10-2014

ECS Evaluation Survey Instruments

Ronald I. Greenberg
Loyola University Chicago, Rgreen@luc.edu

Steven McGee
The Learning Partnership, mcgee@lponline.net

Taste of Computing – Student Pre Survey

1. Gender
   ____ Female
   ____ Male

2. Grade Level
   ____ 9th
   ____ 10th
   ____ 11th
   ____ 12th

3. Race
   ____ American Indian or Alaskan Native
   ____ Asian
   ____ Black or African American
   ____ Hispanic/Latin American
   ____ Native Hawaiian or Other Pacific Islander
   ____ White

4. What grades do you usually get in math?
   ____ Mostly A's
   ____ Mostly B's
   ____ Mostly C's
   ____ Mostly D's
   ____ Mostly F's

5. How interested would you be in majoring in each of the areas below if you went to college? Select one response for each major.

	Not at all interested	**A little interested**	**Interested**	**Very interested**
a. Science				
b. Engineering				
c. Mathematics				
d. Computer Science				

6. Select an option in each row for the following statements

	Strongly disagree	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
a. There is a diversity of people working in computing-related fields.					
b. I am quite familiar with the kinds of computing-related work people do.					
c. There are a large number of computing-related career opportunities.					

7. For each area below indicate how much of an expert you are:

	Not at all	Little Bit	Somewhat	A Lot	Expert
a. Using the Internet					
b. Email					
c. HTML/Web design					
d. Gaming					
e. Microsoft Word					
f. Microsoft Excel					
g. Microsoft Powerpoint					
h. Knowing how computers accomplish their tasks					
i. Problem-solving techniques					
j. Java, C, or C++ Programming					
k. Scratch, Alice or AppInventor Programming					
l. Robotics / Programming and building robots					
m. Computer modeling of real- life situations and analysis of data					
n. Databases/Oracle					
o. Graphics					

Taste of Computing – Student Post Survey

1. Gender
   ____ Female
   ____ Male

2. Grade Level
   ____ 9th
   ____ 10th
   ____ 11th
   ____ 12th

3. Race
   ____ American Indian or Alaskan Native
   ____ Asian
   ____ Black or African American
   ____ Hispanic/Latin American
   ____ Native Hawaiian or Other Pacific Islander
   ____ White

4. What grades do you usually get in math?
   ____ Mostly A's
   ____ Mostly B's
   ____ Mostly C's
   ____ Mostly D's
   ____ Mostly F's

5. How has your interest in taking another computer science course changed as a result of this computer science course?
   ____ My interest has decreased a lot
   ____ My interest has decreased a little
   ____ My interest is about the same
   ____ My interest has increased a little
   ____ My interest has increased a lot

6. As a result of this class, how has your interest in majoring in each of the areas below changed? Select one response for each major.

	Interest has decreased a lot	**Interest has decreased a little**	**Interest is about the same**	**Interest has increased a little**	**Interest has increased a lot**
a. Science					
b. Engineering					
c. Mathematics					
d. Computer Science					

7. Select an option in each row for the following statements about your computer science class.

	Strongly disagree	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
a. I gained a greater recognition of the diversity of people working in computing-related fields.					
b. I learned more about the kinds of computing-related work people do.					
c. I learned more about availability of computing-related career opportunities.					
d. Knowing more about Computer Science will make me better at problem-solving and critical thinking.					
e. This computer science class is helping me towards my goals.					
f. This computer science class gives me skills that help me in other classes.					
g. The challenge of computer science does NOT appeal to me.					
h. I will need computer science skills for my future work/career.					
i. Taking computer science classes is a waste of time.					
j. I will use computer science in many ways throughout my life.					
k. Once I start working on a computer science problem or assignment, I find it hard to stop.					
l. Computer science is enjoyable and stimulating to me.					
m. When a question is left unanswered in this computer science class, I continue to think about it afterward.					
n. I would rather have someone give me the answer to a difficult computer science problem than have to work it out for myself.					

