (10)	22.5% (9)	
	Minor/no need	11.4% (4)	17.5% (7)	-
		35	40	75
Training facilities and resources	Great need	45.7% (16)	42.5% (17)	
	Moderate need	31.4% (11)	37.5% (15)	
	Minor/no need	22.9% (8)	20.0% (8)	

		35	40	75
Sufficient training opportunities nearby	Great need	54.3% (19)	35.9% (14)	
	Moderate need	37.1% (13)	41.0% (16)	
	Minor/no need	8.6% (3)	23.1% (9)	
		35	39	74
Readily available information about upcoming training opportunities	Great need	34.3% (12)	28.2% (11)	
	Moderate need	42.9% (15)	48.7% (19)	
	Minor/no need	22.9% (8)	23.1% (9)	
		35	39	74
Timely information about training opportunities	Great need	36.1% (13)	33.3% (13)	
	Moderate need	41.7% (15)	38.5% (15)	
	Minor/no need	22.2% (8)	28.2% (11)	
		36	39	75
More training at convenient times during school year	Great need	44.4% (16)	38.5% (15)	
	Moderate need	50.0% (18)	51.3% (20)	
	Minor/no need	5.6% (2)	10.3% (4)	
		36	39	75
More training offered during the summer	Great need	45.7% (16)	45.0% (18)	

	Moderate need	34.3% (12)	35.0% (14)	
	Minor/no need	20.0% (7)	20.0% (8)	
		35	40	75
answered	l question	36	40	76
			skipped question	8

46. What do you believe to be the most effective methods for delivering professional development to CS teachers? (Please rank each.)

		Sex:		
		Female	Male	Response Totals
Workshops/seminars	Most effective	72.2% (26)	61.5% (24)	
	Somewhat effective	25.0% (9)	30.8% (12)	
	Least effective	2.8% (1)	7.7% (3)	
		36	39	75
Online resources	Most effective	48.6% (17)	36.8% (14)	
	Somewhat effective	42.9% (15)	52.6% (20)	'
	Least effective	8.6% (3)	10.5% (4)	
		35	38	73
Networking with others	Most effective	55.9% (19)	50.0% (19)	
	Somewhat effective	32.4% (11)	44.7% (17)	

	Least effective	11.8% (4)	5.3% (2)	
		34	38	72
Computer-based tutorials	Most effective	52.9% (18)	32.4% (12)	
	Somewhat effective	32.4% (11)	56.8% (21)	
	Least effective	14.7% (5)	10.8% (4)	
		34	37	71
Professional conferences	Most effective	48.6% (17)	38.5% (15)	
	Somewhat effective	45.7% (16)	46.2% (18)	
	Least effective	5.7% (2)	15.4% (6)	
		35	39	74
College courses	Most effective	51.4% (18)	54.1% (20)	
	Somewhat effective	40.0% (14)	35.1% (13)	
	Least effective	8.6% (3)	10.8% (4)	
		35	37	72
Other effective m	ethods (please specify)	5 replies	2 replies	7
	answered question	37	39	76
			skipped question	8

47. Please rank your preference/the convenience of each of the following times for your participation in professional development activities?

		Sex:		
		Female	Male	Response Totals
After school-4:30-6:00 pm	Most prefer/most convenient	35.3% (12)	31.6% (12)	
	Prefer slightly/Somewhat convenient	26.5% (9)	28.9% (11)	
	Definitely not/Not convenient	38.2% (13)	39.5% (15)	
		34	38	72
Saturday morning during school year	Most prefer/most convenient	9.1% (3)	20.0% (8)	
	Prefer slightly/Somewhat convenient	39.4% (13)	15.0% (6)	
	Definitely not/Not convenient	51.5% (17)	65.0% (26)	
		33	40	73
Saturday afternoon during school year	Most prefer/most convenient	8.8% (3)	13.2% (5)	
	Prefer slightly/Somewhat convenient	29.4% (10)	5.3% (2)	
	Definitely not/Not convenient	61.8% (21)	81.6% (31)	
		34	38	72
Summer-weekdays in June immediately after school ends	Most prefer/most convenient	51.4% (19)	63.4% (26)	

	Prefer slightly/Somewhat convenient	29.7% (11)	22.0% (9)	
	Definitely not/Not convenient	18.9% (7)	14.6% (6)	
		37	41	78
Summer-weekdays in July	Most prefer/most convenient	41.2% (14)	35.0% (14)	
	Prefer slightly/Somewhat convenient	29.4% (10)	40.0% (16)	
	Definitely not/Not convenient	29.4% (10)	25.0% (10)	
		34	40	74
Summer-weekdays in early August	Most prefer/most convenient	34.3% (12)	32.5% (13)	
	Prefer slightly/Somewhat convenient	48.6% (17)	32.5% (13)	
	Definitely not/Not convenient	17.1% (6)	35.0% (14)	
		35	40	75
Summer-Saturdays	Most prefer/most convenient	6.1% (2)	12.8% (5)	
	Prefer slightly/Somewhat convenient	15.2% (5)	15.4% (6)	
	Definitely not/Not convenient	78.8% (26)	71.8% (28)	
		33	39	72
	answered question	37	41	78
			skipped question	6

