

Subject: Mathematics

Level: S.3

Topic: Measures of Central Tendency

Sub-topic: Comparing two sets of data using the mean, median and mode

Learning Objectives

1. Content:

students should be able to:

i. compare two sets of data using the mean, median and mode..

2. Language:

students should be able to discuss two sets of data using:

i. the language forms of comparison

ii. the language forms of comparison to discuss data on measures of central tendency.

iii. contrast and cause and effect to discuss data on measures of central tendency.

Background information

This is the fifth lesson in a series of 6. The activity is carried out in the middle of a double lesson. The teacher has introduced the basic mathematical concept and reminded students of the language forms which can be used to compare two sets of data using the mean, median and mode.

The teacher has discussed some simple problems on the topic. Then she gives the students a problem and asks them to calculate the averages and state the results below:

Activity 1

The teacher gives out the Worksheet 1 and explains the instructions by using Powerpoint. She reminds the students to use an appropriate sentence structure (shown on Powerpoint and the worksheet) during the discussion.

She tells the students to work in groups and gives each group a transparency.

The students do the discussion. Two to three groups present their conclusions in transparency.

The teacher discusses the results and helps the students understand more clearly how to compare two sets of data by using averages.

S.3 Mathematics
Measures of Central Tendency
Worksheet 1

Name: _____ Class: _____ No.: _____ Date: _____



Activity 1

Instruction for discussion:

1. Work in groups of 5. Each group has 2 pairs of students and a judge.
2. Pair A students represent the fans of team A.
Pair B students represent the fans of team B.
The remaining student is the judge who is going to be a fan of one of the teams.
4. Each pair of fans finds evidence to support their dream team.
5. Support your evidence with the definition and characteristics of the averages.
6. Persuade the judge that YOUR dream team members are younger. 7.
The judge decides which team has younger members and, therefore, which team she wants to support.
7. Write down your conclusion on a transparency.
8. Present your conclusion to your classmates.

Here are the ages of the teams

The following table shows the averages of ages of players in two football teams.

Football Teams	Mean age	Median age	Modal age
Team A	25	26	28
Team B	28	28	23

Both teams' fans claim: "We are younger."

Which team's players are younger than the other?

You may refer to the original data if necessary.

You can use the following sentences to help you:

- The mean / median / modal age of team? is **higher/lower than that of team?**
but the ? of team ? is **higher/lower than that** of team? .
- **? are the same.**
- The ? is not affected by extreme value in this situation.
- The ? is not a persuasive average in this situation.
- **Therefore, team? is a younger team.**