8. What did you like the most about this computer science class?

9. What changes would you suggest for the next time this computer science course is taught?

Taste of Computing – Teacher Background Survey

1. Have you been awarded degrees or certifications in the following fields? (Select all that apply)

	Bachelor's	Master's	Doctorate	Technical Certification	Teaching Certification
a. Business					
b. Computer Science					
c. Engineering					
d. Mathematics					
e. Mathematics education					
f. Science (any discipline)					
g. Science Education					
h. Other, please specify					

2. How many computer science college courses have you completed?
   ____ None
   ____ 1-2
   ____ 3-5
   ____ More than 5

3. When did you last participate in professional development (sometimes called in-service education) focused on computer science or computer science teaching? (Include attendance at professional meetings, workshops, and conferences, as well as professional learning communities/lesson studies/teacher study groups. Do not include this professional development program. Do not include formal courses for which you received college credit or time spent providing professional development for other teachers.)
   ____ In the last 3 years
   ____ 4 – 6 years ago
   ____ 7 – 10 years ago
   ____ More than 10 years ago
   ____ Never

4. What is the total amount of time you have spent on professional development in computer science or computer science teaching in the last 3 years? (Include attendance at professional meetings, workshops, and conferences, as well as professional learning communities/lesson studies/teacher study groups. Do not include this professional development program. Do not include formal courses for which you received college credit or time spent providing professional development for other teachers.)
   ____ Less than 6 hours
   ____ 6-15 hours
   ____ 16-35 hours
   ____ More than 35 hours

5. How well prepared do you feel to do each of the following in your computer science instruction? [Select one in each row.]

	Not adequately prepared	Somewhat prepared	Fairly well prepared	Very well prepared
a. Plan differentiated instruction for your students				
b. Teach computer science to students who have learning disabilities				
c. Teach computer science to students who have physical disabilities				
d. Teach computer science to English-language learners				
e. Provide enrichment opportunities for gifted students				
f. Encourage students' interest in computer science				
g. Teach computer science to females				
h. Teach computer science to students of racial or ethnic minorities				
i. Teach computer science to students from low socioeconomic backgrounds in computer science				
j. Teach students the relevance of C.S. in their daily lives.				
k. Teach computer science using a guided inquiry approach				
l. Ensure that every student in the class participates in the learning activities				
m. Foster group interactions during the learning activities				
n. Plan and facilitate learning activities focused on introductory computer science concepts				

6. What do you perceive as the greatest professional development needs? Please rank each need below:

	Minor/ no need	Moderate need	Great need
a. Training facilities and resources			
b. Time for training			
c. Reimbursement for training costs			
d. Stipends for attending training			
e. Sufficient training opportunities			
f. College credit for attending training			
g. CPDUs for attending training			

7. What do you believe to be the most effective methods for delivering professional development to CS teachers? Please rank each method below:

	Least effective	Somewhat effective	Most effective
a. College courses			
b. Computer-based tutorials			
c. Networking with others			
d. Online resources			
e. Professional conferences			
f. Workshops / seminars			

8. How many years have you taught in grades K-12?

9. How many years have you taught computer science at the high school level?

10. Outside of your years teaching computer science, how many years of experience do you have working in the computing field?

11. What professional societies related to computer science and computer science education do you belong to?
    ____ Computer Science Teachers Association (CSTA)
    ____ Association for Computing Machinery (ACM)
    ____ Other, please specify

12. Please list any district, state, or national computer science education initiatives you have participated in during the last 3 years.
    _____
    _____
    _____

13. Do you use all or part of the standard curriculum as outlined in the curricular standards and models available through the CSTA web site?
    ____ Yes
    ____ No
    ____ Don't know what they are

14. Which best describes the availability of computers in your classroom?
    ____ One per student
    ____ One for every two students
    ____ One for every 3-5 students
    ____ One for every 6-10 students
    ____ Fewer than one for every 10 students
    ____ None

15. In your opinion, how great a problem is each of the following for your computer science instruction? [Select one on each row.]

