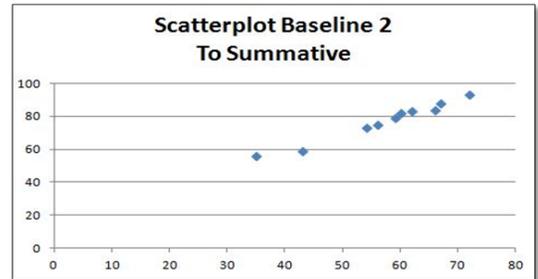
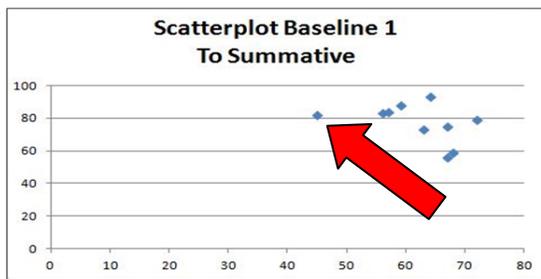


Correlating Data

At the end of an SLO cycle, take a careful look at those measures you selected for baseline measures, and assess whether they were good predictors of students' ultimate success. To do this you can search for correlations in the data.

Process: To accomplish this task, you will need to create a graph for each measure you used to establish your baseline. For each measure, place the data source on the x-axis. On each graph, place the summative test results on the y-axis.

Create a point representing each individual student's score with the coordinates (score on baseline, score on summative). For example, the point at the red arrow represents a student who scored a 42 on the pre-assessment and an 82 on the summative assessment. This type of graph is called a scatterplot, and can help you see the relationship between the data you thought was important and the actual performance of students.



Interpretation: Does your plot look more like Baseline 1 or 2? If it looks more like 1, you should consider finding alternative measures to establish a baseline in the future as the relationship is not strong. Graphs that show points that are widely spread out indicate little relationship between the two assessments.

If your plot looks more like the baseline 2 plot, the relationship is strong and the baseline measure should be used again. Anytime you see points that appear to be more clustered together, particularly if they form a cluster around a line, we know that the two assessments are more aligned.

Points of Caution: Although a scatterplot may show a correlation between measures, it does not explain the reason for the relationship. Have you ever heard someone say: "Correlation is not causation"? This is the nature of correlation. Sometimes when two tests are correlated, it can mean that the knowledge of the pre-assessment or baseline measure influenced the measure on the summative. In other words, it could be that knowledge students brought to your class influenced their ability to succeed on the summative assessment. But it could also be that the relationship is "spurious" or random – caused by some other factor, such as students like to take tests on blue paper more than white paper. Obviously, that is not helpful. So, treat these graphics with caution and include a measure only if you have a sound, educational reason to believe that this relationship the measures are related. And, be willing to continue to revisit these assumptions as you gather more data over time.

