

### Recommendation 3: Emphasize Statistical Literacy and Develop Statistical Thinking

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This article outlines seven important topics that the author believes educated citizens should know about probability and statistics. These topics are all related to misconceptions people have statistics and probability. The seven topics are related to (1) cause and effect, (2) statistical significance and practical importance, (3) low power versus no effect, (4) biases in surveys, (5) probable coincidences, (6) confusion of the inverse, and (7) average versus normal.

The article highlights the fact that, for the average individual, accurately interpreting statistics is more important than being able to calculate something like a probability. These misconceptions can lead people to have inaccurate ideas about situations in their life. The article gives good examples of studies that have implications for a typical person's life. The seven topics align with the GAISE recommendation in that they all force a student, or an average citizen, to think with a statistical mindset. All too often, students and adults take things like a news report at face value, without actually making sure the statements made in the report are accurate. All of the examples were very practical but I thought the example of the study that involved car accidents and cell phone use was particularly interesting. High school students would probably find this example interesting because a lot of them are likely to have cell phones and drive.

The most beneficial thing I got from this article is that these topics are all very important to address with students and they would be easy to incorporate into a typical high school statistics class. All of the topics are ones that would likely be addressed in a high school class.