	Not a significant problem	Somewhat of a problem	Serious problem
a. Lack of access to computers			
b. Old age of computers			
c. Lack of access to the Internet			
d. Unreliability of the Internet connection			
e. Slow speed of the Internet connection			
f. Lack of availability of appropriate computer software			
g. Lack of availability of technology support			
h. Other, please specify			

16. What do you perceive as the greatest challenges in teaching CS? Please rank each challenge below:

	Minor/no challenge	Moderate challenge	Great challenge
a. Lack of student interest/enrollment			
b. Rapidly changing technology			
c. Difficult subject matter			
d. Lack of support / interest by school staff			
e. Lack of student subject knowledge			
f. Lack of curriculum resources			
g. Lack of hardware / software resources			
h. Lack of teacher subject knowledge			

17. What has been the impact of the No Child Left Behind (NCLB) legislation on your CS program?
    - ____ Negative impact
    - ____ No impact
    - ____ Positive impact

18. Does your school offer any introductory (or pre-AP) Computer Science (CS) courses?
    - ____ Yes
    - ____ No

19. What content is covered in introductory CS? Check all that apply.
    - ____ Human-Computer Interaction
    - ____ Robotics
    - ____ Data analysis
    - ____ Computer Security
    - ____ Databases
    - ____ Ethics & social issues
    - ____ Game Programming
    - ____ Graphics
    - ____ Hardware
    - ____ Logic
    - ____ Networks
    - ____ Problem solving
    - ____ Productivity software
    - ____ Programming
    - ____ Web Development
    - ____ Other, please specify

20. What programming languages / software tools are used in introductory CS? Check all that apply.
    - ____ Java
    - ____ Alice
    - ____ Visual Basic
    - ____ Scratch
    - ____ java script
    - ____ C++
    - ____ Python
    - ____ Greenfoot
    - ____ C#
    - ____ AppInventor
    - ____ Processing
    - ____ Other, please specify

21. Does your school offer AP Computer Science?
    - ____ Yes
    - ____ No

22. How many students take AP CS?

23. What percentage of students enrolled in AP CS are female? (Skip if your school is single-sex.)

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

25. Does your school offer computing courses other than introductory and AP Computer Science?
    - ____ Yes
    - ____ No

26. What kinds of courses?
    - ____ Web design
    - ____ Computer graphics
    - ____ Computing communications/media
    - ____ Programming
    - ____ Networking
    - ____ Game development
    - ____ Other, please specify

27. Do the CS courses offered in your school have prerequisites?
    - ____ Yes
    - ____ No

28. At the school where you will be teaching, how many years of each of the following subjects are grade 9-12 students required to take in order to graduate from high school?

	None	**1 year**	**2 years**	**3 years**	**4 years**	**Don't know**
a. Mathematics						
b. Science						
c. Business						
d. Technology						

29. At the school where you will be teaching, are students able to use a course in computer science as part of satisfying the graduation requirement in any of those areas?
    ____ Mathematics
    ____ Science
    ____ Business
    ____ Technology
    ____ No
    ____ Don't know

30. Under what department is CS offered in your school:
    ____ Business
    ____ Technology
    ____ Computing
    ____ Math
    ____ Science

31. How have CS enrollments changed in your school over the past three (3) years?
    ____ Increased
    ____ Decreased
    ____ No real change

32. In your judgment, do you think there are students who should be taking or would like to take the CS course(s) your schools offers but who are not?
    ____ Yes
    ____ No

33. Why? Please rank each reason below:

	Uncommon	**Somewhat common**	**Very common**
a. No room in timetable			
b. Greater interest in other subjects			
c. Elective courses less important			
d. Subject matter too difficult			
e. CS is perceived to be 'geeky'			
f. Perceived as male-dominated			
g. Perception of limited job opportunities			

34. Are you of Hispanic or Latino origin?
    ____ Yes
    ____ No

35. What is your race? [Select all that apply.]
    ____ American Indian or Alaska Native
    ____ Asian
    ____ Black or African American
    ____ Native Hawaiian or Other Pacific Islander
    ____ White

36. What is your disability status? [Select all that apply.]
    - ____ Hearing Impairment
    - ____ Visual Impairment
    - ____ Mobility / Orthopedic Impairment
    - ____ Other
    - ____ None

37. What is your gender?
    - ____ Female
    - ____ Male

38. What is your age?

39. Will you be teaching computer science at the high school level next school year?
    - ____ Yes
    - ____ No

40. What percentage of the courses you anticipate teaching will be CS courses?

41. What computer science courses do you anticipate teaching next school year? (Check all that apply.)
    - ____ Exploring Computer Science (ECS)
    - ____ CS Principles
    - ____ APCSA
    - ____ Web Design
    - ____ Other, please specify

Taste of Computing – Workshop Feedback

1. Overall as a professional development experience how satisfied are you with this workshop? Check one, then briefly explain why you feel as you do.
   ____ Very satisfied
   ____ Satisfied
   ____ Neutral
   ____ Dissatisfied
   ____ Very dissatisfied

2. Please explain the level of satisfaction you selected in the previous question.

3. What workshop activities or experiences do you feel were especially helpful for learning what was expected?

4. What workshop activities or experiences do you feel were not helpful for learning what was expected and that instructors should change or improve?

