Teacher Pre-observation form and conference

User Information

Name: Kuri DiFede (3994)	Title: Computer Science Teacher
Building: Mineola High School	Department: None
Grade: None	Evaluation Type: Non-Tenured Teacher
Assigned Administrator: Culella, Nicole	Evaluation Cycle: 09/01/2018 - 07/01/2019
Submitted By: DiFede, Kuri	Date Submitted: 10/26/2018 10:49 am EDT
Acknowledged By: N/A	Date Acknowledged: Unacknowledged
Finalized By: Culella, Nicole	Date Finalized : 11/01/2018 12:21 pm EDT

1A. What student learning outcomes/objectives and CCS learning outcomes are the focuses of the lesson? Include what data informed this (these) outcome/objective(s).

Learning Goals:

- Students will understand boolean logic and complex conditionals by comparing Java syntax to real life examples and recognizing patterns
- Students will apply this knowledge by demonstrating on short questions in the interactive book.

CCSS Standards:

- CCSS.ELA-LITERACY.RST.11-12.3: Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
- CCSS.ELA-LITERACY.RST.11-12.4: Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics.

This topic requires previous knowledge, of boolean variables and conditional statements. This topic I am trying to not only teach them this logic, but also how understanding it can help them with writing and debugging code.
After this lesson, we will discuss DeMorgan's Law and then we will reinforce conditionals with coding bat exercises and the Magpie chatbot lab. They will have a practice quiz and a real quiz the next week.

1B. Briefly describe the students in your class including those with special needs. How will you differentiate instruction for individuals or groups in your class to meet lesson objectives?

The students in my class are overall eager learners. They range from students who are trying to be the valedictorian, to students who are interested in computer science, but are not in all honors classes. All of the students are interested in learning the material, but some struggle with abstract concepts. There are no formal IEPs for the students in this class, but the students still vary widely in their learning styles and in the speed at which they pick things up.
The students have naturally grouped themselves, and the groupings are mostly similar abilities, with students helping each other out. If this lesson differentiates students (and I believe it will), I often will have the students who understand well work one-on-one with the students who don't understand to help bring everyone to the same level.
Additionally, I offer the materials to students in several ways. There are slides on the board that they can listen to and see. Some students follow along on their own devices, and some even print them out and annotate. They are available to all students on iTunesU. Students participate with the whiteboard markers on the table, and also on worksheets. Students are given guided practice on paper as well as programming assignments (though not in this class) to reinforce the topic in different ways. Students also have access to a digital text which allows them to test out examples inside the book. I find that the difference in learning styles helps the students synthesize in different ways.

1C. How does this lesson align within the current unit of study/across other units?

We have been learning about conditionals in the class. This lesson is in the logic behind longer more complicated boolean logic statements. Students will apply their knowledge of boolean variables, and conditional logic to understanding the current topic. All students will need to understand the basic boolean functions to succeed on the AP CS test. This lesson should reinforce previous topics while teaching the complicated conditional statements.

1D. What instructional materials, including technology, will you employ to meet the learning outcomes/objectives of this lesson?

I use a lot of materials and resources for this class. The materials I create are uploaded onto iTunes U for the students to view. There is also a digital textbook with interactive examples that students use at Runestone.academy. Additionally, students will do work on paper (or iPad) to support the class. Students will do coding work in codingBat after which should reinforced boolean logic. After that, they will create a chatbot which will further utilize Boolean logic.

1E. How do your instructional strategies, including student grouping, promote higher levels of thinking and student engagement?

During the lesson, students will be given a marker so that they can write on the boards to try to solve the questions as I go through the lesson. Because students are active, they are more engaged when I reveal how to do the problem. Students are seated in small groups, and will often discuss and work together during this time which further increases their engagement. Finally, a portion of the class is dedicated to practice, which allows students to practice their skills, further engaging them and allowing them to ask questions one on one.

1F. How do you plan to assess student achievement? Include how your assessment(s) will be a tool for future instruction.

Students will be informally assessed through the lecture part of the lesson. This will inform the timing of the lecture, slowing down an explaining things if I feel there are misconceptions. Additionally, students will be surveyed as they are doing work in class to see who is understanding the topics and who is not. This will be used to try to tailor future lessons to help make sure all students understand. The homework is graded for completion, but the actual data is used for me to determine who needs more help and where.

Lesson Plan and Pre-observation Artifacts

Please upload Lesson Plan and Pre-observation Artifacts below.

Artifacts

Name	Upload Date	Upload User	File
Slides	10/26/2018	DiFede, Kuri	3__And____OR___.pdf
Complex Conditionals	10/26/2018	DiFede, Kuri	Complex_Conditionals_Lesson_Pla…