



Statistics and Spreadsheets

Guide for Curriculum Unit 86.05.04
by John P. Crotty

Share Pam's adventures as she progresses from homecoming queen to Lee High School's leading scorer. Take part in 12 well-documented lesson plans. Starting with a blank worksheet, you will fill in different types of labels. Then you will enter Pam's points. You will create formulas to tie the points together. Now you have a usable template.

Let's analyze the way that Lee beat Cross and then Hillhouse. A quick way is with one of the different types of graphs. See how not every picture tells a true story? Now let's employ some statistics. We'll find ranges. Move to the arithmetic mean. Then to deviation. Not my students you say? Take heart, this method works.

A spreadsheet is better than a calculator. You don't lose the numbers. They stay on the screen. You can actually see where the variance is coming from. You can play what-if. Make one score closer to the mean and see the changes.

But you say you don't like Pam? No problem. Use one of your own students. In fact, that's the preferred method. Everyone likes to talk about themselves. Now your classes are interesting. Now you're a good teacher.

You can also teach this unit without a computer. I developed most of the exercises when I had a remedial class with two boy basketball players in it. I would recommend calculators, then, so the students don't get bogged down in the formulas.

(Recommended for Data Entry classes, grade 10; Applied Mathematics classes, grade 9)

Key Words

Statistics Basic Skills Mathematics Probability Spreadsheets

<https://teachersinstitute.yale.edu>

©2019 by the Yale-New Haven Teachers Institute, Yale University

For terms of use visit <https://teachersinstitute.yale.edu/terms>