5. List the two most important outcomes of your participation in this professional development.
   First Important Outcome

   Second Important Outcome

6. Explain why those are the most important outcomes of the professional development for you.

7. At this point how confident are you that you will be able to integrate what you have learned in this workshop into your classroom?
   - ____ Very confident
   - ____ Confident
   - ____ Somewhat confident
   - ____ Not confident at all

8. Please explain the level of confidence you selected in the previous question. If you checked "not confident" or "somewhat" what needs to be done to increase your confidence level?

9. How will you use what you learned in today's PD to inform your teaching of ECS? Provide some examples.

10. Consider the various inquiry strategies that you saw implemented today. How will you try to implement those inquiry strategies in your classroom?

11. In what ways did this PD deepen your understanding of computer science content/concepts? Provide some examples.

12. How did the PD expand your understanding of equity? How will you apply this to your classroom?

13. Is there anything else you want to tell us about this workshop?

Taste of Computing – Teacher Implementation Survey

Unit 1: Human Computer Interaction

1. Did you implement Unit 1: Human Computer Interaction?
   ____ Yes
   ____ No

2. Unit 1: Human Computer Interaction (Check off all of the lessons you implemented)
   ____ Explore the concepts of computer and computing
   ____ "Demystify" and learn the function of the parts of a personal computer. Learn the terminology of hardware components necessary for the purchase of a home computer.
   ____ Explore the world wide web and search engines. Experiment with a variety of search techniques, internet resources, and Web 2.0, applications. Evaluate websites.
   ____ Examine the implications of data on society and how computers are used for communications.
   ____ Tell a story with data.
   ____ Explore how computers are used as a tool for visualizing data, modeling and design, and art in the context of culturally situated design tools.
   ____ Introduce the concept of a computer program as a set of instructions.
   ____ Explore the idea of intelligence—especially as it relates to computers. Explore what it means for a machine to "learn". Discuss whether computers are intelligent or whether they only behave intelligently.

3. How successful do you feel you were in implementing this unit?
   ____ Not at all successful
   ____ A little successful
   ____ Successful
   ____ Very successful

4. For Unit 1: Human Computer Interaction, did you modify any aspects of the curriculum?
   ____ Yes
   ____ No

5. Please indicate how you implemented Unit 1 of the Exploring Computer Science (ECS) curriculum. Please use the table below as a reference for the curriculum schedule

	Yes	**No**
a. Did you switch the order of any of the topics for this unit?		
b. Did you follow the curriculum as it is written for this unit?		
c. Did you adapt any sections of this unit?		
d. Did you eliminate any parts of this unit?		
e. Did you replace any topics of this unit?		
f. Did you follow the pace recommended by the ECS manual for this unit?		

6. For Unit 1: Human Computer Interaction, only if you responded yes to modifying the unit, please comment on what you did differently for each topic. Describe how it is different from the ECS curriculum and why you made the change. If you did not make a change to a particular topic, please leave it blank and move onto the next topic.
   a) Instructional Days 1-2: Explore the concepts of computer and computing.

   b) Instructional Days 3-4: "Demystify" and learn the function of the parts of a personal computer. Learn the terminology of hardware components necessary for the purchase of a home computer.

   c) Instructional Days 5-7: Explore the world wide web and search engines. Experiment with a variety of search techniques, internet resources, and Web 2.0, applications. Evaluate websites.

   d) Instructional Days 8-9: Examine the implications of data on society and how computers are used for communications.

   e) Instructional Days 10: Tell a story with data.

   f) Instructional Days 11-14: Explore how computers are used as a tool for visualizing data, modeling and design, and art in the context of culturally situated design tools.

   g) Instructional Days 15-16: Introduce the concept of a computer program as a set of instructions.

   h) Instructional Days 17-19: Explore the idea of intelligence—especially as it relates to computers. Explore what it means for a machine to "learn". Discuss whether computers are intelligent or whether they only behave intelligently.

