

## **Lesson Plan #4 Title: Bar Graph Our Favorite Apple**

**Performance Objective:** Given class discussions, examples, and collaboration of building bar graphs students will be given collected data, a graph template, and linking cubes. The students will use the linking cubes to build the bar graph to represent the data with 90% accuracy.

### **Resources or Materials Needed:**

#### **❖ Teacher**

- Chart Paper with *Our Favorite Apple* Title
- Apple cutout outs copied on white paper (one for each student)
- Apples (red, yellow, green)
  - At least 3 of each color cut into eight slices
  - Put 3 slices of different apples on plates prior to lesson
  - Account for each student to have one plate with three different apple slices.
- Linking cubes (red, yellow, green)

#### **❖ Students**

- Pencils
- Colored pencils or crayons

**Time:** Approximately 90 minutes

### **Step 1: Pre-Instructional Activities:** (students are seated at their desks)

- Teacher will review the purpose of graphs is to gather information and represent data.
- Teacher will show examples of bar graphs.
- Teacher will review the components of graphs (title, key, labels)

### **Step 2: Content Presentation:**

- ❖ Explain to students that they will be tasting three different apples and will choose their favorite apple to build a bar graph with the data collected.
- ❖ The teacher will distribute paper plates with apple slices to each student.
- ❖ Students will taste each apple slice and choose their favorite apple.
- ❖ Distribute one apple cutout to each student.
- ❖ Instruct students that they will color their apple cutout the color of their favorite apple (green, red, or yellow).
- ❖ Students will color their apple cutout their favorite apple color.

### **Step 3: Learner Participation:**

- ❖ The teacher will display class apple graph.
- ❖ Instruct students that you will call them by their groups to come to the floor.
- ❖ The students will come to the floor with their colored apple paper square representing their favorite apple when teacher announces their group.
- ❖ Direct attention to components on class apple graph display (key, labels, title)
- ❖ Teacher will model placing a paper apple square on the graph display of the corresponding column labeled favorite apple color.

- ❖ Students will place their construction paper colored squares on graph when teacher calls their name.
- ❖ Discuss and analyze graph data class when all classroom data is gathered.
  - Questioning:
    - *Which apple did students like the most?*
    - *Which apple did students like the least?*
    - *How could we show if a student didn't like apples?*
    - *What other graphs could we make as a class?*

#### **Step 4: Assessment (Appendix C)**

- ❖ Instruct students to return to their desks.
- ❖ Distribute apple graph template.
- ❖ Guided instruction of building bar graphs to represent classroom apple graph using linking cubes.
- ❖ Students will use the linking cubes to represent the classroom graph onto their apple graph template.

#### **Step 5: Follow-Through Activities:**

- ❖ **Math Center:**
  - **Supplies:**
    - apple cutouts
    - task cards
  - **Center Activity:**
    - The students will build bar graphs using pictures of apples to construct a pictograph that corresponds to the task card.
    - After building the pictograph the students will complete a bar graph worksheet that represents the data from the pictograph.
    - Students will continue to practice graphing at home with their ixl.com accounts

**Lesson Plan Summary:** The instructional strategy used in the learner participation of building an apple graph representing the data gathered from the class of their favorite apple aligns with the constructivism theory. The students are working collaboratively while building the graph. It is also authentic learning by tasting an apple before building a graph of their favorite apple.