48. Which of the following certifications do you currently hold? (Check all that apply)

	Sex:		
	Female	Male	Response Totals
Professional Eligibility Certificate (PEC)	0.0%	0.0%	0.0%
Standard Professional Certificate I (SPC I)	17.9% (7)	24.4% (10)	21.3% (17)
Standard Professional Certificate II (SPCII)	2.6% (1)	2.4%	2.5% (2)
Advanced Professional Certificate (APC)	76.9% (30)	73.2% (30)	75.0% (60)
Resident Teacher Certificate (RTC)	2.6% (1)	0.0%	1.3% (1)
Conditional Certificate (COND)	0.0%	0.0%	0.0%
answered question	39	41	80
		skipped question	4

49. In which of the following areas are you certified to teach in Maryland?

	Sex:		
	Female	Male	Response Totals
Agriculture/Agribusiness and Renewable Natural Resources	0.0% (0)	2.3% (1)	1.2%
Biology	7.7% (3)	2.3% (1)	4.8%
Business Education	33.3% (13)	27.3% (12)	30.1% (25)
Chemistry	5.1% (2)	4.5% (2)	4.8% (4)
Computer Science	56.4% (22)	27.3% (12)	41.0% (34)
Data Processing	2.6%	0.0%	1.2%
Earth/Space Science	0.0% (0)	0.0%	0.0%
English	7.7% (3)	2.3% (1)	4.8% (4)
Family and Consumer Sciences	12.8% (5)	0.0%	6.0%
Family and Consumer Sciences/Career Technology Education	7.7% (3)	0.0%	3.6%
Foreign Language: Classical	2.6% (1)	0.0%	1.2%
Foreign Language: Modern	2.6% (1)	0.0% (0)	1.2%
Geography	2.6%	0.0% (0)	1.2%
Health Occupations Education	0.0%	0.0%	0.0%

		skipped question	1
answered question	39	44	83
Other (please specify)	3 replies (7.7%)	8 replies (18.2%)	13.3% (11)
Work-Based Learning Coordinator (endorsement only)	0.0%	0.0%	0.0%
Trades and Industry	0.0%	9.1% (4)	4.8% (4)
Theater	0.0% (0)	0.0%	0.0%
Technology Education	38.5% (15)	47.7% (21)	43.4% (36)
Speech Communication	0.0%	0.0%	0.0%
Social Studies	5.1% (2)	6.8% (3)	6.0% (5)
Physics	5.1% (2)	0.0%	2.4% (2)
Physical Science	0.0% (0)	2.3% (1)	1.2% (1)
Mathematics	28.2% (11)	27.3% (12)	27.7% (23)
Marketing Education - Teacher-Coordinator	5.1% (2)	0.0%	2.4% (2)
History	2.6% (1)	2.3% (1)	2.4% (2)

50. How many years have you been teaching?

	Sex:		
	Female	Male	Response Totals
1-3 years	2.6% (1)	4.4% (2)	3.6% (3)
4-7 years	20.5% (8)	22.2% (10)	21.4% (18)
8-14 years	25.6% (10)	33.3% (15)	29.8% (25)
15+ years	51.3% (20)	40.0% (18)	45.2% (38)
answered question	39	45	84
		skipped question	0

51. How do you identify yourself? (Check all that apply.)

	Sex:		
	Female	Male	Response Totals
African American/Black	5.1% (2)	20.5% (9)	13.3% (11)
Asian American/Pacific Islander	5.1% (2)	2.3% (1)	3.6% (3)
Caucasian/White	84.6% (33)	77.3% (34)	80.7% (67)
Hispanic	0.0%	0.0% (0)	0.0%
Native American/Indigenous	0.0%	0.0%	0.0%
Other (please specify)	2 replies (5.1%)	1 reply (2.3%)	3.6%
answered question	39	44	83
		skipped question	1

52. Sex:

	Sex:		
	Female	Male	Response Totals
Female	100.0% (39)	0.0%	46.4% (39)
Male	0.0%	100.0% (45)	53.6% (45)
answered question	39	45	84
		skipped question	0

53. What is your age?

	Sex:		
	Female	Male	Response Totals
22-30	5.3%	6.7%	6.0%
	(2)	(3)	(5)
31-40	18.4%	22.2%	20.5%
	(7)	(10)	(17)
41-50	31.6%	31.1%	31.3%
	(12)	(14)	(26)
51-60	36.8%	31.1%	33.7%
	(14)	(14)	(28)
61+	7.9%	8.9%	8.4%
	(3)	(4)	(7)
answered question	38	45	83
		skipped question	1