7. Please add general comments you'd like to share about Unit 1.

Unit 2: Problem Solving

1. Did you implement Unit 2: Problem Solving?
   ____ Yes
   ____ No

2. Unit 2: Problem Solving (Check off all of the lessons you implemented)
   ____ Introduce data collection and problem solving.
   ____ Introduce the four steps of the problem solving process.
   ____ Apply the problem solving process. Use different strategies to plan and carry out the plan to solve several problems.
   ____ Reinforce the four steps of the problems solving process.
   ____ Count in the binary number system. Convert between binary and decimal numbers in the context of topics that are important to computer science.
   ____ Introduce the linear and binary search algorithms.
   ____ Explore sorted and unsorted lists and various sorting algorithms.
   ____ Introduce minimal spanning trees and how graphs can be used to help solve problems.
   ____ Final projects and presentations

3. How successful do you feel you were in implementing this unit?
   ____ Not at all successful
   ____ A little successful
   ____ Successful
   ____ Very successful

4. For Unit 2: Problem Solving, did you modify any aspects of the curriculum?
   ____ Yes
   ____ No

5. Please indicate how you implemented Unit 2 of the Exploring Computer Science (ECS) curriculum. Please use the table below as a reference for the curriculum schedule

	Yes	**No**
a. Did you switch the order of any of the topics for this unit?		
b. Did you follow the curriculum as it is written for this unit?		
c. Did you adapt any sections of this unit?		
d. Did you eliminate any parts of this unit?		
e. Did you replace any topics of this unit?		
f. Did you follow the pace recommended by the ECS manual for this unit?		

6. For Unit 2: Problem Solving, only if you responded yes to modifying the unit, please comment on what you did differently for each topic. Describe how it is different from the ECS curriculum and why you made the change. If you did not make a change to a particular topic, please leave it blank and move onto the next topic.

   a) Instructional Days 1-2: Introduce data collection and problem solving. Instructional Days 3: Introduce the four steps of the problem solving process.

   b) Instructional Days 4-6: Apply the problem solving process. Use different strategies to plan and carry out the plan to solve several problems.

   c) Instructional Days 7-9: Reinforce the four steps of the problems solving process.

   d) Instructional Days 10-12: Count in the binary number system. Convert between binary and decimal numbers in the context of topics that are important to computer science.

   e) Instructional Days 13-14: Introduce the linear and binary search algorithms.

   f) Instructional Days 15-16: Explore sorted and unsorted lists and various sorting algorithms.

   g) Instructional Days 17: Introduce minimal spanning trees and how graphs can be used to help solve problems.

   h) Instructional Days 18-21: Final projects and presentations.

7. Please add general comments you'd like to share about Unit 2.

Unit 3: Web Design

1. Did you implement Unit 3: Web Design?
   ____ Yes
   ____ No

2. Unit 3: Web Design (Check off all of the lessons you implemented)
   ____ Explore issues of social responsibility in web use as well as the relative merits of the influence of the web on society, personal lives, and education.
   ____ Introduce the use of basic html.
   ____ Introduce basic formatting in html.
   ____ Explore image editing for the web using Photoshop or an image editor of choice.
   ____ Introduce basic css.
   ____ Explore the concept of separating style from structure by keeping separate html and css files.
   ____ Add hyperlinks to other websites.
   ____ Introduce a variety of page layout styles.
   ____ Practice the use of various design elements.
   ____ Introduce several different enhancements for website design, including web user interface elements combining java script, html, css, and Photoshop, accordion menus, lightbox and sliding images.
   ____ Final project and gallery walk

3. How successful do you feel you were in implementing this unit?
   ____ Not at all successful
   ____ A little successful
   ____ Successful
   ____ Very successful

4. For Unit 3: Web Design, did you modify any aspects of the curriculum?
   ____ Yes
   ____ No

5. Please indicate how you implemented Unit 3 of the Exploring Computer Science (ECS) curriculum. Please use the table below as a reference for the curriculum schedule

	Yes	**No**
a. Did you switch the order of any of the topics for this unit?		
b. Did you follow the curriculum as it is written for this unit?		
c. Did you adapt any sections of this unit?		
d. Did you eliminate any parts of this unit?		
e. Did you replace any topics of this unit?		
f. Did you follow the pace recommended by the ECS manual for this unit?		

