

Are Our Schools Living up to Their Potential? School Factors Associated with WASL success

There is a clear relationship between income and academic achievement. That is, schools that enroll high percentages of students who qualify for free or reduced-price meals – a commonly accepted proxy for poverty – tend to have lower WASL scores.

Are there other factors that are associated either with low or high academic achievement (as measured by WASL scores)? For example, are schools that have successful athletic programs more or less likely to have high WASL scores than schools that do not? Are schools that have a higher percentage of teachers who have a masters (or higher) degree more likely to have high WASL scores than those that have lower percentages? What about attitudes toward school? Is a positive student attitude toward school associated with higher academic achievement? Is a positive teacher attitude toward school associated with higher academic achievement?

Using the Web site, “Washington State Report Card,” (<http://reportcard.ospi.k12.wa.us/>)

You can access a tremendous amount of data regarding the demographics and academic achievement (as measured by the WASL) of school and school districts throughout the state. You will need to explore this site and its capabilities thoroughly. There are, of course, limits to the data found at this site and you will need to do some data gathering and analysis of your own in order to analyze other factors such as student or teacher attitudes, etc.

Examine six characteristics and try to determine whether each one is correlated positively or negatively with academic success (as measured by the WASL). The six characteristics to be examined are these:

1. successful or unsuccessful school athletic programs,
2. positive or negative student attitudes toward school,
3. positive or negative teacher attitudes toward school,
4. teacher demographics: average years of experience, teachers with at least a Master's Degree,
- 5 and 6: two factors of your own choosing.

In your report, explain how each factor is correlated (positively or negatively, strongly or weakly) with academic success (as measured by the WASL OR by GPA). Within reason, take advantage of all the data you can find. For characteristics like teacher demographics (average years of experience, teachers with at least a Master's Degree) you can get data for nearly every school in the state. You may need to sample rather than getting and using every single number. For other characteristics such as student attitudes you may choose to do an anonymous survey of students in your school, collecting data on attitudes toward school and approximate GPA. As always, your work will be assessed in large part on how well you are able to use mathematics to back up your assertions regarding how these characteristics are associated with academic success.

