## Discussion Project - Drug Use in Teenagers

A survey was conducted in the United States and 10 countries of Western Europe to determine the percentage of teenagers who had used marijuana and other drugs. The results are summarized in the table below.

| Country | \% who have used marijuana | \% who have used other drugs |
| :--- | :--- | :--- |
| Czech Republic | 22 | 4 |
| Denmark | 17 | 3 |
| England | 40 | 21 |
| Finland | 5 | 1 |
| Ireland | 37 | 16 |
| Italy | 19 | 8 |
| Northern Ireland | 23 | 14 |
| Norway | 6 | 3 |
| Portugal | 7 | 3 |
| Scotland | 53 | 31 |
| United States | 34 | 24 |

a) Make a scatterplot with the percentage of teenagers who had used marijuana versus the percentage of teenagers who had used other drugs.
b) What is the relationship between the two variables and is that relationship weak or strong?
c) Does the data above indicate that marijuana use causes teenagers to use other drugs?

## Discussion Project - Outliers

Below is a scatter plot of the number of votes in the 2000 U.S. Presidential election in the counties of Florida obtained by Ralph Nadar (given on the horizontal axis) versus the number of votes obtained by Pat Buchanan (given on the vertical axis).
a) Describe the pattern in the data on the scatter plot?
b) Is there an outlier in this data? Why or why not? If yes, circle the outlier on the scatter plot.
c) If you found an outlier, discuss with your neighbors what this outlier may signify.
d) Would it be important to get more information about the data in this scatter plot?
i) If yes, what information would be useful?
ii) If no, what conclusions can you draw from the scatter plot?

2000 U.S. Presidential Election