6. For Unit 3: Web Design, only if you responded yes to modifying the unit, please comment on what you did differently for each topic. Describe how it is different from the ECS curriculum and why you made the change. If you did not make a change to a particular topic, please leave it blank and move onto the next topic.

   a) Instructional Days 1-2: Explore issues of social responsibility in web use as well as the relative merits of the influence of the web on society, personal lives, and education.

   b) Instructional Days 3-4: Introduce the use of basic html.

   c) Instructional Days 5: Introduce basic formatting in html.

   d) Instructional Days 6-7: Explore image editing for the web using Photoshop or an image editor of choice.

   e) Instructional Days 8-10: Introduce basic css.

   f) Instructional Days 11-13: Explore the concept of separating style from structure by keeping separate html and css files.

   g) Instructional Days 14: Add hyperlinks to other websites.

   h) Instructional Days 15-16: Introduce a variety of page layout styles.

   i) Instructional Days 17-19: Practice the use of various design elements.

   j) Instructional Days 20-21: Introduce several different enhancements for website design, including web user interface elements combining java script, html, css, and Photoshop, accordion menus, lightbox and sliding images.

   k) Instructional Days 22-25: Final projects and gallery walk.

7. Please add general comments you'd like to share about Unit 3.

Unit 4: Introduction to Programming

1. Did you implement Unit 4: Introduction to Programming?
   ____ Yes
   ____ No

2. Unit 4: Introduction to Programming (Check off all of the lessons you implemented)
   ____ Introduce the Scratch programming language, including the basic terms utilized in the language.
   ____ Practice using the basic features of Scratch in the context of creating a simple program.
   ____ Create a dialogue between two sprites.
   ____ Introduce the methods of moving sprites in Scratch.
   ____ Practice the concept of event driven programming through the creation of an alphabet game.
   ____ Introduce the concept of broadcasting via role play.
   ____ Write Scratch stories and present them to the class. Conduct peer reviews.
   ____ Introduce the concept of variable.
   ____ Introduce the concept of conditionals.
   ____ Introduce And, Or and randomness.
   ____ Apply knowledge of conditionals to develop a Rock Paper Scissors program in Scratch.
   ____ Build on previous programming concepts to create a timer.
   ____ Create a timing game in Scratch and present it to the class. Peer reviews are conducted.
   ____ Investigate two types of games that may provide ideas for the final project.
   ____ Explain final project and the rubric for the final project.
   ____ Write Scratch programs for either My Community or Game project. Conduct peer reviews.
   ____ Complete final projects.
   ____ Presentations of final projects

3. How successful do you feel you were in implementing this unit?
   ____ Not at all successful
   ____ A little successful
   ____ Successful
   ____ Very successful

4. For Unit 4: Introduction to Programming, did you modify any aspects of the curriculum?
   ____ Yes
   ____ No

5. Please indicate how you implemented Unit 4 of the Exploring Computer Science (ECS) curriculum. Please use the table below as a reference for the curriculum schedule

	Yes	**No**
a. Did you switch the order of any of the topics for this unit?		
b. Did you follow the curriculum as it is written for this unit?		
c. Did you adapt any sections of this unit?		
d. Did you eliminate any parts of this unit?		
e. Did you replace any topics of this unit?		
f. Did you follow the pace recommended by the ECS manual for this unit?		

