

Do high payrolls for sports teams guarantee big wins?



We often hear about teams that spend a lot of money to bring talented players to their team. It makes us wonder, does a large payroll equal more wins? In this updated activity we ask students to compare sports teams' payrolls with the team's total wins.

For all students regardless of sport:

1. What are the variables in this situation? Which is the independent variable? Which is the dependent variable? In general, how do you determine independent and dependent variables for a given situation?
2. On a separate piece of paper, create a scatter plot of the data. Be careful to consider which variable belongs on the x-axis and which belongs on the y-axis. Carefully consider the scales that you will use for each axis. It may make sense to talk this out with your partner or even another group before creating your scales.
3. Does there appear to be an association between team salary and total team wins? If so, describe the association, is it positive, negative, weak, or strong?
4. Are there any data points that appear to be outliers? If so, which teams? How did you decide that they were outliers?
5. Do you see any clusters of data in your scatter plot? If so, describe the clusters, giving salary range and range of total wins.

*Whole class tasks (after seeing scatter plots from all four sports).*

6. Which of the sports shows the strongest association between team salaries and total team wins? Which of the sports shows the weakest association?
7. Based on the data from the four sports, would you say that there is a relationship between team salaries and wins in the sporting world? Explain your reasoning? To better answer this question, what other information would be useful?