## Probability and Statistics Lesson Plan Using JotForm

**Grade Level:** High School

### Overview

JotForm is an exciting Web 2.0 application that allows users to create web forms and surveys. Such an application can be a great way for a High School Statistics class to work in groups to analyze survey data using statistical methods.

### Objective

Given a set of data, students can successfully calculate mean, media, mode, weighted mean, quartiles, variance, and standard deviation with 90% accuracy.

### Students

Grades 9-12

### Learning Environment

- Classroom
- Computer Lab

### Procedures

After presenting a unit mathematical unit explaining the concepts of mean, media, mode, weighted mean, quartiles, variance, and standard deviation, the teacher would break students up into groups of three to four where they would accomplish the following:

- Design a survey using JotForm
- Distribute the link to the survey to their classmates
- Complete their own survey as well as those of their classmates
- Analyze the data for mean, media, mode, weighted mean, quartiles, variance, and standard deviation
- Make graphical representations of some of their data
- Present their findings, with graphical representations of their data, to the class.

### Application

Students will apply the statistical concepts they have learned to harvest data harvested from the surveys they created using JotForm.

### Motivation

Students will be motivated to learn about statistical analysis of data by creating survey questions that are relevant to a topic of their interest.

### Materials

- Computers equipped with internet access – preferably students would have computer lab time
- Graphing software
- Teacher computer equipped with presentation software and projection capabilities

### Standards

Indiana Department of Education Probability and Statistics Standards PS 1, PS 1.1, & PS 12.