Lesson Plan on Sutayta Al Mahamali
Date : Jan 14, 2023
Teacher Name: Mr. Bari
Grade Level: High School
Topic: Mathematics of Inheritance
Subject: Algebra

Flipped Classroom
Students will receive the link of the website at least 24 hours prior to the class meeting, so as to learn about the mathematician's story and come to class with any questions. Link,
www.muslimwomenmathematicians.org

Learning Objectives:

Students will learn how to solve algebraic problems by constructing diagrams. I will ask students to use different colors to highlight the different parts of the diagram, e.g., First child, second child and so on. I will ask my students that I would like to accomplish this goal through performance-type tasks that must be accompanied by individual students because my intention is to gain a more accurate measure of every student's understanding and ensure that students who need additional teaching support are not overlooked because they performed a task as a part of a group. Formal assessment: I've assessed my students through five different ways: (1) Do now; (2) Big Idea (3) Exit slip (4) Homework (5) Unit Test

Learning Goals:

1. SWBAT learn that when Sutayta solved quadratic equations in 10th century Baghdad, Europe groaned in obscurity.

2. SWBAT understands how she overcame all the odds and became the first Muslim woman mathematician.

3. SWBAT discovered that women are biologically as capable as men when it comes to mathematics.

Lesson component	
Activity # 1 (0- 4 minutes)	Students will complete the Do Now in 5 minutes (See Page # 1 on the worksheet) Worksheet is divided in three components: (1) DN (2) BI and (3) ES
Activity # 2 (20 minutes)	Main Task: Students will form in a group and will solve the problem. There are 4 students in a group and each one has a job assignment (Group Leader, Engineer, Scientist, Mathematician)
Activity # 3 (10 minutes)	Teacher will go over the Main Task on the whiteboard.
Activity # 4 (5 mins)	Student will complete the exit slip in 5 minutes
Activity # 5	Briefly overview discussed throughout the period

Every second matters!

Time	Teaching activities / Student activities	
Activity # 1 (5 mins)	Teacher distributes the handout for students to work with groups Explain the "Do now" Listening the instructions Teacher is Circulating while students completing "Do Now" Solving the Do Now Going over the "Do Now" Students will check their answers to make sure they have full understanding.	
Activity # 2 (20 mins)	Group activity	Students will compare their diagram with others in the group.
Activity # 3 (10 mins)	Teacher in action	Teacher will go over main task
Activity # 4 (5 mins)	Assessment	Students complete Exit Slip in 5 Minutes
Activity # 5 (2 mins)	Recap I briefly overview what we discussed throughout the period in 5 minutes.	Ask student to summarize what they have learned