**From the readings up to and including this week, find one example of a data graph that attempts to tell an interesting story of a useful topic. How well does it succeed? How could it be improved?**

A diagram of different colored dots

AI-generated content may be incorrect.

**How Well the Graph Tells an Interesting Story of a Useful Topic**

The graph successfully tells an interesting story by visualizing the distribution of bill lengths for the three penguin species—Adelie, Chinstrap, and Gentoo. By comparing the distributions side-by-side in a single plot, the graph allows the audience to quickly identify differences in central tendencies, such as which species has the longest or shortest bills on average. Clear distinctions—such as separate colours or shapes for each species—help the viewer differentiate between the groups and make the data engaging and accessible.

**How the Graph Could Be Improved**

While the graph succeeds in presenting the data effectively, there are areas where it could be improved to enhance its storytelling capabilities. Adding annotations highlighting key findings—such as "Gentoo penguins have the longest bills on average" or "Chinstrap penguins exhibit the least variability"—would direct the viewer's attention to the most critical insights. A compelling title and subtitle could provide additional context, such as "Penguin Bill Lengths: A Comparison Across Three Species" and "Exploring Diversity in Key Ecological Traits," to draw in the audience and clarify the purpose of the visualization. To further enhance clarity, overlaying statistical markers like mean or median lines, confidence intervals, or even shaded regions to show overlaps between species would add quantitative depth. Additionally, simplifying or balancing the designs such as avoiding overly complex or cluttered elements—would ensure that the focus remains on the data's story.