6. For Unit 4: Introduction to Programming, only if you responded yes to modifying the unit, please comment on what you did differently for each topic. Describe how it is different from the ECS curriculum and why you made the change. If you did not make a change to a particular topic, please leave it blank and move onto the next topic.
   a) Instructional Days 1: Introduce the Scratch programming language, including the basic terms utilized in the language.

   b) Instructional Days 2-3: Practice using the basic features of Scratch in the context of creating a simple program.

   c) Instructional Days 4: Create a dialogue between two sprites.

   d) Instructional Days 5-6: Introduce the methods of moving sprites in Scratch.

   e) Instructional Days 7-8: Practice the concept of event driven programming through the creation of an alphabet game.

   f) Instructional Days 9: Introduce the concept of broadcasting via role play.

   g) Instructional Days 10-13: Write Scratch stories and present them to the class. Conduct peer reviews.

   h) Instructional Days 14: Introduce the concept of variable.

   i) Instructional Days 15: Introduce the concept of conditionals.

   j) Instructional Days 16-17: Introduce And, Or and randomness.

   k) Instructional Days 18: Apply knowledge of conditionals to develop a Rock Paper Scissors program in Scratch.

   l) Instructional Days 19: Build on previous programming concepts to create a timer.

   m) Instructional Days 20-23: Create a timing game in Scratch and present it to the class. Peer reviews are conducted.

   n) Instructional Days 24: Investigate two types of games that may provide ideas for the final project.

   o) Instructional Days 25: Explain final project and the rubric for the final project.

   p) Instructional Days 26-28: Write Scratch programs for either My Community or Game project. Conduct peer reviews.

7. Please add general comments you'd like to share about Unit 4.

Unit 5: Computing and Data Analysis

1. Did you implement Unit 5: Computing and Data Analysis?
   - ____ Yes
   - ____ No

2. Unit 5: Computing and Data Analysis (Check off all of the lessons you implemented)
   - ____ Review how data can be used for making a case/discovery and provide an overview of the final project.
   - ____ Discuss photo ethics and student safety related to android phone use.
   - ____ Distribute phones. Create groups. Discuss group roles and responsibilities. Navigate the android application. Navigate the online system.
   - ____ Data check-in—Discuss issues that arise (aggregating data, etc.).
   - ____ Introduce R/Deducer. Create maps using the latitude and longitude of a location and then create maps from a file of data.
   - ____ Create maps with student data and related data set.
   - ____ Discuss bar plots, categorical and continuous data, and mosaic plots as a vehicle for comparing categorical data, and looking at trends in data.
   - ____ Create bar plots and mosaic plots with student data and related data set.
   - ____ Review mean, median, minimum, maximum. Discuss various ways to subset data. Represent data with box plots and histograms.
   - ____ Identify mean, median, minimum, maximum, create subsets, and create box plots and histograms with student data and related data set.
   - ____ Use a variety of filters and queries to create subsets of text data. Create bar plots to graphically display the information.
   - ____ Analyze text in student data and related data set.
   - ____ Finalize data analysis for final project.
   - ____ Develop website or Scratch program to present data analysis campaign.
   - ____ Final project presentations

3. How successful do you feel you were in implementing this unit?
   - ____ Not at all successful
   - ____ A little successful
   - ____ Successful
   - ____ Very successful

Unit 6: Robotics

1. Did you implement Unit 6: Robotics?
   - ____ Yes
   - ____ No

2. Unit 6: Robotics (Check off all of the lessons you implemented)
   - ____ What is a robot? Identify the criteria that make an item a robot.
   - ____ Evaluate robot body designs and create algorithms to control robot behavior.
   - ____ Set up LEGO® Mindstorms® NXT® kit.
   - ____ Build robot base.
   - ____ Introduce the features of NXT Brick—the "brain" of the robot.
   - ____ Introduce the features of the Mindstorms NXT software.
   - ____ Program the robot using the Mindstorm Robot Educator Software tutorials.
   - ____ Introduce RoboCup real life robotic competition and write instructions for tic-tac-toe.
   - ____ RoboTic-Tac-Toe Tournament and introduction to RoboCupJunior Dance Challenge.
   - ____ Build, program, and present a dancing robot.
   - ____ Build program and present a rescue robot.
   - ____ Final projects and presentations

3. How successful do you feel you were in implementing this unit?
   - ____ Not at all successful
   - ____ A little successful
   - ____ Successful
   - ____ Very successful

1. The professional development workshop training you received adequately prepared you to implement the curriculum.
   ____ Strongly disagree
   ____ Disagree
   ____ Agree
   ____ Strongly agree

2. Based on your experience with this curriculum, what changes would you recommend for future professional development training workshops?

3. How likely are you to recommend the Taste of Computing to one or your colleagues?

1	2	3	4	5	6	7	8	9	10
Not at all likely									Definitely